

905156

A MANUAL
OF
PHARMACODYNAMICS.

BY THE SAME AUTHOR.

Post 8vo, cloth. Part I. 6*s.*, Part II. 7*s.* 6*d.* Bound in One Volume,
price 12*s.* 6*d.*

A MANUAL OF THERAPEUTICS.

Demy 8vo, cloth, 2*s.*

ON THE SOURCES OF THE HOMŒOPATHIC MATERIA MEDICA.

Three Lectures delivered at the Homœopathic Hospital, 1877.

A MANUAL
OF
PHARMACODYNAMICS.

FOURTH EDITION,
REVISED AND AUGMENTED,

BEING THE COURSE OF MATERIA MEDICA AND THERAPEUTICS
DELIVERED AT THE LONDON SCHOOL OF HOMŒOPATHY,
1877—1880.

BY
RICHARD HUGHES,
L.R.C.P., ED.

LONDON:
LEATH AND ROSS,
5, ST. PAUL'S CHURCHYARD, AND 9, VERE STREET,
OXFORD STREET.

LEAMINGTON: LEATH AND WOOLCOTT,

1880.

TO

WILLIAM BAYES, M.D.,

TO WHOSE ENERGY AND PUBLIC SPIRIT

THE

LONDON SCHOOL OF HOMŒOPATHY

OWES ITS EXISTENCE,

This Volume,

A RECORD OF SOME OF THE WORK DONE THEREIN,

Is Dedicated

BY HIS FRIEND

THE AUTHOR.

PREFACE.

WHEN publishing (in 1875-6) the third edition of this Manual, I introduced it in the following words :—

“This work originally appeared in 1867, as the first part of a ‘Manual of Homœopathic Practice for students and beginners.’ It was couched in the form of letters to an enquiring friend. A second edition was published in 1870. The additions rendered necessary by the progress of knowledge were, for the convenience of those who possessed the volume in its original form, placed between brackets or affixed as notes.

“When, in 1874, I was called upon to prepare a third edition, it seemed desirable that the work should assume a homogeneous and as it were primary character; and that the matter of the first two editions, together with such additions as I might have to make, should be welded together in one consecutive whole. But I found, on consideration, that more than this would be necessary. I had by this time become painfully conscious of the limited range of the information with which I had previously worked, especially as regards original provings and French and German literature. The endeavours I now made to extend my knowledge showed me that the work must be, to a great extent, not only re-cast but re-written, if it was to satisfy my present sense of what was required of it.

“While I was planning and initiating the undertaking, the circumstances arose which led to my being requested by the British Homœopathic Society to deliver a course of lectures in London on *Materia Medica* and *Therapeutics*. The form

of my work was thus determined for me ; and an additional motive supplied for making its substance as full and accurate as possible. The lectures were delivered between February and June, 1875, and again from October to January, 1875-6. The present volume contains them. I have added the minor medicines omitted in my course, and some re-arrangement has been necessitated hereby. With this exception, the lectures stand here substantially as they were given.

“ In my introductory discourse I have stated fully the scope and method of my procedure ; and need not dwell upon them in this preface. On one feature of the work only I would make a remark. While I had hitherto been content to say—the proving of such and such a drug is in the *Materia Medica Pura*, or *Chronic Diseases*, or elsewhere, I have now thought it advisable to give a brief analytic account of each pathogenesis, stating the sources from which it is derived, and the proportion in which they have contributed to it ; and also, where possible, the manner in which the symptoms were obtained. I have reason to think that a very vague conception exists in most minds (I know it once did in my own) as to the nature of the pathogenetic materials of Homœopathy. This imperfect knowledge is apt to lead, on the one side to superstitious veneration, on the other to sceptical neglect—both being, I conceive, unwarranted towards the *Materia Medica* as a whole, and either being generally misplaced in its own reference. I have accordingly done my best (though I have yet more to do in the same field) to ascertain and exhibit the general character of such pathogenetic collections as we possess, so that a reference to them may carry its own meaning with it. And I have also examined each constituent member of these, and each separate contribution of the kind, on its own merits, and stated the results ; so that the student may know in each case the nature of the material with which he is working, and esteem and use it accordingly.”

In 1877, the London School of Homœopathy was founded, and I was appointed to fill the chair of *Materia Medica* and *Therapeutics* therein. My Manual naturally became the text-

book of my course, and the groundwork of the lectures I delivered. Such fresh matter as from time to time I have brought before my class, and such improvements in presentation as have occurred to me while going on, I have incorporated into the substance of the book which is now offered to the profession in its fourth edition.

I have described this as "revised and augmented." It is not, as was the third edition, "mainly re-written:" the framework on which that was constructed will be found here substantially unaltered. But it has been filled in with a liberal hand, so as to make the volume more than one-fourth larger than its predecessor, and—I hope—proportionately more satisfying to the student. There is hardly an article which has not received some fresh touch; and those on most of the polychrests, and on Chamomilla, Gelsemium, Iris, Plumbum and others have been much enlarged. Supplementary lectures on some minor and recently-introduced medicines are appended; while several of those which occupied such rank in the former edition find place in the main series, in which also will be found new sections on the picric and salicylic acids, on chlorine and its derivatives, and on *Ceanothus coccineus*.

Following upon the introductory lecture will be found six new ones. The two on the sources of the Homœopathic Materia Medica contain the substance of the little book I have published under that title. Those on the general principles of drug-action bear the same relation to the lectures I delivered at the London Homœopathic Hospital in 1877, and which appeared in the earlier numbers of the *Monthly Homœopathic Review* of that year. That entitled "Homœopathy—what it is" is a similar reproduction of the paper on "The Two Homœopathies" which I had the honour of reading at the British Homœopathic Congress held at Liverpool in 1877; and that on "Homœopathic Posology" has already appeared in the *British Journal of Homœopathy* for January, 1879. By including these materials in my present volume, I have made it contain all work I have hitherto been able to do in the field

to which it belongs ; and I hope that it may continue to be useful to the class which I am no longer able to conduct in person.

My third edition, at its appearance in two parts, in 1875 and 1876 respectively, received very full notice in the *Monthly Homœopathic Review*. Of the general tone and bearing of my reviewer's criticism I have nothing to express but sincere acknowledgment ; and I have shown my sense of the weight of such exceptions as he has taken to my work by the large consideration I have given them, both here and elsewhere. His remarks on my treatment of certain medicines I have had before me in my revision of the articles upon them for the present edition. His challenge of my ignoring or rejecting the doctrine of the opposite action of large and small doses I have fully met in the pages of the *Review* itself, and (to some extent) in the fifth lecture of my present series. The only points raised by him which yet remain for notice are my large employment of the results of experimentation on animals, and my copious reference to and quotation of the works of Drs. Ringer and Phillips. As to the first, I would remark that the main object of my work is to illuminate the symptomatology of our medicines by aid of such side-lights as can be thrown upon it ; and of these none are more important than the experiments of the physiological laboratory. They are necessarily excluded from our ordinary pathogenetic collections : it is all the more important that they should find large place in commentary and interpretation such as this. My object in making so much employment of the treatises mentioned was that, lecturing, as I always have done, to auditors trained in the schools of traditional medicine, it was a clear gain to be able to support my arguments as to the homœopathicity of certain practices by evidence accredited therein. Drs. Ringer and Phillips were both Professors of *Materia Medica* in recognised colleges. It was for them to account for the unusual amount of homœopathic matter contained in their pages : I, finding it there, turned it to the advantage of my position.

I have only now, in presenting this fourth edition of my book to the profession, to repeat my hope that the kind appreciation it has hitherto received, both in its own language, and in French, German and Spanish translation, will continue to be extended to it.

36, SILLWOOD ROAD, BRIGHTON.

June, 1880.

CONTENTS.

LECTURE	PAGE
I. Introductory	I
II. Sources of the Homœopathic Materia Medica	17
III. The same (continued)	40
IV. The General Principles of Drug-action	54
V. The same (continued)	68
VI. Homœopathy—what it is	79
VII. Homœopathic Posology	93
VIII. Acidum benzoicum, carbolicum, fluoricum, hydrocyanicum, muriaticum	107
IX. Acidum nitricum, oxalicum, phosphoricum, picricum, salicylicum, sulphuricum	124
X. Aconite	147
XI. Actæa, Æsculus, Æthusa, Agaricus, Agnus castus, Ailanthus	167
XII. Allium Cepa and sativum, Aloes, Alumen, Alumina, Ambra, Ammonium carbonicum and muriaticum, Amyl nitrite, Anacardium, Angustura	183
XIII. Antimonium crudum and tartaricum, Apocynum	198
XIV. Apis, Argentum metallicum and nitricum	212
XV. Arnica, Arsenic	228
XVI. Arsenic (continued)	247
XVII. Arum, Asafœtida, Asarum, Asclepias, Asterias, Aurum, Baptisia	264
XVIII. Baryta, Belladonna	281
XIX. Belladonna (continued)	295
XX. Berberis, Bismuth, Borax, Bovista, Bromine and the bromides	308
XXI. Bryonia	323
XXII. Cactus, Calcarea	336

LECTURE	PAGE
XXIII. Calendula, Camphor, Cannabis sativa and Indica, Cantharis	349
XXIV. Capsicum, Carbon sulphuratum, Carbo animalis and vegetabilis, Caulophyllum, Causticum, Cedron ..	365
XXV. Chamomilla, Chelidonium, Chimaphila, Chloral, Chlorum, Cicuta, Cina and Santonine	378
XXVI. Cinchona	391
XXVII. Cinchona alkaloids, Cistus, Clematis, Coca, Cocculus, Coccus cacti, Coffea	409
XXVIII. Colchicum, Collinsonia, Colocynth, Conium, Copaiba	425
XXIX. Corallium, Crocus, Croton, Cundurango, Cuprum, Curare, Cyclamen, Dioscorea	442
XXX. Digitalis, Drosera.	457
XXXI. Dulcamara, Elaterium, Eupatorium perfoliatum and pnrpureum, Euphorbium, Euphrasia, Ferrum ..	471
XXXII. Gamboge, Gelsemium, Glonoin, Graphites, Gratiola, Guaiacum	488
XXXIII. Hamamelis, Helleborus, Helonias, Hepar sulphuris ..	505
XXXIV. Hydrastis, Hydrocotyle, Hyoscyamus, Hypericum, Indigo	520
XXXV. Ignatia, Iodine and the iodides	534
XXXVI. Iodine and the iodides (continued), Iris	547
XXXVII. Ipecacuanha, Jaborandi, Kali bichromicum	563
XXXVIII. Kali carbonicum, chloricum, nitricum, and perman- ganicum ; Kalmia, Kreosote, Lactuca	580
XXXIX. Lachesis and the serpent-poisons	595
XL. Ledum, Leptandra, Lilium, Lithium, Lobelia, Lycopo- dium, Lycopus	609
XLI. Mercurius	624
XLII. Mercurius (continued)	636
XLIII. Mercurius (continued)	649
XLIV. Magnesia carbonica and muriatica, Manganum, Menyanthes, Mezereum, Millefolium, Moschus, Murex, Natrum carbonicum, muriaticum, and sul- phuricum, Nuphar	665
XLV. Nux vomica	682
XLVI. Nux moschata, Œnanthe, Oleander, Opium	695
XLVII. Opium alkaloids, Origanum, Osmium, Pæonia, Paris, Petroleum, Petroselinum, Phellandrium, Physo- stigma, Phytolacca	711

CONTENTS.

xiii

LECTURE	PAGE
XLVIII. Phosphorus	726
XLIX. Phosphorus (continued), Plumbum	741
L. Platina, Podophyllum, Pulsatilla	759
LI. Ranunculus, Ratanhia, Rheum, Rhododendron, Rhus, Rumex, Ruta	775
LII. Sabadilla, Sabina, Sambucus, Sanguinaria, Sarracenia, Sarsaparilla, Scilla, Secale, Selenium, Senega ..	791
LIII. Sepia—Silica	807
LIV. Spigelia, Spongia, Stannum, Staphisagria, Stramo- nium	822
LV. Sulphur	837
LVI. Tabacum, Taraxacum, Tellurium, Terebinthina, Teu- crium, Thuja, Uranium.. .. .	850
LVII. Urtica, Uva ursi, Valerian, Veratrum album and viride, Verbascum, Viola odorata and tricolor, Xan- thoxylum, Zincum	869
LVIII. Supplementary	886
LIX. Ditto	900
APPENDIX	913
INDEX OF MEDICINES	923
CLINICAL INDEX	927

CORRIGENDA.

On p. 2 and p. 45, for "*curantur*" read "*curentur*."

On p. 14, for "kaloid" read "haloid."

LECTURE I.

INTRODUCTORY.

GENTLEMEN,—

We are met to-day to inaugurate a course of instruction upon Materia Medica and Therapeutics, *i.e.*, upon the materials used in the practice of medicine, with their properties, and of the application of these to the art of healing. It will be well, at the outset, to indicate and define our field of study.

1. There are agents employed and measures prescribed in the treatment of disease which are roughly classed under the term *hygienic*. These include the diet and regimen of the patient, the choice of his climate, the regulation of his habits. Again, there are ways in which the various forces and elements of nature can be pressed into therapeutic service, as the use of water in its various forms, the bringing to bear of heat and cold in due proportions, and the application of electricity. In systematic treatises on Materia Medica many of these agents are discussed, and they cannot be denied a title to the name. If I exclude them from our consideration here, it is not from their being undervalued. It is simply because I have nothing to say about them which is not better said elsewhere; and because I wish to devote our entire attention to the action of *drugs*.

2. *Drugs*—that is, substances which have the power of affecting the animal body in health and disease—are the Materia Medica of which I propose to speak. And of these, again, solely as they affect the body. Taken from the animal, vegetable, and mineral kingdoms, they have characters and relations which belong to the sciences dealing with those departments of nature. In the treatises of which I have spoken, such features of drugs often occupy a large space; and to them I must refer you for all detailed information of the kind. I shall use it only so far as may be necessary to identify the drug before us, and to ensure a concrete concep-

tion of its origin and character in your minds ; for which purpose the specimens contained in our museum will come in aid. This done, it will be discussed as a drug and nothing else.

3. Such discussion, as I have said, will embrace the action of each substance upon the organism in health and disease,—its action physiological (or pathogenetic), and its action therapeutical. Of the former little needs now to be said. There is no question but that our knowledge on this head should be as full and accurate as possible. The only limitation is on the side of Toxicology. Our subject is pharmacodynamics ; but it is the *δυνάμεις* of *φάρμακα* as medicines, not as poisons. We require to know their poisonous action for the purpose of using them as curative agents : in as far as it comes within the range of Forensic Medicine—in all that relates to diagnosis, tests, antidotes, and such like—it is beyond the range of our present inquiry.

4. A far more important qualification of our task arises from the therapeutic side of the action of drugs. These lectures are delivered as part of the course of instruction of the London School of *Homœopathy*. How far do the principles indicated by this name modify the teaching of *Materia Medica* ?

It is not my province to expound to you in any detail the nature of homœopathy : this task belongs to my colleague occupying the chair of the Practice of Medicine. The only assumption regarding it needful for my present purpose is that it is a therapeutic method, and a legitimate one. It is nevertheless entirely ignored in the common text-books on *Materia Medica*, the few known applications of medicines which come within its range finding place there as empirical uses only. It accordingly becomes the duty of a teacher of this subject in a School of Homœopathy to give, in the therapeutic part of his task, the foremost rank to such uses of his medicines as result from the rule *similia similibus curantur*—let likes be treated by likes. He will not neglect to glance at and estimate other modes of employing them, but he will give his main strength to these : these he will do, and not leave the others undone.

But the avowed recognition of homœopathy in this place will have further effects.

First, it will influence the range of the *Materia Medica* we shall have to consider. Homœopathy presses into its service a far greater number of natural products than traditional medicine employs. It has revived many valuable agents from the unmerited oblivion into which they had fallen, and is continually adding new remedies to its stock by means of the organon it possesses in the law of similars ; for it has but to

ascertain the pathogenetic action of any substance, and its medicinal use is indicated forthwith. The *Materia Medica* we shall study will be that of Homœopathy, which embraces all the ordinary medicines, and adds many another thereto.

Secondly, our homœopathic standpoint will greatly enrich the materials on which we can draw for the knowledge of the pathogenetic action of drugs. The practical carrying out of our therapeutic rule has necessitated extensive and minute "proving" upon the healthy body. The record of such experimentation constitutes the distinctive *Materia Medica Homœopathica*. Passed by in the ordinary lectures and treatises, this record will take special prominence here. We may use as freely as others can the observations of poisoning and over-dosing, and the experiments on animals, which constitute the bulk of the pathogenetic material generally available. But we shall add to these, and rank above them in importance, the pure proving on the healthy which, though not unknown previously, has been in an especial manner the (confessedly meritorious) endeavour of the disciples of Hahnemann. Such experimentation on the human organism is now gladly welcomed in the old school of medicine, but only when its conductors and subjects are of the orthodox creed. We, having no such prejudices, shall be free to use all material of the kind, estimating it simply on its own merits.

Once more, the homœopathic character of our therapeutics will give a special direction to our study of pathogenetics. There are three recognised kinds of action possessed by drugs, which are commonly called mechanical, chemical, and dynamic respectively. The first is that which they exert in virtue of their bulk, weight, or character of surface, as when mercury used to be given to force a passage through obstructed bowels, or the *mucuna pruriens* to detach intestinal parasites. The second is the action of acid substances on alkalies and alkalies on acids, and such like, whereby the re-actions of the laboratory are reproduced as far as may be possible in the interior of the organism. The third or dynamic operation of drugs embraces all effects of theirs which cannot be accounted for by physical and chemical laws, and which—unlike those of the two former classes—are only produced in the *living* body. It is this last class of the actions of drugs which will chiefly occupy us, as it is by means of this alone that homœopathy works its rule. If we avail ourselves of the mechanical or chemical properties of the substances we employ, we do so on mechanical or chemical principles. *Similia similibus* belongs to the living organism only, and to the re-actions of drugs which are peculiar thereto.

The sum of what has now been said is this. It will be my duty to discourse from this chair on the Homœopathic *Materia Medica*,—embracing, that is, all the substances which homœopathy uses as medicines; setting forth, in addition to other information, the peculiar knowledge which homœopathy possesses as to their pathogenetic properties; and, while omitting no known actions or uses which belong to them, dwelling especially on those which homœopathy employs in its treatment of disease. These lectures will not attempt to supersede, but only to supplement, the instruction on the subject elsewhere given, and which you have already received or will be receiving. They belong, not to a School of Medicine in general, but to a School of Homœopathy. Of course, if the time should ever come when the lectures given here should be officially recognised as substitutes for corresponding courses delivered elsewhere, I should not assume any previous knowledge, but should treat my subject *ab initio*. As it is, it will economize time and strength on your part and mine to confine ourselves within the limits just laid down.

I have now to introduce you to that which, in a more limited and technical sense, homœopathy calls its "*Materia Medica*," viz.: the record of the pathogenetic effects of the medicines it uses. The primary sources of our information on this head, and the compilations of pathogenesis which are available for us, I shall bring before you in the next two lectures. It will also be my duty to refer you, for each medicine, to the original records of its provings, and to any special work in the way of study or arrangement which has been done upon it. The means of following up such references are to a large and increasing extent provided by the library of our School. I must now tell you what, in this so-called "*Materia Medica*" itself, you must expect to find.

Let us take as an example the section on *Arnica* in the first volume of Hahnemann's *Materia Medica Pura*. After a short preface, speaking of some of its therapeutic uses, we have a list of symptoms, 638 in number, purporting to be observed pathogenetic effects of the drug. Of these, 280 have no name attached, and are to be understood as contributed by Hahnemann himself. Of the remainder, 311 are marked with the abbreviated names of the fellow-observers acknowledged by him in his preface, seven in all; and 47 are credited to certain authors, reference being given to the place where the observation may be found. The symptoms are arranged in an order mainly anatomical, proceeding from those of the

head to those of the extremities, and ending with generalities and psychical phenomena. No information is given as to the subjects on whom they were observed, the doses by which they were produced, or the connection and sequence in which they occurred.

This description, with slight variations, will hold good for all Hahnemann's medicines, and for a great many of those furnished by his followers. The first impression made upon the mind by the symptom-lists it characterises is one of utter confusion and discouragement. As has been said (in allusion to the order of the schema)—the reader begins with vertigo, and ends with rage. But let us inquire why Hahnemann originated, and others imitated, such a mode of presenting the pathogenetic effects of drugs; and what use was intended to be made of the symptoms furnished. Then, perhaps, we shall understand the rationale of the form adopted.

Now it is obvious to any one who considers the subject, that there are two conceivable modes of working the homœopathic method—of following the rule, "let likes be treated by likes." The one may be called the *à priori* mode, the other the *à posteriori*. The former infers from the pathogenetic action of any substance what will be the morbid conditions in which it should prove curative. The latter begins with disease instead of drugs: it is the course we adopt when, having examined a case, we turn to our pathogenetic records to see what medicine has caused similar symptoms in the healthy.

That the latter was Hahnemann's ideal plan seems to me incontestably proved by his *Organon*. There is no trace there of wish on his part that the homœopathic practitioner should make any study of medicines in themselves prior to their application to practice. Their pathogenetic effects having been ascertained and recorded, we have but to refer to such record, after we have examined our patient, to discover the *similimum* to his case. Hence the arrangement of the pathogeneses in the form of a schema of disconnected symptoms. If every case is to be treated by writing down its phenomena in anatomical order, and finding what medicine has produced all, or the greatest number, or the most characteristic of them, then the form adopted answers every purpose. That it is impossible to form any *à priori* notion of the medicine, or to see in its effects any true pictures of disease, is, upon this system, of no consequence.

That this is the explanation of the form of the Homœopathic Materia Medica is, I think, unquestionable. Nor is it doubtful but that provision must be made for this mode of

homœopathising. So many morbid states are known to us only as an assemblage of phenomena, that there is no other way of treating them than by comparing them at the time with our pathogenetic records, and fitting drug symptoms to those of disease. Hence the pathogenesis of every medicine must be arranged in schema form for our purposes, and the only change to be desiderated is the improvement of the arrangement. But were this the whole of homœopathy, the function of a lecturer on *Materia Medica* would have no existence. The only knowledge required would be the whereabouts of the pathogeneses; the only faculty to be exercised upon them would be that of memory, and even this would be superseded by the employment of the indices we call repertoires.

The fact of my delivering this course of lectures in the London School of Homœopathy shows that in the judgment of its conductors previous knowledge of medicines *is* necessary and desirable. Even to use the *Materia Medica* aright upon the *à posteriori* plan, it is very helpful to know the significance of the several symptoms as fully as may be, and to be acquainted with the general sphere and character of the medicine. Mere mechanical symptom-covering is as likely to miss as to hit the mark. Still more important is it that you should be furnished for what I have described as the *à priori* method of homœopathising, that as far as possible you should go forth ready equipped for your work without cumbersome apparatus of books of reference. So to inform, and so to furnish you, is the task I have undertaken. Let me say a few words upon the $\pi\omicron\upsilon\ \sigma\tau\omega$ which a lecturer has for this purpose.

First, in nearly all the new provings which have appeared since the death of Hahnemann, it has been recognised as essential that the daily records of the experiments should be furnished, and not merely a schema of the results. These records are invaluable, both for illuminating the individual symptoms, and for revealing the morbid states to which the drug-effects are similar. For the provings of Hahnemann and his immediate followers we have no such aids, so far as their own symptoms are concerned. But those cited from authors, which in some pathogeneses constitute an important element, can in most cases be examined in their originals, and thus their meaning and value be ascertained. This work has been done for some of the medicines by Drs. Roth, Langheinz, and others; and I have myself completed it for the whole Hahnemannic series. Dr. Allen's *Encyclopædia*, and also the

new translation of Hahnemann's *Materia Medica Pura* now in progress, embody my results.

Secondly, we have the facts brought forward in the ordinary treatises on Toxicology and *Materia Medica*. They want the fulness and minuteness required for the application of the law of similars; yet in their measure they are extremely helpful. To know that a poison is narcotic, narcotico-irritant, or irritant only is knowledge sufficiently vague; but it is a clue. It indicates the relative importance of various symptoms, and the class of diseases to which the drug corresponds. The revelations of morbid anatomy carry us a step onward yet. They show the organs and tissues upon which the poison exerts its influence, and in a broad way the character of that influence. The classifications of manuals of therapeutics—which study drugs as cathartics, diuretics, expectorants, and so forth—help us still further to localise the sphere of the influence of each; and of late the physiological side of the action of medicines has received much greater attention in these works, to our corresponding profit.

It is perhaps supererogatory to point out the best books of this kind. Christison and the first edition of Taylor *On Poisons*, with Orfila's *Toxicologie*, have made any later works on the subject needless at present. Of the older treatises on *Materia Medica*, the English Pereira, the French Trousseau and Pidoux, and the American Wood may be named as excellent in their way. The modern books of Phillips,* Ringer,† and the younger Wood‡ are of a different stamp. The first is rather the record of what the writer learned during the twenty years in which he avowedly practised homœopathy, than the result of his observations since he only did so in secret: it is of interest to us mainly as showing how much he could retain and put forward under another name. Dr. Ringer's book, when it first appeared, was an incorporation with the traditional uses of medicines of such knowledge as he could obtain of their employment in the school of Hahnemann. The facts of this latter class it contained (stated always without reference to their source) made it like a stream of fresh air to practitioners of the old system; and it rapidly attained great popularity. In subsequent editions, the author has spoken

* *Materia Medica and Therapeutics. Vegetable Kingdom.* By Charles D. F. Phillips, M.D., F.R.C.S.E. 1874.

† *A Handbook of Therapeutics.* By Sydney Ringer, M.D. 7th Edition. 1879.

‡ *A Treatise on Therapeutics.* By H. C. Wood, junr., M.D. 3rd Edition. 1879.

more frankly as to the authorities for his novel statements; and has himself both supplied many fresh provings on the human subject, and enlarged the therapeutic sphere of several medicines by using them according to the law of similars in the large field of practice at his command. His seventh edition—which I shall cite here—is thus a work of great value. The *Treatise on Therapeutics* of Dr. Horatio Wood has a usefulness of another kind. Himself a diligent worker in the physiological laboratory, he has made it his business to keep *au courant* with all that is done of this sort elsewhere. He can thus present to us a summary of all experimentation that has been carried on with any drug down to the date of his publication, and has done so with very satisfying fulness. His book is as necessary for our knowledge of the pathogenetics of the old school, as they now are, as Dr. Ringer's for its therapeutics, and throws many a side-light on our own *Materia Medica*. Besides these works, I may name with much commendation the elaborate, and indeed exhaustive treatise of Dr. Stillé,* and the later American contribution on the subject by Dr. Bartholow.†

Thirdly, we are materially aided in our studies of pharmacology by clinical experience, by what we are accustomed to call the *usus in morbis*. As soon as this has become sufficiently extensive, it avails to stamp the character of the various medicines, and to show in what part of the body and in what kinds of derangement they have real energy. Light is thus thrown back on the pathogeneses, and their characteristic features and fundamental phenomena become manifest. In these, each medicine seems to affect more or less every organ or function of the body; but from the *usus in morbis* we learn which are the primary seats of its influence, and which the merely subordinate and sympathetic.

A great mass of clinical experience with medicines used after the homœopathic method has now accumulated in our periodical literature. Collections of it have been made from time to time, as those of Rückert in German and Beauvais (a pseudonym for Roth) in French. But for your introduction to the subject, and for our present purpose, I can commend to you no more excellent books than the *Applied Homœopathy* of the honoured founder of this School, Dr. Bayes, and the *Hints for the Practical Study of the Homœopathic Method* of

* *Therapeutics and Materia Medica*. By Alfred Stillé, M.D. 4th Edition. 1874.

† *A Practical Treatise on Materia Medica and Therapeutics*. By Robert Bartholow, M.A., M.D. 1877.

Dr. Chepmell; both of which are in our library. The former by stating his own experience with our leading remedies, the latter by a series of typical clinical records with observations, stamps indelibly on the mind of the student the leading features of the drugs he specifies. But it is not on avowed homœopathic experience only that we can draw for this object. All treatment by single medicines used for their direct effects upon the disease is truly of this kind, though it knows or acknowledges it not. Hence such collections as those of Frank's *Magazin** are of great value to us. This exists only in German; but in M. Teste's *Systématisation pratique de la matière médicale homœopathique* (1853), which we have also in English, copious use is made of the experience of the older medical writers as illuminative of the special properties of our remedies.

Taking his stand upon the ground thus described, the lecturer on *Materia Medica* will survey for his hearers the field of pathogenetic phenomena he has to characterise. My main object will be to set forth the *sphere of action* of each drug. Every medicine, even though it be one of those great polychrests which seem to embrace nearly the whole organism within the circle of their influence, has one or more centres of action. What these centres are we learn, sometimes from the pathogenetic, sometimes from the clinical side. When we have learnt them, they become all-important stand-points for the understanding and the remembrance of the medicine. These centres I shall endeavour, wherever practicable, to reach, and around them to group the several actions and uses of the drugs. There will always be residuary phenomena in such a process; but these I shall not fail to note when their importance demands it.

Besides sphere, moreover, I shall endeavour to set forth the *kind* of action of each drug. Its action upon a certain organ or tissue, a certain physiological function, a certain pathological process, may belong to it in common with several other medicines; and yet there is nearly always something special in the manner of its action which differentiates it from these, and gives it an individual character. Such specialty may sometimes be capable of rational description; but more commonly, perhaps, it will reside in certain symptomatic phenomena which can only be given as they are observed, without attempt at explanations of their meaning. To these belong the facts about drug-action known as "characteristics"

* *Magazin für physiol. und klinisch. Arzneim. und Toxikol.*
4 vols. Leipzig, 1845-54.

and "key-notes," which have been largely used in homœopathising of late, especially in America. Their foremost advocate is Dr. Guernsey, of Philadelphia; and I know no better exposition of their true place and value than a paper upon them from his pen contained in the third volume of the *Hahnemannian Monthly*. They are shown there to be no substitutes for the "totality of symptoms" required by Hahnemann in the comparison between drug-action and disease, but ancillary only thereto, in suggesting the remedy which shall be found to contain this totality, or in determining the choice between several candidates for the post of the *similimum*. For our present purpose, in giving an *à priori* view of medicines, these characteristics have been aptly compared to personal peculiarities which, as much as outline and feature, conduce to the recognition of any one, and, in the case of there being others like him, aid in his distinguishment. I shall indeed lay much more stress upon outline and feature, complexion and manner; but I shall not neglect any "trick o' the voice," any habitual working of the lips or twitch of the eyelids which may serve in cases of difficulty to identify the individual. Nor may we despise such characteristics because of their seeming triviality. It may appear a small thing (the illustration is Dr. Guernsey's) to say that Cina is indicated in metrorrhagia when the patient is given to picking the nose; but when we remember the occasional dependence of this symptom on the presence of worms in the intestines, the reality of the indication becomes obvious.

Our method will be as follows:—After defining what it is that we are administering under the common names of the drugs—Aconite, Arsenic, and so forth—I shall refer you to the authorities for our knowledge of each. Under this head will be mentioned the original provings, and any special sources of information which may exist. Then I shall proceed to describe the pathogenetic influence, and to indicate the therapeutic uses of the drug. A list of allied medicines will next be given, with which the drug under study may be profitably compared. Lastly, I shall touch upon the question of dose, but only so far as to state whether the lower or higher dilutions seem to have been most efficacious in the treatment of disease. The question of the relative superiority of these is a moot one among us; and I have no pretensions, nor is this the occasion, to pronounce upon it. But it is a matter of fact that certain remedies belong almost exclusively to the partisans of infinitesimals, while others are in chief favour among those who prefer appreciable fractions of the drug.

Such facts I shall state for what they are worth. They, together with the individual items of experience on record, are the *data* from which all future generalisations must be drawn ; and in the meantime they are hints for practical use.

Here, as elsewhere, you will desire to know whether homœopathic literature possesses any books which you may profitably study in connection with the present course of instruction. There are two well known among us, the *Traité méthodique et pratique de matière médicale et de thérapeutique* of Dr. Espanet of Paris (1861), and the *New and Comprehensive System of Materia Medica and Therapeutics* of our indefatigable American colleague, Dr. Hempel (2nd ed., 1865). The former is brilliant, but its pathogenetic statements have rather too much assumption about them. The latter contains much information ; and, with pruning of many redundancies, and supplying of more deficiencies,* would be a valuable treatise. No commendation of mine, moreover, is needed in introducing to you the posthumous *Lectures on Materia Medica* of the lamented Carroll Dunham, now just given to the world. A smaller and humbler work, yet one in which I cannot but feel an interest, since it is my own, is the *Manual of Pharmacodynamics*. The third edition of this book, containing the lectures given by me at our Hospital in 1875-6, will be the text-book of our present course, which will embrace all that is contained there, with such additions, modifications, and re-arrangements as the progress of knowledge requires.

And here, as there, I must state that what I shall say in no way professes to be a substitute for the *Materia Medica* itself. It is rather an introduction at first, and then a guide and companion to it. The pathogeneses of the medicines, given in detail therein, I shall present in the way of descriptive outline, of analysis, or (wherever possible) of physiological expression. But the *Materia Medica* itself is the mine where the treasure, however rough its form, really lies. To indicate the vein where each mineral may be worked, to estimate the value of its yield, to exhibit such of its products as have been obtained and smelted, and especially such as have been applied to use,—this will be my task. If there are any who cannot or will not work the mine for themselves, the knowledge of what I show them out of it will be better than total ignorance. In most of my hearers I hope that the specimens I exhibit will excite a thirst for research on their own part, rather than a less worthy content with the result of the labour of others.

How best to study the *Materia Medica*—*i.e.*, the catalogues

* See review in *Brit. Journ. of Hom.*, xxiii.

of pathogenetic symptoms—is a question of importance. I would advise you to read three excellent papers on the subject. The first is by Dr. Constantine Hering, in the second volume of the *British Journal of Homœopathy*; the second by Dr. Dunham, in his tractate entitled *Homœopathy the Science of Therapeutics*, first published in 1863, and now forming the eponymous essay of the first volume of his collected works; the third by Dr. Madden, read before our Congress of 1870, and printed in the *Monthly Homœopathic Review* of that year. The methods they respectively advocate may be described as those of simple comparison, of physiological analysis, and of pathological relation. Dr. Hering would have us learn to know our medicines as a forester comes to know every tree within his range. Dr. Dunham would impress each upon our minds by penetrating to its inmost character. Dr. Madden would group them around morbid conditions, and study their pathogenetic effects in reference thereto, so that “the knowledge of the entire action of any medicine should be left as the ultimate result of a completed study of pathological phenomena.” All these methods have their value. The two former are best suited to those who are yet students, the last to those who are already in practice. Perhaps the comparative method of Dr. Hering may go best with these lectures, as I shall be myself occupying Dr. Dunham’s ground in delivering them.

A few words in conclusion upon the nomenclature and pharmaceutics I shall employ in these lectures, which will necessarily be those of homœopathy.

1. If any of you have read much of homœopathic literature, you must have been surprised at our many singularities in the matter of nomenclature. That the liquid now known as hydrochloric acid we style muriatic might be passed over as of little importance. But it seems strange that we should talk of China and Chininum sulphuricum instead of Cinchona and sulphate of quinine, and of Mercurius instead of Hydrargyrum. Still more strange is our retention of the old names kali and natrum, so long superseded in ordinary parlance by potassa and soda. And the apparent uncouthness is crowned by the phraseology used to designate the chemical salts, *e.g.*, Ammonium carbonicum, Antimonium tartaricum, Argentum nitricum, Calcareo phosphorica, Magnesia muriatica, and Natrum sulphuricum. Perhaps, at a first glance, all may not recognise under these titles their old acquaintances carbonate of ammonia, tartar emetic, nitrate of silver, phosphate of lime, chloride of magnesium, and sulphate of soda.

The *explanation* of this singularity is easy to find. At the time when homœopathy first arose, our present nomenclature prevailed throughout Europe. The medicines were proved, and took their places in the *Materia Medica*, under their ancient names. In this form the converts to the new doctrine received them: under these titles they spoke and thought of them. It would have seemed little less than sacrilege to alter the familiar names because modern chemistry had rechristened its compounds. Perhaps if Germany, the mother-land of our system, had revised the nomenclature of her drugs, other countries might have followed in her wake. But the German *Pharmacopœia* of either school still retains the ancient names. And so we also have them unaltered; and even name our newly proved medicines—*e.g.*, Kali bichromicum—according to their analogy.

But the explanation does not in this case contain in itself the *justification* of the usage. If you should feel disposed to protest against the retention of such obsolete and often cacophonous forms, I cannot but sympathise with you; for I myself felt of much the same mind in the early days of my homœopathy, and I retain my sentiment still. I have contended myself, however, with things as they are for the following reasons:—

1st. Our nomenclature is of historical value; it tells of the place of our origin, of the rock whence we were hewn and the pit from which we were dug. The preservation of names involving history is much thought of elsewhere; one must attach some little importance to it here.

2nd. It affords a bond of union to homœopaths in all parts of the world. It is like the Latin language to the learned in the middle ages. Each country is free to revise its pharmacological nomenclature independently; and, to a great extent, has done so. If a German or French book is translated into English, many of the names of the drugs have to be explained. It is not so in homœopathic literature: we speak a language universally intelligible.

3rd. It is like the Latin tongue, not to the learned only, but to the Church. While the Roman Empire was one, the public Offices were, as a matter of course, recited in Latin. When it fell to pieces, and separate nations, each with its own language, began to rise out of the ruins, some may have desired that the Service-books should be rendered everywhere into the vernacular. But such a step would have been most unwise. The Church held on to her original and unalterable tongue, and would not commit her prayers to the ever changing

and endlessly varying dialects of the nations in her communion. The wisdom of her course is obvious; and the retention of our ancient nomenclature rests on the same grounds. Chemistry is perpetually and necessarily changing her names, and the adoption of her suggestions is not simultaneous in all countries. So, while each national Pharmacopœia speaks a drug-dialect of its own, homœopathy holds on to the changeless mother-tongue, and her words are comprehensible by all alike.

You will have anticipated me in suggesting that this parallel must ultimately tell the other way—that a time did come at last when the demand for vernacular Offices of worship was no longer unwise, but most just and righteous; and that so it must be here. I grant it fully. When chemistry has finally made up her mind as to the nature of the compounds she studies, and when the nomenclature she suggests has met with general acceptance, and has stood firm for many years, then it will be our duty to translate our present language into one understood of the people. To do so earlier would just be to quit our vantage-ground, and commit ourselves to the waves of change and confusion.

That this time has now come has been maintained with much ability by Dr. Hutchinson, in a paper on "Our Nomenclature" in the twenty-fourth volume of the *British Journal of Homœopathy*. I cannot, however, assent to his conclusions. When the latest edition of the British Pharmacopœia converts calomel and corrosive sublimate into the subchloride and perchloride of mercury, after they had so long been known as the chloride and bichloride respectively, I see no permanence yet in chemical nomenclature. For practical purposes, I think it better to go on calling them *Mercurius dulcis* and *Mercurius corrosivus*, as we have done from the beginning.

The principles of our nomenclature of the chemical salts are very simple. Instead of making two substantives of the base and the acid, putting the former into the genitive and the latter into the nominative case, we throw the acid into the adjectival form, with an ending in "ic" or "os." Thus, instead of *Magnesia carbonas*, we have *Magnesia carbonica*; instead of *Potassæ arsenis*, *Kali arsenicosum*. For the kaloid compounds we use the termination "at," as in *Kali iodatum*. The last revision of her nomenclature made by chemistry (in the larger use of the terminations "ous" and "ic" to express different degrees of oxidation), is a return in this direction.

II. So much for our nomenclature; and now a few words upon pharmaceuticals. I have no intention of entering into the minute details which belong rather to the chemist than to

the physician. I just want you to know what it is you are prescribing when you order this attenuation of a vegetable or that of a mineral substance. We have now an excellent *Pharmacopœia* :* and to this I refer you for the full information of which here I give you an outline.

The object of homœopathic pharmacy is so to prepare each substance that the whole of its active virtues shall be present in a form suitable for administration. In the case of vegetable substances this is always done, when practicable, by expressing the juice of the whole plant, and mixing it with alcohol in which the residue has been steeped for some hours. When the plant can only be procured in the dry state, or when but little juice is obtainable by pressure, a tincture is made from it by percolation. The resulting tincture in each case is arranged to contain the medicinal substance in the proportion of about one part in ten. This is what is dispensed as the "mother-tincture," and is ordinarily represented by the Greek ϕ or θ . From it are prepared the "dilutions," "potencies," or (as best called) "attenuations." The 1st is made by adding one part of the mother-tincture to nine of alcohol; the 2nd by mixing one part of the 1st with nine of alcohol; and so on up to the 6th. These dilutions are on what is called the "decimal scale;" and the 2nd, 4th, and 6th decimal obviously correspond with the 1st, 2nd, and 3rd of a centesimal scale, *i.e.*, in which the dilutions are prepared in the proportion of one to ninety-nine. This latter being the method originally in use, its nomenclature is preferred when practicable. So that throughout these lectures, when an attenuation is mentioned, you will understand that the centesimal scale is intended. When I mean the decimal, I will say so. The usefulness of this latter scale is that it gives us dilutions intermediate between ϕ and 1, and between 1 and 2, which are written 1^x and 3^x respectively. After 3 such intermediate stages are unnecessary, and the further dilution may always be proceeded with upon the centesimal scale.

The mineral substances used in our practice are differently prepared according as they are soluble or not. In the former case the dilutions are made with water, which is also the vehicle of the mineral acids. The metals themselves, and their insoluble salts, are prepared by the Hahnemannian process of *trituration*. This consists in rubbing up a grain of the substance with nine grains of sugar of milk to form the first trituration, a grain of this with nine grains more of sugar of

* *British Homœopathic Pharmacopœia*, published by the British Homœopathic Society. 1870. 2nd edition, 1876.

milk for the 2nd, and so on to the 6th. After the 6th decimal the further dilution is carried on according to the centesimal scale, and is commonly effected by solution. A grain of the 3rd trituration is dissolved in fifty drops of water, and to this are added fifty drops of alcohol. A drop of this fourth dilution is mixed with ninety-nine drops of alcohol for the fifth potency, and so on. Long ago, however, Dr. Madden advised* that all the potencies of insoluble substances should be prepared by trituration; and the recommendation is now very generally carried into effect.

Struck by the remarkable development of medicinal power obtained by this process of trituration—even such inert bodies as the metals becoming actively pathogenetic and curative—Hahnemann was led to employ it in the preparation of several vegetable substances, as lycopodium and charcoal, with the result of elevating them to a high rank as medicines. The process of trituration is also resorted to in the case of such products as coral and sponge, and (as an alternative to a tincture prepared by percolation) of such dry plants or portions of plants as Ipecacuanha and Nux vomica.

The globules or pilules used in homœopathic practice are small spheres of sugar of milk, prepared by immersion for some time in the tincture of the drug they are intended to represent. The former were introduced by Hahnemann to reduce still farther the quantity of the drug administered; the latter perform no such office, and are employed simply for convenience. Both labour under the objection of being second-hand preparations; and we cannot desire to furnish an additional element of uncertainty to a process already so perilously delicate as that of attenuation. Tinctures and triturations are the form in which our drugs are most generally used, and to my mind are greatly preferable to any other. The globule, however, is still a useful form in which to administer medicines to infants.

* *British Journal of Homœopathy*, v. 372-3.

LECTURE II.

SOURCES OF THE HOMŒOPATHIC MATERIA MEDICA:

In my introductory lecture I spoke briefly of the distinctive "Materia Medica"—technically so called—of Homœopathy. I stated that when this phrase is used in our literature, it is not to be understood of drugs themselves, but of that collection of their pathogenetic effects—of the derangements they are capable of causing in the healthy body, by means of which is worked the principle, "let likes be treated by likes." Some of these pathogenetic effects are observations of poisonings and overdosings, as recorded in general medical literature; but the great bulk of them are the result of "provings" of the various drugs on the healthy human body, or of their side effects (so to speak) when administered as medicines to the sick. Such collections of drug-symptoms are called "pathogeneses;" and they have been appearing from time to time in the school of Hahnemann ever since 1805. The history of the several publications containing them, and an analysis of the material presented in each, will constitute the account of the sources of the Homœopathic Materia Medica which I now design to bring before you.

1. The earliest volume of the series is that of Hahnemann's entitled *Fragmenta de viribus medicamentorum positivis, sive in sano corpore humano observatis*. It was written in Latin, as its title implies, and published at Leipsic in 1805. A copy of the original edition, and another of the more elegant form in which Dr. Quin edited the work in 1834, lie on the table before you.

The *Fragmenta de viribus* contains pathogeneses of twenty-seven drugs, which you will see enumerated in the list I now hand round, with the number of symptoms in each.

I.—*Fragmenta de Viribus.*

	Hahnemann.	Obs. of others.
Aconitum napellus	138	75
Acris tinctura (Causticum)	30	0
Arnica montana	117	33
Belladonna	101	304
Camphora	73	74
Cantharides	20	74
Capsicum annum	144	3
Chamomilla	272	3
Cinchona	122	99
Cocculus	156	6
Copaifera balsamum	12	8
Cuprum vitriolatum	29	38
Digitalis	23	33
Drosera	36	4
Hyoscyamus	45	290
Ignatia	157	19
Ipecacuanha	70	13
Ledum	75	5
Melampodium (Helleborus)	32	25
Mezereum	62	34
Nux vomica	257	51
Papaver somniferum (Opium)	82	192
Pulsatilla	280	29
Rheum	39	13
Stramonium	59	157
Valeriana	25	10
Veratrum album	161	106

You will notice that some of the symptoms of each drug are "observations of others." This does not mean that Hahnemann had as yet any fellow-observers. The "others" are in every case authors from whose writings he has cited. The symptoms for which he himself vouches are such as had come under his own observation as effects of poisoning or excessive dosing, and (in far larger proportion) those which he had obtained by provings on himself and others. "I have instituted experiments," he writes in the preface, "in chief part on my own person, but also on some others whom I knew to be perfectly healthy and free from all perceptible disease."

He gives no information as to his doses or mode of administration. We can shrewdly infer these, however, from the remarks on the proving of medicines made in his essay entitled *The Medicine of Experience*, which was published in the next year (1806). "In order," he writes, "to ascertain the effects of medicinal agents, we must give only one pretty strong dose to the temperate healthy person who is the subject of the experiment; and it is best to give it in solution. If we wish to ascertain the remaining symptoms which were

not revealed by the first trial, we may give to another person, or to the same individual, but to the latter only after the lapse of several days, when the action of the first dose is fully over, a similar or even a stronger portion, and note the symptoms of irritation thence resulting in the same careful and sceptical manner. For medicines that are weaker we require, in addition to a considerable dose, individuals that are healthy, it is true, but of very irritable delicate constitutions." It would thus appear that the symptoms of the *Fragmenta* obtained from provings were the results of single full doses of the several drugs.

Of the twenty-seven drugs which this volume shows to have received Hahnemann's earliest attentions, twenty-two were carried on into his *Reine Arzneimittelehre*. Two—Cuprum and Mezereum—did not reappear till the second edition of his *Chronischen Krankheiten*; and three—Cantharis, Copaiba, and Valerian—were not again taken up by himself.*

2. Six years now elapsed before Hahnemann published any more pathogeneses. But all this time he must have been diligently working, both in provings and literary researches; for in 1811 appeared the first volume of his *Reine Arzneimittelehre*, containing twelve medicines, six of which were new, the pathogeneses also of those which had already appeared being considerably increased. In 1816 a second volume was published, containing the pathogenetic effects of eight medicines, together with those ascribed to the magnet. This was followed in 1817 by a third, with eight medicines; in 1818 by a fourth, with twelve; in 1819 by a fifth, with eleven; and in 1821 by a sixth, with ten.

The first edition of the *Materia Medica Pura* (so we render *Latiné* Hahnemann's name for his book), which I have now described, is a very rare work. I am glad to be able to lay a copy of it before you to-day; and the table which I now put into your hands will show you its contents as I have done those of the *Fragmenta de viribus*.

* Dr. Waring, in his *Bibliotheca Therapeutica* recently published by the New Sydenham Society, speaks of the *Fragmenta* as "the basis of the homœopathic system. However much," he adds, "one may be inclined to differ from the inferences or conclusions drawn by the author from his facts, all must admire the zeal and labour bestowed by Hahnemann in his investigations, as set forth in this work."

II.—*Reine Arzneimittellehre. 1st ed.*

VOL. I. 1811.

	Hahn.	Others.
Belladonna	176	474
Dulcamara	31	92
Cina	23	15
Cannabis sativa	15	54
Cocculus	224	6
Nux vomica	908	53
Opium	114	464
Moschus	0	39
Oleander	10	18
Mercurius	232	110
Aconite	206	108
Arnica	175	55

VOL. II. 1816.

Causticum	99	176
Arsenicum	294	368
Ferrum	228	36
Ignatia	570	54
Magnes	243	51
" , North Pole	236	14
" , South Pole	237	48
Pulsatilla	971	102
Rheum	79	115
Rhus	409	334
Bryonia	408	102

VOL. III. 1817.

Chamomilla	448	33
Cinchona	391	691
Helleborus	90	108
Asarum	14	254
Ipecacuanha	144	87
Scilla	85	201
Stramonium	83	463
Veratrum album	307	404

VOL. IV. 1818.

Hyoscyamus	103	436
Digitalis	63	355
Aurum	110	203
Guaiacum	26	116
Camphor	104	240
Ledum	182	130
Ruta	23	201
Sarsaparilla	34	111
Conium	87	286
Chelidonium	23	128
Sulphur	112	49
Argentum	48	152

VOL. V. 1819.

	Hahn.	Others.
Euphrasia	25	90
Menyanthes	28	269
Cyclamen	3	197
Sambucus	19	97
Calcarea acetica	0	255
Muriatic acid	57	217
Thuja	222	287
Taraxacum	0	209
Phosphoric acid	160	411
Spigelia	95	543
Staphisagria	210	398

VOL. VI. 1821.

Angustura	93	209
Manganum	89	242
Capsicum	277	69
Verbascum	32	143
Colocynth	17	210
Spongia	89	227
Drosera	124	155
Bismuth	4	97
Cicuta	36	205
Stannum	95	457

There are, you will see, sixty-one medicines contained in these volumes, besides the magnet. Twenty-two of them are, as I have said, transferred from the *Fragmenta*, but always with their pathogeneses enlarged: the remaining thirty-nine are new. There is an important change now manifest, moreover, in the "observations of others." These had hitherto consisted entirely of citations from authors; and the description still holds good of them as they appear in the first volume of the *Reine Arzneimittellehre*. In the five years, however, which elapsed before the second was published, Hahnemann—now in Leipsic, and at the zenith of his fame—had gathered round him a band of disciples, and enlisted them in the task of proving. Of the eight medicines which appear in the second volume, seven have contributions from this source; and henceforth their presence becomes the invariable rule, and they form an increasing proportion of the bulk of the pathogeneses.

It is right that the names of the men who thus combined with Hahnemann to prove drugs on their own persons, and so to lay, at the sacrifice of their own ease, the foundation

of the future *Materia Medica*, should be on record. They are as follows, arranged alphabetically :—

Ahner.	Hartmann.	Mossdorf.
Anton.	Hartung.	Rosazewsky.
Baehr.	Haynel.	Rückert (two).
Becher.	Hempel.	Stapf.
Clauss.	Herrmann.	Teuthorn.
Cubitz.	Hornburg.	Urban.
Franz.	Kummer.	Wagner.
Gross.	Langhammer.	Wahle.
Günther.	Lehmann (two).	Walther.
Gutmann.	Meyer.	Wenzel.
Fr. Hahnemann.	Michler.	Wislicenus.
Harnisch.	Möckel.	

Of these thirty-seven names, some occur comparatively rarely among the provers, but some with great frequency. Of the latter I may specify Franz, Gross, Hahnemann's son Friedrich, Hartmann, Herrmann, Hornburg, Langhammer, Rückert the elder, Stapf, Teuthorn, and Wislicenus. From the accounts we have of these men* we seem generally warranted in full dependence on the symptoms they have furnished. Of the few exceptions to this rule, the mental and moral symptoms of Langhammer are the chief. This prover, deformed in body and unfortunate in his circumstances, is represented by those who knew him as so depressed and altogether morbid in disposition, that his psychical state could at no time be fairly ascribed to the medicine he was taking. His moral symptoms are, as Dr. Roth has shown,† of a very similar character under every drug he proved; and they must, I think, be held as doubtful unless confirmed from purer sources. It has also been noted that every drug proved by Stapf and von Gersdorff excited in the former erotic manifestations, in the latter flatuosities; so that such symptoms in them are of dubious connection with the medicaments taken.‡

Of the pains taken by Hahnemann to ensure the genuineness of his symptom-lists we have abundant evidence. He himself writes thus, in the preface to the latest edition of his first volume :—

“In those experiments which have been made by myself and my disciples, every care has been taken to secure the

* See *Allg. Hom. Zeit.*, xxxviii. and xxxix., and *Brit. Journ. of Hom.*, xxxii., 451.

† See *Brit. Journ. of Hom.* xix, 625.

‡ See also my remarks on F. Hahnemann's contributions to the pathogenesis of *Mercurius solubilis*.

true and full action of the medicines. Our provings have been made upon persons in perfect health, and living in contentment and comparative ease.

“When an extraordinary circumstance of any kind—fright, chagrin, external injuries, the excessive enjoyment of any one pleasure, or some event of great importance—supervened during the proving, then no symptom has been recorded after such an event, in order to prevent spurious symptoms being noted as genuine.

“When such circumstances were of slight importance, and could hardly be supposed to interfere with the action of the medicine, the symptoms have been placed in brackets, for the purpose of informing the reader that they could not be considered decisively genuine.”

To this we may add the testimony of one of the later accessions to the band of disciples—one who still lives, the venerated Constantine Hering, of Philadelphia:—

“Hahnemann’s way of conducting provings was the following. After he had lectured to his fellow-workers on the rules of proving, he handed them the bottles with the tincture, and when they afterwards brought him their day-books, he examined every prover carefully about every particular symptom, continually calling attention to the necessary accuracy in expressing the kind of feeling, the point or the locality, the observation and mentioning of everything that influenced their feelings, the time of day, &c. When handing their papers to him, after they had been cross-examined, they had to affirm that it was the truth and nothing but the truth to the best of their knowledge, by offering their hands to him—the customary pledge at the universities of Germany instead of an oath. This was the way in which our master built up his *Materia Medica*.”

Of the doses used and the mode of administration employed in these later provings, we have no more information than we had as to those of the *Fragmenta*. From the few glimpses we get here and there it seems probable that insoluble substances were proved in the first trituration, and vegetable drugs in the mother tincture—repeated small doses being taken until some effect was produced.

3. In 1822 Hahnemann began to issue a “second, augmented edition” of his *Arzneimittellehre*. It appeared volume by volume, like the first, in the years 1822, 1824, 1825 (two), 1826, and 1827 respectively. Each contained the same list of medicines as before, save that in the sixth *Ambra* and *Carbo animalis* and *vegetabilis* were introduced for the first time.

Of the extent to which the augmentation has been carried you will best form an estimate by looking at the table I now pass round.

III.—*Reine Arzneimittellehre.*

Medicine.	1st Edition.		2nd Edition.	
	Hahn.	Others.	Hahn.	Others.
Acidum muriaticum	57	217	61	218
Acidum phosphoricum	160	411	268	411
Aconite	206	108	246	183
Ambra	—	—	141	349
Angustura	93	209	96	203
Argentum	48	152	64	175
Arnica	175	55	278	314
Arsenicum	294	368	431	517
Asarum	14	254	16	254
Aurum	110	203	173	205
Belladonna	176	474	380	1042
Bismuth	4	97	11	97
Bryonia	408	102	537	244
Calcareo acetica	0	255	34	236
Camphor	104	240	105	240
Cannabis	15	54	42	266
Capsicum	277	69	275	69
Carbo animalis	—	—	159	32
Carbo vegetabilis	—	—	276	447
Causticum	99	176	106	201
Chamomilla	448	33	461	33
Chelidonium	23	128	28	128
Cicuta	36	205	36	205
Cina	33	15	40	247
Cinchona	391	691	427	716
Cocculus	224	6	330	224
Colocynthis	17	210	26	224
Conium	87	286	89	286
Cyclamen	3	197	5	197
Digitalis	63	355	73	355
Drosera	124	155	132	155
Dulcamara	31	92	52	297
Euphrasia	25	90	37	90
Ferrum	228	36	249	41
Guaiacum	26	116	29	116
Helleborus	90	108	92	196
Hepar sulphuris	182	24	282	24
Hyoscyamus	103	436	104	478
Ignatia	570	54	620	54
Ipecacuanha	144	87	146	87
Ledum	182	130	186	152
Magnes— <i>sud</i> und <i>nord</i>	716	113	861	372

Medicine.	1st Edition.		2nd Edition.	
	Hahn.	Others.	Hahn.	Others.
Manganum	89	242	89	242
Menyanthes	28	269	28	267
Mercurius	232	110	663	761
Moschus	0	39	2	150
Nux vomica	908	53	1198	69
Oleander	10	18	16	336
Opium	114	464	119	519
Pulsatilla	971	102	1046	117
Rheum	79	115	94	115
Rhus	409	334	575	361
Ruta	23	201	26	262
Sambucus	19	97	20	99
Sarsaparilla	34	111	34	111
Scilla	85	201	86	202
Spigelia	95	543	130	542
Spongia	89	227	156	235
Stannum	95	457	204	456
Staphisagria	210	398	283	438
Stramonium	83	463	96	473
Sulphur	112	49	755	62
Taraxacum	0	209	0	264
Thuja	222	287	334	300
Veratrum	307	404	315	401
Verbasicum	32	143	32	141

It will be noticed that the chief increase has taken place in the medicines of the first volume, and here mainly in the "observations of others." This is easily accounted for. In the first edition, as we have seen, this volume contains no contributions from fellow-provers. But when its medicines reappear in the second edition, their pathogeneses have been freely supplied from this source, and are largely augmented accordingly.

Hahnemann's own additions, moreover, occur most largely in the medicines of the earlier volumes of the series. Four only of those contained in the fifth volume, and two only of the sixth, have their pathogeneses notably increased in his section of the symptoms. We may be glad that it is so, for Hahnemann had now been driven from Leipsic, and since 1821 had been living in solitude and obscurity at Cœthen. Entering upon the eighth decade of his life, he was too old for further experimentation on his own person; and he had no

other material at hand. We shall see, when we come to the pathogeneses of the *Chronic Diseases*, that his main source of symptoms at this time was the supposed effect upon the sick of the medicines he administered to cure their chronic maladies. We shall see, moreover, that his avowed prepossessions and actual mode of practice in this matter make all symptoms so obtained by him of dubious value. We are glad, therefore, that most of his additions to the second edition are referable to the Leipsic instead of the Cœthen period, and may be counted as homogeneous with the unmistakeably genuine matter of the first edition.

It is time now that I should speak of the citations from authors, which occupy so large a space in many of the pathogeneses, and are entirely absent from but very few. This table will exhibit the number of symptoms due to such sources in the various pathogeneses of the *Reine Arzneimittellehre*.

IV.—Citations from Authors.

Acidum muriaticum	22	Helleborus	34
Aconite	110	Hepar sulphuris	10
Argentum nitricum	8	Hyoscyamus	355
Arnica	47	Ignatia	15
Arsenicum	382	Ipecacuanha	41
Asarum	6	Ledum	4
Aurum	6	Magnes	195
Belladonna	475	Manganum	1
Camphor	93	Menyanthes	3
Cannabis	47	Mercurius	139
Capsicum	4	Moschus	39
Carbo animalis	3	Nux vomica	48
Chamomilla	3	Oleander	10
Chelidonium	6	Opium	518
Cicuta	37	Pulsatilla	25
Cina	11	Rheum	14
Cinchona	141	Rhus	49
Cocculus	6	Ruta	3
Colocynth	29	Sambucus	1
Conium	155	Sarsaparilla	4
Cyclamen	1	Scilla	30
Digitalis	131	Spigelia	17
Drosera	3	Stannum	5
Dulcamara	83	Stramonium	383
Euphrasia	2	Sulphur	10
Ferrum	37	Veratrum	247
Guaiaicum	3		

The medicines which are omitted from the list, as having no citations from authors attached to them, are Acidum phos-

phoricum, Ambra, Angustura, Bismuth, Bryonia, Calcarea acetica, Carbo vegetabilis, Causticum, Spongia, Staphisagria, Taraxacum, Thuja, and Verbascum—thirteen only. Of the remainder, you will see that many are abundantly supplied from this source, whose value it is therefore of importance to ascertain.

I have said that these symptoms are taken from observations of poisoning or of over-dosing. But it makes a great difference to which of the two classes they belong. If they are from poisoning, their subject will ordinarily be a healthy one, and all is well. If they are from over-dosing—real or supposed—they must have occurred in sick persons who were taking the drugs as medicines; and here an element of uncertainty comes in. There can be no doubt, indeed, that, with proper precautions, the pathogenetic effects of a drug may be observed upon patients taking it for their ailments almost as well as upon healthy subjects. Some of our best records of the effects of Atropia—as those of Grandi and Michéa—have been made from epileptics treated by it. The disease must be of a definite and limited character, consistent with fair general health; all symptoms conceivably resulting from it, or occupying the same seat, must be excluded, and likewise all phenomena previously observed in or by the patient during his ill health.

Nor did Hahnemann fail to recognise the necessity of such precautions to obtain even a tolerable result, as is evident from his preface to the first volume of the *Reine Arzneimittelehre*. He there writes:—"Among the observations of others which are mingled with the following symptoms some were obtained from sick persons. However, inasmuch as they were chronic patients, with symptoms well known, these last need not be confounded with the effect produced by the medicines, as Greiding has shown and carefully exemplified. Symptoms observed upon such patients, therefore, are not without value, and may at any time serve for corroboration when analogous or identical symptoms appear among the pure effects of the drugs in healthy persons." He also says, in his *Medicine of Experience* (1806): "how, even in diseases, amid the symptoms of the original disease, the medicinal symptoms may be discovered, is a subject for the exercise of a higher order of inductive minds, and must be left solely to masters in the art of observation." This statement stands unchanged in the last edition of the *Organon* (1833); and a note is added to the words "medicinal symptoms," explaining them to be such as "during the whole course of the disease might have been

observed only a long time previously, or never before ; consequently new ones belonging to the medicines."

We, then, acknowledging Hahnemann a "master in the art of observation," and seeing how sound were the canons he professed, might have taken without question the symptoms he has cited in his pathogeneses, even though they were obtained from the sick. But, unfortunately for our trustfulness, he has given us by his references the means of testing his practice in the matter ; and the result is by no means favourable.

Let us first take Greding, as one whom Hahnemann mentions by name as a typical instance of care in distinguishing between medicinal and morbid symptoms. It is the way of this writer to give a series of cases of the same disease treated by a particular drug, recording all the phenomena noticed in the patient during its administration. He sometimes, but not always, in summarising the results, indicates which of the symptoms recorded may or may not be fairly referred to the drug. Now, when he does so, Hahnemann does not necessarily follow him. When treating some epileptics with Cuprum, one, immediately after swallowing the pill, lost sense and thought for a short time ; and another, who suffered from piles, had hæmorrhage from them for four days together. These, Greding with good sense writes, "huic remedio *nequâquam* tribui posse videntur." But they appear (S. 15 and 208) in Hahnemann's pathogenesis as effects of Cuprum. Again, this author narrates the treatment of twenty-three epileptics and epilepto-maniacs by Belladonna. One would expect that any symptoms taken from such a source would steer very clear of epileptiform and maniacal phenomena. Yet from one of them we have S. 1322 ("with a sudden cry, he trembles in the hands and feet"), which Dr. Russell, in his *Clinical Lectures*, cites as contributing to the evidence for the homœopathicity of Belladonna to epilepsy ;* and the forms of mental disturbance standing as S. 1375, 1376, 1377, and 1387 are all taken from maniacs or melancholics. Once more, Greding treats three cases of jaundice with Belladonna. Two of them have green stools during the transition from clayeyness to their natural tint ; but this phenomenon stands (S. 703, 704) among the effects of the drug on the healthy. Lastly, I would refer you to the account I have given in the seventeenth volume of the *Monthly Homœopathic Review* of the cases treated by Greding with Aconite, from which Hahnemann has taken symptoms. One was a female maniac, and, not unnaturally, showed signs of her disorder at the monthly period. Hahnemann tells us

* See also S. 1374.

(S. 252) that Aconite causes "rage at the time of the appearance of the menses." Another has, as part of a chronic ailment, a troublesome cough. S. 353 belongs to him, and speaks of "frequent cough" as if a part of the effect of the drug.

I need go no farther to show that the use Hahnemann has made of Greding's records has no countenance from that observer himself, and is of a most questionable character. Let us take another author of the same stamp, the famous Baron Störck. His cases treated by Aconite are summarised in the paper to which I have already referred. In one of these a "considerable tumour in the left iliac region" diminished and finally disappeared under the action of the drug, with an accompanying discharge from the vagina of a viscous yellowish matter in abundance. Hahnemann (S. 251) sets down "profuse, tenacious, yellowish leucorrhœa" as caused by Aconite! But the most curious facts in relation to this author belong to his celebrated reports of the use of Conium in cancer. He repeatedly states that no bad effects were observed from the doses he gave; and his recorded cases, as well as our subsequent knowledge of the drug, seem to bear out the assertion. Hahnemann, however, cannot believe this; and so the pathogenesis of Conium contains thirty-three symptoms, to which the name of Störck is attached. The following are specimens of them. A patient with mammary cancer coughs and brings up pus before she dies. As might have been expected, her lungs are found invaded by the disease; but "purulent expectoration" and "a pain shoots into the ulcers when coughing" are contributions from her to the pathogenesis of Conium. Another sufferer with the same disease gets a chill in the street while selling fruit on a cold, windy day, has colic and purging, and finally dysentery, of which she dies. "Violent belly-ache with chill" and "weakening diarrhœa" are extracted from the narrative as effects of the Conium she was taking. Another had a group of symptoms deemed traceable to overloading of the stomach, and which all disappeared after an emetic; but they swell the pathogenesis of Conium.

I could mention numerous facts of the same order. Most of the cited symptoms of Arnica were observed upon injured persons treated by it, or paralytics recovering under its use, and they belong, as a rule, solely to the bruised or powerless parts. To Antimonium crudum are credited a number of phenomena which are obviously the mechanical effects of the violent vomiting caused by it. All the bad results ascribed to suppressing agues by bark, as dropsy, jaundice, phthisis

and the like, are given us as pure effects of Cinchona, though they never occurred in any but aguish subjects. The critical evacuant phenomena with which Dulcamara, in the hands of Carrère, accomplished the cure of gout, rheumatism, cutaneous disease, and suppression of the latter or of the secretions—the eruptions, diarrhœas, sweatings, and urinary depositions which accompanied the subsidence of the symptoms—are set down by Hahnemann as pure pathogenetic effects of the drug. It is needless to go farther. The principles on which he selects the true medicinal symptoms from among those of the disease are not such as we can approve at this day.

It has been suggested that Hahnemann must have employed others in this part of his collection, and hence is not chargeable with their errors. I wish it could be proved so to have been; but there is an entire lack of evidence for the supposition. I believe that the real explanation lies in the exaggerated notions he was led to entertain of the potency of drugs. In the later *Organon*, he lays down the canon (§ cxxxviii) that “all the sufferings, accidents, and changes of the health of the experimenter during the action of a medicine (provided the proper conditions are complied with) are solely derived from this medicine, and must be regarded and registered as belonging peculiarly to this medicine, as symptoms of the medicine, even though the experimenter had observed, a considerable time previously, the spontaneous occurrence of similar phenomena in himself.” He seems to have entertained the same principle in his mind as regards the administration of drugs in disease, and to have considered “all the sufferings, accidents, and changes of health” of the patient as “solely derived from the medicine” he was taking.

It is clear, then, that before you can use with any reliance the symptoms cited by Hahnemann from authors, you must know whether they are taken from narratives of poisoning of the healthy, or whether they were observed upon the sick; and if of the latter kind, under what circumstances they appeared. In Dr. Allen's *Encyclopædia*, and in the new translation of the *Reine Arzneimittellehre* issued by the Hahnemann Publishing Society, are contained the results of an examination of the originals of all Hahnemann's cited symptoms. Under the head of the authority for each is given all available information regarding the circumstances under which the observation was made. The symptoms themselves, thus illuminated to their utmost, are also corrected, or (in Dr. Allen's work) bracketed as dubious, whenever required; so that you will know exactly what you are about in making use of them.

4. I have only a few words to say upon the two remaining volumes of *Reine Arzneimittellehre* which stand upon the table. They are the commencement of a third edition, and bear the dates of 1830 and 1833 respectively. This new edition was not wanted, and it stopped there.

The two volumes contain the same medicines as before, save that Causticum is omitted from the second, having been transferred to the *Chronic Diseases*, the first edition of which was now published. The pathogeneses are somewhat increased in most instances. When the new symptoms are but thirty or forty in number, they are usually Hahnemann's own, *i.e.*, observed upon the sick. When they are more numerous, they will be the result of some fresh provings, which are mentioned in the preface. But the chief change which has taken place has been the amalgamation of all the symptoms of Hahnemann's own observations with those of others into one continuous schema. This was done, Dr. Hering tells us, under pressure from his disciples, and against his own judgment. However, it continued to characterise all his pathogeneses from this time forward.

5. Our attention is now claimed by another collection of pathogeneses from the same author—those contained in the work entitled *Die chronischen Krankheiten*, that is, Chronic Diseases.

You will remember that in 1821 Hahnemann had been compelled to leave Leipsic, and, in difficulty where to find a place in which he could practise in freedom, had been offered an asylum in the little country town of Cœthen. Thither he repaired, and there he remained till his removal to Paris in 1835. He now ceased to attend acute disease, save in the family of his patron, the reigning Duke. But his fame brought him for consultation chronic sufferers from all parts; and the varied, shifting, and obstinate morbid states under which so many men and women labour were pressed closely upon his attention. It is not my place here to tell you of the facts and reasonings which led him to his celebrated theory of chronic disease, namely, that it was always the outcome of one of three infections—the psoric, the syphilitic, and the sycotic. The point of interest to us at present is, that to meet the multiform disorders induced by the first of these miasms it seemed to him that a new set of remedies were required. For, in the years from 1828 to 1830, there appeared from his pen the four volumes, now before you, of the first edition of the *Chronischen Krankheiten*; the last three of which (the first being devoted to an exposition of his theory) contained pathogeneses of

medicines hitherto strange to his *Reine Arzneimittellehre*, and (in some cases) to any *Materia Medica* whatever.

These new medicines are seventeen in number, and are as follows :

Ammonium carbonicum.	Natrum carbonicum.
Baryta carbonica.	Natrum muriaticum.
Calcarea carbonica.	Nitri acidum.
Graphites.	Petroleum.
Iodium.	Phosphorus.
Kali carbonicum.	Sepia.
Lycopodium.	Silica.
Magnesia carbonica.	Zincum.
Magnesia muriatica.	

All these, save Kali carbonicum and Natrum muriaticum, are contained in the second and third volumes of the work, and follow in the alphabetical order of their (Latin) names. The fourth volume was evidently an after-thought. It contains—in this succession—Carbo animalis and vegetabilis, Causticum, Conium, Kali carbonicum, Natrum muriaticum, and Sulphur; five of which medicines will be recognised as having already appeared in the *Reine Arzneimittellehre*.

Another difference, moreover, is manifested in the seven medicines of the fourth volume. The pathogeneses of those of the second and third are introduced without a word of explanation, and no fellow-observers are acknowledged. But of the two new medicines of the fourth volume—Kali carbonicum and Natrum muriaticum—we are told that two persons co-operated in obtaining the pathogenesis of the one and three in that of the other, and that the symptoms of the latter were produced on healthy persons taking globules saturated with the 30th dilution. Fresh associates also are acknowledged in the case of Conium. The difference evidently is that the first list of medicines was compiled, and their symptom-lists completed, as part of the original scheme of the work; but that their publication brought fellow-workers to Hahnemann's aid, and thus—and through the later recognition of other medicines as "anti-psorics"—evoked the additional volume. This, indeed, bears the date of 1830, while the other three were all published in 1828.

In estimating, then, the character and value of the pathogeneses of the first edition of the *Chronischen Krankheiten*, I must speak of those of the second and third volumes separately from those of the fourth, as belonging to different

categories. The last, indeed, so entirely correspond with the distinctive features of the second edition of the work, that I shall say nothing of them till I come to that.

The pathogeneses of the fifteen drugs contained in the second and third volumes appear (as I have said) without a word of explanation as to how the symptoms were obtained, and without acknowledgment (as there is in the *Reine Arzneimittellehre*) of fellow-observers. The absence of any co-operation on the part of others is further to be inferred from what we are told of the first announcement of the work. After six years of solitude at Cœthen, Hahnemann "summoned thither his two oldest and most esteemed disciples, Drs. Stapf and Gross, and communicated to them his theory of the origin of chronic diseases, and his discovery of a completely new series of medicaments for their cure." So writes Dr. Dudgeon. This was in 1827. That he should now first reveal these new remedies, and in the following year should publish copious lists of their pathogenetic effects, confirms the inference to be drawn from his position and from his silence as to fellow-observers. He was himself between seventy and eighty years old, and it is hardly likely that he did anything in the way of proving upon his own person. We are compelled to the conclusion that he drew these symptoms mainly—if not entirely—from the sufferers from chronic disease who flocked to his retreat to avail themselves of his treatment.

The prefatory notices to the several medicines still further substantiate this view, and throw some light on the doses with which the symptoms were obtained. He recommends all the medicines to be given in the dilutions from the 18th to the 30th (save Magnesia muriatica and Natrum carbonicum, of which he advises the 6th and 12th respectively); and repeatedly makes some such remark as this:—"For a long time past I have given the 6th, 9th, and 12th potencies, but found their effects too violent." Occasionally, too, he must have used the second and third triturations; as he speaks of having begun by giving a "small portion of a grain" of these, but, as this was an indefinite quantity, having subsequently dissolved and attenuated them. He mentions cases, moreover, in which he treated itch with Carbo vegetabilis and Sepia of the latter strength.

We conclude, therefore, that it is these "violent effects" of the attenuations from the second to the twelfth, experienced by the sufferers from chronic disease who took them, which make up the bulk—if not the whole—of the symptoms of the first edition of the *Chronischen Krankheiten*.

6. The second edition of the work was published in successive parts—five in all—between 1835 and 1839.* Besides the twenty-two medicines of the first edition it contains twenty-five others, of which thirteen are new, and twelve had already appeared in the *Reine Arzneimittellehre*. The new ones are—

Agaricus.	Cuprum.
Alumina.	Euphorbium.
Ammonium muriaticum.	Mezereum.
Anacardium.	Nitrum.
Antimonium crudum.	Platina.
Borax.	Sulphuris acidum.
Clematis.	

The old ones are—

Arsenicum.	Hepar sulphuris.
Aurum.	Manganum.
Colocynth.	Muriatis acidum.
Digitalis.	Phosphori acidum.
Dulcamara.	Sarsaparilla.
Guaiacum.	Stannum.

The pathogeneses appear in one continuous list, as in the third edition of the *Reine Arzneimittellehre*. Those which had already seen the light have (generally) large additions: for all he acknowledges contributions from fellow-observers,† and for many cites symptoms from the extant literature of his day.

The tables I now lay before you exhibit these facts, and enable the history and growth of each medicine to be ascertained at a glance.

* Parts 1 and 2 in 1835; parts 3, 4, and 5, in 1837, 1838, and 1839 respectively.

† These associates are fewer than they were in the days of the *Reine Arzneimittellehre*, and are taken from a fresh set of men. Their names are Adam, Apelt, Bethmann, Brunner, Bute, Caspari, Foissac, von Gersdorff, Goullon, Hartlaub, Haubold, Hering, Jahr, Lesquereur, Kretschmar, Nenning, Piepors, Röhl, Rummel, Schönke, Schreter, Schweikert, Seidel, Tietze, Trinks, Wahle, Woost. Many of these names appear only once or twice. Wahle's is the only one found also in the older work.

Name.	Materia Medica Pura.	Chronic Diseases Ed. I.	Chronic Diseases Ed. II.
Agaricus	—	—	715
Alumina	—	—	1161
Ammonium carbonicum	—	159	789
Ammonium muriaticum	—	—	397
Anacardium	—	—	622
Antimonium crudum	—	—	471
Arsenicum	1079	—	1231
Aurum	376	—	461
Baryta carbonica.	—	286	794
Borax	—	—	460
Calcarea	269	1090	1631
Carbo vegetabilis.	720	930	1189
Carbo animalis	191	191	728
Causticum	307	1014	1505
Clematis	—	—	150
Colocynth	250	—	283
Conium	375	700	912
Cuprum	—	—	397
Digitalis	428	—	702
Dulcamara	401	—	409
Euphorbium	—	—	281
Graphites	—	590	1144
Guaiaacum	145	—	160
Hepar sulphuris	307	—	661
Iodium.	—	133	624
Kali carbonicum	—	938	1650
Lycopodium	—	891	1608
Magnesia carbonica	—	128	890
Magnesia muriatica	—	69	749
Manganum	331	—	469
Mezereum	—	—	610
Muriatic acid	279	—	574
Natrum carbonicum	—	306	1082
Natrum muriaticum	—	897	1349
Nitric acid	—	803	1424
Nitrum	—	—	710
Petroleum	—	623	776
Phosphorus	—	1025	1915
Phosphoric acid	679	—	818
Platina	—	—	527
Sarsaparilla	145	—	501
Sepia	—	1242	1655
Silica	—	567	1193
Stannum	660	—	648
Sulphur	815	1041	1969
Sulphuric acid	—	—	521
Zincum	—	723	1375

Number of symptoms cited from Authors.

Name.	Total symptoms.	Cited symptoms.
Agaricus	715	21
Anacardium	622	3
Antimonium crudum	471	71
Arsenicum	1231	382
Aurum	461	6
Baryta	799	4
Clematis	150	6
Colocynth	283	29
Conium	912	155
Cuprum	397	154
Digitalis	702	131
Dulcamara	409	83
Euphorbium	281	22
Guaiaicum	160	3
Hepar sulphuris	661	11
Iodium	624	348
Mezereum	610	34
Muriatic acid	574	16
Nitric acid	1424	30
Nitrum	710	122
Phosphorus	1915	84
Sarsaparilla	561	4
Stannum	648	5
Sulphur	1969	10
Sulphuric acid	521	8

There are, it is evident, some fresh features in the pathogeneses of the second edition of the *Chronic Diseases*; and there are more than appear on the surface. Hahnemann was able, at this time, to draw upon other sources than those I have hitherto specified. Hartlaub and Trinks had published an *Arzneimittellehre* of their own. Stapf had begun to issue his journal called the *Archiv*; and many provings, made more or less independently of Hahnemann, adorned its pages. And, while these pathogenetic materials were accumulating in the homœopathic school, outside of it Professor Joerg, of Leipsic, was following in Hahnemann's track, and proving medicines on himself and his students. Hahnemann availed himself of all these materials, incorporating them with his own observations and those of the fellow-observers he acknowledges. In my future lectures I shall take pains to specify the proportion in which these several elements exist in the pathogenesis of each medicine, and of their sources themselves I shall speak at our next meeting. Hahnemann's own additions to the second issue of his work must be of the same character as his contributions to the first, *i.e.*, they must be collateral effects of the drugs observed on the patients to

whom he gave them. They must all, moreover, be supposed to have resulted from the 30th dilution; for since 1829 Hahnemann had urged the administration of all medicines at this potency. The same thing must be said of the contributions of Hahnemann's friends to this edition. They may fairly be conceived to have been provings on themselves or other healthy persons, save where, as in Wahle's symptoms of *Mezereum* and Hering's of *Arsenic*, the internal evidence is strong in the contrary direction. But they must in all cases have been evoked from the 30th dilution; for in the edition of the *Organon* published in 1833 Hahnemann recommends all provings to be made therewith, as yielding the best results. In the preface to *Natrum muriaticum* in the fourth volume of the first edition of the *Chronic Diseases* he states that the symptoms of that medicine were so obtained; and we may fairly extend the inference to all provings subsequently made.

It thus appears that a large proportion of the symptoms contained in the final recension of the *Chronic Diseases* are effects, real or supposed, of very infinitesimal doses—of the potencies from the sixth to the thirtieth of the centesimal scale. This is an altogether new element of our pathogeneses, one which has not encountered us as we have been studying the *Materia Medica Pura*. It may fairly be demanded what evidence we have in support of the assumption made in these symptom-lists, viz., that infinitesimal portions of drugs, from the billionth to the decillionth of a grain, have the power of affecting the healthy organism.

Now into this question I propose to enter on a subsequent occasion, when I shall discuss the infinitesimals of homœopathy. I shall then adduce evidence which will, I think, satisfy your minds—as it does my own—that there is nothing in the fact that the symptoms before us were chiefly obtained with such doses which need discredit them as genuine effects of the drugs administered; though it does give them a special place and character. But there is another element in Hahnemann's own contributions, at least, to these pathogeneses, which is novel. I have shown that his symptoms must be presumed to have been observed upon patients taking the medicines, and not upon healthy persons proving them. Here, again, you will challenge me, and ask what guarantee we have that such symptoms are not effects of the disease existing rather than of the drug being taken.

And here I regret that I cannot meet your challenge. We saw, when upon the *Reine Arzneimittellehre*, how very unsatisfactory was Hahnemann's mode of proceeding in this matter.

We followed him, by means of the references he has given us, to the authors whose observations he cites, many of which were made upon the sick. Here we saw him, as it were, at work among his patients; we noticed the symptoms he selected as resulting from the drug administered, and not from the disease present; we noted their conformity to his own canons and to common sense. The result was to show that his eager desire for symptoms, and his over-estimation of the activity of drugs, had led him in numerous instances to put down as pathogenetic effects phenomena which were obviously those of the disease or of occasional causes. We can have no confidence, but rather the reverse, that he has not followed the same course in his observations upon his own patients. Hence the thousand symptoms of Calcarea and Phosphorus and the twelve hundred of Sepia—all derived from sick persons during the six or seven years of the Coethen period. The recent re-proving of the latter medicine in America, in which thirty healthy persons took part, has only yielded 517 symptoms as its result.

There is one source especially on which Hahnemann seems to have relied at this time for pathogenetic effects of drugs. I mean aggravations, real or supposed, of the existing symptoms of patients. In 1813, he had written to Stapf:.*—"You are right in supposing that the increase by a medicine of symptoms that had been previously present most probably indicates that the medicine given can of itself also excite similar symptoms. *Still, we must not include such symptoms in the list of the pure, positive effects of the medicine, at least not in writing.*" Ægidi's Colocynth case shows how, in the later time, this salutary caution was dropped. A patient labouring long under neuralgia starting from a nephritic complaint, and suffering several times a day from "agonizing pain proceeding from the region of the left kidney down the corresponding limb as far as the outer malleolus," took at 9 a.m. a drop of Colocynth 6. In the evening the patient had, periodically, "a dreadful cutting in the abdomen, proceeding from the left renal region, spasmodically drawing the left thigh up to the body, and forcing the patient to bend herself completely forward." This, at the utmost, was a medicinal aggravation, but it appears as S. 114 of the pathogenesis of Colocynth in the second edition of the *Chronischen Krankheiten*. This suggests how many of the apparently wonderful effects of drugs which experience has proved of little activity (as *Natrum carbonicum*) were obtained.

* Dudgeon's *Lectures*, p. 181.

I am compelled, therefore, to draw the conclusion that the great bulk of the pathogeneses of the *Chronischen Krankheiten* are not to be relied upon as genuine physiological effects of the drugs. The fact of their being obtained with infinitesimal doses would not at all disqualify them, however much they would stand in need of clinical verification. But their appearance in the sick, after the revelation we have had of Hahnemann's mode of dealing with such symptoms, puts them (to my thinking) utterly without the pale of genuine drug effects. They *may* be such, but we have no means of knowing that they are; and here pathogenetic verification—the reproduction of the same symptoms on the healthy—is required ere we can use them with any confidence in working the rule *similia similibus*.

It is otherwise with the *Reine Arzneimittellehre*. We have in that work a genuine contribution, and the first made on any large scale, to the ascertainment of the physiological effects of drugs, of their action on the healthy human body. Urged as a necessity by Haller, feebly attempted by Störck and Alexander, no real step was taken towards this end till Hahnemann published that *Fragmenta de viribus*, of which the *Reine Arzneimittellehre* is the flower and fruit. Whatever additions have been made to our knowledge since, whatever improvements have been introduced into our methods of obtaining it, this first essay of the kind can never be superseded, and stands as an imperishable record of the wisdom, devotion, and industry of its author. If I have had to criticise here and there, it is not that I less admire. I cordially subscribe to Dr. Dudgeon's panegyric. "I may safely say" (he writes)* "that in the mere labour of the *Materia Medica*, Hahnemann's own doings are tenfold as great and important as all the labours of all his predecessors and all his followers; that while we might manage to get on though we were deprived of all the provings of every other contributor to our *Materia Medica*, were we deprived of Hahnemann's observations, and especially his earlier provings, such as those of Belladonna, Aconite, Bryonia, Nux, Pulsatilla, Rhus, Arnica, Mercurius, &c., we might shut up shop at once. In the matter of the *Materia Medica*, we must all acknowledge that among them that are born of women there hath not arisen a greater than Samuel Hahnemann."

**Lectures*, p. 241.

LECTURE III.

SOURCES OF THE HOMŒOPATHIC MATERIA MEDICA.

(Continued.)

In the preceding lecture on the sources of the Homœopathic Materia Medica I gave you an account of our chief mines of knowledge on this subject—the *Reine Arzneimittel-lehre* and *Chronischen Krankheiten* of Hahnemann. Before proceeding to speak of the other and later contributions to it which go to make up our wealth, I ought to tell how far Hahnemann's pathogeneses have been rendered available to us in our mother tongue.

It is obvious that such work must come either from Great Britain or from America; and it is a physician practising in the latter country who has given us the only English version of the master's provings we have hitherto possessed. I refer to Dr. Hempel, from whose pen appeared, in 1846, the four volumes of the *Materia Medica Pura* and the five of the *Chronic Diseases* which now stand before you. You have only to open them to find that they fall very far short of reproducing their original. It is perhaps a small matter that the medicines of the *Materia Medica Pura* are re-arranged according to the alphabetical order of their Latin names. But you will perceive that all names of authorities are omitted, so that for the medicines where the symptoms from all sources are thrown together we have no clue whatever to their origin, and in no case can we distinguish between the results of provings and the observations cited from authors. The pathogeneses in which Hahnemann has separated his own symptoms from those contributed by others are rarely allowed to stand as he left them; but sometimes (as with *Bryonia*) the latter are made to follow the former in each division of the schema, enclosed in square brackets for distinctness, sometimes (as with *Argentum* and *Camphor*) they are thrown together in one series without distinction. The symptoms are printed continuously, instead of in separate paragraphs; and are divided into sections, with headings according to their subject.

A closer examination will discover still further and more serious faults. The medicines of the second volume of the *Reine Arzneimittellehre* have been translated from the edition of 1824, not—as they should have been—from the later one of 1833. Ferrum and Verbascum have been omitted from this work, doubtless by accident. But we miss from it a number of other medicines, and find by the translator's preface that these include all those which subsequently appeared in the *Chronischen Krankheiten*. The reasons Dr. Hempel assigns for such omissions are incorrect, and, in my judgment, wholly insufficient; and English readers have lost materially from not having had the articles on these drugs, with their prefaces and annotations, presented to them in their original forms.

A yet graver objection remains behind; and that is, that the translation is not a faithful one. Dr. Wilson has abundantly proved this in respect of wholesale omission and careless rendering of symptoms, and I must affirm the same as to the presentation of the introductions and notes. *Il va sans dire* that we can never depend upon the version of the cited symptoms, which often suffer materially in their passage from English, French, or Latin into Hahnemann's German, and thence (in ignorance of the originals) into Dr. Hempel's English. I must regretfully say that I have long ceased to have any reliance on this translation, and never venture now to quote Hahnemann as given by Hempel lest I should misrepresent him.

You will find these facts stated in more detail in an article "On the Translations of Hahnemann's Pathogeneses; with a plea for a new English version," which I published in the *British Journal of Homœopathy* in 1877. My plea has since been entertained by the Hahnemann Publishing Society of this country, so far as the *Reine Arzneimittellehre* is concerned; and Dr. Dudgeon, so favourably known by his rendering of the *Organon* and the lesser writings of the master, has undertaken this work also. I have gladly co-operated with him in revising from the originals the quotations made from authors, and supplying to these from the same sources such illumination as they need. The first volume of the work is now before you, and I am sure that you will find it as true a reproduction in detail as you will see it to be in general outline. I hope that, either here or in America, the *Chronischen Krankheiten* will soon be presented in a similar manner; so that English readers may feel with confidence that they possess Hahnemann's pathogeneses in their own tongue.

I now proceed to tell you of the later contributions which have been made to the Materia Medica of Homœopathy.

1. The first to appear in the field of drug-proving after Hahnemann had led the way was no follower of his, but a professor of the University of Leipsic, Dr. Johann Christian Gottfried Jörg. His academical position gave him pupils to assist him; and twenty-one of these, with himself, his two young sons, and three females (aged forty-five, eighteen, and twelve respectively), formed his company of provers. He published at Leipsic in 1825 a first volume of the results obtained, under the title of *Materialien zu einer künftigen Heilmittellehre durch Versuche des Arzneyen an gesunden Menschen*. It contained experiments with the following drugs:

Acidum hydrocyanicum (with aqua laurocerasi and aqua amygdalarum amararum).	Ignatia.
Arnica (flowers and root).	Iodium.
Asafœtida.	Moschus.
Camphor.	Nitrum.
Castoreum.	Opium.
Digitalis.	Serpentaria.
	Valerian.

All these substances were taken in moderate doses, repeated (and if necessary increased) until a decided impression was made. The experiments of each prover are related in full, just as they were made and as the symptoms occurred. In the preface a description is given of the age, temperament, and constitution of those engaged in the task, and the assurance afforded that all were in good health.

You will see at once that in the mode of giving these provings to the world, Professor Jörg has greatly improved upon Hahnemann. While the latter leaves us in darkness as to the subjects of the provings, the doses taken, and the order and connection in which the symptoms appeared, here all is clear daylight. Of the intrinsic value of the provings the best evidence is that Hahnemann was glad to incorporate them in his own pathogeneses. He seems to have been ignorant of them up to 1833; for in the volume of the *Reine Arzneimittellehre* then published, he credits Jörg's symptoms of Ignatia to Hartlaub and Trinks, who had simply copied them into the collection of theirs of which I shall speak next. But in the second edition of the *Chronischen Krankheiten* (1835-9) he uses Jörg's pathogeneses of Digitalis, Iodium, and Nitrum, referring them to him by name and work.

You have only, I think, to examine these provings to come to the same opinion of their value. You may see the original work in the library of the College of Surgeons; or may read its experiments in the fourth volume of Frank's *Magazin*, from which, moreover, many of them have been translated by Dr. Hempel in his *Materia Medica*. It is a pity that a volume so rich in instruction and usefulness has not long ago been rendered into English as it stands; and I commend the work to any competent person who desires to do service to his fellow-homœopathists of the English speech.

2. The next to take up the work of instituting and publishing drug-provings were two distinguished members of the homœopathic school—Drs. Hartlaub and Trinks. They also named their collection *Reine Arzneimittellehre*, evidently intending it to be a sequel to Hahnemann's work. It was published at Leipsic in three volumes, dated 1828, 1829, and 1831 respectively. Each contains an elaborate pathogenesis of certain new medicines, and shorter contributions to the knowledge of others already familiar to homœopathists. The former, like Hahnemann's, are made up of original provings instituted by them and of citations from authors; the latter are chiefly single provings or cases of poisoning. All are arranged in the usual schematic order; and there is a great, though not entire, lack of information as to the circumstances of the experiments.

The first volume contains full pathogeneses of Plumbum, Cantharis, Laurocerasus, Phosphorus, and Antimonium crudum, and shorter additions to the symptomatology of eighteen other drugs.

The second volume gives us, in the first category, Gratiola, Oleum animale, Alumina, and Phellandrium, and fourteen medicines in the second.

The third volume introduces to us Bovista, Kali hydriodicum, Ratanhia, Strontian, and Tabacum, and adds to our knowledge of no less than thirty other substances.

As these volumes came into existence between 1828 and 1831, it was obviously open to Hahnemann to avail himself of them for the third edition of his *Reine Arzneimittellehre* (1830-3), and the second of his *Chronischen Krankheiten* (1835-9). This he has done to the fullest possible extent. He has not only used their new provings, but has transferred to his pages the symptoms they have extracted from authors, and in doing so has frequently omitted the references to the work and page, leaving those curious in the matter to refer to Hartlaub and Trinks. I was much hindered in my work of

examining the originals of some of his citations until I discovered this practice of his.

I come now to an important and much-questioned feature of Hartlaub and Trinks' pathogeneses—I mean the provings furnished by the person designated as "Ng." On the first occasion of Hahnemann's using their work in his *Chronischen Krankheiten*, viz., in the section on Alumina, he makes in his preface the following remarks:—"With merely these two letters (anonymousness indeed!) Drs. Hartlaub and Trinks designate a man who has furnished the greatest number of symptoms for their *Annalen*, but these often expressed in a careless, diffuse, and indefinite manner." He goes on to say that he has extracted that which was useful from his contributions, believing that he was a truthful and careful person; but that it was not to be expected that in so delicate and difficult a matter as drug-proving, the homœopathic public would place confidence in an unknown person designated simply as "Ng." This note of Hahnemann's has led to a good deal of mistrust of the symptoms of the anonymous observer in question, which has been increased by their excessive number,—Dr. Roth having counted more than eleven thousand in the several contributions to the *Materia Medica* furnished by him between 1828 and 1836. So far has confidence been lacking, that the compilers of the earlier parts of the *Cypher Repertory* have felt themselves warranted in omitting "Ng.'s" symptoms from the materials they have indexed. But there are important considerations on the other side. Dr. Hering has satisfactorily explained the anonymousness. "Ng.," he writes,* "was a surgeon near Budweis, in Bohemia, a candid, upright, well-meaning man, not very learned: his name was Nanning, and everybody knew it. According to the laws of his country he had no right to practise except as a surgeon. A lameness of the right arm disabled him from following his calling. His wife commenced a school and instructed girls in millinery; she supported the family by this. Nanning became acquainted with homœopathy, and soon was an ardent admirer. He had the grand idea to aid the cause by making provings on the girls in his wife's millinery shop. He succeeded in persuading them. Unluckily enough he came in connection with Hartlaub in Leipzig, instead of with Hahnemann himself. All Austrians were forbidden by a strict law to send anything outside of Austria to be printed; hence not only Nanning, but all other Austrians, appeared in our literature with only initials." Nanning himself has given, in the *Allgemeine Hom.*

* See Allen's *Encyclopædia*, III., 640.

Zeitung for 1839, a similar account, to explain the number of his symptoms. "If I have perchance," so he writes, "made too many provings, for it is remarked that I have furnished too many symptoms, that should, in my opinion, deserve sympathy rather than ridicule. The exhortation of Hahnemann not only to enjoy but to put our hand to the work animated my zeal, and the active support of Hartlaub rendered it possible for me to do that which perhaps strikes Hahnemann as surprising. A number of persons, partly related to me, and partly friendly, were gathered together by me, and, in consideration of board and payment, made experiments. Along with them were also my two daughters, and, with complete reliance on the honesty of them all, I gave one medicine to one and another to another, writing down all that they reported. It was a matter of conscience on my part also not to omit the smallest particular; and that thereby frequent repetitions have arisen I grant readily, but I thought that just in that way the sphere of action of the medicine could be best recognised."

It seems, then, that Nenning's symptoms were obtained in the true way, viz., by provings on the healthy body; but that the payment of the provers and the want of discrimination exercised in receiving their reports throw some shade of doubt upon the results. I cannot think, however, that they warrant their entire rejection. The only thing which such symptoms need is "clinical verification," testing, that is, by being used as materials wherewith to work the rule *similia similibus curantur*. If, when submitted to this test, they (as a rule) prove trustworthy, we may safely assume them to be genuine, and admissible into the *Materia Medica*. Now, we have the testimony of three of the most industrious symptomatologists of our school—Bönninghausen, Hering, and Wilson—that they have found no reason to distrust Nenning's symptoms, and have used them as satisfactorily as those of other observers. No statement to the reverse of this has come from the other side; so that we may accept Nenning's contributions as at least provisionally established to be good and sound additions to our pathogenetic material.

3. The next name on our list is that of Dr. Ernst Stapf. This physician, one of Hahnemann's oldest and most valued disciples, began in 1822 to publish a journal devoted to the interests of the new method. He called it *Archiv für die homöopathische Heilkunst*; but it is generally known simply as the *Archiv*, or—very often—Stapf's *Archiv*. To this journal the contributions most urgently called for and most

largely furnished were provings of medicines. By the time that fifteen volumes had been published a considerable number of these had accumulated; and it became desirable to give them a separate form for practical use. Some of them—notably those of Anacardium, Cuprum, Mezereum, and Platina—Hahnemann (who had himself taken part in many of the experiments) designed to use for the second edition of his *Chronic Diseases*; and these Stapf left alone. But the rest—in all containing twelve medicines—he published in 1836 in a volume entitled *Beiträge zur reinen Arzneimittellehre, i. e., Additions to the Materia Medica Pura*. The medicines are—

Agnus castus.	Ranunculus	Sabina.
Clematis.	(bulbosus and sceleratus).	Senega.
Coffea.	Rhododendron.	Teucrium.
Crocus.	Sabadilla.	Valerian.

All those as to which any information is given on the point were proved in Hahnemann's earlier manner, *i. e.*, in moderate but substantial doses, generally taken singly. The results are presented in the usual schema form, but with copious reference to the separate experiments of the provers, when these are specified. The introductions to the several medicines are full and interesting, and contain much information about their former uses and about such homœopathic experience as had been gained with them. The whole makes a very valuable volume; and, as it has been rendered into English by Dr. Hempel, it is available for all students.

4. I have next to speak of the Austrian provings. By the year 1842 homœopathy had come to number many able and active representatives in Vienna; and it seemed to them (in the words of one of their number) "a shame to be stretching their indolent limbs and lolling lazily upon the couch prepared for them by the laborious toil of the master:" they determined to have "courage to tread bravely in his footsteps, and to pursue, with untiring patience, the path he had opened up to them." They considered the most serious obstacle to the practice and advance of the homœopathic method to be the form in which Hahnemann had given his provings to the world, *i. e.*, as a schema of detached symptoms, without information as to how, or in what order and sequence, they were obtained. They set therefore before themselves, as their main task, the re-proving of medicines, without excluding occasional original experiments.

In pursuance of this object they gave us re-provings of Aconite, Bryonia, Colocynth, Natrum muriaticum, Sulphur, and Thuja; and primary provings of Argentum nitricum, Coccus cacti, and Kali bichromicum. Each drug was entrusted to one member of the society into which they formed themselves, who undertook and superintended the experiments, and published them in full detail, with an elaborate account of all that was known of the medicine up to the time of writing. From twenty to thirty persons took part in every proving; and, though trials of the attenuations were not neglected, the great aim of the experimenters seems to have been the development of the full physiological action of drugs from repeated and increasing doses of the mother-tincture, which, in the case of Thuja, even reached as much as 1000 drops at a time.

The monographs containing these most valuable provings were chiefly published in the *Österreichische Zeitschrift für Homöopathie*, a journal conducted by the Austrian Society, which runs through four years. Wurmb's re-proving of Sulphur is contained in a later periodical, the *Zeitschrift des Vereins der homöopathischen Aerzte Österreichs* (vols. i and ii). Most of them have been translated into English* with more or less completeness. They will always be ranked among the chief materials we possess for the construction of the Materia Medica of the future; and the labourers at them, of whom we may mention as pre-eminent Watzke, Huber, Mayerhofer, Wachtel, Wurmb, Arneth, Gerstel, and von Zlatarovich, have written their names indelibly on the roll of the heroes of the homœopathic history.

While thus giving prerogative rank to the Austrian provings, it must be added that they are but one instance of the activity of German homœopathy in this field down almost to the present day. Not only Stapf's *Archiv*, but the other journals published in that country, as Hartlaub and Trinks' *Annalen*, Griesselich's *Hygea*, and, later, the *Allgemeine homöopathische Zeitung* and *Vierteljahrschrift*, teem with provings and re-provings. Among the former may be mentioned those of Berberis, Coca, Colchicum, Hypericum, Kreosote, and Nux moschata; among the latter those of Agaricus, Chamomilla, Cyclamen, Chelidonium, and Euphrasia. The men whose names stand out most prominently as conductors of

* Colocynth, Coccus cacti, and Thuja, in Metcalf's *Homœopathic Provings*, Sulphur in the *British Journal of Homœopathy* (vols. xv. and xvi.), and Argentum nitricum as an appendix to Hempel's translation of Stapf's *Beiträge*.

these experiments are Buchmann, Buchner, Helbig, Hencke, Hoppe, Koch, Lembke, and Reil. The last great contribution to the *Materia Medica* we have received from this source has been Buchmann's *Chelidonium*; but an endeavour to have a thorough re-proving of *Cuprum* has recently been set on foot by the Central Verein, and we hope it may bear good fruit.

Nor has the old school of medicine in Germany been altogether insensible to the exhortations and example of Jörg. Professor Martin, of the University of Jena, has occasionally proved medicines on his students, and published the results obtained: to this source we owe the pathogenesis of *Kali chloricum*. In 1848 the Vienna Society of Physicians set itself—in emulation of its homœopathic “double”—to make provings. The medicines selected were *Arnica*, *Belladonna*, *Chamomilla*, and *Chelidonium*; and each was tested by from five to twelve persons, taking the drugs after the manner of Jörg. Unfortunately, “the committee” (I quote from Dr. Dudgeon's account) “who had the drawing-up of the report of the results of the trials cut down the symptoms of each prover in a most arbitrary manner, and only recorded such symptoms as were common to all or most of the experimenters.” One of these, however—Schneller by name—has given a detailed account of his provings of the above-named drugs, and also of some additional experiments instituted on himself with *Aconite*, *Conium*, *Hyoscyamus*, *Rheum*, and *Stramonium*. You will find his communication translated in the sixth volume of the *British Journal of Homœopathy*. Besides these, the followers of Rademacher have made a few provings; their experiments with *Ferrum* have been translated in the ninth volume of the same journal. More recently Professor Schroff, though giving his attention mainly to experiments with drugs on animals, has not been unmindful of the value of occasionally instituting them on the human subject, and has given us (especially from *Aconite*) some valuable provings.

Before passing to the other chief scene of homœopathic provings—the United States of America—let me say a few words as to what has been done of the kind in the rest of the countries into which the method of Hahnemann has penetrated.

The only original pathogenesis of note which *France* has given us is that of *Quinine* by Dr. Alphonse Noack; and the two great compilers of *Materia Medica* in that country have been Drs. Roth and Jahr. All these three names point plainly

to the German extraction of their bearers. Some indigenous proving, however, has been done by Pétroz, Ozanam, Teste, Molin, and Imbert-Gourbeyre; and published in the French homœopathic journals.

England has contributed little more to our pathogenetic treasury. The Kali bichromicum of Drysdale, the Naja of Russell, the Cedron of Casanova, the Cotyledon umbilicus of Craig, and the Uranium nitricum of Edward Blake—these are all the provings of any note of which we can boast during the forty and more years in which homœopathy has been practised in this country.

Still less can be said of *Spain* and *Italy*, which have only given us (so far as I know) one medicine each—the Tarantula of Nuñez from the former and the Cactus of Rubini from the latter. From *Brazil* we have received a collection of provings of the plants and animal venoms indigenous to that country instituted by Dr. Mure, of Rio. They are of obscure origin and doubtful value; and hardly one of the substances tested has come into general use. Still more dubious are the *Nouvelles Données* of Dr. Houat, of the French island of Réunion. If you will read the review of his first volume in the twenty-seventh volume of the *British Journal of Homœopathy*, and will then verify the suspicions expressed by looking through a few of his pathogeneses as given by Dr. Allen in his *Encyclopædia*, you will not wonder that the latter generally (I could have wished it had been always) places them in an appendix by themselves, as unworthy to rank with the *bonâ fide* experiments derived from other quarters.

5. I come now to the American sources of the Homœopathic Materia Medica; and the first and most illustrious name on the record is that of Dr. Constantine Hering. I should suppose that the number of medicines in whose proving this physician has taken a more or less principal part is only less than that which we owe to Hahnemann; and though the latter, being first in the field, has given us most of our greatest remedies, yet we cannot forget our debt to Hering for Lachesis, for Apis, and for Glonoin.

I believe that a good many of Dr. Hering's provings remain in manuscript to this day; and I hope that, in spite of his already venerable age, he may live to publish them. Those which have already seen the light are contained in the Transactions of the American Institute or the *American Homœopathic Review*, or they appear in one or other of his two separate publications—the *Amerikanische Arzneiprüfungen* and the first

(and as yet only) volume of his *Materia Medica*. The former is written, as its name imports, in the German tongue, Dr. Hering having originally come from that country. He began to issue it, in parts, in 1852; and, when discontinued, it had come to contain monographs on twelve medicines—most of them new to homœopathy—embracing clinical observations as well as pathogenetic effects. Among the drugs included I may mention Benzoic acid, Aloes, Apis, Allium Cepa, Glonoin, and Millefolium. The greater number of these have been translated in one or other of our journals. In 1869 Dr. Hering set on foot the *American Journal of Homœopathic Materia Medica*, with the design of appending thereto another series of monographs on medicines. He ceased to do so when sixteen of these had been completed, and then published them separately as the volume of *Materia Medica* which I have mentioned. Besides elaborate arrangements of several of our old remedies—as Cuprum, Spongia, and Stramonium—it gives us the Biniodide of Mercury, Natrum sulphuricum, and Osmium.

I have omitted to mention Dr. Hering's first publication, which dates as far back as 1837. It is his *Wirkungen des Schlangengiftes*—a full collection of the observed phenomena of snake-bites, together with provings on the healthy subject mainly instituted with Lachesis, which great remedy he thus introduced to medicine.

But, while all would give the precedence to this honoured name among the American contributors to our *Materia Medica*, it is far from standing alone. In the earlier period those of Neidhard, Jeanes, Williamson and Joslin may be named in association with it: in later times those of Dunham, Allen and Conrad Wesselhoeft—not to mention Dr. E. M. Hale, of whose work I must speak separately. The chief instigation and collection of the provings of the United States has proceeded from the American Institute of Homœopathy. This association, at its first meeting (under Dr. Hering's presidency) in 1846, appointed a "bureau" (or committee as we should call it) for the augmentation and improvement of the *Materia Medica*. The first fruit of its labours was the volume entitled *Materia Medica of American Provings*, whose third edition I now lay before you. It contains the original provings of the Benzoic, Fluoric, and Oxalic acids, of Kalmia, Podophyllum, Eupatorium, Sanguinaria, and several other important drugs. From that time to this, the Transactions of the Annual Assembly of the Institute have rarely failed to contain fresh provings furnished by its Bureau of *Materia Medica*, down to those of Physostigma and Sepia which constitute its chief

labours for 1874 and 1875 respectively. Provings have also formed a prominent feature in many of the American journals. Excellent material for them is now afforded by the students of both sexes who flock to the homœopathic colleges of the States; and the teachers of Materia Medica therein have not been slack in availing themselves of their opportunities.

6. A new fountain of Materia Medica was opened in 1865 by Dr. E. M. Hale, of Chicago. For some years previously his attention had been drawn to the mine of remedial wealth which existed in the indigenous plants of his country. A few only had been proved and employed in the homœopathic school; but all around him he found them in constant use by the common people, and by the "botanic" and "eclectic" practitioners—cures often resulting from them where both allopathy and homœopathy had failed. He determined to collect into one volume all pertinent information regarding the principal medicines thus obtained, to reproduce old and institute new provings, and to present all trustworthy recommendations and experiences as to their use. The result was the volume entitled *New Remedies in Homœopathic Practice*. It obtained great success, so that in two years a second edition was demanded. This appeared in 1867, following the same order as the first, but incorporating all fresh facts that had come to light, and adding thirty-five more medicines to the forty-five previously published. In 1873 a third edition was issued, in which (very unwisely, as I think) the materials previously collected were boiled down to a list of (so-called) "characteristic" symptoms. But in the fourth and latest form which the work has assumed this error has been retrieved. The first volume, indeed—entitled *Special Symptomatology*—is of the same character as the third edition. But in the second volume, or *Special Therapeutics*, history, account of provings, testimonies of authors, and narratives of cases have been restored. We only want the detailed provings of the second edition to make the work complete.

I do not hesitate to say that by these publications Dr. Hale has rendered an inestimable service to homœopathy, and thereby to the art of medicine. There has been plenty of severe criticism on his indiscriminate collection of material, his too fond estimates of his new treasures, and the assumptions in which he has sometimes indulged. But these are small matters compared with the actual enrichment of our remedial treasury which has been effected by his means. We really owe to him *Actæa*, *Æsculus*, *Apocynum*, *Baptisia*, *Caulophyllum*, *Collinsonia*, *Dioscorea*, *Eupatorium purpureum*,

Gelsemium (as Dr. Allen will have us call it), *Hamamelis*, *Helonias*, *Hydrastis*, *Iris*, *Phytolacca*, *Sanguinaria*, and *Veratrum viride*. It is no abatement of this obligation to say that some of these had been known previously, and that none have been actually proved by Dr. Hale himself. It was his book that made them current coin, wherever they had been minted before; and it was he who incited the new provings, though he acted only as their promulgator and expositor. The school of Hahnemann in every country owes him hearty thanks for all this; and allopathy is beginning to share our gain.

I would advise students, until they can obtain the fifth edition (which I have reason to believe will meet every requirement), to endeavour to procure a copy of the second, supplementing it, if possible, by a perusal of the second volume of the fourth.

7. I have now mentioned all the primary sources of the special *Materia Medica* of Homœopathy. In doing so I have had to bring before you more than a score of separate volumes, besides referring to whole series of Journals and Transactions. You will naturally ask whether no attempt has been made to bring these multitudinous and scattered provings into one collection, so that they may be accessible to the student and available for use by the practitioner. This brings me to the last name in my list to-day, that of Dr. Allen of New York.

Our only *codices* of symptomatology hitherto had been those of Jahr and of Noack and Trinks. Both date from thirty years ago; and were at the best abridgements. They were of great use in their time, but have long been superannuated. In 1874, however, a work was commenced which it will take many decades to make obsolete, and which gives us our whole pathogenetic treasury in full. I speak of the *Encyclopædia of Pure Materia Medica*, whose ten volumes are now before you. Here, under the head of each drug, are collected all the symptoms obtained from it by every prover who has tested it, from Hahnemann down to the latest student of the American colleges. All are copied, translated, and arranged afresh; and every available information is given regarding the circumstances under which they occurred. Nor is this all. Dr. Allen has made a new collection of symptoms observed from poisoning and overdosing, as recorded in medical literature since Hahnemann's day; and has thereby greatly enriched many of our old pathogeneses, and originated no small number of fresh ones. The work has been improving as it has gone on; and now that it is completed, it forms a treasury upon which

the homœopathic practitioner will thankfully draw for many years to come.

We may partly estimate the value of Dr. Allen's volumes by comparing them with the only work of the kind we have hitherto possessed in English, Jahr's *Manual*. I speak not so much of the greater completeness of the present *Encyclopædia*, as of its manner of presenting its material. Jahr gave us a mind-burdening, a heart-breaking list of bare symptoms, without hint of the manner in which they were obtained or the subjects in whom they appeared. They were themselves but a selection from the original pathogeneses, our sole warrant for the choice made being the judgment of the compiler. Interspersed with them were numerous so-called "clinical symptoms," obtained by breaking up the features of cases reported as cured by the drugs into their component elements, and sowing these in their appropriate plot in the schema. This hideous composition, which has been fitly styled "nonsense made difficult," was, I say, for many years the only general *Materia Medica* available for homœopaths of the English speech. Contrast it with what we have now. To every symptom Dr. Allen gives us (none but physiological ones being admitted, and none of these omitted) a number is attached, which refers to the observer who warrants it. Appended to his name is a statement, whenever such information is to be had, of the form and dose of the drug used, and the subjects to whom it was administered; while the thousands of symptoms cited by Hahnemann from authors have received all possible illumination and revision from their originals.

I earnestly recommend all students of homœopathy to possess themselves of Dr. Allen's *Encyclopædia*; but I do not advise them to content themselves therewith. No collections of symptoms, however thoughtfully made, can convey the same instruction to the mind as the original records of provings. Procure then (I would say), or seek access to as many as possible of the primary sources of our knowledge which I have characterised, and to which Dr. Allen's book will refer you in the case of each drug. Read the day-books of the provers (where we have them), and such narratives of poisoning as are collected in Frank's *Magazin*, in Dr. Hempel's *Materia Medica*, and in the "Pathogenetic Record" which the industry of Dr. Berridge is now giving us as an appendix to the *British Journal of Homœopathy*. You will thus obtain that enlightened general knowledge of the action of medicines which, and which alone, will enable you to use the *Symptomen-Codex* aright.

LECTURE IV.

THE GENERAL PRINCIPLES OF DRUG-ACTION.

I think it well to occupy you, even yet, with considerations of a general and preliminary character. It has occurred to me more than once, when speaking in time past of the action of special drugs, that we ought to have some mutual understanding on the principles of drug-action in general. I propose, therefore, in this and the following lecture, to ask your attention to a brief exposition of my way of looking at this subject, that you may know with what thoughts—whether correct or not—I am wont to analyse the phenomena presented to us by the working of medicines in the organism.

I would begin by reminding you that the basis of all our knowledge on this point must be the science of physiology. Physiology tells us of the healthy substance and functions on which drugs act : we cannot begin to think of the manner in which they disorder unless we understand the order they derange. This, thanks to the unwearied labours of several generations of students, is very largely known. Some portions of it, indeed, are still obscure : some are yet of doubtful significance. But a large tract is fully open to our gaze, and there is substantial agreement as to its general features. It would be quite beyond my province to sketch here, however briefly, the special physiology of the body. But there are certain general principles regarding it which I must recall to your minds ; if for no other purpose, at least to define the basis on which my reasonings about drug-action will rest.

First of all, then, I conceive it must be postulated that this organism of ours is not alive throughout and in every part. I do not know what is the teaching now given in the schools as to the nature of life. For myself, I hold what is called the "protoplasmic theory" ; and, whatever modifications may be required in the time to come as to its details, I think there can be no doubt of its substantial truth. Consider the difference between hair and nails at the one extreme, and the amoeboid white corpuscle of the blood at the other. It is obvious ; and

we may follow either inwards or outwards as the case may be for some distance, ere we come to a region of doubtful import, where there may be gradual transition or a sudden transformation. All on one side is life : on the other, it is non-life. Now this white corpuscle, which I have taken as the type of living matter, is a structureless, transparent, colourless, semi-fluid substance, consisting of minute spherical particles, of very complex chemical constitution, and in continued spontaneous movement. Such is living matter everywhere, whether it be naked, as here, or, as in other parts (the cell for instance), associated with material of another kind. The cell-wall may be taken as a type of this other substance. In it there is the beginning of structure, of rigidity, and perhaps of colour. It is "formed material," and so far has passed from life to death, and has become the subject of chemical and mechanical laws, of which in its living state it was independent. Such formed material constitutes the great bulk of the organism, both of animals and of plants, and determines the manner and fashion of their lives. But that which, in all and everywhere, lives the life is the protoplasm itself, the same whether animal or vegetal, the germinal matter which, like a soul, forms its own body, inhabits, and animates it.

To this protoplasm life belongs, as elasticity belongs to india-rubber. Life is not a force, playing about it only at times, and capable of interchange with other forms of energy : it is its fixed, inherent property, never to leave it as long as it maintains its own integrity. This is the doctrine long ago taught by Fletcher of Edinburgh. It has been—so far as the restriction of vitality to protoplasm goes—re-originated in the present day by Dr. Lionel Beale, and established by him on the basis of physical demonstration. He, however, regards the life here manifested to be an independent entity, a quasi-soul. Dr. Drysdale, from our own school, has taken up the subject ; and, while showing the essential harmony of Fletcher and Beale, and the truth of the doctrine on which they agree, has (to my mind) irrefutably argued the preferableness of the position of the former as to the nature of life itself. I would refer you to his works "On Life and the Equivalence of Force" and "The Protoplasmic Theory of Life" for a full exposition of the subject.*

Now this protoplasm, as it is the only vital substance, so does all the vital work of the organism. There is, of course,

* See also what Dr. Drysdale justly calls a "brilliant essay" on this matter, by Dr. Madden, in the fifteenth volume of the *Monthly Homoeopathic Review*.

plenty of mechanical and chemical work done there ; but with this we are not at present concerned. It is protoplasm which effects all those operations which belong peculiarly to living bodies. It is the formative agent for all their tissues : according to its situation it dies into (to use Dr. Beale's graphic expression) nerve, muscle, epithelium, areolar tissue, bone. And, lest by such continuous drain on its material it should dwindle away, it has the power of taking up fresh pabulum from the blood, and converting it into its own substance. It has been itself in other situations the appropriator of the food from the digestive canal and its elaborator up to the point at which it reaches the tissues ; and now, by a final act of assimilation, it lays hold of it in its altered form, and absorbs it into itself, to reappear as the tissue it has to make. Thus the whole process of *nutrition*, from the time that the mechanical and chemical acts of digestion are over—the chain of operations consisting of chylification and sanguification, of the taking up of the blood-plasma by the tissues, and the formation from it of new material—all this is the work of protoplasm. No less is *secretion* performed by it. Secretion is but nutrition under altered conditions. It is merely that the matter appropriated by the glandular cells is formed by them into bile, saliva, and so forth, instead of into bone and muscle and skin. The process is the same, and the proceder is the same—the everywhere-present, everywhere-active protoplasm. And as protoplasm is the agent in nutrition and secretion, so is it the seat of vital *function*. It is this which, in the gray substance of the nervous centres, enables us to think and feel, which receives impressions and conveys volitions. It is this, in all probability, which contracts in the muscles. Wherever we have living action—action impossible to the same body when dead, and unknown in the extra-vital world—there we have protoplasm at work.

I have said that protoplasm exists alike in the vegetable and the animal—in either the basis of organic life. But there is this difference, that in the former it stands as it were on a common level, while in the latter a portion of it is differentiated into a system previously unknown,—the nervous. This new organism (for so we may call it), while it lives its own life and carries on its own operations of nutrition and function, exerts a regulating influence over the vegetative processes which were before it and are beneath it. Though they be for their own affairs independent of it, yet they all acknowledge its sway. By its control (through the muscular coats of the arteries) of the circulation it determines the all-important blood-supply of

the tissues; and if (as is most probable) there are secretory and trophic nerves, ending in the cells themselves, it must influence them still more directly.

This will suffice for our physiological basis. But, before we go on to build upon it any theory of drug-action, we must dwell awhile in the region of pathology. Pathology is physiology altered by the causes of disease in general, as pathogenesis—pharmacology we may call it for analogy's sake—is physiology altered by drugs. Hence the one cannot but throw much light upon the other. Since, moreover, pathology tells of that very disorder which by means of our remedies we seek to restore to physiological order, it is evident that we must have clear conceptions and substantial agreement about its principles ere we advance to the therapeutical side of pharmacodynamics.

Now as we have seen physiology largely concerned with the doings of protoplasm, so also pathology must be. If there are any diseases primarily mechanical or chemical, in these of course it would not come into account. But as most, if not all, of the maladies to which flesh is heir are disorders of vital processes—alterations in nutrition, secretion, or function, protoplasm must be the seat of these also. Let us see how it is in the two most frequent forms of disease, inflammation and fever.

1. The most obvious fact about *inflammation* is the change in the circulation of the affected part; the dilatation of its blood vessels, the throbbing of its afferent arteries, its own redder colour and heightened temperature. It was natural to suppose that this vascular disturbance was the prime factor of the process; that inflammation consisted in increased determination of blood to a part, and consequent functional change. But experiment has shown that such elements do not of themselves constitute inflammation. The circulation of a part may be greatly exaggerated by dividing its vaso-motor nerves, and its colour, temperature, and nutritive and secretory operations enhanced in proportion; but no inflammation need occur. The blood flows through it more rapidly, instead of having its current retarded; and there is an entire absence of exudation, and of swelling or pain. On the other hand, let an irritant be applied to a given spot, or conveyed thither by the circulation. There is the same dilatation of vessels and increased afflux of blood; but at the seat of irritation stasis soon supervenes, and liquor sanguinis and corpuscles begin to be extravasated. If any secretion is carried on there, it is (at least as far as the production of fluid is concerned) diminished even to arrest,

and nutrition, though still exaggerated, is perverted. There is, in Hughes Bennett's words, increased attraction but diminished selection; and formation is hurried, but imperfect. What can we conclude but that the protoplasm of the part is the seat of the irritation; that the circulatory changes are subsidiary only, and the real seat of inflammation is (as Lister and Virchow teach) the extra-vascular tissues? Nor is this less true when division of the vaso-motor nerves of a part *does* cause inflammation; which obtains when the subject of experiment is already in a weak state, as from partial inanition. The new factor which allows the process to be set up is still the protoplasm of the tissues, which in its feeble state seems unable to bear the stress of the active hyperæmia and its consequences. Here, however, the inflammation is primarily neurotic in origin, while in the case of the application of irritants it begins in the organic cells of the part affected.

2. We have a corresponding series of facts in regard to *fever*, which is—as Fletcher long ago pointed out—inflammation in the system at large. Here, too, the circulatory disturbance is that which arrests the attention, and by which the older observers sought to explain the phenomena. In dilatation of the blood-vessels throughout the frame, preceded or not by their contraction, with quickened action of the heart, they thought they had all the necessary elements of the case. But experiment now proves that we may have these conditions without any fever necessarily being associated with them. They may be induced, for instance, by paralysis of the arteries, brought about by removal of the vaso-motor centres. The result of this proceeding is to make the subject of experiment very sensitive to its environment. If the animal be placed in a hot room, it does become feverish, and probably the same thing would occur if it were in feeble health; but if the surrounding temperature be lowered, its own bodily heat falls in proportion, and it may readily die from very moderate cold. Clinical observation, moreover, ascertains that increased heat of the blood itself is the real essence of fever; that the febrile chill, when it occurs, is the first sign that such increase has begun; and that the subsequent hot period, as also its several common phenomena, depend upon the heightened temperature of the blood stream, and vary with its intensity. Then, going a little farther back to ascertain the cause of the augmented heat of the blood, we find preceding it as well as accompanying it throughout evidence of increased metamorphosis of tissue. That this precedes the rise of temperature shows that it is not caused by it: on the other hand, physiology tells us

that it may well be its cause. We can follow Dr. Burdon Sanderson, therefore,* when, after examining all the elements of fever, he comes to the conclusion that at present we must be content to refer it to increased heat-production, and to connect this with the tissue-changes occurring in the protoplasm. Here, however, as with inflammation, the whole process may begin in the nervous system, and reach the tissues only secondarily; or, on the other hand, the tissues themselves may initiate the morbid action. The former is probably the history of the catarrhal fevers, the latter of those of toxæmic origin.

I need hardly tell you that fever and inflammation, in their various forms, lie at the bottom—constitute the proximate cause—of a very large proportion of the diseases we have to treat. The remainder are mostly “functional” disorders—increase, diminution, or irregularity of the action of the various organs of the body. As protoplasm has been seen to be the seat of function also, we are not beyond its sphere when dealing with these disorders. The only difference is that we have now to do with its *vis* rather than its *substantia*, with the energy it puts forth rather than with its own internal operations of appropriation, assimilation, and transformation of pabulum. Inflammation and fever belong to it as the agent of nutrition; neuroses, spasms, and such like derangements may be connected with its functional duties. And here a word about secretion. This process, though merely nutrition under altered conditions, by this very alteration comes somewhat within the domain of function. It may be altered by inflammation or fever, but it is easy to conceive of it as having a *plus* and *minus* of its own, independent of these processes, independent even of the state of its blood-supply. We must bear this in mind when discussing the influence of drugs on glandular organs.

It follows, from what has been said, that every organ of the body is a complex whole, admitting of being reached in various ways. Its own inherent living matter may be affected; and this either by its nutrition being disordered in the special manner we term inflammation, or by its functional activity being altered in the direction of *plus* or *minus*. Again, all these changes may be effected by the agency of the nervous system. We do not need nervous intervention, indeed, for the sufferings any more than for the actings of protoplasm; and an exclusive neuro-pathology would be as false as a neuro-physiology. But by the influence of the nervous system of which I have

* See *Practitioner*, vol. xviii.

spoken, certainly upon the blood-supply, and probably also upon the actual substance of the tissues, both nutritive and functional disturbance may be brought about. Yet again, the nervous protoplasm may itself be the seat of trophic change; and its functions, as also those of other parts, may be affected secondarily through altered nutrition, as by the supervention of inflammation or fever.

These, gentlemen, seem to me to be the physiological and pathological *data* required for the construction of a theory of drug-action; and to that task I shall now address myself.

All writers on the subject begin by distinguishing between the mechanical, the chemical, and the dynamic effects of drugs. The distinction is as true as it is obvious, and the ground of it is not far to seek. Drugs can act mechanically and chemically upon the body because a large portion of it, being no longer alive, has come under the dominion of mechanical and chemical laws. And that they have another action over and above these exactly corresponds with that which physiology has shown us, viz.: that there is in every organism, animal or vegetal, a certain proportion of living matter, exempt from the operation of merely physical laws, and subject to actions and re-actions all its own. The dynamic influence of drugs is exerted upon the living matter of the body—upon its protoplasm. And upon this as such. It does not (as is sometimes supposed) affect the nervous system only, for it manifests itself to a large extent in plants, which have no nerves. Nervous protoplasm may be the primary seat of the influence of any drug, and other changes may be secondary to its disorder; but no less may the same living matter anywhere else be attacked in the first instance, and without such medium.

It is with these dynamic effects of medicines that homœopathy, as a distinctive method, has to do. Homœopathsists—so-called because they acknowledge the rule *similia similibus* and its practical corollaries to be by far the most important thing in therapeutics—may have at times to avail themselves of the mechanical and chemical influences which drugs can exert; and they, as well as others, must understand these, and know how to apply them when they are needed. But the method they predominantly follow is concerned with the dynamic actions of medicines only; and to these, accordingly, my further remarks must be understood exclusively to refer.

Drugs act upon protoplasm; but in so doing they make manifest that which is otherwise ascertained to be true, that all protoplasm is not the same protoplasm. They do not affect all parts of the body indiscriminately and alike, but

select one or more organs or tissues or regions, and there expend their power. This *elective* action of drugs is no novelty; it has been made the foundation of a system of practice by Rademacher, who himself traces the thought to Paracelsus.* But it receives very little recognition in the orthodox school of medicine, and even in homœopathic philosophy has hardly taken the place it deserves. We are, in this country, much indebted to Dr. Sharp for his insistence on the truth of the local action of drugs. I hope you are all acquainted with this author's "Tracts," which are about the best exposition and defence of homœopathy we possess. He has in later years devoted himself to an enquiry into the basis of the system; and you will do well to read the volume of *Essays in Medicine* (1874) in which most of his work at the subject is contained. But previous to the appearance of his essays insisting on this point, Dr. Imbert-Gourbeyre had, in his *Lectures Publiques sur l'Homœopathie* (1865), called attention to the same fact, and formulated it as the "law of electivity." Dr. Drysdale also has laid much stress on what he calls "specificity of seat," connecting it with the special irritability displayed by the various parts for their natural stimuli and for causes of disease, and extending it to the minutest localities or nerve-branches which have anything independent and special about them.† In quoting this physician now, I am referring to a series of papers of his extending through the twenty-fifth and two following volumes of the *British Journal of Homœopathy*. They are weighty with solid and original thought; and I commend them to your earnest attention.

In relation to these *Wahlverwandschaften*—these elective affinities existing between drugs and organs, we must observe the caution that we do not infer them from manifestations of topical action only, however strong they may be. A substance when swallowed may inflame the stomach and intestines; when inhaled, it may set up coryza, cough, even bronchitis; when applied to the skin, erythema or eczema may result,—but we cannot therefore infer its specific influence upon these cutaneous or mucous tracts, and give it homœopathically for their corresponding morbid states. We might do so, indeed, if we applied it locally as a remedy also; but not if we administered it by any indirect channel. We can only demonstrate the elective action of a drug on a given part by intro-

* See *Brit. Journ. of Hom.*, viii., 253; *Monthly Hom. Review*, Nov., 1879.

† See *Brit. Journ. of Hom.*, xxvii., 86.

ducing it into the circulation at some other point,—as when gastritis results from Arsenic applied to an ulcer, duodenitis from Podophyllin inserted into the peritoneal cavity (the serous membrane itself being unharmed), bronchitis from Kali bichromicum swallowed, eczema even on covered parts from the emanations of Rhus. We know then that, however taken, it will go to its proper mark,—that it is a bullet which has its billet, and will assuredly find it. We shall have abundant illustration of this distinction between specific and merely topical actions as we proceed.

Special seat of action is the first fact about the behaviour of drugs, and special *kind* of action is the second. Dr. Drysdale has dwelt upon and illustrated what he calls the *qualitative* action of drugs at considerable length. He shows that as there are specific as well as common inflammations, so there must be medicines related to the special quality present as well as to the generic lesion—medicines appropriate to gouty, rheumatic, and syphilitic inflammation in virtue of some peculiar similarity to the element which makes them what they are. He goes on to make some very interesting remarks on the fact of certain remedies being specially indicated by the nature of the exciting cause of the morbid condition to be treated—as Arnica when this is mechanical injury, Dulcamara when it is damp cold, and so forth. He argues that there must be a qualitative difference in the affections produced by these various causes, and a corresponding one in the drugs which thus become their best remedies. He also points out, as others have done, that at the same seat there may be set up very different pathological processes; that the intestines, for instance, may be affected by cholera, common diarrhœa, the typhoid process, tubercular ulceration, and dysentery, and require different remedies accordingly to modify their disorder.

So far I am entirely at one with Dr. Drysdale. But I go on to make another distinction as to the kind of action of drugs which he refuses to recognise. He maintains Fletcher's doctrine that all drugs are stimuli, analogous to the natural agencies so-called—heat, light, &c.—which, acting on the excitability of organic matter, evoke the phenomena of life. Any symptoms of depression which appear in the course of their action he explains as signifying exhaustion following upon over-stimulation. Now I cannot think that this view of drug-action is borne out by facts. Take such a substance as the nitrite of amyl, whose effects when inhaled are immediate. We all know the general flushing of the surface which ensues,

and agree to ascribe it to dilatation of the arteries from relaxation of their muscular coats. What is this but primary depression, whether the drug's influence fall (as I think it does) on the vessels directly, or through their nervous supply? It may be suggested that the amyl really acts as a stimulant to those vaso-dilator nerves which recent research has discovered in connexion with certain vascular areas, and which may exist throughout the circulatory system. But the proof that it is otherwise lies in the fact that, simultaneously with the flushing it excites, the inhalation of the amyl nitrite causes relaxation of any spasm that may exist, as that of angina pectoris or of dysmenorrhœa. As no dilator nerves can be conceived to exist here, the hypothesis of a primary sedative influence seems the only one applicable to the whole group of phenomena. The same thing may be said of the action of Curare, Conium, Physostigma, and Gelsemium upon the musculo-motor nerves and centres. There is ordinarily no trace of excitation here from first to last. Claude Bernard, indeed, laid it down that "every substance which in large doses abolishes the property of an organic element stimulates it if given in small ones;" and so some evidence of augmented energy may occasionally appear in experiments made with these motor depressants. It is too slight, however, for the subsequent paresis to be ascribed to exhaustion following over-excitement; and I shall ere long have occasion to argue that it is a reaction of the organism against doses too feeble to induce the direct effect of the drug.

I must maintain, therefore, that while many drugs are primarily stimulant to the tracts they influence, others are primarily depressant. And I must draw a further distinction between stimulants and irritants. Stimulants excite function, irritants inflame tissue. Strychnia is an excellent example of the former class. It powerfully excites nervous tissue, motor or sensory, wherever it finds it: mobility and impressionability are both morbidly heightened, but there is no inflammation. On the other hand, substances like Arsenic, Iodine, and Cantharides have no definite action upon function; but they inflame tissue wherever they are locally applied or electively attracted. They act (we may suppose) in the latter case like other internal causes of the process. Conveyed in the circulation to the part for which they have affinity, they there act upon the protoplasm, and fret it into that morbid and blind activity in which I apprehend inflammation to consist.

There are three things, then, which drugs can do with protoplasm. They can affect its functional operations simply, and

this either by exciting or depressing them ; or they can induce that morbid change in its work of nutrition and tissue-making, which (in its full development) locally we call inflammation, and generally fever. The function-modifiers are those drugs which, from their giving rise to nervous phenomena chiefly or solely, we call neurotics ; and I should add to them the myotics, which seem to influence directly the unstriated muscular fibre, as *Secale* does, and perhaps some direct excitants of certain secretions, like *Jaborandi*. The modifiers of nutrition form a still larger collection. To this belong all those substances which Toxicology classes as irritants, so far as their irritation is not a mere chemical effect, as with the strong mineral acids. That they act topically only, and not when introduced into the circulation, would not disqualify them for this place ; but they must be used topically as remedies also. There are many true irritants, however, of which Toxicology knows nothing ; for they produce no dangerous effects. Nor would they be discovered by the method which has recently come into so much favour—of experiments on the lower animals with large single doses. In this sphere they can only be recognised by persistent administration over a length of time, as carried out by Wegner with Phosphorus, and by our colleague, Dr. Eugène Curie, with *Bryonia* and *Drosera*. But the main source of knowledge regarding them is proving on the healthy human subject. It is thus that we get a number of drug effects which are not explicable on the supposition of a *plus* or *minus* state of any function, but which, if not inflammatory or febrile in the full sense of the words, at least show signs enough of these morbid conditions to evidence a power on the part of the drugs of causing them, if pushed far enough, and to lead us, on the principle of similarity, to give such remedies for their cure. There is many a feverish condition in childhood which yields to *Calcarea*, and many a smouldering inflammation put out by *Sulphur*.

I would divide drugs, then, in their influence upon protoplasm—in other words, their dynamic operation—into two classes, those which affect its performance of function, and those which disorder its nutritive processes. There are, of course, many drugs which belong to both classes, as Toxicology recognises in naming some poisons acro-narcotics. Each substance must be separately studied, and examined on its own merits. But the classification I have proposed, whether affecting the whole or only a part of the actions, is no less valid. It fits in, moreover, with an important distinction in the dynamic effects of drugs which has been much insisted upon

both by Dr. Drysdale and Dr. Madden. The latter, regarding chiefly the fact that some properties are common to a number of drugs—as emesis, purgation, and the like—and others peculiar to individuals, has named them *genico-dynamic* and *idio-dynamic* respectively.* The former, pointing out that the common dynamic effects of medicines are producible at will, while the peculiar ones depend for their production on the presence of a special susceptibility in the subject, would call the one *absolute* and the other *contingent*. Now I think that if these generic actions of drugs, producible at will, be examined, they will all be found to belong to functional excitation or depression; while the peculiar effects, which require special susceptibility, are nearly, if not quite, always disorders of nutrition. The subcutaneous injection of atropia, for instance, will always dilate the pupil, always depress the inhibitory influence exerted upon the heart by the pneumogastric. But it is only in this individual or in that that it produces a scarlatinal rash or an inflamed throat, that it induces neuralgic pain or excites fever. Dr. Drysdale has forcibly pointed out that it is the contingent effects of medicines which we chiefly use in applying the law of similars, their absolute actions being often entirely incongruous therewith. “For example,” he writes, “if we are watching a group of chest symptoms produced by Tartar emetic, or the characteristic pustular eruption on the skin, and suddenly a large emetic dose is given, though the whole action is certainly that of Tartar emetic, yet if we admit the vomiting as a part of either morbid picture, we should be unable to comprehend it.” Trousseau and Pidoux, viewing the matter from Dr. Madden’s stand-point, make a similar remark upon the relation of the two orders of symptoms to those of disease. “In special medicines, in medicines properly so called, above all in poisons, we find two elements. They enjoy properties which belong to the whole genus; these are their common properties, which scarcely excite in the organism more than common and general action, as to stimulate, irritate, weaken, calm, etc. But they possess, beyond this, special properties peculiar to each, and which excite in the organism morbid actions more or less resembling the symptoms of disease.” Dr. Imbert-Gourbeyre, without distinguishing between the absolute and contingent effects of drugs, lays much stress on the latter, and adds *contingenter* to the *similiter* and *elective* in which he formulates homœopathic action.

He also adds *omni dosi*. Dr. Drysdale agrees with him, and

* See *Brit. Journ. of Hom.*, viii., 13.

shows that herein lies another distinction between absolute and contingent symptoms, the former requiring the drug to be given in a certain quantity for their production, the latter being singularly independent thereof. You may, in proving a medicine, reduce the dose until its recognised physiological effects cease to appear; but, unless the subject of experiment be insusceptible to its action, he will manifest one or more of the peculiar phenomena which belong to it. Trousseau and Pidoux, also, say of the "special effects" of drugs which they recognise, that "if we wish to obtain them, small doses must generally be administered, for then the common effects are very little perceived." Dr. Drysdale believes that the same independence of quantity holds good in disease; and that, where a condition resembling the contingent effects of a drug is present, you can hardly (within certain limits) give so small a dose as to fail to benefit, or (and this is a new point) so large a dose as to aggravate. Everything depends on the special susceptibility of the part; and, this once exhausted, the medicine has no longer any influence upon it. He illustrates this view by a case in which Glonoin, given for a neuralgia because of the presence of some of its characteristic physiological effects, caused its well-known throbbing headache, without aggravation—and rather with amelioration—of the troubles for which it was administered. He thus extends the *omni dosi* of Dr. Imbert-Gourbeyre's formula to the other extreme also of the scale. A similar thing appears in provings. You will see ever and anon in Hahnemann's pathogeneses the term "curative effect" applied to a symptom. This does not mean (save sometimes in the quotations from authors, as under Iodium) the result of the administration of the drug in disease. It means that the prover who took it, though otherwise in good health, was morbid in this particular, and that the medicine, while causing pathogenetic effects elsewhere, finding disorder already present here, reduced it to order. To take an indisputable instance. One of the most constant effects of iodism, as observed in the sensitive Genevese patients, is palpitation; but "in a case altogether exceptional," Trousseau writes, "M. Rilliet has seen palpitation cease, instead of appearing or increasing, under iodism; *the patient was one habitually subject to it.*"

This mention of dose brings me to yet one other feature of the kind of action of drugs, in which it plays an important part. But I will reserve this portion of the subject for another lecture.

LECTURE V.

THE GENERAL PRINCIPLES OF DRUG ACTION.

(Continued.)

Upon the last occasion of our meeting, we discussed several of the features of the *kind* of action produced by various drugs. To-day I have to bring before you those modifications of their influence—real or supposed—which are brought about by difference of dosage.

You will find Dr. Sharp, in his later essays, insisting much on a fact which he denominates “antipraxy,” by which he means that large and small doses of drugs exert a precisely opposite effect. He does not mean merely that they do this in health and in disease respectively, which would only be describing the apparent working of the law of similars; but he affirms that the opposition holds good in health, so that, whatever be the effect of a large dose, a small dose may be found whose action shall be of a precisely contrary kind. It was early pointed out* that, so far as this double action of medicines existed, it belonged to those primary and secondary effects long ago discovered in them by Hahnemann, and employed by Fletcher, Drysdale, Dudgeon, Reith and others to explain the action of homœopathic remedies. Dr. Jousset thus states the doctrine in relation to dose: (†)

“1. Every medicine produces on the healthy body two successive actions, primary and secondary. These two actions are always opposite one to another.

“2. The stronger the dose of the medicine the less marked is the primary action. If the dose is excessive, the secondary action only is developed.

“3. The weaker the dose the more manifest the primary action.”

As Dr. Sharp now teaches that between the large and the

* See *Brit. Journ. of Hom.*, xxxi., 756.

† *L'Art Médical*, xlv., 182.

small dose, with their opposite actions, there is an intermediate point at which the medicine produces the two effects in succession, his doctrine becomes harmonious with that of his predecessors and colleagues.

I entirely subscribe to it, and teach it you from this chair, as a feature of the action of *certain* drugs. But I cannot go with Dr. Sharp, or indeed with Dr. Jousset, in affirming it of the action of *all* drugs. Hahnemann admitted two qualifications of his general statement as to the opposite primary and secondary action of medicines. The first was, that there were some (of which he specifies the metals, as arsenic, mercury, and lead) which "continue their primary action uninterruptedly, of the same kind, though always diminishing in degree, until after some time no trace of their action can be detected, and the natural condition of the organism supervenes." The second is expressed in a phrase he uses in the *Organon*—"the exact opposite condition to the primary effect, *if there be an opposite condition.*" Truly, there is much virtue in this "if." It is obvious that opposition can only be predicated of functional states which admit of a *plus* and *minus*, as excretions and secretions, sleep, muscular and nervous tone, and the like. These are the conditions which vegetable drugs—being mostly neurotics and eliminants—influence, and hence Hahnemann's description of primary and secondary actions applies chiefly to medicines of this order; while the metals, which rather produce inflammation and other organic changes, do not manifest such phenomena. "The possibility, then," writes Dr. Carroll Dunham, "of classifying symptoms into primary and secondary on the basis of the relative nature of the symptoms, is not co-extensive with symptomatology; it is partial, confined to a moderate number of conceivable morbid phenomena." I quote from a paper published by this physician in the *Hahnemannian Monthly* for May, 1876, and reprinted in his *Homœopathy the Science of Therapeutics* (1877), to which I would direct the attention of all who desire to have clear thought upon the subject.

Regarding then, as I do, the whole group of actions at present under discussion as limited in their sphere, I cannot go with those who explain by means of them the action of homœopathically-selected remedies. I am under the misfortune of disagreeing herein with my much-esteemed colleague in this School, Dr. Dyce Brown. Maintaining as he does (with Dr. Sharp) the opposite action of all drugs in health according to the quantity in which they are given, he would argue that when we give in disease small doses of a substance which in

large doses has caused a similar condition to that before us, we are administering an agent whose influence is in direct opposition to the morbid state. The curative process is thus antipathic, though the principle of selection is homœopathic. Now here I must recall the distinctions we have already established. In those functional exaltations and depressions which many a drug causes, common to it with others, and producible at will if a certain quantity is administered—in such a region we may have primary and secondary actions, we may have opposite effects from different doses ; and our cures may be wrought by counteracting secondary states in disease with primary states caused by the drug, or by opposing the action of one dose to morbid conditions similar to those producible by another.* Such antipathic medication, whether practised under homœopathic appearances or without them, may accomplish all we require. But I think that *plus* or *minus* functional states like these, though frequent enough in pathogenesis, are far from being common occurrences in the actual disorders we have to treat. When existing at all, they are often indications of some nutritive disturbance at their root, or single features of a complex state similarly induced. How rarely is paralysis, for example, a purely “functional” disorder ! Nearly every form of it is traceable to inflammation or softening of the nervous substance ; even the diphtheritic variety, which did seem to have no lesion associated with it, has been found on deeper investigation to be connected with definite central alterations. So that, although the antipathic cure of functional excess or defect is easier of conception, and perhaps more in accordance with fact than the homœopathic, I do not think that we are therefore justified in inferring that all or even the greater part of apparent homœopathy is real antipathy. When we come to nutritive disturbances—to those alterations which in their full development are inflammation and fever, we have entered a different region. There is no *plus* and *minus* of opposition possible here, no conceivable reverse action of large and small doses in health. We have got beyond dose as an important element in the result : if the contingent susceptibility be present, the drug will cause disorder in almost any quantity, and cure it in almost any. You have only to read a few detailed provings, and a chapter or two of Rückert or Beauvais, to see that this is so. Such a law as that propounded by Dr. Yeldham about the curative dose being as little below the physiological as possible fails here, however it may hold good in the absolute region ; for there is no physiological dose for

* See Camphor.

contingent effects. It is very significant that Dr. Sharp admits that he has not yet touched the subject of infinitesimals; all his statements about "large" and "small" apply to differences between grains and hundredths of grains. In like manner I think he will find that he has not yet touched the subject of nutritive as distinct from functional disorder. While in the latter the curative operation of apparently homœopathic remedies may be antipathic, in the former I can see no room for such working and no evidence but against it. *Aut simile, aut nihil*; there is no trace of anything but homœopathy from the surface to the deepest root.

And there is yet one caution more to be observed. All these theories of primary and secondary action, and of the opposite effect of large and small doses, impose a limitation on the class of pathogenetic effects which we can employ in homœopathic practice. If homœopathy means opposing morbid conditions answering to the secondary effects of drugs by inducing the primary action of the latter, we must use such secondary phenomena only in selecting the *simile*. If we are, by giving a small dose, producing an opposite action to that of a large one, we must only take the effect of large doses into account. But facts are entirely against such limitation, and it would be disastrous to work by it. Hahnemann held just the contrary view, and believed that only the primary effects of drugs could be used in homœopathising. He therefore took special care to obtain such primary effects in his provings, and used small doses accordingly, as he himself tells us. Consequently, the pathogeneses he has furnished us, and which constitute the very core of our *Materia Medica*, are quite unsuited for the purposes of those whose views I am now considering. Upon Dr. Sharp's principles, he ought to give large doses instead of small to patients presenting groups of symptoms analogous to those found in Hahnemann's provings. That he does not do so, but gets excellent results from following an opposite course, shows (I submit) that his theory fails, at least in being conterminous with homœopathic action. Moreover, upon Dr. Sharp's showing, all those opposite effects of the same drug—constipation and diarrhœa, sopor and insomnia, excitement and depression, and so forth—which we find in nearly every pathogenesis, must be either primary and secondary actions of a single dose, or the effects of large and small doses respectively. Hahnemann, however, clearly perceived that this was not so. He would use none but primary actions for homœopathic application, as Dr. Sharp would use none but secondary; but he soon found that the primary action of

many drugs included two opposite states, either or both of which might be induced by it in the small doses used in his provings, and either or both removed by it in the still smaller quantities he administered to the sick. Such oppositions (antinomies, we might call them) he styled "alternating effects," and distinguished them sharply from the mere "secondary effects" of functional exhaustion, which last he considered unavailable for homœopathic purposes. I think that his discernment was entirely sound, and that Dr. Sharp is unduly limiting the range of the treatment by similars in fixing it to one set of oppositions in the action of each drug. *Veratrum album*, for instance, causes diarrhœa in large doses, and checks it in small, because (he thinks) in the latter it constipates. But he would find it—in smaller doses still—an excellent remedy for the kind of constipation itself causes; and this cannot be because these smaller doses purge. It is wiser, therefore, to say with Hahnemann that constipation and diarrhœa are alternating effects of the primary action of *Veratrum*,—that action probably being a depression of the functional activity of the intestinal nerves; and that either, if the other symptoms coincide, may be used in prescribing homœopathically. The same thing is true when opposite effects occur in succession as part of the primary action of a drug. They are then to be reckoned as part of the order and sequence of such action, and are to be fitted to corresponding successions occurring in disease. Thus, *Aconite* causes both the chill and the heat of fever; it is, therefore, homœopathic to fevers consisting of chill and heat, and in either stage. Here, too, the explanation is probably the same, that it sets up in the healthy that essential change of which the febrile heat and chill are the complementary expression, and neutralises the same change when present in disease.

In two lectures "On the Rationale of Homœopathic Cure," delivered at our Hospital in February, 1877, and printed in the *Monthly Homœopathic Review* for the March and April of that year, I have gone more fully into these questions of the primary and secondary actions of drugs, and of the opposite effects of large and small doses. I have examined the views propounded on these subjects, and the endeavours to explain by them the action of similar remedies, of Hahnemann and Fletcher in the past, and of my living colleagues, Drs. Drysdale, Dudgeon, Bayes, Sharp, Pope, and Dyce Brown. To those lectures I must refer you for my reasons in detail for being unable to agree *in toto* with the doctrine of any of them. The only further contribution which has been made to the subject

since their appearance is the paper "On the Double and Opposite Action of Drugs," which was read by Dr. Drysdale at the British Homœopathic Congress of 1877.* I fully agree with the criticisms he there makes upon Dr. Sharp's arguments, and am pleased to find him stating that he and I agree in our present views more nearly than I had supposed. I may quote the following passage in evidence thereof. "At the same time," Dr. Drysdale writes, "I admit that the bare principle of a primary excitation, followed by a secondary collapse or exhaustion, is insufficient, *per se*, to explain numerous and important *qualitative* changes in the living matter produced by the exciting causes of disease, and by drugs, and which are met by the homœopathic law of cure. Here, I think, we had better still rest the homœopathic law on an inductive basis, viz. : that it simply expresses a general fact established by a sufficient number of experiments. . . . In diseases of mere *plus* and *minus* of vital action, on the other hand, the Brunonian theory of excitement and exhaustion gives an *à priori* explanation of the double and opposite action of drugs, and of the homœopathic law of cure." This is in complete accordance with the distinction between functional and nutritive disorders which I was drawing a few minutes ago.†

I must now say a few words upon another part which dose has been made to play in drug-action. I shall be here on common ground with those whose views I discuss as to either of two opposite effects of a drug being available for therapeutic comparison. But I must inquire how far they are warranted in maintaining that the opposite phenomena displayed by certain medicines are dependent upon difference of dosage, and that corresponding variations must be made in the quantity administered when we come to apply them to the treatment of disease.

The advocates of this doctrine are three of our American colleagues—Drs. Hering, Hempel, and Hale, who, however, differ considerably in their way of putting the matter.

1. Dr. Hering distinguishes primary and secondary symptoms only as those occurring earlier or later in the provings, and states that observation will show the effects of the more attenuated doses to correspond, not to the primary, but to the secondary action of larger quantities. He would, accordingly, advise the administration of the higher potencies when the symptoms of the case before us have more resemblance to the later symptoms of the drug, of the lower when the similarity is between them and its earlier working.

* See *Monthly Hom. Review*, xxi., 656. † See p. 69.

2. Dr. Hempel takes a somewhat similar view, though going further in the interpretation of the phenomena. Let me cite a short passage from one of his lectures.

“ I shall have frequent occasion to show you that drugs seem to affect the organism in two opposite ways, and may therefore be homœopathic to two pathological conditions, holding towards each other relations of antagonism. We may illustrate this point by the well-known condition of fever. The first stage of an inflammatory fever is not a full and bounding pulse, a hot and dry skin, flushed face, and so forth; an opposite group of symptoms occur. The patient experiences a chill or cold creepings along the back; he looks pale, hollow-eyed, the hands and feet are cold, the pulse is thin, feeble, rather slower than naturally; or, at any rate, not much accelerated. This condition is soon superseded by the opposite group of phenomena generally designated as fever. The chill is the primary effect of the disease; the fever constitutes a secondary effect, or the re-action of the organism. In selecting a remedial agent for this derangement, it should be homœopathic, not only to the primary chill, but also to the secondary group, fever. Aconite is such a remedy. Aconite is homœopathic to the chill, which marks the first invasion of the disease, and to the fever which marks the beginning of the organic re-action. We are seldom called to a patient during the primary invasion of the disease; the organic re-action is generally fully established when we first see the patient. Nevertheless we prescribe Aconite, knowing full well that the inflammatory stage must have been preceded by a chill.

“ We say that Aconite is homœopathic to the chill, and we prove this experimentally by taking a large dose of this drug, of course within conservative limits, which will uniformly cause a more or less perceptible chill, coldness of the skin, depression of the pulse, all which symptoms disappear after a certain interval of time, and are followed by the opposite condition, fever. A small dose of Aconite will not produce the primary chill, but will at once excite the organic re-action characterised by the usual phenomena of heat, flushed face, dryness of the mouth, &c. This shows the importance of proving drugs in massive doses. It is massive doses that develop the primary drug-symptoms; small doses do not develop these primary symptoms, because the organic re-action very speedily supersedes them.

“ In practice it is of the utmost importance that we should discriminate between the primary and secondary action. If we are called upon to prescribe for a group of symptoms corresponding with the primary action of a drug, we give a larger dose than we should do, if we had to prescribe for a group corresponding with the secondary action, or organic re-action.”

Dr. Hempel adds as illustrations of the possibility of a medicine being homœopathic to two opposite conditions, that “ Aconite and Nux may be used as true homœopathic remedies in paralysis as well as tetanus; Ipecacuanha may remove perfect atony as well as spasmodic irritability of the stomach; Opium cures diarrhoea as well as constipation, excessive wakefulness as well as drowsiness and stupor; Mercurius will check as well as promote the secretory action of the pancreas;

Secale answers in uterine hæmorrhage from atony of this organ as well as in spasmodic uterine contractions."

3. And now of Dr. E. M. Hale. In consulting the work of this author entitled *New Remedies*, which I have already brought before you, you will find frequent references to what he calls his law of dose. This law he states as follows :

"In any case of disease we must select a remedy whose primary and secondary symptoms correspond with those of the malady to be treated.

"If the primary symptoms of a disease are present, and we are combating them with a remedy whose primary symptoms correspond, we must make the dose the smallest compatible with reason; and if we are treating the secondary symptoms of a malady with a remedy whose secondary symptoms correspond, we must use as large a dose as we can with safety." Under the latter circumstances he speaks of drugs as "secondarily homœopathic" to the morbid condition present; and by means of this qualification maintains that we are still practising the method of Hahnemann though we should treat relaxed states with the ordinary doses of astringents, and states of excitement with those of narcotics.

Proceeding now to an examination of these views, it will be seen, in the first place, that we must be agreed as to what are primary symptoms. We have hitherto understood them—with Hahnemann and all who have followed him—to be the least possible effect of a drug, the expression of the direction in which the function affected by it deviates from the right line. It is obvious that an increase of the disturbing influence would but push it farther and farther still on the same side of the normal path, and that in proportion as it did so a pendulum-like swing to the opposite side would (when its action was over) become more and more apparent. Thus the re-active and secondary phenomena of the drug—when it exhibited any—would be opposite to its least possible effect, while Drs. Hering and Hempel would make them parallel thereto.

I think, nevertheless, that there can be no doubt of the reality of the facts to which they have directed attention; and that Dr. Hempel's explanation of them is the true account of their meaning. This organism of ours into which we introduce drugs to prove them is a living one: it does not merely passively suffer under what is done to it, but re-acts thereupon. If the impression made by a foreign agent is sufficiently potent, it bends before it, with such subsequent recoil as the case demands. But it is readily conceivable that the impression may be so slight that the only notice taken of it by the

organism is, so to speak, a resenting push in the opposite direction ; and this also may be the earliest response to the influence of a drug, while, as its action gathers force, it bends the function it modifies in its own way. I think that in this way are explained those temporary phenomena of excitation under paralysing agents—such as curare—which led Claude Bernard to the generalisation that “every substance which in large doses abolishes the property of an organic element stimulates it if given in small ones,” and again, that “all those causes which exhaust the vital properties of a tissue or of an organic element commence by exciting them.” I cannot, indeed, think him warranted in further maintaining that “they are paralyzers because they are first excitants that exhaust ;” for the period of excitation is so short and its symptoms so slight that it cannot be conceived of as causing a collapse which should account for the long-lasting paralysis which ensues. Dr. Hempel’s view that it is a re-action of the organism seems to me exactly to explain it ; and it puts it accordingly with all phenomena of the same kind in a separate class by themselves, standing on the hither side of the true primary action of drugs, in which the organism does not act but only suffers.

I therefore accept Dr. Hale’s view as to what is primary and what secondary in the action of drugs, following here in the track of all the older observers. I agree with him also that “in any case of disease we must select a remedy whose primary and secondary symptoms correspond with those of the malady to be treated,” always adding the proviso that there be such a succession of opposite states in either or both, which does not by any means hold good in all cases. But when I am told I must make a difference in dose according as the primary or secondary stage of the disease is present, I pause, and ask why ? The only answer it seems possible to give is that in the one case I shall be administering a remedy whose action is the same direction with that of the disease, and which therefore might aggravate if the doses were too large ; while in the other I should be as it were pushing the morbid process the opposite way, and must increase my force accordingly to the utmost point consistent with the safety of the organism at large. That is, in plain words, in one I shall be practising homœopathy, in the other antipathy.

It is well to perceive the true position to which we are led by this proposed rule of Dr. Hale’s. It has more than one aspect in relation to our present subject. It suggests that even in the functional states of *plus* and *minus* of which I have

spoken—and to which alone I conceive it to apply—there may be a real and not merely an apparent homœopathy practised. Our attention has been already called to this point by one among ourselves, of the same name phonetically though not literally as our Chicago colleague: I mean Dr. Hayle, of Rochdale. In his Presidential Address at the Congress of 1876, he pointed out* that Dr. Sharp's explanation of apparent similars as being real opposites could not hold good if both the double actions of medicines are to be used for homœopathic application. *Nux vomica* might cure paralysed conditions by its power of stimulating; but if it be also useful in spasm and irritation we cannot invoke any such opposite influence, especially as we have to give it in smaller doses. Thus the practitioners who habitually employ attenuated medicines are in all probability homœopathising really and not apparently only; while the remedies Dr. Sharp would give—he having, as we have seen, hardly entered the field of infinitesimals—may be such as are actually antipathic to the condition present, though on the surface seeming to be similars.

So far I think we can fully accept Dr. Hale's canon. But it is another thing to affirm that we should use all the secondary reactions which are observed in drug-effects as homœopathic indications, even though remedies so chosen should have to be given in the most substantial doses. It is obvious that such a mode of proceeding would lead us into the whole sphere of antipathic treatment, without even the appearance of homœopathicity about it. It would be impossible to convince others, difficult, I should think, even to satisfy ourselves, that we were practising the method of Hahnemann in giving (say) twenty grains of ergot to contract a flabby uterus after parturition. Dr. Hale would argue—The primary action of ergot is indeed to induce contraction of the womb; but after a time, by the law of action and re-action, this over-rigid condition must be succeeded by one of relaxation. Ergot is therefore primarily homœopathic to the former, secondarily homœopathic to the latter; and we are quite within the sphere of the law of similarity in giving it to induce contraction, while the dosage must be such as is sufficient to effect the purpose.

I shall certainly not teach you to apply the idea of homœopathy to such practices as these, but shall frankly acknowledge them to be what they are. At the same time I entirely assent to Dr. Hempel's statement that a medicine may be homœopathic to two apparently opposite conditions. It may be (as I have already suggested in the instances of *Aconite* and

* See *Monthly Hom. Review*, xx., 668. .

Veratrum album) a similar to the underlying vital disturbance, of which these two states are the successive or the alternative expressions. It may produce one class of effects by acting on one element of the part, and the opposite of these by acting on another; and so it may homœopathically cure either. It may begin its action by increasing the secretion of an organ, but its prolonged influence may cause so much congestion that secretion is diminished or arrested. In these and in many other ways, of all which we have had or shall have examples, a medicine may be a true similar to two apparently opposite states. *Nux vomica*, as well as *Veratrum*, is applicable to both constipation and diarrhœa: *Secale* will check some forms of menorrhagia and counteract a certain form of uterine exhaustion: *Scilla* will arrest diuresis and restore the diminished secretion of acute renal dropsy. But in all these cases no difference of dose is necessary in the two spheres of action, or at least no such difference as that contemplated by Dr. Hale. We are really practising homœopathy, not inducing the physiological action of our remedy under its guise; and our posology can be determined by the considerations which guide us in all other cases.

There are, indeed, only two ways of employing in disease the power which a drug has of disordering the healthy body. You may use it either to induce this physiological action in the patient, or to neutralise such action if it be already present. The former is (to use Hahnemann's nomenclature) antipathy or allœopathy, according as you are acting on the disordered part or not: the latter, and this alone, is homœopathy. For the former purpose some such dosage is required as is sufficient to develop the change in question in the healthy: for the latter no such quantitative administration is necessary. When, therefore,—to take an instance from another writer—Dr. Jousset tells us that for cardiac dropsy *Digitalis* has to be given in spoonfuls of a decoction representing not less than two grains of the powdered leaves, but maintains that such practice is homœopathic, because the drug causes an "asystolia" similar to that which is present in such cases, we must pause before assenting. And a very little inquiry, I apprehend, is needed to show that such asystolia in the case of *Digitalis* is but the functional exhaustion consequent upon the precisely opposite effect of the drug, and that to administer it for a similar condition in full doses is merely to induce such a contrary state in your patient as by the same means you could set up in the healthy. If this is homœopathy, I know not what is antipathy.

Of Dr. Hering's and Dr. Hempel's rules of dose, I can say little. They seem based upon the view that the larger the dose which produced the pathogenetic effect, the lower should be the attenuation given to counteract its *simile* in disease. Of this, however, we have no certain evidence.

I have now, I think, said sufficient to acquaint you with the principles as to drug-action which will regulate the teaching on the subject I shall give in this place. Very often, indeed, I shall have simply to present the phenomena of pathogenesis to you, and to state their therapeutic applications. But wherever analysis and interpretation are possible, they will proceed upon the physiological and pathological bases now laid down. How far they are absolutely true, I cannot say; they are the best at which I can arrive at present, and that is all I can do. Our comfort is, that however they may shift in the progress of time and knowledge, homœopathy, as a mode of the art of healing, is not dependent on them. The relation it establishes is between the observed facts of drug-action on the one hand, and of disease on the other; and no alteration in our view of the meaning of either can affect it one whit.

LECTURE VII.

HOMŒOPATHY—WHAT IT IS.

I must yet detain you a little longer on the threshold of our subject. I have spoken of several things pertaining to homœopathy ; but I have said nothing as yet about homœopathy itself. It seems desirable that, before I begin to tell you how to study and use medicines in the homœopathic manner, I should explain to you what that manner is, as I myself understand it. It is the more necessary that I should do so, as you will soon discover (if you have not already done so) that there are two distinct ways of conceiving and applying the method of Hahnemann prevalent among those who adopt it. You ought to know from me what is the position I take up in the controversy between the advocates of these two views, and on what principles I propose to conduct the present course of instruction.

Now both the homœopathies which exist at the present day find their origin in Hahnemann himself, though both are departures from his stand-point—the one diverging under the attraction of modern science, the other prolonging his own line of advance into regions unknown and undreamt-of by him. I can best present them to you, therefore, by tracing the history of the master's own mind, from his first conception of the new method to his final elaboration of it. Let us dwell, then, upon the history of homœopathy.

In the year of our Lord 1790, when the eyes of all Europe were fixed upon the rapidly evolving drama of which France was the theatre, there was a man in Germany intent upon far different matters. This man was a physician, in the prime of his life ; his name was Samuel Hahnemann. An accomplished scholar, both in medical and general letters ; a profound chemist ; the friend of the illustrious Hufeland,—he was utterly dissatisfied with the state of therapeutics in his day. One of its few bright spots seemed to him to be the treatment of ague by bark. He pondered much over the rationale of this curative action—so simple, so direct, so effectual. How

could other medicines be so used? How could other diseases be so treated? It occurred to him to try the effect of this bark in health: he experimented on his own person. He found that it set up a fever very like that which it cured: the relation between its disease-producing and disease-curing properties was that of similarity. Its operation, therefore, was an instance of that "similia similibus" which Hippocrates had recognised as occasionally holding good, and whose claims to notice and possibilities of fruitfulness as a therapeutic principle had been noticed by more than one writer. If it obtained in the present notable instance, the inference was obvious. Was it not possible that other cure-work like that of bark in ague might rest upon such relationship between drug and disease—might have been got from it occasionally in the past, might be got from it continuously in the future?

The question was a reasonable one; but it was only a question. It had to be answered by observation and experiment—by reviewing the cures on record, and endeavouring to obtain new ones. Both were fully carried out. Hahnemann's *Organon* (the systematic exposition of his method, first published in 1810) contains a copious list, drawn up from medical literature, of cures of disease effected by drugs which on no less satisfactory testimony were declared capable of causing similar conditions in the healthy. And his own experience, which was published from time to time, showed him that the power of similarly acting medicines was most undoubted, and their manner of curing greatly preferable. He now considered that the question had been answered affirmatively, the induction deductively verified; and, after suggesting it as a new method in 1796,* in 1806† he confidently put forth *similia similibus*, ὁμοιοπαθεῖα, as the cardinal principle of therapeutics.

He had not gone far, however, in working out the method, when he found that to do so properly required a much fuller knowledge of pathogenetics than that possessed at the time. Records of poisoning and over-dosing were not scanty; but they referred only to a small number of very active substances, and to the large and crude effects of these. A few typical and severe diseases were here pictured, and served for the early application of the method. But if it was to be carried out systematically, if the great variety of morbid conditions

* In his "Essay on a new principle for ascertaining the curative power of drugs" (*Hufeland's Journal*, vol. ii. See Dudgeons's translation of his Lesser Writings, p. 295).

† "The Medicine of Experience" (*Hufeland's Journal* for 1806. See translation, p. 497).

which come before the physicians were to be "covered" by corresponding drug effects, his knowledge of the latter must be indefinitely increased. With Hahnemann, to perceive this need was to feel the obligation of supplying it; and to feel the obligation was to fulfil it. He at once set to work to "prove" medicines on his own body and that of other healthy persons. In 1805 he had collected sufficient material of the kind for publication; and it appeared in his treatise *Fragmenta de viribus medicamentorum positivis*, of which I have already spoken to you, and which contains (as you will remember) pathogenetic effects of twenty-seven drugs, obtained from the ingestion of single full doses.

But yet another step had been taken before this time. In prescribing medicines according to the rule *similia similibus*, Hahnemann of course gave them singly, and without the complex admixtures so common in his day. He administered them, however, in the usual doses. It is not surprising that his patient's symptoms, even though ultimately removed, were often in the first instance severely aggravated. It needs no argument to show that the ordinary doses of Arsenic, against which even a healthy stomach needs to be shielded, would increase the irritation of one already inflamed—for which, nevertheless, the homœopathic principle would direct its being given. So Hahnemann found, and he reduced his doses accordingly. He did so by mixing his solutions or tinctures with definite proportions of some menstruum, as water or alcohol. The now well-known advantages of dilution came out in this process; and he found that attenuation could be carried to an extent hitherto undreamt of without the remedial power of the drug being lost. Accordingly, in his treatise on the *Cure and Prevention of Scarlet Fever*, published in 1801, we find him recommending Belladonna, Opium, and Chamomilla in fractional quantities about equivalent to our third centesimal dilution, and defending his practice in *Hufeland's Journal* of the same year.

His complete method, constituted as now described, is set forth in the luminous essay entitled "The Medicine of Experience," published by him in the same journal for 1806. He there expresses his conviction that "as the wise and beneficent Creator has permitted those innumerable states of the human body differing from health, which we call diseases, He must at the same time have revealed to us a *distinct* mode whereby we may obtain a knowledge of diseases that shall enable us to employ the remedies capable of subduing them; He must also have shown to us an equally distinct mode, whereby we may

discover in medicines those properties that render them suitable for the cure of diseases." To obtain this practically useful knowledge of disease, he maintains, we must abandon all speculation as to its essence, and content ourselves with a faithful and detailed picture of its manifestations, with their predisposing and exciting causes when these can be discovered. To ascertain the properties of medicines we must experiment with them on the healthy human body, noting the symptoms which result in their order and connection. We must, then, if we wish a permanent and curative effect, administer in disease that drug whose effect most nearly resembles the morbid condition before us. To give, as is ordinarily done, remedies whose primary action is opposed to the diseased state we have to treat (as opium for sleeplessness), is mere palliation, and useful and necessary in but few cases. Finally, curative—because similarly acting—remedies must be given in comparatively small doses, lest excessive aggravation or undue reaction should occur; and so sensitive is the diseased body to their influence, and so purely dynamic their mode of operation, that doses of extreme minuteness—even to a millionth part of those ordinarily given—will often suffice for the end proposed. Such medicines, also, should be given singly; and the doses should not be needlessly repeated—each being left to work within its ascertained term of action. "If," he sums up, "as is not unfrequently the case when there is a sufficient supply of well known medicines, a positive remedy perfectly appropriate to the accurately investigated case of disease be selected, administered in a suitably small dose, and repeated after the expiry of its special duration of action, should no great obstacles come in the way (such as unavoidable evolutions of nature, violent passions, or enormous violations of regiminal rules), and should there be no serious disorganisation of important viscera, the cure of acute and chronic diseases, be they ever so threatening, ever so serious, and of ever so long continuance, takes place so rapidly, so perfectly, and so imperceptibly, that the patient seems to be transformed almost immediately into the state of true health, as if by a new creation."

The facts, dates, and quotations I have thus brought before you present several aspects for consideration.

I. It would, I think, be impossible for any unprejudiced person at the present day, standing in the light of the medical knowledge now enjoyed, and having some acquaintance with the doctrine and practice current in Hahnemann's time, to doubt that the reform thus proposed by him was a real and

most beneficent one. Pathology, at the end of the eighteenth and the beginning of the nineteenth century, was a tissue of the most baseless hypotheses : the therapeutics associated with it were a mixture of violence and confusion. Men were treating, as Hahnemann says, "unknown morbid states with unknown medicines," opposing fancies about the one to fancies about the other. In the stead of this most unsatisfactory system he proposed a method alike simple, intelligible, and innocuous. It consisted, as we have seen, in the following elements :—

1. The apprehension of disease by its symptoms, *i.e.*, as we say at the present day, by its clinical characters and history.

2. The ascertainment of the powers of drugs by experimentation on the healthy human body.

3. The application of drugs to disease by a principle which at least insured directness of aim.

4. The administration of remedies singly, instead of in complex admixture.

5. Their prescription in doses too small to aggravate existing troubles or cause extraneous ones.

Who can doubt the blessing it would have been to mankind had such a method been adopted when Hahnemann promulgated it? Who can reckon the thousands that would have been saved from the murderous and poisonous doings universally prevalent in the days when bleeding and mercurialisation reigned supreme in therapeutics? If the profession can go no farther with Hahnemann; if even they feel his system imperfect for fully dealing with disease in all its forms, let them at least admit the vast advance it made upon the practice of its day, and its anticipation of much that is now regarded of unquestionable importance.

But the point to which I wish especially to direct your attention is the relation of Hahnemann's first conception of his method, as now described, to the homœopathy practised in the present day.

The great majority of those known as homœopaths, at least in the old world, have been converts from the recognised modes of practice. The expositions of the system which have satisfied their reason, the cures which have established their faith, have been of the kind we have seen in the earlier writings and practice of its founder. They have accepted his method as he himself then conceived it—with its law of similarity, its provings of medicines on the healthy, its single medicine, and its small dose. But they do not think they need follow him in the rejection of the pathology of their day, as he

in that of his. They find him allowing the existence of certain specific diseases, always essentially identical, for which fixed remedies can be ascertained ; and they think that the advance of knowledge has identified many more of the same kind. They prefer to work the rule *similia similibus* with pathological similarities where these are attainable ; though in their default, and to fill in the outline they present, they thankfully use the comparison of symptoms. Accepting his statement that attenuation within the millionth degree hardly weakens the power of a drug for good, while it robs it of power to harm, they freely use such fractional quantities ; but they rarely go beyond this limit, and as a rule steer closer to the other end of the scale. They do not mix medicines, but they often alternate them ; and (besides the occasional use of antipathic palliatives, which Hahnemann at this epoch recognised as sometimes allowable) they supplement them more or less freely with such agents as—lying outside the range of pure homœopathic medication—are commonly called auxiliaries.

On the other hand, there are many—especially in America—whose views of homœopathy have been formed upon the later teachings of the master, of which I shall subsequently speak ; and some of these have become more Hahnemannian than was Hahnemann himself. Among these colleagues of ours there has often displayed itself an intolerant spirit towards such as occupy the more independent position I have described above. Hard words are used of them, of which “mongrel” seems the favourite ; and they are bidden to depart from the associations of the true followers of Hahnemann, and to profane the name of homœopathy no more. Homœopathists of this kind are also exposed to considerable animadversion from their brethren of the old school. They are accused of sailing under false colours, because their practice is not exclusively of the kind denoted by their name, and are called upon—if they would vindicate their honesty—to withdraw from all fellowship from the societies, hospitals, journals, and other institutions which are consecrated to homœopathic therapeutics.

Now I maintain that great injustice is done to such men (who indeed form the great bulk of the homœopathists of the present day) by the attack of either side. It is not their fault that they, and the associations to which they belong, are known by a distinctive name. It is the fault of those who have refused to allow the views denoted by that name to be advocated, tested, and freely practised within the bounds of ordinary professional fellowship. Grant to homœopathy the same

liberty which is accorded to all other ways of thinking, however novel and unlike those ordinarily received, and the *raison d'être* of homœopathic institutions will have disappeared. But, till then, it must not be supposed that men who do believe in homœopathy, however little they make it the exclusive rule of their practice, will consent to put themselves in positions where all employment of and reference to it is tabooed. They join themselves to homœopathic societies and journals because there alone do they find the liberty of opinion and action they require. And why should their stricter colleagues be impatient of their fellowship? Their practice is surely good practice as far as it goes—far superior to that of one who rejects the master's teachings altogether. Pathological similarity must be better than no similarity at all. It may be a pity to alternate, but it is less injurious than to mix. Auxiliaries may be used more freely than is needful; but that is better than using nothing else. Of course, there may be so frequent an employment of extraneous measures, and so little cultivation of the method of similarity, that homœopathy ceases to be the predominant feature in a man's practice; and in that case the less he is connected with the name the better. But this is a rare occurrence; as a rule, the adoption of homœopathy leads, by its own intrinsic value, to a subordination of all other methods of treatment, which is as evident to the observation of others as to the consciousness of the practitioner.

Hitherto I have been vindicating the legitimacy of the homœopathy taught by Hahnemann up to 1806 to be called by that name, and to be practised by professed acceptors of the system. But it is another question whether it is wise to pause there; and whether, in declining to follow him further in the elaboration of his method, there may not be involved the neglect of a more excellent way.

It will be remembered that, when he wrote the *Medicine of Experience*, Hahnemann was only fifty-two years of age. In the ordinary course of things, supposing health and strength to be spared, there were at least twenty years of work remaining to him ere age should begin to dim his perceptions and enfeeble his faculties. Such work, moreover, if less original than that of earlier life, ought to be more matured; it should naturally contain the ripest fruits of a man's thought and observation. Now the twenty-two years which followed 1806 were those of Hahnemann's greatest activity as a practitioner and a writer. To this period belong the first four editions of the *Organon*, the first and second of the *Reine*

discovery of the efficacy and sufficiency of infinitesimals, for example, was mixed up with hypotheses of all disease being a derangement of the "vital force," and of a "dynamisation" effected in medicines by the processes of trituration and succussion to which he subjected them. All this may be rejected, as it generally has been rejected; but the discovery remains. It is thus with the various explanations he suggested of likes being cured by likes. Few receive these, but that *similia similibus curantur* is acknowledged by all his disciples.

Dismissing, therefore, the theories of the master as of doubtful value and only speculative interest, let us fix our attention upon him in the sphere of his true greatness, and consider his practical rules. I can but very briefly indicate the facts and arguments by which they have been substantiated. In so doing, I shall draw chiefly on the writings of Dr. Carroll Dunham. I feel that I am indebted to him for the conviction of the reasonableness of Hahnemann's fuller doctrine, as I was to Dr. Madden many years ago in respect of homœopathy generally.

1. And first, as regards individualisation. It is pointed out that while a few leading symptoms are sufficient to enable us to diagnose the nature of a case, and for this purpose we may ignore the rest, it cannot be so when we are to treat it by the method of similarity. Every appearance the patient presents, every sensation he experiences, every circumstance of amelioration or aggravation of his sufferings, must have some pathological basis, and must be taken into account in the choice of a remedy. Just in proportion as a drug has been found capable of causing all these concomitants and characteristics, will it be the rapid and certain cure for the case in which they occur. If it is otherwise, then, although the drug may have produced the actual disease, nosologically speaking, by which our patient is attacked, yet it may not be essentially homœopathic to the form of the disease now before us. It may be fever we are treating, and our medicine may be truly pyretogenic. But suppose that the pyrexia it causes is accompanied with great restlessness and anxiety, while the febrile sufferer under our care lies dull and listless, there is a lack of true homœopathicity between disease and drug. Adherence to the "totality of symptoms" would set us right, though we could not define or explain the difference between the two cases. Again, our patient may have rheumatic joints; but their painfulness may be either increased by continued motion or the reverse. It is obvious that this distinction may depend on the presence or absence of an inflammatory condition of the

parts, and may modify accordingly our whole management of the case. But, even though we knew not its significance, it would symptomatically guide us to the choice between Bryonia and Rhus as the medicinal remedy.

The individualisation of each case, therefore, by the totality of its symptoms, is the only certain method of arriving at the true *similimum* for it among medicines. The more we generalise, and refer it to a class, the less happy we shall be in our drug-selection for it. And, should there be no drugs which correspond to it as whole to whole, we should select that one which has caused any peculiar features it may have, if we have good reason to believe such remedy suited to the essential malady present. Correspondence at such special points indicates a very close relationship between disease and drug—far more so than if common characters only were in question. Subjective symptoms outweigh objective ones in such differentiation, for they present less of the common than of the peculiar features of a case. They are, moreover, of great value, as being the earliest signs of disorder, before organic change has begun; they constitute the main phenomena of a malady at a stage in which it is still curable. I should have liked, had time permitted, to have read you an extract from the Address on Medicine, delivered by Dr. Russell Reynolds before the British Medical Association in 1874, enforcing the importance of subjective and mental symptoms. "We are bound to remember," he concludes, "that there are many affections of which they furnish the earliest indication, and there are not a few of which they are throughout the only signs."*

2. And now as to the infinitesimal doses of this period, by which I mean the dilutions from the 2nd to the 30th. Evidence as to their positive efficacy, and as to the comparative inertness of many medicines unless thus attenuated, is abundant. The best proof of the latter point is that in the practice of those who confine themselves to the lowest potencies such remedies find little estimation or use. But a good deal of consideration is also due, I think, to the position of those who affirm the relative superiority of infinitesimal over more substantial doses. Besides Hahnemann himself, this class includes Dunham, Hoppe, von Grauvogl, and Chargé; and—to some extent at least, as evidenced by their practice—Tessier and his foremost disciple Jousset. The first-named has shown, from the comparative statistics of Wurmb and Caspar's

* See also Dr. Madden, "On Subjective Symptoms," in *Brit. Journ. of Hom.*, xxvii., 458; and Dr. C. Dunham, in *Homœopathy the Science of Therapeutics*, p. 89—92.

Hospital, that in pneumonia the action of the 30th decimal dilution was more certain and more rapid than that of the 15th and the 6th, while of the two last the 15th bore away the palm.* There is, moreover, in the general tone of those who employ highly attenuated medicines, a confidence in their remedies, an habitual sense of power and success, which cannot be disregarded.

3. Regarding the use of single doses, instead of a series of them, allowing the medicine thus given to act undisturbed for a reasonable length of time, I can say little at present. When we find so scientific a physician as Professor Hoppe maintaining the reasonableness of this practice,† and a veteran like Jahr saying that his best cures have been achieved in this way, which—he truly says—was that of Hahnemann and all his disciples for the first twenty years of homœopathy, it merits our best consideration.

4. And, lastly, as to the doctrine of chronic diseases. I think there can be no doubt of the immense benefit which has resulted therefrom in the past, in the tendency it has given us to look to the possible constitutional origin of local and superficial affections, and to treat them accordingly. This view, and our possession of the “anti-psoric” medicines, has placed us on the same vantage-ground towards all such affections, as, *e.g.*, the knowledge of the syphilitic origin of many examples of nervous disease has afforded in general medicine. There is a tendency in a certain school of homœopathists to think of all disease as local, and to neglect medicines which have not an absolute physiological action dependent on dose. Such, for instance, would be the result of Dr. Sharp’s system, if it were allowed to embrace the whole sphere of therapeutics. We need, I think, to be recalled to Hahnemann’s sounder standpoint if we are not to lose many of the triumphs over chronic disease which have hitherto waited on the steps of those who have adopted his method.

The second of our two homœopathies is now before us. It is that which Hahnemann taught and practised between 1806 and 1828. With the further modifications which took place subsequent to the latter date I have nothing at present to do. The new points which a man makes after seventy-four have no *à priori* recommendation in their favour; and that the first of them here was the fixing the 30th attenuation as the uniform

* See *Op. cit.*, p. 240.

† See his article in Hirschel’s *Neue Zeitschrift*, ii., 3, transl. in *Brit. Journ. of Hom.*, xx., 369.

dose of all medicines, whether for provings or for curative purposes, does not invite us to welcome the rest. To make the Hahnemann of 1830-43 our guide is, I think, to commit ourselves to his senility. But the second homœopathy which I have just been expounding is the fruit of his ripest manhood, and I think it ought to be more cultivated than it is in England at this time. I doubt whether it is, at least in all hands, applicable to the exigencies of every-day practice and the treatment on a large scale of acute disease. For this purpose I commend to you rather the earlier and simpler method I have previously exhibited. But when there is more leisure, and especially when chronic disease comes before you, I think that your best hope of making certain and speedy cures, whose brilliancy shall recall the earlier days of our history, will lie in your adherence to that (shall I call it?) higher homœopathy which the genius and toil of its discoverer have elaborated for us.

It is under these convictions that I shall set about teaching you *Materia Medica* and *Therapeutics* from the homœopathic point of view. I must avow at once that my ordinary standpoint is that taken up by the followers of Hahnemann's earlier method. It must almost necessarily be so. Lectures on *Materia Medica*, like those on the *Practice of Medicine*, must contemplate *diseases* as their objects, while the purer homœopathic therapeutics regard rather the sick person in his individuality. The similarities, moreover, which I shall seek to establish between drug-action and disease will be in the main pathological. When, again, I see reason to conclude that any recognised use of a drug—as that of Amyl nitrite in angina pectoris, and of Belladonna in nocturnal enuresis—is anti-pathic and palliative only, I shall not therefore advise you to reject it from your practice. I shall also tell you of many applications of remedies which, though truly homœopathic, are (in my judgment and according to experience) best carried out with appreciable doses. On the other hand, I shall be far from ignoring such subjective and peculiar symptoms of drugs as may aid in the task of individualisation: I shall frankly accept the efficacy of infinitesimal doses, both in pathogenetic and in therapeutic action; and I shall assume the soundness of Hahnemann's psora-doctrine, as I have now explained it, and devote much attention to the new and recondite remedies which it has led him to introduce to our notice.

The homœopathy you will learn from me will thus be no narrow or imperfect thing, but will embrace the whole range of Hahnemann's progress as a thinker and discoverer, while

content to receive some modification of its form from the advances of modern investigation. It will be such as he (I apprehend) would not fail to recognise as his offspring, while in no disciple of the scientific medicine of to-day will it be likely to excite repugnance or contempt.

LECTURE VII.

HOMŒOPATHIC POSOLOGY.

There is one more topic on which I must enlarge ere we begin our detailed study of the *Materia Medica*. I have spoken of the modifications imposed upon this course of instruction by the fact of its being delivered in a School of *Homœopathy*. But I find that I have omitted any special notice of what to many minds would seem the most peculiar feature of that which I shall say. I refer to the minute dosage with which I shall so often have to deal. The pharmaceutic processes I have described as characteristic of homœopathy have for their main objects the reduction of the drug to fractional proportions, of which the third degree already represents the millionth part of a grain or a drop, while I shall have to speak familiarly of the sixth, the twelfth, and even the thirtieth. You will be warranted in demanding of me some explanation and vindication of such unwonted dosage; and it will be my pleasure as well as my duty to give it you.

Now the first and chief reason of my dealing with these minute quantities of drugs is that their use is a fact in the history of homœopathy. I have already told you how Hahnemann early followed up the enunciation of his new principle by a reduction of the dose of medicines given in accordance with it, and how in later times he pushed the attenuation of his remedies to the elevated degrees I have just mentioned. If any of you desire to follow him step by step in his progress, from 1796 to 1839, you will find the means of doing so in the article on the subject contained in the *British Journal of Homœopathy* for April, 1878.* As it was not till after 1811 that he began to make professional converts to his system, it came to them all with the infinitesimal dose as a part of it, and was by them all carried out therewith. Most of them, moreover, went on with their master in his further development of attenuation, and some have since pushed far beyond him in the process. The result is that the great bulk of the

* Reprinted in the Appendix to this volume.

homœopathic experience on record has been obtained by means of minute dosage, and no little of its pathogenesis owns a similar origin. I, as a teacher in a School of Homœopathy, have to deal with it historically—as it actually is and has been; and, whether I myself approved of them or not, infinitesimals must necessarily play a large part in the lessons it is my duty to give.

But I am fully prepared to maintain the tenableness in itself of the homœopathic posology, and to advocate it as a most important and beneficent part of Hahnemann's therapeutic reform.

In the first place, comparative smallness of dosage is the logical and obvious corollary of *similia similibus curantur*. It needs no argument, as I have said, to show that the ordinary doses of Arsenic, against which even a healthy stomach needs to be shielded, would increase the irritation of one already inflamed, for which, nevertheless, the homœopathic principle would direct its being given. The quantity administered must be reduced accordingly. Nor are Hahnemann and his avowed followers the only witnesses to the practical necessity of this proceeding. Whenever a piece of homœopathic practice has been borrowed by the practitioners of the old school, the small dose has always gone hand in hand with the similar remedy. Drops of Ipecacuanha wine were unknown to the ordinary posology until the drug began to be used to check vomiting instead of to cause it; and similar novelties in the way of dosage abound in the *Therapeutics* of Dr. Ringer, and in the like-minded communications of Dr. Dessau to his New York colleagues.* I may appeal to such facts as the best answer to the argument lately advanced by Dr. Decaisne in France, and Dr. Barr Meadows in this country, that the aggravation caused by similarly-acting remedies in the ordinary quantities proves their unsuitableness, and that the diminution of dose merely evades the difficulty by reducing their action to nullity.

But this argument, valid as it is, establishes only the relative smallness of the homœopathic dose. We must go farther to ascertain what its positive littleness may be, and to warrant any measure of the astonishing exiguity it has actually attained.

Now I would here suggest that dose is, to begin with, a mere arbitrary matter. There is nothing in nature corresponding to drachms and scruples and grains, and there is no reason why that particular number of molecules which go to make up the

* *New York Medical Record*, July 28, 1877.

last-named quantity should be designated by a whole number, while all below it must be expressed by fractions. Yet the result of its being so is that in the grain we seem to have got to the *ultima Thule* of ordinary smallness, and any further division strikes us as strange. Again, it is evident that all our notions of dosage are derived from the quantities of drugs it has been found necessary to give to produce their physiological effects on the system—to set up purgation or emesis, the sedation of an aching nerve or the relaxation of muscular spasm. If the so-called “alterative” medication had attained a larger place in therapeutics, these notions might have been modified. It has always been recognised that a different posology holds good with regard to remedies of this kind; that, as no physiological effect was sought, but only a gradual extinguishment of the morbid state, the dose necessary to be given was purely a matter of experience. Now it cannot be too clearly recognised that all homœopathic remedies are “alteratives” in this sense; and hence that any standard of dosage taken from such medication as aims to produce physiological effects is inapplicable to them.

Further, it is obvious that, even without taking such distinctions into account, dose is a shifting quantity. It varies, as every one admits, within certain limits, according to age and sex, the strength or weakness of the patient, and the amount of medicinal susceptibility he possesses. It varies through a still wider range with the different drugs we administer. Take, for instance, two remedies renowned of old in the treatment of cutaneous disease—Dulcamara and Arsenic. Carrère, the introducer of the former, administered it in tablespoonfuls of a decoction made in the proportion of an ounce to a pint; while the latter is given in small doses of a solution (Fowler's) which contains only 1 part in 120, sometimes requiring (as in a case of Mr. Hunt's) that even minims of this shall be broken up into fractions, which yet prove curative. So, when another potent substance—Phosphorus—is introduced (as lately by Mr. Ashburton Thompson) into the ordinary practice, no one is surprised at his recommending its employment in hundredths of a grain. With the alkaloids we get further still in the realm of minuteness, even as regards physiological action. Take the influence of atropia in dilating the pupil. The “atropised gelatin” prepared by Savory and Moore under the direction of Mr. Ernest Hart purports to contain but $\frac{1}{100000}$ of a grain in each disk; yet it answers its purpose excellently well. Professor Doñders (cited in the fourth edition of Pereira's *Materia Medica*) finds that in dogs the attenuation of atropia may be

carried up to $\frac{1}{100000}$ before the effect becomes doubtful ; and it is possible, from the experiments of Rossbach and Frölich, that the doubtfulness arose from contraction being produced by the drug when reduced below the dilating point. Professor Donders, moreover, adds :—“ The sensitiveness of the eye to atropia, indeed, excites astonishment, when we consider that of the single drop of attenuated solution which suffices to produce dilatation probably not a fiftieth part is absorbed.” Nor is it the pupil only that these dilute applications to the eye can affect. Dr. Harley records an observation of “ congestion of the entire conjunctiva, with dryness of the membrane and dull aching pain in the eyeball, lasting for several hours,” occurring after the instillation of twelve drops of a solution of one part in 400,000 of water. We have only to go somewhat lower in the scale of fractional minuteness to see the drug affecting the whole organism from within. Dr. Ringer finds the 200th of a grain of Atropia, subcutaneously injected, sufficient to dry up the whole surface of the body, even when freely perspiring in the Turkish bath ; and Dr. Harley writes of this substance—“ An infinitesimal quantity—a mere atom—as soon as it enters the blood originates an action which is closely allied to, if it be not identical with, that which induces the circulatory and nervous phenomena accompanying meningitis, enteric, or typhus fever.” Aconitine carries us a step farther. The 300th of a grain of this alkaloid was found by Dr. Milner Fothergill sufficient actually to kill a rabbit of three lbs. weight ; while guinea pigs are so extraordinarily sensitive to its lethal influence that one weighing a pound died in three hours and a half after the administration of $\frac{1}{1125}$ of a grain. After these experiences you will not be surprised to hear that Professor Arnold, of Heidelberg, found tetanus readily produced in frogs by $\frac{1}{100000}$ of a grain of strychnia. Even the $\frac{1}{1000000}$ caused increased reflex excitability ; and in one of these creatures, which the day before had been tetanic for some hours, after $\frac{1}{100000}$ had been administered to it, but had quite recovered, a slight attack came on in half an hour after receiving the $\frac{1}{1000000}$, which ended, after some hours, in its death.

With these poisons and alkaloids, then, we have clearly got far on the road to another standard of dosage. The French *milligramme*—i.e. (about) $\frac{1}{75}$ th of a grain—is found the most convenient unit for them, and even this (as M. Gubler has announced in regard to aconitine) has to be further divided. We have got a long way towards infinitesimals, even for the production of physiological effects ; and it would be very

unwise if we refused to look ahead, and see what further reduction may be necessary when we seek for pure therapeutic results on the principle of similarity. If drop doses of Ipecacuanha wine are sufficient to check vomiting, while drachms are needed to cause it, then, if "an infinitesimal quantity—a mere atom" of atropia will originate the pyrexial process in the blood, how minute must be the quantity which, on the same principle, will be appropriate to extinguish it!

Yet again. There are many substances which are inert in their crude state, but which, when rubbed up with some indiffereñt vehicle so as to insure a fine division of their particles, become active enough. We have a familiar instance in Mercury, which as pure quicksilver may be swallowed by the pound, but which, when intimately mixed with confection of roses or with chalk, becomes a potent drug. It is now recognised that the amount of oxidation which takes place in the preparation of blue-pill and grey powder is very small, and that minute subdivision is the essence of the process. Now Hahnemann, as you are aware, has largely developed this mode of preparing drugs, introducing the improved method of a graduated trituration with sugar of milk. The metals—gold, silver, platinum, zinc, together with such neutral substances as charcoal, flint, and lycopodium, are awakened to energy by this potent process, and show themselves capable of no little influence upon the organism. It is obvious that since in this way a real development of power is effected, there must be a certain stage in the process at which the drug, inert in its crude state, begins to be active, and another at which this newly-awakened energy is at its height, after which all further attenuation must have a contrary effect. At this second stage the triturated substance stands on the same level with a medicine of similar character which is active from the first; so that a grain of Silica 2 may be equal to one of Hepar sulphuris ϕ , though in actual quantity of the drug the latter is to the former as 10,000 to 1. Thus, with the medicines made such by trituration a very minute fraction may be the unit of their strength and the standard of their physiological activity; while a still more infinitesimal quantity will be appropriate when they are used as remedies upon the homœopathic principle. I have mentioned the second trituration here because it was in those from the first (as Aurum and Argentum) to the third (as Carbo) that Hahnemann proved medicines of this kind.

We have arrived, then, at the conclusion that, when administered in conditions similar to those which they cause, medi-

cines must be given in smaller doses than would be necessary for such causation; and that the exiguity thus required may, from the natural activity of the substance, or from the degree of attenuation at which its energies begin to appear, be very considerable, reaching sometimes to such fractions as the thousandth, the ten-thousandth, and even the millionth of a grain. It may have to go thus far, but it need hardly go farther. To attenuations of this degree Hahnemann was led when first (in 1799) he began to use infinitesimals; and for some years after he seems to have remained at the same point, more often descending below it than rising above it. To such potencies, moreover, a number of his followers—and these not of least eminence—have confined themselves, when they have found it necessary to ascend above the mother tincture or the crude drug. Drysdale and Kidd, Yeldham and Black in this country; Trinks and Arnold in Germany; Cretin in France; Gray in America—these are homœopathists of no small note, who tell us that in the first six decimal potencies they find all the attenuation they need, *when they need any at all*. On the other hand, the reasonableness of so far diluting potent drugs, when homœopathically employed, is denied by none. Dr. Ringer may recommend his hundredth-of-a-grain doses of corrosive sublimate in dysentery, and Mr. Hunt may come down to the 480th of a grain of Arsenic in psoriasis, and no one will gainsay them. One of the latest critics of Homœopathy—Dr. Rogers, in his *Present State of Therapeutics*, says:—"I can well imagine that certain energetic remedies may act more or less in doses of the 1st, 2nd, or 3rd dilutions of the decimal scale," *i.e.*, in the tenth, hundredth, or thousandth of a grain.

So far you have, I imagine, followed me without difficulty. There is nothing in reason, nothing in the nature of things to render doubtful the apparent testimony of experience, when it speaks of the efficacy of similarly-acting medicines in the attenuations from the 3rd or 2nd downwards. If homœopathic posology had only taken this range, I should have had nothing further to urge, and could now have left the subject in your hands, confident of your acceptance of my position. I wish indeed that I could have done so, and that the method of Hahnemann had not been weighted with anything in the way of dosage less defensible than the thousandths and millionths with which I have been dealing. But here again I must remind you that my duty is not to express my own preferences, but to teach you homœopathy as actually existing and historically developed. I must, therefore, take into account that,

from 1808 onwards, Hahnemann is found raising the potencies of several of his medicines far above the 3rd, dealing with billionths, trillionths, quadrillionths, octillionths, at length reaching the decillionth, and in 1829 fixing this last proportion as most suitable for all drugs. I must recognise the fact that the majority of his disciples have followed him in the employment of these higher fractions, and are using them more or less largely in their practice at the present day. Nor can I shut my eyes to the later development of attenuation up to the 200th dilution; and to the knowledge that potencies of this strength, of undoubted pharmaceutic reality, have been warranted as active by such men as Bönninghausen, Dunham, Tessier, and von Grauvogl, and by the first two at least esteemed of more efficacy—both in acute and chronic disease—than any lower dilutions. I cannot ignore these facts; and more, I do not feel justified in presenting them to you as a mere recorder, with such unsympathetic reluctance as to influence you against their acceptance. Much as I regret the necessity of employing the higher infinitesimals, I cannot but acknowledge it. The testimony in their favour is overwhelming; the evidence of their efficacy undeniable. My own experience of such dilutions as the 6th and 12th, and (with some remedies) of the 30th, is such as to make me join with unquestioning acclamation in their praise. I have no practical knowledge of the 200ths; but if I had no other fact before me than their constant use by so scientific and successful a physician as Carroll Dunham, I should be content to acknowledge their legitimacy.

But here, too, we must inquire how far the apparent testimony of experience is supported by reason, by science, by observation.

1. I fear that reason has nothing to say in our favour. We have good logical ground for reducing our dose below the point at which it can aggravate the existing malady, or injure healthy parts; but we have none for carrying our attenuation further than this. We seem, therefore, to have effected all reasonable ends, even with the most potent poisons, when we have reached the thousands and millionths of which I have hitherto spoken; and the same may be said of the inert substances whose properties are first elicited by trituration and dilution. Unless some evidence should be brought before us to prove that we actually develop power, as we go on attenuating after the Hahnemannian method, reason must certainly frown upon the higher potencies. I shall examine presently the theories of "dynamisation" which have been put forward

to support this conclusion, and I fear I shall not be able to endorse them. I must, then, for myself at least, give up any countenance from the side of reason for this part of my position.

2. The relation of science to us, however, is at first sight very encouraging. No one can have followed the researches of the last thirty years, and considered the sizes dealt with in thermal and luminous undulations, and in the molecules and atoms of matter, without feeling that infinitesimals of a most minute character are acquiring undoubted place and reality in the world of being. All the work of the universe, all the actions of life, are seen to be carried on by these tiny existences; in their little microcosm forces of all kinds play, and in them begin all changes whether normal or morbid. It seems at first sight, I say, that we are only following in the same track when we present our drugs in a state of the finest molecular subdivision, when we seek to counteract abnormal motions of the ultimate particles of matter by vibrations as minute as their own.

And to a great extent we are, I think, quite justified in claiming the support of science for our proceedings. The existence and the energy of the infinitely little have been substantiated thereby, and no one is now warranted in rejecting effects because their supposed causes are inappreciable by coarse sensation. But I fear that if we make too much of the analogies of the minute quantities with which scientific speculation deals, we shall find we have enlisted a dangerous ally, one who will leave us when most we need assistance. It must be remembered that the conception of the atomic constitution of matter, while suggesting how infinitesimally small are its ultimate particles, implies also that it is not infinitely (in the strict sense of the word) divisible. You must come at last to atoms (*ἄ, ἄμω*)—particles which can be divided no farther; and then any subsequent attenuation can but reduce their number until all trace of them disappears from the vehicle. Now molecular science has so far advanced that it has seemed practicable to estimate approximately the size of the ultimate atoms of matter. Sir W. Thompson, Clerk-Maxwell and others have attacked this problem, and, though their solutions of it differ pretty widely, none have gone further than the affirmation that a trillion of such atoms may be contained in a space of $\frac{1}{1000}$ th of an inch cube.* Now, making all allowance* for the molecular contraction which, as Jolly has shown,

* See *Monthly Microscopical Journal*, March 1876, p. 113.

attends upon all attenuation of chemical solutions,* this will hardly carry us beyond our 12th potency. At higher degrees than this the presence of any atoms of matter whatever must become increasingly doubtful.

This is the latest word of theoretical science on the subject; and its practical observations point in the same direction. Chemical tests, applied to those substances which are readily recognised thereby, follow them up with decreasing clearness to the third attenuation, and there—or thereabouts—lose them. The spectroscope carries our vision further still; but the 9th dilution is the highest point from which any response has been forthcoming to this potent detector. The microscope, used upon the triturations, has yielded similar results.† Under a power of 300 diameters, Dr. Mayrhofer has traced metallic particles up to the 10th, 11th, and (in the case of precipitated tin) even the 13th and 14th attenuations, but no further. “Moreover, the visible particles of the substances,” he says, “become gradually smaller and fewer as the triturations advance, and at last cease altogether.” Up to a certain point, then, we gain by this process. “A patient who takes a grain of the 3rd trituration of tin or arsenic, swallows no less than 576,000,000 particles, each of which possesses all the properties of the metal, and from their minute size can freely penetrate to all parts of the organism, and develop their peculiar effects on every part.” But, if trituration is carried on, “the atoms, becoming always smaller and more mobile, at length come to be so much so that they elude the triturating force.” If, on the other hand, they are (according to our usual plan) mixed from this point with a fluid menstruum, either they are suspended therein, when it is obvious that their number must decrease a hundredfold with each successive dilution, or they undergo a true solution, when they are as divisible as matter itself, but no farther.

When now we turn to observations on the animal body, corresponding conclusions have to be drawn. M. Davaine, in experimenting with septicæmic blood, was led to try in what fractional proportion it still retains its virulence. He found that by employing the graduated Hahnemannian method of dilution, he could reproduce the disorder by inoculating other animals (rabbits) with the millionth, the billionth, the trillionth, and at last the ten-trillionth of a drop of blood. Above this

* See v. Grauvogl's *Text-book of Hom.*, pt. ii., § 221.

† Dr. Conrad Wesselhoef's recent examination of our triturations has yielded results still less favourable; but his work is regarded as still *sub judice*.

point, however, no effects were produced. Again, therefore, science goes a long way with us. It shows that matter can be carried by the homœopathic process of attenuation above the 9th centesimal degree without ceasing to be present or losing the activity proper to it. But at this point it leaves us in the lurch, and—without denying it—gives no warrant to the supposition that the same thing will hold good at further stages of the process.

From science as such, then—science unconnected with Medicine—we receive countenance for our infinitesimals so far, that up to about the 12th centesimal dilution we can depend upon the presence of some particles, however few or small, of the original drug. But the very support which it gives us up to this point turns into opposition when we go beyond it; for, if every test finds less and less response as we mount higher in the scale of dilution, it implies that there is a progressive diminution in the quantity and energy of the matter present, and that we must at last get to an end of it. And, again, if when we have reached the ultimately visible particles of matter, we see them diminishing in number as we attenuate farther, must it not be so with those still smaller particles into which matter is ultimately divisible? At the 12th dilution we are a good way off from the 30th, and there is a great gulf between us and the 200th. How are we to bridge it over? how fill up the yawning void? Now at this point come in the theories of “dynamisation” which have attracted so much attention in the homœopathic controversy—much more, indeed, than their intrinsic importance deserves. They imply that the processes of trituration and succussion with which our attenuations are made more than compensate for the reduction of the mass of the medicinal substance, that they actually develop power, and this to an indefinite extent, so that the higher dilutions are more potent as medicines than the lower, the 30th than the 3rd, the 200th than the 30th, and so on *ad infinitum*. By some of Hahnemann’s followers, who are more imaginative than philosophical, this dynamisation has been supposed to result from a transference of the whole thing from the realm of matter to that of spirit.* I can only say that

* I must admit that his own language in later days favours the same idea, but I think that he used the term “spiritualisation” metaphorically. He supposed matter to be infinitely divisible, saying in the last edition of the *Organon* (1833): “A substance divided into ever so many parts must still always contain in its smallest conceivable parts *some-what* of this substance, and the smallest conceivable part does not cease to be *some* of this substance, and cannot possibly become nothing.”

I know nothing of such conceptions as applied to natural things: they are to me alike uncongenial and unintelligible. Others, with a more just idea of the matter in hand, have endeavoured to apply to it the doctrine of the correlation of force, and have argued that the energy put forth by the triturator or succusser must be converted into increased force on the part of the drug so treated. But they have not shown, on the one hand, that it may not be accounted for by the heat and electricity developed in the process, and on the other, that the power of drugs to affect the organism is a "force," in the sense that heat and light and such like are forces, so that it has equivalence and correlation with other modes of motion. It seems rather to be a fixed and inalienable property, peculiar to each substance possessing it. The same objection holds good to the hypothesis advanced by my friend Dr. Allen,* that the energy of the drug is transferred to the vehicle, so that although no particles of the original substance remain therein the medicinal force is not lost. If, moreover, it were so, it is obvious that no further potentisation would be possible when once the drug had attained its ultimate subdivision, and, parting with its force to the surrounding menstruum, disappeared from the scene. From about the 12th to the 18th dilution, then (if the calculations I have specified are correct), all capacity of change must cease, and we have in hand nothing but a medicated water or spirit, incapable of further dynamisation. Dr. Allen refers to the French observations with septic blood as illustrating this transference of energy to a vehicle. But he forgets that after the ten-trillionth (*i.e.*, 19th decimal) dilution had been reached, which is about the estimated extent of the divisibility of matter, no further effect was manifested.

I may refer you to a short but able paper by Mr. Proctor in the thirty-first volume of the *British Journal of Homœopathy*, on "The Theory of Dynamisation," as a complete examination and, I think, refutation of these ideas.

You will observe that I have said nothing about the potencies lately employed in America, in which the 1000th becomes a new unit, and the scale is run rapidly up until now the millionth and ten-millionth are supposed to have been reached. I must reject these, not upon the grounds of science and reason, but upon those of pharmacy. They are simple impossibilities. It is easy to calculate that, if Hahnemann's directions are followed, upwards of 2,000 gallons of spirits of wine would be required for making the millionth potency of a single medicine, to say nothing of a million clean bottles; and, as not more

* See *New York Journ. of Hom.*, ii., 1.

than four potencies could be made in a minute, each receiving its due number of shakes, that incessant labour at the rate of twelve hours a day, and six days a week, would yet occupy more than a year in the process! Even if machinery be employed, the time taken could not be reduced much more than one half, and as power of some kind must be supplied, considerable expenditure would be incurred. Whenever, accordingly, we are able to learn the process by which these potencies are prepared (and the tendency is to keep it a secret), we always find it other than that recognised among us, and illegitimate in itself. Jenichen's preparations, which first broke ground in the new field, are now believed to be simply succussions of an ordinary attenuation without further dilution—ten of such shakes being reckoned as producing a potency one step higher in the scale. The preparations which go under the names of Fincke and Swan are manufactured by what is called "fluxion," *i.e.*, by allowing a stream of water to be propelled with some force into a phial containing a hundredth part of a drug, each emptying of which is reckoned as diluting it one step farther in the centesimal scale. Even in this way an immense time must be taken to produce such potencies as are named; * and how utterly untrustworthy is the result! † My advice to you, therefore, is to keep altogether clear of these obscure and objectionable practices, and to set down any results which seem to have been obtained by medicines so prepared to their being other than what they assume to be.

Putting these, then, out of sight, and limiting ourselves to such attenuations as have been, and can be, prepared in a proper way, our conclusion must be that while we are fully warranted in expecting action from those below the 3rd, and are not without countenance in similar hopes from those up to the 12th, beyond this range we have nothing to depend upon

* Jenichen purported to produce the 60,000th potency. Dr. Dudgeon has shown that, working five hours a day, and allowing a second for each shake, it would take him five weeks to raise—according to his method—a single drug to this height.

† Dr. Burdick, of New York, who has eminent scientific qualifications, has lately shown, by calculation and microscopical investigation, that the potency which Dr. Swan represents as m.m. (*i.e.*, thousand thousandth, or millionth), "cannot exceed the tenth centesimal of Hahnemann, and is liable to be much lower" (*Hahn. Monthly*, Nov., 1877). It has been cruelly suggested (and not without warrant) that the reason why these preparations have been found so efficacious is that they are really much *lower* attenuations than their adopters have been accustomed to employ.

but observation and experience. While we are not, therefore to ignore curative results obtained from 30ths and 200ths, we must be wary about admitting them, requiring the warrant either of the capacity of the observer, or of a full statement of the facts of each case. Upon these principles I shall act in dealing with the materials of my present course. They are applicable also, and with even greater force, to provings which purport to have been made with infinitesimal doses, many of which will come before us as we proceed. The altered sensibility to stimuli of diseased organs, and the similarity of the action of the drug to the morbid cause, combine to suggest that homœopathic remedies may cause aggravation, and that their doses should be small and may be minute. Upon the healthy there is no such *à priori* probability of the action of infinitesimals: it is a pure question of fact. Well: I can here also affirm that, in my judgment, the facts bear out the doctrine that such quantities *may* produce effects. Let me mention three crucial instances:—

1. Dr. Imbert-Gourbeyre, whose bibliographical and personal collections of the effects of Arsenic will connect his name indissolubly with this drug, has recorded several instances of its physiological action in infinitesimal doses.* Among these are,—from the fourth trituration (gr. १०००३०००), pruritus, erythema, papules, and burning of the eyes with lachrymation; from the eighth (gr. १००००००००००००) a confluent miliary rash with great malaise (this was in a healthy prover, a medical student).

2. Dr. von Grauvogl, to whose transcendent ability his *Lehrbuch der Homœopathie* bears unquestioned witness, proved the same drug on himself. The 3rd and 10th decimal attenuations made him ill: the 30th decimal did not do this, but it brought on the insatiable thirst which he subsequently experienced when suffering from the stronger doses, and which he therefore knew to be arsenical.† The 30th decimal = the 15th centesimal attenuation; *i.e.*, a drop of it represents the quintillionth of a grain.

3. Arsenic is a virulent poison in its crude state. But of the drugs which, inert thus, develop energy in the process of trituration we have a typical example in Natrum muriaticum. This substance was re-proved in Vienna, under the superintendence of Dr. Watzke, a most competent observer, and with all his prejudices the other way. But he writes—"I am,

* See especially his "Etudes sur quelques symptômes de l'arsenic" in the *Gazette Medicale* for 1852.

† *Text-book of Hom.* (trans. by Shipman), ii., 59.

alas! (I say, alas! for I would much rather have upheld the larger doses which accord with current views) I am compelled to declare myself for the higher dilutions. *The physiological experiments made with Natrum muriaticum*, as well as the great majority of the clinical results obtained therewith, speak decisively and distinctly for these preparations."

In the face of such facts (which might easily be multiplied, both from the Austrian* and the later American provings) we are not justified, I think, in rejecting symptoms purporting to be obtained by infinitesimal doses of drugs, as such. They possess, however, in enhanced degree the uncertainty which hangs about all provings on the healthy subject. Dr. Hamilton showed us some years ago† how many slight deviations from the norm will occur in a man presumably healthy, who notes his own feelings and doings for a few days. Dr. Conrad Wesselhœft, of Boston, has recently shown‡ the same thing on a larger scale by a crucial experiment. Having to conduct a re-proving of *Carbo vegetabilis*, he began by furnishing his fellow-workers with a number of blank powders of sugar of milk. No inconsiderable array of symptoms were reported to him as the result of the ingestion of these placebos, before a single particle of the drug had been absorbed. Except, therefore, where care has been taken to eliminate this source of error, we must accept with considerable reservation the results purporting to be obtained from infinitesimal doses, especially when they are of the subjective and fleeting character which mostly belongs to them. When, as in Dr. Imbert-Gourbeyre's cases, they are objective, or when, as with Dr. von Grauvogl's, they are marked and recurring, there need be no doubt of their reality.

I believe these to be reasonable grounds on which to proceed in dealing with the difficult subject of Homœopathic Posology.

* See *Brit. Journ. of Hom.*, vi., 10.

† See *Ibid.*, xxix., 565.

‡ See Transactions of the American Institute of Homœopathy for 1877.

LECTURE VIII.

ACIDUM BENZOICUM, CARBOLICUM, FLUORICUM, HYDRO-CYANICUM, MURIATICUM.

We now proceed to the consideration of the several substances constituting the Homœopathic Materia Medica. Various classifications of drugs have been adopted by teachers and writers of the old school, as the order in which they should be discussed. I venture to think that all these, whether based on natural history, on physiological action, or on therapeutic properties, assume more relation between drugs than really exists. In homœopathy we are led to regard each drug as an individual, and it will be more in accordance with the genius of this system to adopt an order which assumes nothing as to the action of its constituents. This is, obviously, the *alphabetical*.

Most homœopathic authors, in adopting this plan, begin with Aconite, and at once plunge therewith into the very thickest of the fight. I shall ask your previous attention to the *acids* used in our practice. By Hahnemann and Jahr these were named after the substance which yields them, as Nitric acidum, Sulphuris acidum; and took place in their alphabetical catalogues accordingly. Dr. Allen has them similarly scattered throughout his volumes, through their being called Benzoicum acidum, Fluoricum acidum, and so forth. I much prefer grouping them all together, with their *adjectiva* in the second place: their names will then stand first on our list. We shall gain this advantage thereby, that several minor yet not unimportant medicines will have come under our notice, and will have initiated us in the study of Materia Medica on homœopathic principles, ere we grapple with one of the most eminent of the series.

The first medicine we shall consider, therefore, is—

Acidum benzoicum.

This acid is obtained by sublimation from benzoin, a balsamic resin which exudes from the incised bark of the

Styrax Benzoin. It is dissolved in rectified spirit, or triturated.

Nothing was known of the physiological effects of Benzoic acid (save the alteration of the urine which it causes) till it was proved by the American Institute of Homœopathy. The report of these experiments, by Dr. Jeanes, is contained in the *Materia Medica of American Provings*. Another pathogenesis of the drug was then published by Dr. Petroz, and may be found in his collected writings. An "arrangement" of our knowledge concerning the drug forms one of Hering's *Amerikanische Arzneiprüfungen*, and may be read in English in Dr. Shipman's translation of v. Grauvogl's *Text-Book of Homœopathy*. It contains many additional observations. Dr. Allen's article includes all these materials, but is somewhat spoiled by a commingling of clinical with pathogenetic symptoms, the former being not always distinguished by their proper mark.

The pathogenesis of Benzoic acid does not lend itself readily to interpretation or analytic statement. It is one of those which are utilised therapeutically rather by the *à posteriori* than by the *à priori* method of homœopathising. The account to be given of it is therefore the statement of what application has been made of it to practice.

After taking Benzoic acid in quantity, hippuric acid appears in the urine. This seems merely a chemical change, as hippuric acid under the influence of acids is converted into Benzoic acid and gelatine sugar, and the opposite transformation has every opportunity and material for its occurrence. It was supposed, however, by Mr. Alexander Ure that in this process the lithic acid of the urine disappeared; and hence he proposed to use Benzoic acid in gouty subjects to prevent concretions and calculi. Later investigations have not confirmed this observation as to lithic acid, nor Dr. Garrod's statement that under these circumstances the urea is diminished. But Lehmann has demonstrated that the Benzoic is one of the few acids which manifestly increase the acidity of the urine. It has accordingly been used, with decided temporary benefit, in cases of irritable bladder with alkaline urine and muco-purulent or phosphatic deposits.

The dynamic properties of the drug seem to centre at the same spot. Dr. Jeanes has found a deep red (almost brown) colour of the urine, and a great intensification of its natural odour, an almost unfailing characteristic for the drug. A minute dose even will change these features of the secretion, and therewith ameliorate the morbid conditions associated

with them. Among these he mentions especially syphilitic and gonorrhœal affections occurring after suppression of the primary symptoms, but also recurring quinsy and nephritic colic, infantile diarrhœa (the stools being pale and fœtid), ulcerations of the mouth and tongue, and rheumatic and gouty arthritis. In all these, Benzoic acid, prescribed mainly because of the presence of the characteristic urine, relieved greatly or cured. Subsequent experience and testimonies are in the same direction. In the enuresis of children* and old persons where this condition is present; in dysuria similarly accompanied; † and in acute articular rheumatism having the same feature, ‡ the drug has been found of the utmost value. Dr. Guernsey states that the odour of the urine is more characteristic than the colour, and that it must be present when the urine is freshly voided.

These are the main uses of Benzoic acid; but a few miscellaneous observations must be added.

1. Benzoin and other balsams—as those of Peru and Tolu—are regarded as having a specific influence upon the mucous membranes, especially that of the respiratory tract, which (say Trousseau and Pidoux) they affect as the turpentine that of the urinary organs. They are used to check excessive expectoration. Now although, when swallowed in substance, their resinous constituents might have much to do with this action, yet the more common mode of applying them to the bronchial membrane is by fumigation, and here it is the acid they contain which becomes the active agent. In the case of benzoin this acid is, as we have seen, our present drug; which thus appears to exert a special action on the respiratory mucous tract. Accordingly, we find that when Schreiber had taken in two days about half an ounce of the acid, he noted—among other effects—an increase of the pulse-rate amounting to thirty beats per minute, *with increased secretion and excretion of phlegm*; while Pereira states that he has repeatedly tried the acid in bronchial affections, but has more frequently seen it augment than relieve the cough. Perhaps in the smaller doses we should use it would prove more beneficial.

2. Dr. Hering says that “the more Benzoic acid is used in

* *North Am. Journ. of Hom.*, iii., 334. Marcy and Peters, p. 14. Stillé says that incontinence of urine, without an altered condition of the secretion, has been treated successfully by means of benzoic acid; but Bartholow thinks that in such cases the urine was too alkaline.

† See *Brit. Journ. of Hom.* xxvi, 489.

‡ Von Grauvogl's *Text Book* (Engl. transl.), ii., 127. It is much used in this disease in the Leopoldstadt Hospital at Vienna (*Annals*, iv., 514).

gout the more it will be prized." The swelling of the fingers noted by Nusser, one of his provers, who took eighty grains of the second trituration in one dose, points in this direction; and the facts we have just mentioned suggest the drug in gouty bronchitis.

3. Dr. Bayes states that he found it rapidly curative in a case of tendinous swelling at the back of the wrist of long standing; he does not say in what dose. I have myself frequently obtained much reduction in size of ganglia situated in this region by its external application in an ointment containing five grains to the drachm. But Dr. Turrel has communicated to the eighth volume of the *Bibliothèque Homœopathique* (p. 354) five cases in which such tumours were dispersed by the medicine given internally in the dilutions from the 12th to the 30th. He mentions that horses are liable to an analogous affection ("wind-galls"), and suggests that it may be owing to the considerable proportion of Benzoic acid which exists in their forage. This latter fact may account for the uric acid in their renal secretion undergoing that modification which has given it the name "hippuric," and which accounts for the strong odour of horse-urine. In one of Dr. Turrel's cases the urine had a remarkable fœtor.

There is no homœopathic medicine I can compare with Benzoic acid.

Its chemical action on the urine seems attainable with about ten-grain doses. Its homœopathic uses have been carried out with quantities varying from gr. $\frac{1}{20}$ th to the 3rd and (as we have seen) higher dilutions.

I have next to speak of the product of the distillation of coal-tar known as

Acidum carbolicum.

The Pharmacopœial preparation is a solution in rectified spirit.

Some excellent provings of this substance (mainly with the medium dilutions), in which upwards of thirty persons took part, have been made in America. Their results, together with a good many effects of poisoning, are given by Dr. Allen. Some of the provings are related at length, together with some clinical experience obtained with the drug, in the fourth volume of the *Pathogénésies Nouvelles* appended to the *Bibliothèque Homœopathique*, which you will find in the library

of this School. There is a good account of its crude physiological effects in Dr. H. Wood's treatise.

It is needless to speak here of the action of Carbolic acid as an antiseptic and as a local anæsthetic. These are properties of the substance which medical men of all schools can and do utilise. Our present interest is with its dynamic influences and specific remedial powers.

The most marked symptoms of poisoning by this acid are those of the nervous centres, which are congested and prostrated by it, so that coma (with contracted pupils) and paralysis result. In animals clonic convulsions are not uncommon, which seem to be epileptiform in seat and character. In the provers these effects take the milder form of languor of mind and body, with headache and vertigo, and sometimes spinal pain and tenderness. The headache implies great fulness of the cerebral vessels, being generally compared to a sensation as if a tight band were stretched around the forehead and temples. Sometimes it becomes neuralgic in character, and is then especially felt over the right eye. We next have marked effects upon the *stomach*. Vomiting is often produced, even when the acid has been absorbed from a wound; and flatulent distension, causing frequent sighing or belching, is a constant symptom with the provers. One of these speaks of himself as suffering throughout his experiments from a veritable acute dyspepsia, though the doses he took were too small to produce any local caustic effect. These are the main seats of its action in the provers; but experiments on animals give us also fatty degeneration of the liver and kidneys, with epithelium and albumen in the urine; keratitis and conjunctivitis; and—post-mortem—pseudo-membranous and purulent inflammation of the bronchial tubes, with disseminated lobular pneumonia or else congestion of the lungs. It is not certain how far the human body is susceptible of these actions.

Of the therapeutic powers of Carbolic acid we know little as yet; but, so far as they go, they correspond with its pathogenetic action. It is especially in gastric affections that it has been found useful,—in vomiting (H. C. Wood) and flatulent distension (Ringer) in the old school, and in some complicated dyspepsias in homœopathic practice. Migraine, moreover, when the pain is seated above the right eye, has yielded to its use. Its physiological influence on the skin is uncertain, though itching and vesiculo-pustular eruptions occasionally appeared among the provers. But it has been found very useful, not only in such forms of cutaneous disorder, but also (by my friend Dr. Guerin Ménévillè, of Paris) in psoriasis.

It can hardly be doubted that more has yet to be made of this potent agent. What it can do against purulent formations and malignant febrile and inflammatory conditions is probably due to its antiseptic influence, and needs material doses of the acid itself or of the sulpho-carbolates. My colleague Dr. Cooper has communicated to me an excellent cure of hepatic abscess and dysentery thus effected. A female prover experienced great relief from a lumbo-sacral pain which had long troubled her. The head symptoms, moreover, are so strikingly apoplectic that some use ought to be made of the analogy. It seems once at least to have cured acute hydrocephalus, and might be useful in uræmic coma. Davidson and Bähr esteem it highly in diphtheria.*

Carbolic acid compares with *Gelsemium* in its action on the nervous centres, with *Carbo vegetabilis* and (naturally) *Kreosote* in the gastric sphere.

Its homœopathic cures have been effected with the dilutions from the first to the third.

The next in order is—

Acidum fluoricum.

This acid—more strictly hydrofluoric—is peculiar to homœopathic practice. The primary dilutions of it are, of course, prepared with water; and, owing to the solvent action of the acid upon glass, must be kept in gutta-percha bottles.

The homœopathic school possesses an exhaustive proving of the dilute acid. It was conducted by Dr. Hering, assisted by thirteen others, and its results may be read in the *Materia Medica of American Provings*, or in Allen's *Encyclopædia*.

This is another pathogenesis of which no general account can give an adequate idea. But the main curative sphere of Fluoric acid has been ascertained by applying certain of its indications to practice. It may be defined as consisting in chronic irritations of mucous membrane, and in morbid conditions of the more lowly organized tissues. Cases are on record in which the acid, in dilutions from the 5th decimal upward, has proved curative of chronic diarrhœa, of secondary syphilis of the throat and tongue,† and of osseous caries.‡ These are from the late Dr. Laurie's pen; but in Hering's article we read

* See Oehme's *Therapeutics of Diphtheritis*, p. 24.

† See *Brit. Journ. of Hom.*, xxiv., 154.

‡ Laurie's *Elements of Hom. Practice of Physic*, p. 609.

how under the use of the drug whitlows have been blighted, fistulæ—lachrymal and dental—have closed, varicose veins have shrunk to half their size, fresh hair has grown on a bald head, and moist palms have regained their healthy dryness. Chronic rhinitis also has been cured, and rectal troubles alleviated. Other directions in which it may profitably be applied will probably appear. My own experience with it in old cases of varicosis of the leg, such as we see at the hospital, is very favourable.

The following seem to be prominent among its physiological effects :

1. Disagreeable and inimical mood.
2. Sense in the brain as if on the verge of being struck by apoplexy. (After smelling the strong acid. The first effect was to irritate the throat : then an influence seemed to pass to the brain.)
3. Retinal excitement, with red photopsia.
4. Urine of strong odour (once with purple sediment).
5. Great excitement of the sexual instinct in men, and in a woman premature appearance of the catamenia.
6. Pains in the bones generally.
7. Numbness and lameness of the hands.
8. Itching and redness of old cicatrices of the skin.
9. Perspiration, glutinous or sour.

M. Maumené has been led from his observations and experiments to believe that the cause of goitre is the presence of fluorides in drinking water. He asserts that they are peculiarly abundant in the water of goitrous districts. In corroboration of his views he cites an experiment in which a true and permanent bronchocele was established in a dog by a five months' course of fluoride of potassium. This is a hint not to be neglected.

I have already mentioned the doses in which this acid has been given in homœopathic practice. It is a close analogue of *Silica*, of which we shall have hereafter to speak.

I have now a more familiar drug to introduce to you,—prussic acid, or

Acidum hydrocyanicum.

“Equal measures of the officinal acid” (which contains 2 per cent. of anhydrous prussic acid) “and rectified spirit will make the first centesimal dilution :” so writes the British Homœopathic Pharmacopœia.

Hydrocyanic acid has not been experimented with in the school of Hahnemann. But an excellent proving of it has been furnished by Professor Jörg, in which five persons tested the acid itself, and sixteen the distilled waters of the two natural substances which contain it most largely—the bitter almond and the cherry laurel. Some of the numerous cases of poisoning by this agent have been collated, and their physiological and therapeutical significance analysed, in a paper on the acid by Dr. Madden and myself in the twentieth volume of the *British Journal of Homœopathy*, to which reference may be made for more details than can find place here. Dr. Allen's pathogenesis embraces the above materials and many other symptoms from poisonings.

This potent poison, reputed in many disorders since its discovery in 1782, appears in Ringer's *Handbook* as sometimes relieving pain and vomiting in chronic gastric diseases; and that is all. Stillé allows also some power on its part to overcome nervous coughs, including pertussis. In homœopathic practice it is very rarely mentioned. I venture to think that this is undeserved neglect; and that we have in Hydrocyanic acid, given according to the law of similars, a very useful medicine.

It should be so, indeed, according to its physiological action, which pictures several severe diseases.

1. The first of these is *epilepsy*. There is a large *consensus* of authority as to the essential similarity between the phenomena of poisoning with this acid and the epileptic paroxysm. Pereira, Christison and Taylor all affirm it, and it need not be argued afresh here. The first case of poisoning we have cited in our paper was taken by the medical attendant for an epileptic fit; and there is nothing surprising in the mistake. The sudden falling and loss of consciousness, the subsequent laryngismus, empurpled face, foam at the mouth and convulsions together form a perfect picture of the attack of this disease. Excitation of the cervical sympathetic, which is now regarded as (through the contraction of the cerebral arteries it produces) the proximate cause of epilepsy, was undoubtedly present in this case, as indicated by the dilated pupils, with prominent, glistening eyeballs. Pereira's statement seems to be correct, that "whatever be the precise pathological condition of the brain in poisoning by this drug, it is probably identical with that which occurs during an epileptic paroxysm, and with that produced by loss of blood."* The sensations in

* This argument will be found more fully drawn out in a paper contributed by me to the World's Convention of 1876, and published in its Transactions.

the head described by provers are in entire harmony with this view, and forcibly suggest the epileptic vertigo.

The homœopathic inference from these facts must be that Hydrocyanic acid ought to find a very prominent place among anti-epileptic remedies. Its use in this affection hitherto has been only limited. It was hardly to be expected that it should play any large part in the old-school therapeutics of epilepsy: nevertheless, some experience of the kind is on record. Hartlaub and Trinks, in the preface to their proving of *Laurocerasus*, mention that Gremmler found the acid diminish the frequency and severity of the paroxysms, though he could not effect a radical cure with it; and that Remer praises it in the epileptic convulsions of pregnant women. They also refer to a cure of epilepsy by cherry-laurel water, communicated by one Müller to *Hufeland's Journal*. I find that the patient here was a woman of twenty-two, who had had the fits for seven years, often twice a day. *Aqua laurocerasi* was prescribed, in doses increasing from twenty to eighty drops daily. By the time that four ounces had been taken, the patient was quite cured. Frank, in the first volume of his *Magazin* (p. 320), relates three of Gremmler's cases, which seem to warrant a more favourable account than that given of them by Hartlaub and Trinks; and also one from Koehler, in which a complete cure was effected. In his fourth volume he cites a narrative from the *Bulletin* of the French Academy of Medicine, which tells how an epileptic dog, being delivered over to be poisoned, instead of being destroyed by the prussic acid given him with this intent, lost his fits and became quite healthy.

In homœopathic literature I know of no record of the treatment of epilepsy by this drug. Baertl, in the exhaustive collection of cases of the disease which he communicated to the *Vierteljahrschrift* in 1863 (translated in the twenty-second volume of the *British Journal of Homœopathy*), finds no place for Hydrocyanic acid. He mentions, indeed, some favourable results from *Ferrum hydrocyanatum*; but this compound seems to have none of the active properties of the acid. I can only, therefore, speak from my own experience with the medicine.

Dr. Madden and myself were so struck with that homœopathicity to epilepsy which I have now claimed for it that we proceeded to use it largely in the treatment of the disease. Our results at first were encouraging, and we hoped to be able to communicate many instances of cure from its administration. But in all save recent cases the fits soon returned.

We thought that Dr. Russell had noted a fatal weakness in the medicine when he pointed out the evanescent character of its action, and we supposed that thus our fleeting successes were explained.

Save, then, in recent epilepsies—as from fright—I made little use of Hydrocyanic acid until 1875. Having then to lecture on the drug at the London Homœopathic Hospital, the fresh and more extended survey of the facts which I made led me to think that I had been hasty in abandoning it as an anti-epileptic. I thought it likely that some part of our failure had arisen from not giving the medicine strong enough or long enough, and that thus the evanescence of its effects might obtain compensation. I altered my plan accordingly, and am much better pleased with my results. It is my practice now to give from five drops of the 3rd decimal attenuation to three drops of the first centesimal three times a day.

Drs. Croucher and Holland have recently reported cases of epilepsy cured by the acid where the sudden cry so characteristic of poisoning by it has ushered in the paroxysms.

2. Secondly, Hydrocyanic acid causes undoubted *tetanus*. There is not, as with Strychnia, evidence of increased reflex excitability; but, as with Aconite and Cicutæ, persistent tonic spasm. This it produces by direct action upon the spinal cord; for, when the cord was divided (by Wedemeyer) between the last dorsal and the first lumbar vertebræ, and prussic acid introduced into one of the hind legs, these, as well as the forelegs, were immediately convulsed.

We have thus in our medicine another anti-tetanic. The only instance of its use of which I am aware is a case of the traumatic form of the disease successfully treated by Dr. George Moore with drop doses of Scheele's acid.* The curative action here seems undoubted.

3. The tonic spasm excited by Hydrocyanic acid is nowhere more marked than in the organs of respiration. This also is the general testimony of toxicologists. "Spasmodic respiration" is noted by all observers of acute poisoning, Boehm† pointing out that it is to the expiratory stage that this character especially belongs; and Wood mentions among the chronic effects of the vapour "difficult respiration, constriction of throat, feelings of suffocation." "The only marked post-mortem phenomenon," he writes, "is a universal venous congestion, proving that the circulation had been arrested in the lungs."

* *Brit. Journ. of Hom.*, xxiv., 506.

† Ziemssen's *Cyclopædia*, xvii., 509.

Now it is in spasmodic disorders of the respiratory organs that, next to gastric affections, Hydrocyanic acid has obtained its chief reputation. In whooping-cough Dr. West says that "it sometimes exerts an almost magical influence, diminishing the frequency and severity of the paroxysms almost immediately." In recent and uncomplicated asthma I have a high opinion of it: it is to this disease as to epilepsy. Dr. Russell, in his work on *Epidemic Cholera*, relates a case in which it gave great and speedy relief to an intense spasmodic oppression of the chest, which came on in a cholera patient; and Dr. Sircar, from his Indian experience, speaks highly of it in such conditions.

4. Any poison which through the nervous centres can affect the respiration is capable through the same channels (pneumogastric and others) of disturbing the action of the heart. Hence the palpitations, anxiety, diminished pulse, and tendency to syncope, noted alike in poisonings and provings by this acid.

The value of prussic acid in cardiac affections is fairly stated in this sentence of Dr. George Wood's. "In palpitation and other irregularities in the function of the organ, of no very energetic character, whether purely nervous or associated with organic disease, I know no medicine better calculated to alleviate the disturbance of the function, and afford ease and comfort to the patient." It has been recommended in angina pectoris, which is indeed of a piece with the gastrodynia and enterodynia in which it has proved so useful. There are testimonies extant to its efficacy.* I had an interesting case some time ago, in which epilepsy and angina pectoris coincided in the same patient. Hydrocyanic acid was of very great benefit for both disorders.

5. The curative power of Hydrocyanic acid in pain at the stomach and vomiting must also, I think, be traced to its homœopathicity thereto. "An overdose," writes the late Dr. Elliotson, one of its warmest advocates, "will in every person occasion nausea, vomiting, and pain and tightness at the præcordia. Even applied externally, it has caused nausea, vomiting, vertigo, and syncope. It appears therefore," he concludes, "to act specifically upon the stomach." It is evident that here, as often elsewhere, "specifically" means homœopathically. And, indeed, some such action seems required to account for the brilliant and permanent cures of gastrodynia and enterodynia recorded by this physician, and

* "New Materia Medica," by Drs. Marcy and Peters, appended to *North American Journ. of Hom.*, p. 25.

also by Pereira and Granville. Here also, as in whooping-cough, is displayed that *contingent* character which belongs to all the best homœopathic medication. Its beneficent effects are sometimes astonishing, while at others there is utter failure. When benefit does result, it is exceedingly rapid, so that there is no need to persist in the use of the drug for many days; and, as its action is of very short duration, it may be repeated pretty frequently. Whether in the instances of success the pains are from spasm, and therefore the acid homœopathic, while in those of disappointment they are neuralgic, I cannot say: if it were so, I should apply the same principle to the treatment of angina pectoris. The gastralgia which indicates this medicine I find always worse when the stomach is empty, and relieved by food.

There is good evidence of the action of Hydrocyanic acid on the solar plexus. Sir B. Brodie applied one drop of the essential oil of bitter almonds to his tongue. He immediately felt a remarkable and unpleasant sensation at the epigastrium, with such weakness in the limbs and loss of power in the muscles, that he thought he should have fallen. I have frequently removed by it the distressing feeling known as "sinking at the stomach," when this has been unconnected with the climacteric age.

The outline of the sphere of Hydrocyanic acid is now very clearly before us. It affects the whole cranio-spinal axis and associated sympathetic ganglia, setting up that disturbance which induces tonic spasm in the muscles. Hence the phenomena of head, heart, lungs, stomach, and trunk in general; and hence its therapeutic value in similar idiopathic conditions. It will be a profitable task if any one will undertake from study of the provings and from clinical observation to fill in this outline, and define for us the precise place of the medicine in specific therapeutics.

You may ask—is this description of prussic acid warranted by toxicology? It is commonly supposed to be a paralysing rather than a tetanising agent; and is set down in ordinary classifications of the *Materia Medica* as a pure sedative. But a few cases of poisoning will dissipate the first notion,* and will show you that the second arises from observation of its curative action only.

* See also Stillé (ii., 252, 254-5):—"the immediate consequences of a fatal dose of the acid are general spasm of the muscular system, and death from an arrest of the action of the heart and lungs;" and Boehm (*loc. cit.*, p. 505)—"we consider the convulsions of prussic acid poisoning the result of a transient but energetic irritation of the central apparatus of the brain and spinal cord."

For its action on the spinal cord Hydrocyanic acid may be compared with *Aconite* and *Cicuta*. As an epileptifacient, its only analogue is *Enanthe crocata*.

I have generally used Hydrocyanic acid in the dilutions from the third to the sixth decimal. The experience of the ordinary practice would seem to show that in whooping-cough and gastrodynia the first attenuation may be used with advantage.

As the salts of Hydrocyanic acid and the plants containing it owe their active properties to its presence, it will be well to consider here any that demand our notice. I shall speak only of the cyanide of potassium among the former, and of the cherry-laurel among the latter: others are probably conformable to these types.

Kali cyanatum.—As a poison this salt seems identical with Hydrocyanic acid. It has been proved, in the first, second, and third attenuations, by two members of the Massachusetts Homœopathic Society (1861-2): the record of their experiments may be read in the twenty-second volume of the *British Journal of Homœopathy* (p. 496). Lembke also has experimented with it. The results obtained by these provings, with effects of poisoning, enable Dr. Allen to present a pathogenesis of 228 symptoms. It presents little that is noteworthy, save as it covers the same ground as the acid. My only reason for mentioning the drug is that in the hands of the late Dr. Petroz it effected a remarkable cure of disease of the tongue, which may be cited here:—

“In 1829 a woman living in the Rue St. Nicolas, whose family was known to me, came to ask my advice about a disease of the tongue, for which she had been under the care of Dr. L’Herminier. The organ was profoundly altered by an ulcer, which appeared to me cancerous, and which occupied its right side; the edges, especially posteriorly, were indurated, raised, and knotty; speech was difficult, indistinct, and accompanied with much pain. The patient could only take liquid nourishment. Distrusting my own diagnosis, I sent her to Professor Marjolin. She brought me back the following judgment: ‘Cancerous ulcer; no chance of cure but from operation; and this impossible, for the base of the tongue is involved.’

“In the presence of so grave a disease, I turned my thoughts to diminish her sufferings. I prescribed the $\frac{1}{100}$ th of a grain of hydrocyanate of potassa, to be repeated every fourth day. After fifteen days I again saw the patient. She suffered less; the tongue appeared to me not so thick, the edges less hard, the speech easier. The medicine was continued in the same way. Fifteen days later the patient, whose countenance had lost its grey hue and drawn features, said to me with joy, ‘I begin to be able to eat a crumb of bread.’ The hydrocyanate was continued for a month longer, when the cure was complete. It is now eighteen years ago, and there has been no relapse.”

Laurocerasus.—The cherry-laurel has found a place of its own in homœopathic medicine, from having been proved in an elaborate manner by Professor Jörg and eleven of his pupils, and subsequently by Drs. Hartlaub and Trinks. The article on the drug in the first volume of the latter's *Arzneimittellehre* contains Jörg's symptoms and their own, with many observations of poisoning and overdosing; Dr. Allen's pathogenesis is a reproduction of this, Jörg's provings being transcribed from the original. A tincture is prepared for homœopathic practice; but the distilled water (*Aqua laurocerasi*) is generally the favourite preparation.

I am myself unable to see in either the pathogenetic or the curative effects of *Laurocerasus* anything specifically distinct from those of Hydrocyanic acid. It has, moreover, the disadvantage of very uncertain strength. Nevertheless, Dr. Phillips seems to have used it with good effect in the gastric, cardiac, and respiratory affections for which the acid itself is recommended. His doses are from five to thirty minims of the distilled water. It has been very little used in homœopathic practice. Dr. Guernsey considers the sense of tightness about the heart and chest which prussic acid causes a characteristic indication for *Laurocerasus*; and mentions that it has been very beneficial in his hands for the cyanosis of childhood, when a little exercise produces gasping for breath and increased blueness. A gurgling sound in the œsophagus when swallowing is regarded as indicating this medicine in gastro-intestinal disorders.

Last, on the present occasion, we come to

Acidum muriaticum.

This is of course the acid now called hydrochloric. The attenuations are necessarily aqueous,—10 minims of the acid of the British Pharmacopœia with twenty-one minims of distilled water making the 1st dilution.

Nothing is known in extra-homœopathic literature of the physiological action (save the local poisonous effects) of Muriatic acid. Hahnemann's first proving of it appears in the fifth volume of the *Reine Arzneimittellehre*, containing (in the second edition) 61 symptoms of his own, 196 from six fellow observers, and 22 from authors. A later pathogenesis in the fourth volume of the *Chronic Diseases* adds 295 symptoms more, contributed by Hahnemann himself and two others (Rummel

and Nenning). Dr. Allen reproduces this last, adding a few symptoms from poisonings.

I have already explained why I can make no use of the symptoms of the *Chronic Diseases*. Moreover, since the attenuations of the acid are directed to be made with diluted alcohol for the first, and undiluted subsequently—a process which would go far to change it into ether, even the symptoms of Hahnemann and his fellow provers in the *Materia Medica Pura* are somewhat vitiated as indications for the use of true Muriatic acid. Again, the twenty-two symptoms (made into twenty-four in the later pathogenesis) from authors are strangely irrelevant for their purpose and incongruous with their surroundings. Hahnemann himself tells us of some as the effect of “aqua oxymuriatica,” *i.e.*, solution of chlorine (Schmidtmuller, Crawford, Sachse, Humboldt), of others as the troubles of workmen in salt-mines (Ramazzini); while sneezing and cough with hæmoptysis are the local effects of inhaling the acid in gaseous form (Theiner, &c.).

Happily, our clinical experience is sufficient to define pretty closely its sphere of action. This may be said to be a *low febrile condition of the blood, with ulceration of mucous membranes and eczema of neighbouring cutaneous surfaces*. Its use in low fever is common to both schools of medicine. Of old, its action in these cases was ascribed to a power of modifying a supposed putrescence of the fluids; and the medicine was given also in malignant scarlatina and putrid sore throat. Now-a-days its use seems pretty well confined to true “fever,” and it is considered to act by neutralizing superabundant alkali (Richardson) or by supplying deficient acid (Chambers). I am disposed to believe that its (undoubted) action in this malady is, after all, dynamic; for it is certain that Muriatic acid, in doses too small to exert any chemical action, has a very high reputation in homœopathic practice as a remedy for low fever. Dr. Trinks* warmly commends it (in the first dilution) in the type known of old as “*nervosa versatilis*,” where it does great things in calming and cooling. Its homœopathicity to the erethism of the circulation and nervous centres present in this stage is evident from Stillé’s description of its physiological effects. “In small doses,” he writes, “medicinal muriatic acid occasions . . . generally some quickening of the pulse, . . . flushing of the face, and an increased flow of urine. In larger doses it excites the brain in a peculiar manner, causing giddiness, confusion of the senses, a sort of intoxication, in fine.” Teste extols it later on, to modify the

* *Brit. Journ. of Hom.*, xxix., 200.

intestinal ulceration, over which he thinks it has as much power as when the same morbid condition exists in the mouth or throat. He says that "the almost constant and frequently immediate effect of this drug is to modify the character of the intestinal secretions, and to take away their foul smell; and, after this result is accomplished, almost all the other symptoms improve, and the course of the malady is considerably shortened." With this coincides, from another point of view, the testimony of Dr. George Johnson.* He thinks that the diarrhoea of typhoid may well be increased by the mineral acids (usually the hydrochloric) commonly given; and ascribes its diminution at King's College Hospital to their discontinuance.

Bähr, Guernsey, Bayes and Espanet concur in commending Muriatic acid in typhoid; and add to the above as indications for it slipping down to the foot of the bed, tendency to involuntary evacuations, utter aversion to food, and copious urination, with putrescent phenomena.

A similar condition of blood and mucous membrane exists in malignant scarlatina and perhaps in diphtheria. In the former disease Muriatic acid is of great value for the affections of the nose and ears, especially when they occur as *sequela*; and it vies with Mercury in the ulcerations of mouth and throat. About its action in true diphtheria I cannot speak with any confidence, though I think (and herein Dr. Kidd confirms me†) that it has some efficacy when symptoms of blood-poisoning are prominent. The following case by the late Dr. Russell will show what it can sometimes do here; and we should not forget the value set upon it by Bretonneau as a local application.

"The case was that of a lady about sixty years of age, who had been ill for two days. He found the pulse very small and quick, as high as 130. There was great prostration; the expression of the countenance almost like that of cholera, from the sunken, exhausted look—very remarkable, considering the shortness of the illness, and indicating the action of some poison. There was great fœtor of the breath, and on examining the fauces the whole surface was of a dark red, approaching violet hue, and spotted over with white membranous deposit. He gave a drop of the 1st dilution of Muriatic acid every hour, and next day found great improvement. From the first dose the patient was sensible of benefit, which continued till she got well. The disease had been increasing up to the time of the administration of the medicine, and from that time declined."‡

Muriatic acid also plays an important part in ulcerations of

* *Practitioner*, Jan., 1875.

† *Brit. Journ. of Hom.*, xxviii., 742.

‡ *Annals*, i., 231.

the mouth and throat independent of these acute diseases, though probably connected with similar constitutional conditions, as indicated by the "low" character of the local mischief. Mercurial sores and aphthæ often come under this category. It seems to have a special affinity for the tongue. To this attention has been called by Dr. Cooper.* The symptoms of Letocha in Hahnemann's pathogenesis, which he cites, are not to be found at the place referred to; and, until verified, can hardly be relied on as dynamic effects of the acid. But his cases of cure are quite valid; and, embracing as they do induration, fungous swelling, ulceration, and that so-called psoriasis linguæ which so often proves incipient cancer, encourage us to confident use of the acid in affections of this organ. In a letter of Hahnemann's, which is on record, we find him prescribing Muriatic acid for cancer of the tongue;† and I have myself employed it in recurring ulcers of the organ with the best effect.

Several other uses of the drug, but all falling within the general description I have given, are mentioned by Dr. Marcy in the *New Materia Medica*. His, too, are the fullest statements of its usefulness in cutaneous affections, where itching papules or vesicles seem to indicate it both internally and externally. Its employment in dyspepsia, so well defined by Dr. Ringer, seems beyond the sphere of its specific operation. It acts here either by locally checking excess of formation of gastric juice, or by supplying deficient acid to the digestive process. It is esteemed by some in piles and other troubles at the anus, when a great sensitiveness of the parts is present. There may also be much itching, and a parietic condition of the sphincter, in which case it is doubly indicated.

Nitric acid is the only medicine with which, as it seems to me, Muriatic acid can be advantageously compared; though it has some points of contact with *Baptisia*, and perhaps with *Rhus*.

There seems no advantage in raising Muriatic acid above the 3rd attenuation, and the 1st and 2nd are those most commonly used.

* *United States Med. and Surg. Journal*, ix., 268.

† See *Brit. Journ. of Hom.*, xiii., 149.

LECTURE IX.

ACIDUM NITRICUM, OXALICUM, PHOSPHORICUM, PICRICUM,
SALICYLICUM, SULPHURICUM.

The acid with which we begin to-day is one of the most important members of our group—

Acidum nitricum.

Ten minims of the acid of the British Pharmacopœia with sixty minims of water make our 1^x attenuation, which is thus of about the same strength as the ordinary dilute acid. The subsequent attenuations must, of course, be aqueous.

Our only pathogenesis of Nitric acid was first published in the second edition of the *Chronic Diseases*. It contains 1426 symptoms, of which about 130 were supplied by fellow provers, and 30 taken from authors, the remaining 1260 being Hahnemann's own. Dr. Allen's additions are chiefly toxicological.

The reasons I have alleged for ignoring the pathogeneses of the *Chronic Diseases* press with double force in the case of Nitric acid. Hahnemann's age and practice at the time make it certain that his symptoms—six sevenths of the whole—were observed on patients; and his globules of the 30th have but a doubtful relation to Nitric acid, as alcohol was used to make the dilutions from the 2nd upwards. His cited symptoms, moreover, are rarely pure; being too often observed upon syphilitic subjects. An exception to this statement is formed by the symptoms ascribed to Scott, which—as they constitute almost our only genuine proving of the medicine—I will give in some detail from the original.*

Mr. Scott, an Indian army surgeon, suffering from chronic hepatitis, was led to think that Nitric acid might be an effective substitute for the usual mercurials in his case. He took accordingly a drachm daily of the strong acid, in divided doses.

* Duncan's *Annals of Medicine*, 1796, i., 375.

On the third day the gums began to be somewhat red and enlarged. He slept ill; but could lie for a length of time on his left side, which the disease of the liver prevented him from doing for many months previous to this period. He also felt a pain in the back of his head,* resembling what he had commonly experienced when taking mercury. On the fourth day his gums were a little tender; headache and pain about his jaws still troubled him; but the symptoms of his liver complaint had already left him. The acid was continued on the fourth, fifth, and sixth days, the soreness of the mouth increasing, and salivation taking place. On the seventh day he felt his mouth so troublesome that he took no more.

Other observers have confirmed this effect of Nitric acid upon the mouth, adding looseness of the teeth and bleeding from the gums to the symptoms mentioned by Scott. The action is not a local one, as Richter has found it produced by baths containing the acid. It is ordinarily unaccompanied by the fœtor of the breath or the tendency to ulceration of the gums which characterises the mercurial sore mouth; but Prioleau has seen these symptoms also, with swelling of the sub-maxillary glands, occur under its use, when given for syphilis. All these observers, moreover, find it somewhat diuretic.

Save these effects on the mouth, then, we know little about the dynamic pathogenetic action of Nitric acid. Clinical experience with it, however, is large and definite; and allows its sphere to be assigned with much precision.

1. I would first speak of its action on the *muco-cutaneous outlets*—those parts where mucous membrane is exposed to the external air, and where skin is so shielded and moistened that it approximates in character to mucous membrane. Its ptyalism and gingivitis suggest its Mercury-like affinity for the mouth, which is very strong; it antidotes its analogue here, and cures ulceration of the buccal mucous membrane. Dr. Ringer recognises this "further action" (*i.e.*, beyond the chemical) "on the mucous membrane of the mouth," and recommends it where this is reddened, inflamed, and glazed, in connexion with irritation of the digestive organs. The same thing may be said of it as regards the throat. Then, leaping over the intermediate digestive tract, it exhibits a singular power over the rectum and anus: it is reported to have cured prolapsus, fistula, and especially fissure. The evidence of its

* A case of chronic headache seated in the occipital protuberance, cured by Nitric acid, may be read in the *New York State Hom. Society's Transactions*, iv., 365.

power over this last-named trouble is quite satisfactory: the sharpness of the pain excited by stool is most felt at the time of passing. In the respiratory tract it controls the ocular, nasal, and laryngeal mucous membranes. Dr. Goullon, in his treatise on Scrofula, assigns it a high place in the treatment of obstinate strumous ophthalmia, and considers it useful in superficial ulcers of the conjunctiva corneæ, and indispensable in ophthalmia neonatorum. Jahr praises it in gonorrhœal ophthalmia. It has been commended for the affection of the nose which obtains in malignant scarlatina, for ozæna, and for chronic laryngeal affections. Acting on the genito-urinary membrane, it is a valuable remedy (according to Dr. Marcy) for chronic vaginal leucorrhœa, which may be tenacious, and flesh-coloured or green, in cachectic subjects; and has cured a long-lasting itching of the urethra left behind after gonorrhœa.* Dr. Guernsey recommends it for pruritus vulvæ.

Dr. Hempel truly says that "Nitric acid is principally adapted to disease depending upon the presence of some virulent miasm, especially the scrofulous, syphilitic, and mercurial." But it is chiefly when these muco-cutaneous outlets are the seat of the mischief that it proves an antidote: it hardly penetrates deeper. As regards syphilis, it supplements Mercury in soft chancres occurring in weakly or scrofulous subjects, and often supplants it in secondary ulcerations of the mucous membranes (Jahr extolling it also for inflamed bubo). It becomes the prime remedy when even a hard chancre begins to sprout into vegetations, and for the "mucous patches" which occur at this stage of the malady, and which always haunt its favourite seats of action. We are thus led to that curious offset or ally of syphilis which Hahnemann distinguishes as "sycosis," whose local manifestations are condylomata. Whether he was right or wrong (and he is not alone) in thinking this a separate disease, at least we do well in following him as to its remedies; and these are Thuja and Nitric acid.† I shall have more to say on the subject when we come to the former medicine.

2. Next in importance to the foregoing is the action of Nitric acid on the *liver*. The experiments of Scott, which first brought it into notice, related to its power over hepatic disease: it was only later that they suggested its use in syphilis. He cured with it chronic hepatitis and the "liver-

* *New Mat. Med.*, p. 54.

† "Small syphilitic warts and condylomata, kept constantly moist with a wash of diluted nitric acid, are removed certainly and painlessly. A drachm or two of the dilute acid to a pint of water is sufficient" (Ringer.)

cake" of ague; and it has always continued a favourite medicine in Indian practice. Of late, the combination with Muriatic acid has been preferred for this purpose. Dr. Horatio Wood praises this Nitro-muriatic acid for hepatic congestion, "biliousness," non-obstructive jaundice, and commencing cirrhosis; he says it should always be freshly prepared. It is also used in baths and compresses. Considering its virtues in oxaluria also—in which, since Golding Bird's time, it has been considered almost specific—it deserves a good proving. Dr. Allen gives a short pathogenesis of it, obtained by three provers, using small doses; and in his supplement cites an observation by Scott of its effect when used as a bath. It produced on him the same beneficial influence on the liver, and the same irritation of the mouth and salivary glands which he experienced from Nitric acid; but the sensations of the stomatitis extended down the gullet, and in the buccal cavity and on the tongue small superficial ulcerations appeared. Sometimes, he says, the compound acid "very suddenly increases the secretion of bile." It also (in him) increased the perspiration.

3. Of late years, Nitric acid has come to the front as a remedy for *cough*. The late Sir Duncan Gibb wrote a book on pertussis expressly to extol its virtues. Dr. Bayes says—"Another affection in which Nitric acid has proved serviceable is a chronic laryngeal cough, without expectoration, which is characterised by a stinging or smarting sensation, as if a small ulcer were there, and is generally felt on one side. The 3rd dilution of the medicine often speedily arrests and cures this cough." I have myself long used it with benefit in laryngeal coughs, dry and violent. But Dr. Dyce Brown has led us to extend the sphere of this acid in coughs. He commends it in several forms of disease in which this symptom is the prominent feature, and especially when there is much general physical depression. He even extends its use to pneumonic phthisis after the more active symptoms have been removed by other means. A good many typical cases are related in his communication, which you will find in the eighteenth volume of the *Monthly Homœopathic Review*. I myself have certainly been led by it to prescribe Nitric acid more largely in chronic coughs; and have found it very beneficial, both to these and to the gastric irritation and general cachexia which often accompany them.

Dr. Brown mentions constipation as a marked indication for the acid in cough cases; and adds that he has found this symptom so often to disappear under its use that he has been led to

use it as a remedy for the trouble itself, and with such success that he now places it in the front rank of available means in its treatment. Dr. Wilde has communicated some confirmatory evidence. Hahnemann (as Dr. Brown notices) expresses himself to just the contrary effect, saying that "it is more suitable to those chronic patients who are disposed to looseness : it is very seldom useful to those who suffer from constipation." It is possible that infinitesimal doses of the acid, prepared according to his method, may have an action of their own. But there is another intestinal affection in which Nitric acid may prove useful, and this is dysentery. "The dysenteric process," says Rokitansky, "offers the greatest analogy to the corrosion of the mucous membrane produced by a caustic acid ;" and in the present instance we have evidence that the action is not local only. Wunderlich observed a case fatal on the eighth day after the ingestion of a teaspoonful of the strong acid, in which the usual lesions were found in the mouth, fauces, œsophagus, and stomach, but the small intestine was sound. The colon, nevertheless, was "intensely and deeply ulcerated."*

Dr. Ludlam, speaking of Nitric acid as indicated generally "in those hæmorrhages from the mucous surfaces which depend upon the destruction and desquamation of the investing epithelium," commends it highly in menorrhagia following upon abortion or continued dysmenorrhœa ; and says that a similar condition sometimes exists at the climacteric age, and is to be treated in the same manner.†

Dr. Guernsey's indications for Nitric acid are chiefly offensive urine, smelling like that of horses, restlessness after midnight, and (in women) violent downward pressure in the pelvis, with pain in back and thighs. Amelioration from riding in a carriage is also mentioned by him, and of this Dr. Hoynes gives a curious illustration.

Nitric acid compares with *Muriatic acid*, with *Mercury*, and with *Thuja*.

Dr. Brown advises two or three drop doses of the first decimal dilution ; and with this or the potencies near to it all the successes of Nitric acid have been obtained, save those in the rectal and anal troubles. Here the 30th Hahnemannian attenuation is reputed to have effected the cures.

* Stillé.—Boehm, who also mentions this case, adds that the symptoms of acute morbus Brightii were present.

† *Diseases of Women*, 2nd ed., p. 565.

‡ *Clinical Therapeutics*, i., 455.

For our next acid we have once more the advantage of a good pathogenesis ; it is

Acidum oxalicum.

This well-known acid is almost unused in ordinary practice. For homœopathic use it is triturated or dissolved in rectified spirit.

Our toxicological knowledge of Oxalic acid is both extensive, from its frequent use in suicide and ingestion by mistake for Epsom salts, and precise, from the full experimentation to which it has been subjected, chiefly by Drs. Christison and Coindet.* It has received a full proving (by six persons taking the 1st and 2nd triturations) under the auspices of the American Institute, and Koch and Reil also have experimented with it. Arrangements of these materials exist, from Dr. Neidhard in the *Materia Medica of American Provings*, from Dr. Hering in his *Amerikanische Arzneipruefungen*, and from Dr. Allen, who adds numerous symptoms from poisonings.

Oxalic acid is an irritant poison ; and the great body of the symptoms induced by its ingestion in bulk are due to inflammation of the alimentary mucous membrane. There is, however, no evidence of intestinal irritation when the poison is otherwise introduced into the system ; so that we have here a local rather than a specific effect. Oxalic acid would thus be truly homœopathic to irritation of this tract only where it was of local origin, and would need to be given in semi-material doses. A Dr. Nardo, of Turin, is reported by Marcy and Peters to have used it (in grain doses) with uniform success for many years in gastritis ; and it has been useful in glossitis and chronic angina.

When absorbed into the system, its elective affinities manifest themselves in the sphere of the lungs and of the nervous centres. The former present—*post mortem*—either scarlet patches or a uniform scarlet redness over their anterior surface, but without effusion ; and the provers had lancinating pains through them, especially on the base of the left side. The trachea also has been found reddened after death ; and the provers experienced some irritation in it. Marcy and Peters mention some experience suggestive of its value in chronic inflammations of the respiratory mucous membrane, and even in phthisis pulmonalis.

But the most important action of the poison is that

* *Edinb. Med. and Surg. Journ.*, xix.

which it exerts upon the nervous centres. The facts are as follows :—

When administered to animals in such a manner as that it can be absorbed, "the first unequivocal sign of its action is generally a slight permanent stiffness of the hind legs and increased frequency of the pulse. About the same time there appears a slight sudden check in inspiration, from the respiratory muscles contracting before the chest is fully expanded. Gradually several of these come together, so as to constitute paroxysms of short, hurried breathing, with intervals of ease. Meanwhile the stiffness of the hind legs increases; they become likewise insensible, and often the spasm gives place to paralysis; he jerks the head occasionally backwards, walks with a peculiar stiff gait, and assumes very odd postures, from inability to regulate the motions of the limbs. As the poisoning advances, the motions of the chest during the paroxysms become more and more confined by spasms of the muscles; and at last there is a period towards the close of each paroxysm, when the spasm is so great as completely to suspend the respiration. This is commonly accompanied with more or less extension of the head, tail, and extremities, sometimes amounting to violent opisthotonos. . . . The insensibility, hitherto limited to the hind legs, now extends to the trunk and fore-legs, and lastly to the head. As the insensibility increases, the breathing diminishes in frequency, the spasmodic paroxysms become more and more obscure, and then cease altogether. For some time, however, they may be slightly renewed, by striking the back and limbs; but at last the animal falls into a state of deep pure coma, with complete relaxation of the whole body. The heart can now scarcely be felt; the breathing is low, regular, and short, and becomes gradually more obscure, till finally life is extinguished without a struggle." If the dose be larger, "the fits of spasm come on early and with great violence, the intervals are marked by remissions only, and the animal expires in a paroxysm, before the stage of insensibility begins. . . . Death may be produced in this manner in three, five, or ten minutes. If on the other hand the dose be much diminished, there may be stiffness of the hind legs, much dulness, drooping of the whole body, and a sort of somnolency, without insensibility, or even without spasmodic paroxysms, and then the animal will commonly recover."

This summary is taken from the original paper in the *Edinburgh Medical and Surgical Journal* by Drs. Christison and Coindet. The former, in his *Treatise on Poisons*, adds the

following as regards the effects of the acid on the human subject. "The best instance yet related of the development of nervous symptoms in man is a case described by Dr. Scott of Cupar, of a girl who swallowed by mistake a solution kept for cleaning brass, and containing about two drachms. She did not vomit until emetics were given, but complained much of pain, which was succeeded by great lassitude and weakness of the limbs, and next morning by numbness and weakness there as well as in the back. This affection was at first so severe that she could hardly walk upstairs; but in a few days she recovered entirely. There is also evidence to the same effect both in Mr. Hebb's patient and in Dr. Arrowsmith's case. The first thing that the former complained of was acute pain in the back, gradually extending down the thighs, occasioning ere long great torture, and continuing almost till the moment of his death. Dr. Arrowsmith's patient had the same symptoms, complained more of the pain shooting down from the loins to the limbs than of the pain in the belly, and was constantly seeking relief in a fresh change of posture. Mr. Fraser's patient had from an early period a peculiar general numbness, approaching to palsy." Boehm adds "formication both on the trunk and on the extremities," and "numbness and anæsthesia of the finger tips."

I think there can be no doubt that the phenomena thus described are those of inflammation of the membranes and substance of the cord. In no post-mortem has the spinal column been opened for examination; and we thus want ocular evidence. But the stiffness of the limbs and paroxysms of spasmodic dyspnoea point plainly to irritation of the spinal meninges; and the anæsthesia, neuralgia and loss of power indicate a similar affection of the spinal marrow itself. I once had the painful duty of watching a chronic case of this disease until its termination in death; and the symptoms I then observed come vividly back to my mind as I cite these descriptions of poisoning by Oxalic acid. I hope that some use may be made of the analogy. I am myself learning to depend with great confidence on the drug as a means of checking the tendency to spasmodic constriction of the chest which manifests itself in several forms of spinal disease.

Dr. Burnett has recently given us* an excellent study of Oxalic acid. As regards its physiological action, he shows that later German experiment has brought out in greater relief the paralysing action on the heart which Christison noted. He also mentions three cases in which it caused loss

* See *Brit. Journ. of Hom.*, xxxv., 309.

of voice, and suggests its use in aphonia. But the most interesting thing in his paper is a series of cases treated by him in which anomalous pains in the head and spine, like those it causes, have disappeared under its use, and in which its elective affinity for the left lung near its base was utilised by treating congestion and inflammation with it when localised there. In these last instances it manifested remarkable powers, obviously touching the mischief when the ordinary remedies had failed. Dr. Burnett takes exception to my view that the lungs are specifically irritated by Oxalic acid, suggesting that the hyperæmia found in them *post mortem* may have been secondary to disorder of the nervous centres or the heart. His own clinical observations are, I think, the best facts I can adduce in support of my statement. Unless the poison can directly inflame the lungs in health, it could not have cured pneumonia and pulmonary congestion in the way it did in his hands.

Christison says that in minimum doses the effect is mainly on the brain; and most of the provers seem to have felt it acting there, especially on the vertex and forehead, where it causes (and has removed) a dull headache. The following symptom was produced by it, and has been verified in practice: "immediately after lying down in bed at night, palpitation of the heart for half an hour, three nights consecutively." Colic about the navel, with difficult emission of flatulence, and irritation of the genito-urinary tract, with diuresis, are other marked symptoms of the proving; to which may be added great exhilaration of spirits.

Oxalic acid has more analogies with *Arsenicum* than with any other drug in the Pharmacopœia.

The 2nd and 3rd triturations seem to have been those mainly used, though Dr. Marcy speaks well of the 12th. Dr. Burnett gave the 3rd in his cases.

The acid I am now coming upon is a special favourite of my own. It is

Acidum phosphoricum.

The "dilute phosphoric acid" of the British Pharmacopœia forms our 1st attenuation, and water is used for subsequent dilutions up to the 2nd centesimal.

The original proving of Phosphoric acid is in the fifth volume of the *Materia Medica Pura*. It contains (in the second edition) 268 symptoms from Hahnemann himself, and

411 from twelve fellow observers. A later pathogenesis appears in the fifth part of the *Chron. Diseases*. It is increased by 139 symptoms, most of which are credited to Hering, and were probably observed on the patients mentioned in the preface as cured by him with the acid. Five persons have proved it since, one in the pure substance, four in the dilutions: their symptoms are incorporated with Hahnemann's by Allen.

Hahnemann's directions in the *Materia Medica Pura* for the attenuation of Phosphoric acid are not so destructive as those for the other acids, as the dilute alcohol of the 1st potency is to contain nine parts of water to one of spirit. Perhaps the provings were made with this preparation. At any rate, they impress one with a greater sense of reality than those of the others; and Hahnemann characterises them as "remarkable, pure symptoms of artificial disease elicited by Phosphoric acid in the healthy body." They will well repay study and analysis. I shall best help this here by sketching and characterising the therapeutic action of the drug.

The chief sphere of this is the *nervous system*; and the condition it influences here is one of debility without erethism (in this contrasted with China). When we find brain* or cord,† sight or hearing thus affected—as from continued grief, over-exertion of mind or body, sexual excess, or drain on the system, or remaining after typhus or typhoid‡—Phosphoric acid is an invaluable remedy, well deserving the name of "tonic." Failure in memory is reputed a special indication for it in cerebral depression: the emotional condition is one of apathy and indifference. It is to "nervous debility" what iron is to anæmia. In virtue of this action (as I believe) is its curative power in its two chief local spheres, the *renal* and the *male sexual organs*.

1. Phosphoric acid has no known action on the kidneys themselves; but it exerts a remarkable control over those changes in the composition of the urine which arise farther back than the secreting organs. Dr. Sutherland has directed attention to its usefulness in phosphatic deposits;§ it is obviously indicated for these when, as commonly, depending on waste of nervous tissue or on alkalinity of urine from nervous depression. It cures, as Hering|| and Chapman¶ have pointed

* *Brit. Journ. of Hom.*, vii., 391. *Hahn. Monthly*, Aug., 1876.

† Bayes, *Appl. Hom.*, 138.

‡ *Monthly Hom. Review*, x.

§ *Brit. Journ. of Hom.*, vi., 410.

|| Preface to pathogenesis in *Chron. Diseases*.

¶ *Brit. Journ. of Hom.*, vii., 391.

out, those derangements in children connected with a milky state of the renal secretion; and would probably help (unless the affection be a mere mechanical leaking) in the West Indian "chylous urine," whose constitutional symptoms are very characteristic of the drug. But it is in *diabetes* that Phosphoric acid has won its greenest laurels. Not only in the "insipid" form—"chronic diuresis" or "polyuria" as we should now call it—but in true glycosuria cure has repeatedly resulted from the administration of this acid.* It is possibly a similar to the essential symptom of the disease; for Dr. Pavy† found saccharine urine to result from its injection into the general venous system, or introduction into the intestinal canal, and Griesinger, who gave it in diabetes to the extent of an ounce a day, found the sugar rather increased thereby. But the frequent origin of diabetes in the nervous centres (as suggested by Claude Bernard's well-known experiment) commends it still more forcibly; and in the only case out of those I have myself recorded in which I have needed it to re-inforce the nitrate of Uranium the disease obviously began in this way.‡ It will therefore be in diabetes of nervous origin that we shall expect to get the best results from Phosphoric acid; and this continues to be my own experience with it. Moreover, since Bernard found albuminuria to result from a central nervous lesion hard by that which occasions glycosuria, there may well be cases of this malady in which Phosphoric acid is indicated. Two cures by it are on record,—in one of which the albuminuria was associated with chorea,§ and in the other followed upon typhoid.|| The presence of simple diuresis—especially when quantities of colourless urine are passed at night—is an indication in favour of the choice of the medicine in morbid conditions in general.

2. It is the nervous apparatus of the male sexual organs which is influenced by Phosphoric acid. It has no relation to

* *Brit. Journ. of Hom.*, xxiv., 260; xxxvii., 371.—The last reference is to Dr. Black's elaborate and interesting essay on diabetes. He there shows that we must not lay much stress upon the evidence I have cited above as to the causation of glycosuria by the acid: he also demonstrates that the remedy was known in the old school twenty years or more before it was employed in homœopathic practice. I do not think, however, that his criticism, judiciously sceptical as it is, has robbed Phosphoric acid of the laurels with which I have ventured to crown it in respect to this disease. The cases collected by himself suffice to show its power; and for my own part I rarely prescribe it without satisfaction.

† *On Diabetes*, p. 82.

‡ *Brit. Journ. of Hom.*, xxxi., 369.

§ Hempel, ii., 46.

|| *Monthly Hom. Rev.*, x., 527.

their inflammatory states ; but in simple debility and relaxation—even to impotence—of these organs, resulting from excess or unnatural use, it is the most important of remedies. Frequent weak emissions and dragging aching in the testes may also be removed by it.

This action on the nervous system, peculiar to the Phosphoric among the mineral acids, is probably due to the nature of its base. From the same source may come its action on the *blood* and on the *bones*. In low fevers, indeed, it is indicated when the nervous system rather than the blood is affected by the poison, and only in milder cases here,—standing on the same level as Muriatic acid in their respective spheres ;* but it has more than once proved curative in purpura and passive hæmorrhages. As regards the bones, it is spoken highly of by German writers of the old school as a remedy for caries, and our own Hartmann recommends it strongly in rachitis. Its physical relation to osseous tissue is obviously an intimate one ; and there is good reason to believe that such facts may be used as suggestive of medicinal affinities.

In all these affections, the Phosphoric acid patient is characterised by tendency to passive flux from skin and mucous membrane. The medicine (which herein may be compared with China and Iodine) often first displays its power by checking these, as the perspiration of phthisis and the diarrhœa of rachitic or otherwise weakly children : the diarrhœa, I should say, is painless, and the stools are grayish-white. It has even cured ague when this condition, in the shape of profuse sweat, was the prominent feature of the case.† I know not whether the ozæna, and the thin and acrid leucorrhœa, in which Dr. Marcy has found it curative, come under this head ; or the falling of the hair, as from debility after fevers, in which I have often seen it successful. Dr. Hoync says it is equally good when the loss of hair results from depressing emotions. This writer also praises it for the pressive headache on the vertex which so often accompanies cerebral anæmia, and for which we shall see Cactus and China recommended. Dr. Guernsey commends it for physometra, and mentions pain in the hepatic region during the menses as a noteworthy indication for it in women.

Phosphoric acid works side by side with *Phosphorus* throughout its action. Besides this, it touches at some points *Fluoric acid* and *Silica* ; *China* ; *Anacardium* ; *Ignatia* ; and the mineral acids in general.

* See *Brit. Journ. of Hom.*, xii., 23.—Jousset also commends it here, and thinks that I hardly sufficiently value it.

† *Annals* i., 457 ; *Monthly Hom. Review*, xiv., 544.

In nervous affections, in milky urine, in nutritive derangement, in fever, and in passive fluxes, Phosphoric acid seems to act well in the attenuations from the 3rd to the 12th. But as a sexual tonic, in purpura, the phosphatic diathesis, diabetes and caries, it does best in doses of several drops of the 1st decimal dilution.

I have now to introduce you to two new members of our group of acids—the picric and the salicylic.

Acidum picricum

(or, as it used to be called, carbazoticum) is the product of the action of nitric acid upon several substances, among which I may mention (as suggesting one of its relationships) carbolic acid and salicin. It forms in whitish-yellow prisms; and is soluble in alcohol, which will accordingly be its pharmaceutical vehicle, unless triturations are preferred.

Dr. Allen is able to give us a pathogenesis of Picric acid containing 469 symptoms, obtained by 18 provers. Three of the observations laid under contribution are from an old-school source (Parisel), seven are from the provings instituted by Dr. L. B. Couch in 1874,* and five from some very thorough experiments made at the Michigan University by Professor S. A. Jones. The latter has furnished from time to time† some elaborate analyses of the drug's effects, more especially of those which it causes in the blood and the urine. Drs. Couch and Jones have unhappily fallen out of late over their offspring;‡ but their controversy, though personally lamentable, has elicited still farther the action of the new remedy.

Our fullest information as to the toxic influence of Picric acid is contained in an essay by Erb, of Würzburg, entitled *Die Pikrinsäure, ihre physiologischen und therapeutischen Wirkungen* (1865). The conclusions arrived at by this experimenter are stated by him as follows:—

“1. Picric acid, in combination with potash or soda, is absorbed into the blood, enters nearly all the tissues of the animal organism, and is in most part excreted with the urine.

“2. The entrance of large doses of an alkaline picrate into the blood brings about the destruction of a great part of the red blood-corpuscles, and a consequent increase of the colourless (artificial leucocythæmia).

* See *New York Journ. of Hom.*, ii., 145.

† See *North Amer. Journ. of Hom.*, xxiii., 443. Transactions of World's Convention, vol. ii. *Amer. Hom. Observer*, xiv., 395.

‡ See *Hom. Times*, April—July, 1878.

"3. Under the same circumstances, a transitory icterus is produced.

"4. Small quantities of the alkaline picrates are borne quite well for a long time: larger doses, after long use, cause death with the phenomena of inanition: very large doses, produce (probably through destruction of the blood) a collapse which after a short time ends in death."

Dr. Jones, in some experiments made upon two students, found Picric acid to cause increase of the uric and phosphoric acids in the urine, and diminution of the sulphates and chlorides; *i.e.*, it diminished oxidation. He connected this action with Erb's observations of the destructive influence of the alkaline picrates upon the red corpuscles (the oxygen-carriers) of the blood; and when lecturing on former occasions I have followed him in so doing. Dr. Couch, however, has objected that Erb's results were obtained equally when the picrates were mingled with blood outside the body; and no alteration was found in the blood in dogs poisoned by himself with the pure Picric acid crystals. He justly infers, therefore, that the action is a chemical one only, and is probably due to the action of the alkaline bases rather than to the acid with which they were united. But I cannot follow him when he goes on to impeach Dr. Jones' own experiments as failing to evidence any real power on the part of the drug to cause sub-oxidation. He argues that the deviations from the normal standard discovered in the provers' urine were not greater than occur in health. But if you will look at the tabular views given of these, in the case of the principal prover, in Allen's *Encyclopædia*, I think you will come to a different conclusion. They display the proportion of the constituents of the urine, first, in health; secondly, whilst taking the acid; and, thirdly, for some time afterwards. It is quite apparent that although the increase of uric and phosphoric acid, and the diminution of the chlorides,* which occurred during the medication, might not exceed the oscillations of average health, they greatly exceeded those of the health of the prover in question. Moreover, Dr. Jones has verified his experiments by therapeutic results. He joined his earlier provers in testing the acid, being at the time out of health; "markedly indisposed to either mental or physical exertion; easily fatigued; readily blown by walking up hill; inclined to day-sleepiness," with poor appetite and a general sense of tor-

* In the table at p. 528, the decimal point of the mean chlorides during medication is put in the wrong place. Instead of 76.911, the figures should stand as 7.6911.

pidity. The effect of the drug on his urine was the precise opposite of that experienced by his two fellow-provers, who were in good health. Uric acid and phosphoric acid were diminished : urea increased to the extent of two grammes per diem : the sulphates and chlorides were in excess. Therewith was experienced "an improved appetite, a general feeling of well-being, a renewed vigour in the morning, and an ability to rise much earlier than usual." In a later communication* he relates a still more striking case. It was one of profound anæmia, with prostration and vomiting : uro-hæmatin was discovered in the urine, which showed also the evidences of sub-oxidation mentioned above. Under the third trituration of Picric acid improvement speedily set in ; and in a few weeks strength and colour had returned, and the same changes had occurred in the urine as those experienced by Dr. Jones himself, though in a greater degree.

Dr. Couch, indeed, states that his experiments on animals show, from small doses of the acid, a primary increase of all the constituents of the urine, with secondary diminution,—from large doses, the converse sequence of phenomena. Whatever be the value of these observations, they cannot outweigh Dr. Jones' provings on the human subject, confirmed as they are by the therapeutic results obtained from the drug when given as a remedy in accordance therewith. They give us *sub-oxidation* as its essential and fundamental action upon nutrition, which can be used upon the principle *similia similibus* for curative purposes ; and they thereby add another potent weapon to our armoury.

Dr. Couch's earlier experiments on dogs, however, brought to light another action of the acid, viz. : that which it exerts on the nervous centres. These were found *post mortem* soft, pulpy, and apparently completely disorganised,—the focus of the mischief being from the mesocephale to the upper cord, but extending more or less forwards and backwards. The symptoms during life were of the paralytic character which might have been expected. In later investigations† of the same kind, entire anæsthesia and analgesia of the posterior extremities was noted. The poison was also found to produce "spasms, both tonic and clonic, which had a striking resemblance to those produced by strychnia." This may seem curious, when it is added that "under the influence of the drug the animals betray great weakness and lassitude ; especially is this noticeable of the hind legs, they being

* See *Hom. Times*, June, 1878.

† See *Ibid.*, April, 1878.

scarcely able to support the already attenuated body, which sways constantly from side to side; the tail, too, is as limp as a wet rag, and cannot be made to either wag or curl." But Drs. Ringer and Murrell have recently adduced considerations which tend to account for this apparent anomaly.* They maintain that tetaniform phenomena are due to a diminution or destruction of the *resistance* of the cord, "so that an impression conveyed through an afferent nerve can spread throughout the reflex portion of the central nervous system, and produce tetanus." Such diminished resistance may coincide with unimpaired functional activity of the cord, as with strychnia; or with more or less paralysis of it, as they have ascertained in relation to Gelsemium and the buxus sempervirens, and as Dr. Couch seems now to have shown with Picric acid.

The symptoms of the provers show a very similar condition, though of course of lower grade. Their legs were cold, weak, and heavy like lead; and they experienced a feeling of great lassitude and debility, which with one was accompanied by cold clammy sweats. Nor does the marked excitement of the sexual organs, shown by priapism and profuse emissions, and finding its parallel in Dr. Couch's dogs, contradict these indications, when we remember how often such a condition exists in the early stages of chronic disease of the cranio-spinal axis, or as the result of injury to it.† Everything points—as Dr. Jones argues—to a profound depression and anæmia set up in the nervous centres, going on to softening.

Little use has yet been made of this action of Picric acid. It has served me very well to complete the cure of a case of spinal exhaustion following acute disease, which Phosphorus had begun. I gave it in the twelfth dilution. It should be helpful in white softening of the cord. Dr. Jones mentions a cure of satyriasis of three years standing effected by it, given in the third trituration; and Dr. Couch relates a case of masturbation, in which the 30th dilution, given to "cool the blood," proved (according to the patient) "altogether too cooling." It will probably play an important part ere long in the treatment of central nervous disease. In this connexion, the severe headaches it causes must be taken into account. They all begin in the occipital region, and thence extend forwards and downwards. Dr. Hale has found it very useful in headaches so localised, when the slightest excitement or

* See *Medico-Chirurgical Transactions* for 1876, and *Journal of Anatomy and Physiology*, vol. xi.

† As in a case recorded by Harley, *Old Vegetable Neurotics*, p. 50.

even use of the brain would bring on the attacks ; and I have in one instance verified his experience. Here, too, I should mention its effects upon the visual organs. In two of the provers the sight was much obscured ; and in the dogs poisoned with it the veins of the retina were found (ophthalmoscopically) much enlarged. In one, examined by Dr. Norton, "immense white patches of exudation were observed, with some hæmorrhagic spots." On post-mortem examination, the lesions thus manifested were found to be seated in the nervous elements of the eyeball, both nerve-entrance and retina showing infiltration and extravasation. Such phenomena suggest the possible usefulness of the drug in albuminuric and syphilitic retinitis, while the optic neuritis displayed completes the evidence of its homœopathicity to organic brain-mischief.

In two provers Picric acid caused "small, painful, reddish elevations, like furuncles" on the face, going on to suppuration ; and Dr. Houghton, writing of that troublesome affection, boils in the auditory meatus, says :—"during the last year I have used Picric acid here with the greatest satisfaction, and find it nearer to a specific for the disease than any other medicine."

Dr. Jones very justly compares Picric acid with *Phosphorus* and *Argentum nitricum*.

I have mentioned the doses in which it has hitherto been successfully used. The provings seem to show it as active in the 30th as in the 1st attenuation, and to produce effects of a similar kind.

My other new acid is

Acidum salicylicum,

which, as its name imports, is obtained from salicin, an active principle contained in the bark of the willow (*Salix*). It is not yet officinal in our Pharmacopœia ; but will form either dilutions with alcohol (in which it is quite soluble), or triturations. The latter form would be most suitable for salicin itself ; and the salicylate of soda, which has been much used as a substitute for the acid, and exerts similar properties, is best prepared in aqueous solution.

Salicin has been proved to some extent on the healthy subject by Ringer and a few others in the old school, and by Mr. Nankivell in our own ranks. The physiological effects of the acid, and of its compound with soda, we know mainly from observations of overdosing. These, with the results of such

provings as we have, may be found collated in Dr. Allen's *Encyclopædia* and its supplement under the heads of Salicinum, Salicylicum acidum, and Natrum salicylicum.

Salicylic acid was first introduced as a rival of the carbolic in point of antizymotic power, and for internal administration with this view—as in cases of fermentation of the food in the stomach—is preferable to that substance, having no offensive odour or actively toxic properties. The popular repute of willow-bark, and the proved efficacy of salicin in malarious fevers, then led to the employment of salicylic acid therein. It was found to exert an undoubted, though not extensive, influence upon cases of this kind; and the interesting fact came out that (as we shall see presently) it resembled quinine in pathogenetic as well as curative action. It thus came to be tried, like that drug, as an anti-pyretic in general, and especially in febrile states presumably depending on a zymotic process, or on the development of disease-germs. It exerted a certain amount of influence over these also, but hardly sufficient to give it any recognised place in their treatment, unless it be in septicæmia. Its most striking effects were manifested in a non-contagious fever, which had hitherto been classed separately from the zymoses: I speak of acute rheumatism. As a remedy for this malady it has received the warmest commendation from all quarters. It seems to find its opportunity when the temperature is high, and joint after joint is being involved, with severe pain: its administration at this time rarely fails to bring down the fever and relieve the pains in the space of 36 or 48 hours. Salicin, in Dr. Maclagan's hands, has yielded results as good as those obtained with the acid, without the occasional unpleasant effects of the latter;* and the combination with an alkali—as in the form of the salicylate of soda—seems in no way to weaken its properties, while it gives a more soluble preparation.

In the face of these facts, we disciples of Hahnemann had to consider what we ought to do. The results of our treatment of acute rheumatism, though satisfactory enough, were certainly not so good as those claimed for this remedy; so that, even could we not recognise its action as an instance of the law of similars, we should have felt bound—as being physicians, and not mere homœopathsists—to have entertained the question of its employment. At first this seemed to be the position of affairs. The acid was found by Fürbringer to cause no elevation of the temperature in healthy animals, and Dr. Ringer found the same negative results from salicin in the human

* See *Practitioner*, Nov., 1877, and *Lancet*, June 21, 1879.

subject. Of late, however, some observations on the other side have appeared. Dr. Wheeler, in a paper communicated to the British Homœopathic Society,* relates a proving of Mr. Nankivell's on himself, in which ten grains of salicin on two occasions brought on a feverish attack of twenty-four hours duration, in the first of which the temperature rose to 101°. He also cites a case of acute rheumatism, treated with this substance in such large and frequent doses that in the four or five days the patient was under its influence he must have taken at least 1,400 grains. Under this medication the temperature steadily rose until death occurred, when the thermometer registered 111°. Two Neapolitan physicians, moreover, have lately ascertained on dogs and rabbits that Salicylic acid, both free and in the state of salicylate, lowers the temperature, but within restricted limits. In a somewhat larger dose, it not only does not lower the temperature, but sometimes considerably increases it.†

Now as it is in febrile rheumatism that the drug displays its great powers, there is some suggestion in these facts of its possible homœopathicity thereto. A similar conclusion follows from the small dosage which sometimes proves sufficient. Those of our own school who have used it, and have reported successes surprisingly good in comparison with those to which they had been accustomed—among whom I may name Drs. Hale and Lilenthal in America, besides Dr. Wheeler among ourselves—have all found doses of from two to five grains of the soda salt sufficient for their purpose. On the other hand, I apprehend that such results are exceptional, and that it is only occasionally that the drug is truly homœopathic to the disorder. Its employment in the old school seems to me to rest upon an altogether different basis. There are three ways in which acute rheumatism has been and can be treated, and the medicines which have been in repute for it fall into three classes accordingly. You may endeavour to neutralise chemically the presumably acid *materics morbi*, as by alkalies, neutral salts, or lemon juice. You may seek to check the formation of this peccant matter: such, I apprehend, must be the action of such medicines as the colchicum and propylamine of old-school practice, and of our homœopathic remedies (as Bryonia). Or, thirdly, you may forcibly (as it were) repress fever and deaden pain, while leaving untouched the specific morbid process present. I suppose that a good deal of the success obtained from Aconite by Lombard and Fleming is to be thus explained; and I am sure that in this way Briquet and his

* *Annals*, viii., 363.

† See *Lond. Med. Record*, April 15, 1878.

imitators gained their results with full doses of quinine. Salicin and its derivatives, I consider, act in acute rheumatism like the last-named drug; and the necessary dosage has similar inconveniences. It has been said that "cerebral rheumatism" was almost unknown in France until the quinine treatment of the original malady became fashionable. Accidents of this kind have been common enough under the free use of salicylic acid and its compounds, and have more than once ended fatally. The great defect of such remedies, moreover, is that, leaving the essential malady untouched, and only hushing up its expressions, they favour the tendency to relapse—strong enough already in rheumatic fever, and so unduly protract the illness. That it is so with the salicylates was the conclusion reached at the discussion of the subject at this year's meeting of the British Medical Association,* and has since been shown by the statistics of the Middlesex Hospital.†

While, then, I cannot give to our present drug any important place in the homœopathic therapeutics of acute rheumatism, indications for uses of it of this kind are sure to result from the symptoms of overdosing with it now so often reported. Dr. Ringer's experiments on the human subject with salicin show that it affects the head like quinine. "The aspect," he writes, "of a patient under full medicinal doses is very characteristic, being in many respects similar to that of a patient suffering from cinchonism." Amongst other symptoms of this state he mentions—"The patient, made more or less deaf, often complains of noises in the ears." This effect, noted by Dr. Tuckwell from salicylic acid, has been most definitely described by Dr. Gowers, of University College Hospital, as occurring during the administration of salicylate of soda; and he, besides the deafness and tinnitus, found vertigo to exist.‡ We have thus, as Dr. Gowers perceived, the essential features of Ménière's disease ("auditory nerve vertigo"). He himself curiously enough made some tentative prescriptions of the drug in this very affection. Dr. McClatchey, of Philadelphia, initiated the systematic application of drug to disease in the homœopathic school by reporting§ a striking cure with it,—the salicylate being given in two-grain doses. Dr. Dyce Brown has since followed up with others, in which the dilutions from the 1st to the 3rd decimal seem to have done

* See *Brit. Med. Journ.*, Aug., 25, 1879, p. 283.

† See *Lancet*, Sept. 20, 1879.

‡ See *Brit. Med. Journ.*, April 21, 1877.

§ *Hahn. Monthly*, Aug. 1877.

everything that was required;* and Dr. Claude reports from Paris that the third trituration of salicylic acid is becoming quite a favourite medicine with him for simple deafness with tinnitus. My own experience has been quite as favourable with it in this class of cases.

The power of the drug to disorganise osseous tissue has also been utilised by Mr. S. H. Blake in a case of scrofulous caries.†

I have already mentioned *Quinine* as the analogue of our present drug, and suggested the dosage in which it will probably have to be given.

The last of my group is

Acidum sulphuricum.

“Ten grains by weight of the officinal acid of the British Pharmacopœia, mixed with sufficient distilled water to measure eighty minims, will constitute our 1^x preparation.” I quote the British Homœopathic Pharmacopœia.

The only pathogenesis of Sulphuric acid we have is that contained in the second edition of the *Chronic Diseases*. It contains 513 symptoms from Hahnemann and five fellow-observers, and 8 from authors.

The first dilution of this acid is here directed to be made with distilled water, and the subsequent ones with alcohol. If we could suppose the former to have been used for the proving, we might attach some importance to the symptoms recorded; but the epoch of their appearance compels us to refer them to the category of those supposed to result from globules of the 30th. Of the eight symptoms from authors five are those of a typhoid from which the patients taking it were suffering. The only valid ones are S. 148 (“salivation”), 151 (“aphthæ in the mouth”) and 198 (“hiccough”—this repeatedly recurred after the administration of clysters containing the acid).

We thus know next to nothing about the dynamic physiological effects of Sulphuric acid; and, judging from its therapeutic position in homœopathic practice, these are probably of more limited range than in the case of the other mineral acids. It has been mainly used in disorders of the alimentary canal. Hahnemann‡ speaks of “a very small dose of a high dilution”

* *Monthly Hom. Review*, Sept. and Oct., 1878.

† *Ibid.*, xxii., 415.

‡ *Organon*, note on p. 10 of Dudgeon's translation.

as curative of acidity of stomach. Dr. Bayes mentions a form of gastralgia in which he found it very useful; and Dr. Schneider commends it in obstinate hiccough, to which it is certainly homœopathic. Its undoubted power, now so generally recognised, over diarrhœa is also a homœopathic action; for it is admitted by all therapeutists that its continued use tends to loosen the bowels.* The same may be said of its influence over cutaneous disorder: "occasionally" writes Christison of acute poisoning by it "eruptions break out over the body." Pereira says that "no remedy is so successful in relieving the distressing itching, tingling, and formation of the skin of lichen, prurigo, and chronic urticaria, as sulphuric acid taken internally." Teste has cured syphilitic maculæ with it.

But there are those who would have it that our use of Sulphuric acid has been too limited hitherto. Among these are Drs. Espanet and Cooper. The former thinks that it is the antiphlogistic of cachectic subjects, as Aconite is that of the robust. The latter† considers that Sulphuric, like Phosphoric, acid shares the virtues of its base, and is an anti-neuralgic and a possible anti-periodic. He gives a good case of chronic gastralgia cured by it. The special relation of this acid to cutaneous affections seems to support his position: it was, indeed, on this ground that it was first used in them.‡

It must also be mentioned that later observation shows that, in poisoning by Sulphuric acid, some absorption into the blood does take place, leading to a great increase in the elimination of sulphates in the urine, and the setting up of an acute parenchymatous nephritis thereby, manifested during life by albuminuria and fibrinous casts. In several cases, moreover, there have been observed during convalescence from the immediate local effects "neuralgic affections of the intercostal and abdominal nerves; also, in isolated cases, extended and severe hyperæsthesia over the whole trunk."§

Dr. Guernsey considers Sulphuric acid indicated by a general sense of tremulousness, without actual tremor; and by a hurried feeling on the patient's part. The former symptom seems connected with general debility ("the weaker the patient

* Dr. Ringer moreover says, "A small dose often benefits diarrhœa, whilst a full one, by increasing the acidity of the canal, may even aggravate it;" and Stillé—"A caution should be observed in treating bowel affections with sulphuric acid, which is, not to persevere in it if the first few doses fail to mitigate the symptoms, for in that case it is almost certain to aggravate them."

† *Brit. Journ. of Hom.*, xxix. 699.

‡ See *Med. and Phys. Journ.*, iv., 484.

§ *Ziemssen's Cyclopædia*, vol. xvii., *sub voce*.

is, the more tremulous she becomes"); otherwise its association with hurriedness would suggest an incipient stage of the tremor and festination of multiple cerebral sclerosis.

The Sulphuric may be compared with the other mineral acids, and with Sulphur. The 2nd and 3rd decimal have been its usual attenuations.*

* A comparative view of the action of some of these acids, by Dr. H. V. Miller, may be read in the *Hahn. Monthly*, Nov., 1877, and *Mon. Hom. Review*, xxii., 30.

LECTURE X.

ACONITE.

The survey we have now completed of the acids used in our practice has exhibited the weakness as well as the strength of Homœopathy as it at present exists. But in the medicine we have now to study its strength alone is seen, and that at its full. If Homœopathy had done nothing for therapeutics but reveal the virtues of

Aconitum,

it might even die content.

The Homœopathic tincture is prepared from the *Aconitum napellus*. By Hahnemann the whole plant was used. The British Homœopathic Pharmacopœia directs the employment of the leaves and flowering tops, freshly collected, with the fresh or dry root. This is the tincture ordinarily dispensed; but an alternative (and of course much stronger) one made with rectified spirit from the dry root alone can be had if ordered.

Hahnemann's proving of Aconite is contained in the first volume of his *Materia Medica Pura*. It contains (in the latest edition) 541 symptoms, of which 431 are from himself and seven fellow-observers, and 110 from authors. Aconite was, moreover, one of the medicines selected for re-proving by the Austrian Provers' Society. Their work was carried out in the most thorough manner, sixteen persons co-operating in it, two of whom were women: the record of the experiments is contained in the first volume of the *Oesterreichische Zeitschrift für Homöopathie*. These two provings, with all additional matter available, are collated by Dr. Dudgeon in the first part of the *Hahnemann Materia Medica*, and by Dr. Allen in his *Encyclopædia*. There are also (besides the well-known treatise* of Fleming from the other school) studies of Aconite by

* *An Enquiry into the Physiological and Medicinal Properties of the Aconitum Napellus*. 1845.

Hartmann,* by Reil (in the form of the first prize essay of the German Central Verein),† and by Carroll Dunham in his Lectures. Hempel and the *New Materia Medica* give numerous cases of poisoning ; and all the systematic writers devote large space to the discussion of the action of the drug.

It is impossible to begin to speak of Aconite without a thrill of gratification and pride. The inestimable benefits which are daily being obtained from this remedy as an antipyretic and antiphlogistic, and which are now—at least in this country and America—obtaining general recognition, are the direct result of homœopathy. Fleming indeed, in 1845, was led by his experiments to infer that Aconite was an arterial sedative, and to recommend and employ it accordingly in fever and inflammation. But, as might have been expected, so indiscriminate a use of the drug made little way ; and the place it occupies in Pereira's great work as a mere benumber of pain, and its rejection as dangerous and useless by Trousseau and Pidoux, sufficiently characterise its reception in the old school twenty years ago. When, ever and anon, our brethren without have caught a glimpse of its precious virtues, it has been from its use by homœopaths that they have done so ; though they have generally (Liston being a noble exception‡) proclaimed them in the medical journals with a sneer at the source of their information. The present English use of the drug is not handed down from Fleming, but is the result especially of the persistent teaching of Dr. Ringer, whose inspiration is not dubious. But this writer had to say, as late as 1874, first, indeed, that “perhaps no drug is more valuable than Aconite,” but then, that “its virtues are only beginning to be appreciated.”§

On the other hand, the therapeutics of homœopathy exhibit a continuous use of Aconite as an antipyretic and antiphlogistic from the earliest years of the present century down to this day. The knowledge of this property of the drug it owes to Hahnemann himself ; and the history of his discovery is of importance, alike as vindicatory of his own fame and as illustrative of the working of his method.

On his first mention of the plant—in his “Essay on a new

* *Practical Observations on some of the chief Homœopathic Remedies*, trans. by Okie. First Series, 1841.

† Translated into English by Millard. 1860.

‡ See *Lancet*, April 13, 1836.

§ *Handbook of Therapeutics*, 4th ed.—Dr. Ringer's first memoir on Aconite appeared in the *Lancet* for Jan. 9th, 1869, and closely follows the article on it in the first edition of this Manual, which was published in 1867.

principle for ascertaining the curative power of drugs," published in *Hufeland's Journal* in 1796—he evidently knew no more of it than was known by the toxicologists and therapeutists of his day. He describes its familiar poisonous effects, and suggests that, upon the "new principle" of similarity which he was now advocating, it might be given in rheumatic, paralytic, convulsive and eruptive affections, in some of which he states that it had already displayed no trifling efficacy.

When, however, in the first edition of his *Materia Medica Pura* (1811) he publishes a pathogenesis of Aconite, he prefixes thereto the following remarks:—

"There is hardly any vegetable medicine but Opium whose primary action is characterised by the production of heat; and so those medicines serve just as effectively in acute diseases, whose primary action is compounded of several alternate states of chill (or coldness) and heat. To plants of this class belong Aconite, Ignatia, and some others. Since, moreover, the action of Aconite is of very short duration, and nearly always over in twenty-four hours, it thus becomes intelligible, that for the most part it is in acute diseases only that this plant can be permanently helpful; and that it but seldom suffices in chronic disorders, which are subject to far fewer of those alternations of condition which constitute the main essence of the action of this substance.

"Where Aconite is suitable as regards the rest of its symptoms, it becomes nevertheless so much the more helpful as the state of the patient's disposition presents at the same time a predominant resemblance to that which is expressed in its symptoms."

This is entirely a new thought about the drug, and is the germ of our present knowledge regarding it. When we enquire how Hahnemann came to this thought, the answer is plain. In the year 1805, he had issued his *Fragmenta de viribus medicamentorum positivis*, which contained pathogenetic effects of a number of substances obtained by provings on the healthy human body. Among them was Aconite, and in a note to his article upon it Hahnemann had written: "through the whole course of action of this plant, its effects of the first and second order were repeated in short paroxysms two, three or four times before the whole effect ceased, which it did in from eight to sixteen hours." And these effects he describes thus:—"coldness of the whole body, and dry internal heat; chilliness. Sense of heat first in the hands, then in the whole body, especially in the thorax, without sensible external heat. Alternating paroxysms (during the third, fourth, and fifth

hours); general sense of heat, with red cheeks and headache, worse on moving the eyeballs upwards and laterally, then shuddering of the whole body with red cheeks and hot head; then shuddering and lachrymation with pressing headache and red cheeks."

It was from his provings, then, and upon the the principle of similarity, that Hahnemann inferred the usefulness of Aconite in acute diseases, in which it had hitherto found no employment. In what forms of these disorders it would be serviceable he does not indicate at present, save that he points to the mental and moral symptoms of the drug as those especially to be looked for in the patient. When, however, we next hear from him on the subject, he is able to be much more explicit. I quote from the preface to the pathogenesis of Aconite in the first volume of the second edition of the *Materia Medica Pura*, published in 1822.

"Although the following symptoms do not yet express the whole significance of this most valuable plant, they nevertheless disclose to reflecting homœopathic physicians a prospect of help in morbid conditions, in which the ordinary practice employs its most dangerous means, viz., copious venesections and the whole antiphlogistic apparatus,—measures very often injurious, and nearly always followed by disastrous after-effects. I mean the so-called pure inflammatory fevers, in which the smallest dose of Aconite renders unnecessary all the antipathic measures hitherto in use, and cures rapidly and without *sequelæ*. In measles, in purple-rash, and in the most intense pleuritic fevers its remedial power is something miraculous, when—the patient observing a somewhat cooling regimen, and avoiding everything else* of a medicinal kind, especially vegetable acids—a dose of a small part of a drop of the octillionth" (*i.e.*, the 24th) "attenuation is administered. Seldom is a second dose, thirty-six or forty-eight hours after the first, required.

"But to remove from our conscientious method all influence of the ordinary practice, which is too ready to be regulated by (often imaginary) names of disease, it is necessary also that in all morbid conditions in which Aconite is indicated, the principal symptoms of the patient, as well as those of the (acute) disease, should suitably correspond as likes to likes with those of the remedy.

"The result is then surprising.

"It is just in the cases where Allopathy most prides itself, in the great inflammatory fevers where they look to bold and free blood-letting as the only means of salvation, and consider

that herein they have a huge advantage over homœopathic modes of help, that they are most utterly mistaken. Just here appears the infinite superiority of homœopathy, that—without the need of spilling a drop of that precious life-juice, so irreparable, which Allopathy relentlessly sheds in streams—it not seldom transforms those frightful fevers to health in as many hours as the life-reducing proceedings of Allopathy require months for the full restoration of the patient, if perchance he has escaped actual death, and has only had to struggle with the chronic *sequelæ* which have been artificially produced.

“It is sometimes necessary, in these acute attacks of disease, to have recourse to an intermediate homœopathic remedy for the symptoms which remain after Aconite has acted for twelve or sixteen hours, and still seldomer (as I have said) to a second dose of Aconite after this intermediate remedy.

“When the careful employment of Aconite is practised in the morbid conditions mentioned, four hours will not have passed ere all fear for life has been removed, and the excited circulation then returns from hour to hour to its habitual tranquil course.”

He goes on to say that it is occasionally a useful auxiliary even in chronic diseases where tension of the fibre is present; and that most of the symptoms in the appended list which seem contrary one to the other are really alternating states, either of which can be used as curative indications, although those of a “tonic” character are of most value. Lastly, he repeats his admonition as to the importance of securing similarity in the symptoms of the mind and disposition.

Eight years more gave him little to add upon the subject. The preface to Aconite in the third edition of the first volume of the *Materia Medica Pura* (1830) is almost identical with that of the second, save that for the 24th he substitutes the 30th dilution, and mentions the value of the remedy in preventing the injurious effects of fright or vexation when occurring in women during the catamenial flow, which these emotions are very apt to suppress. He also inserts one other new paragraph which must be transcribed. “So also,” he writes, “is Aconite the first and chief remedy (in the attenuated doses mentioned) in inflammation of the windpipe (croup, angina membranacea), in several kinds of inflammation of the throat and gullet, and in like manner in acute local inflammations elsewhere, especially when, with thirst and rapid pulse, an anxious impatience, an unappeasable restlessness, and an agonised tossing about are conjoined.” These last are evi-

dently the "symptoms of the disposition" (Gemüths-symptomen) on which Hahnemann had always laid so much stress as indications for its choice.

And when again we enquire how Hahnemann came to these applications of Aconite—how from a general fitness for acute diseases he was led to see its especial appropriateness to active states of fever and inflammation, we find that it was (in all probability) from these very mental conditions that the discovery was made. Dr. Quin—the honoured pioneer of Homœopathy in this country—was well acquainted with Hahnemann, and has related how "in 1826 he asked him how he had discovered the great antiphlogistic power of Aconite, as that was not evident from the proving. Hahnemann replied, that he had not directly discovered this property from the proving, but that whilst treating some inflammatory disorders he was led to the employment of Aconite from the similarity of some of the concomitant symptoms with some in the pathogenesis of Aconite, and he had found its administration followed by a great diminution in frequency of the pulse, and a cessation of the febrile state."*

From the facts and dates now brought forward the following conclusions seem to result:—

1st. The antipyretic and antiphlogistic properties of Aconite were an original discovery of Hahnemann's, made by him many years before any thought of the kind occurred (if it ever did occur at first instance) to a practitioner of the old school.

2nd. The discovery was made by pure induction from the symptoms produced by the drug when proved upon the healthy human body, applying these to disease according to the relation of likes to likes.

3rd. The application which led to the discovery was regulated primarily by the similarity of the mental symptoms of the drug to those of the morbid condition present.

4th. The antiphlogistic and antipyretic virtues of Aconite were first ascertained and obtained by means of infinitesimal doses.

But although the actual discovery of the power of Aconite over fever was made by means of the associated mental symptoms rather than by the febrile phenomena themselves, yet there can be no doubt of the real homœopathicity of the drug to the latter also. It is true that a hasty glance at the symptoms of poisoning by this plant has led to its being set down as a mere cardiac depressant. But a closer look reveals that the condition set up is one answering to the chill

* *Brit. Journ. of Hom.*, v., 387.

of fever and ague and the collapse of cholera. The pale face, the quick and contracted pulse, the general coldness within and without; the signs (should death result) of extreme venous congestion—these speak of a corresponding excitation of the vaso-motor nerves throughout the body. Had the thermometer been applied, it is probable that here as there* the temperature would have been found already on the rise. That this is the true explanation of the symptoms appears from what follows. For mark, that, should reaction take place, the condition of febrile heat succeeds that of chill: as Dr. Geo. Wood states, “the circulation, respiration, and general temperature are somewhat increased.” The same statement is made and illustrated by Fleming (pp. 34, 148). This is well seen in such a case as the tenth of Hempel’s series. The pulse, at first collapsed, became fuller, and rose to 100; the skin being hot and dry and the tongue coated, with headache and sleeplessness. His twelfth case exhibits a similar succession of phenomena. But the power of Aconite to induce fever is still more evident in the provings, and especially those of the Austrian Society.† One of the latter experimenters was so distressed by the febrile heat induced, that, not knowing what drug he had been proving, he commenced taking Aconite to obtain relief. The fever in these subjects was generally accompanied by signs of arterial congestion of the head and chest. If further confirmation of the pyreto-genetic power of Aconite had been needed, it would have been supplied by the experiments of Professor Schroff.‡ Their main interest to us lies in the evidence they afford of the influence of Aconite upon the trigeminal nerve. But repeatedly in their record we meet with expressions like these—“much febrile movement,” “general internal and external heat, with quick pulse,” “the whole body was burning,” “he passes from the midst of cold to the midst of heat,” “alternately hot or cold.” Dr. Mackenzie, also, as the result of his recent experiments on animals, states that Aconite increases the temperature until asphyxia sets in,—the thermometer in the ear of a rabbit rising from two to four degrees Fahrenheit under its influence.

* That the temperature is rising during the collapse of cholera is proved by Erman’s observations (see *London Medical Record*, i., 580). I need not argue the point with reference to fever and ague.

† See Symptoms 777-782 in Dr. Dudgeon’s arrangement.

‡ Translated from the *Präger Vierteljahrsschrift* and *Journal für Pharmakodynamik*, in *L’Union Médicale* for June and July, 1854. Reil also gives the earlier set of experiments *in extenso*.

I maintain, then, that it is in virtue of its power of setting up the essential phenomena of fever, of its action upon the same parts and in a similar manner, that it controls this condition when already present. It is febrifuge because it is febrigenic. But it is not every kind of fever which Aconite can remove. Like every other specifically acting drug, it has its proper sphere, beyond which it is less useful. The sphere of Aconite may be defined by two negations.

First, it has little control over the fevers resulting from morbid poisons. Its use in typhus and typhoid is mere waste of precious time. In variola it will not lower the circulation until the eruption comes out; nor will it touch the high temperature of pyæmia. It is more frequently useful in measles and scarlatina, though in the latter only when of a sthenic type, *i.e.*, when the blood-poisoning is but slight. I need hardly say that it will do nothing to prevent the recurrence of the paroxysms of hectic or of the malarial fevers.

Secondly, Aconite will do little for a fever which is symptomatic of an acute local inflammation. The excellent cases of pneumonia which Tessier has put on record* well illustrate this: it is most interesting to notice how the pulse defied Aconite, but went down rapidly when Bryonia or Phosphorus touched the local mischief. There are, indeed, a few inflammations in which Aconite may alone effect a cure, as being a specific irritant of the part affected. These are especially, as we shall see, the rheumatic inflammations. But even in non-rheumatic pleurisy, in its plastic form, and also in some kinds of croup and angina tonsillaris, Aconite is, as Hahnemann has said, a potent remedy. With these exceptions, it may be laid down that in proportion as true inflammatory changes in a part have actually begun, it ceases to exert remedial influence; and a medicine homœopathic to the local mischief must take its place.†

These negatives suggest the positive we desiderate. The fever in which Aconite is specific is neurotic, not toxæmic or sympathetic in nature. It is the "synocha" of the old authors,

* *Récherches cliniques sur le traitement de la Pneumonie et du Choléra, suivant la méthode de Hahnemann.* Paris, 1850.

† Dr. Ringer supplies another contra-indication to the use of Aconite in inflammation, *viz.*, the absence of increased temperature, as shown by the thermometer. When this obtains—as in some forms of angina—the remedy will be ineffectual. Dr. Imbert-Gourbeyre, in pre-thermometric days, had shown the same thing symptomatically (*Brit. Journ. of Hom.*, xiv).

the "pure inflammatory fever" indicated by Hahnemann, the fever in which the fibrin of the blood is in excess (so that its clot would be buffed and cupped), while the corpuscles are unpoisoned and the tissues are yet intact. It is the kind of fever which follows in some sensitive persons upon the passing of a catheter, or which any one may experience from exposure to (especially dry) cold. Let the morbid impression known as a "chill" be made upon the vascular nerves; let the arterioles under their influence first contract to produce the cold stage, and then dilate for the hot stage of simple fever; and we have the everyday occurrence for which Aconite is the unfailing remedy. Whether the chill or the heat be present the medicine is no less indicated; and let the storm of arterial excitement be ever so high, a few doses will quiet its fury, "In as short a time as four hours after the administration of Aconite in the morbid states in question, all danger to life is past, and the excited circulation returns from hour to hour to its more tranquil course." So (as I have reminded you) wrote Hahnemann in 1822, pointing out to us this most important use of our medicine. Indeed, it may be laid down, that unless a fever (not being rheumatic, of which more anon) has greatly abated within twenty-four hours of commencing Aconite, it is one for which the remedy is unsuited.

The relation of Aconite to inflammation and inflammatory fever is well stated by Teste;* and still more fully by Dr. Dunham. He (the latter) well points out its accordance with the symptomatic indications given for the drug by Hahnemann himself, *i.e.* (as you will remember) when "in conjunction with thirst and a rapid pulse there are present an anxious impatience, a restlessness not to be quieted, distress, and an agonised tossing about." These are the symptoms of inflammatory fever before it has well localised itself. When exudation has set in at the affected part, the tension of the circulation and nervous system diminishes; and such fever as continues is sympathetic, and of like character with the local changes. He illustrates the phenomena by the passing of a tempest over a village, which may subside to perfect calm; but which may leave behind it a cottage on fire, that shall be in its turn the centre of agitation and mischief. Aconite will subdue the storm; but it will not put out the conflagration. The same symptomatic indications admirably harmonize with the relation of our drug to the essential fevers. The condition of the patient in typhoid and other toxæmic pyrexia is one of

* It is, he says, "in phlegmasia primarily general, and only secondarily localised" that Aconite is curative.

heaviness and oppression, rather than of the *anxietas* characteristic of Aconite.

It is right to add that all these observers—Hahnemann himself, Tessier, Teste, Dunham (and I may add Dr. Guernsey in the same strain)—speak of the action of the higher dilutions of the medicine, which alone they were accustomed to employ. Those who have used stronger preparations seem inclined to give it a wider range. “The power of this drug over inflammation,” writes Dr. Ringer, “is little less than marvellous;”^{*} and Hempel seems to know no limit to its action here. Dr. Bayes speaks highly of it, in the first decimal dilution, in acute otitis, to which it has no proved homœopathic relation. Wurmb, who gave it high, allows it no place in typhoid; but Trinks, who used the lowest dilutions, thinks it of real service in the incipience of the less asthenic forms. It is here as elsewhere. Infinitesimals, at least in the higher grades, act only when the homœopathicity is perfect; though they then display such brilliant powers that one may well become enamoured of them. A nearer approach to the crude drug widens the range of action, and enables us to be content with a *simile* instead of searching for an often unattainable and still more often illusory *similimum*. But, on the other hand, the farther you get from the *punctum saliens* of minute symptomatic resemblance, and increase your doses accordingly, you are in peril of coming to employ the drug in quantities large enough to induce its physiological action as an “arterial sedative,” in which it ranks with Digitalis, Tartar emetic, and other drugs, like them retarding the heart’s action through the vagi, and relaxing the system through the induction of nausea. It is such an application of the drug which was advised by Fleming (in 1845) on the strength of his experiments with it; and it is this, mainly, which, through Ringer and Phillips, has come into vogue again now. It is not without its merits; but I am anxious to impress upon you that it is not homœopathy, and that you must not claim it as such. It is not that antipyretic and antiphlogistic use of Aconite which was discovered by Hahnemann before 1822, and which has ever since constituted (as you may see by Reil’s and Dudgeon’s quotations) one of the most cherished practices of his school.

The condition, then, to which Aconite is homœopathic, and which makes it our great febrifuge, is one of *tension* of the nervous and arterial systems, manifesting itself by restless

^{*} This was his language in 1874. In his seventh edition (1879) he employs more qualified language, and inclines to the views expressed above.

anxiety in the one, and chill and heat, with thirst, in the other. It is easy to see that a large class of acute affections beyond those hitherto specified may thus come within its range. In active hæmorrhage, especially hæmoptysis; in acute congestion of almost any part; and in recent febrile dropsy, Aconite will always commence and often complete a cure. The same thing may be said of acute sthenic erysipelas and puerperal fever, and (as I have said) of the "urethral fever" which in some subjects ensues upon catheterism. In cholera infantum Dr. Madden found it indispensable in Australia;* and Dr. Guernsey writes of it—"if a child is suffering from a watery diarrhœa, is crying and complaining very much, biting his fists, and is sleepless, Aconite will usually settle this trouble in a short time." In the collapse of Asiatic cholera itself, where the chill is so deadly that were it not for the consecutive fever its true nature would be hardly recognisable, but where (as in ague) the temperature is already rising, Aconite will assert its power. It is due to Dr. Hempel to say that from early times he has maintained the homœopathicity and potency of the medicine here. In the epidemic of 1865, a French physician (Dr. Cramoisy) reported twelve severe cases recovering under this remedy alone, given in drop doses of the mother tincture.† It is especially when collapse comes on very rapidly, with little or no premonitory illness, and unattended by copious evacuations, that Aconite is indicated. Arsenic is the medicine generally prescribed in such cases; but its sphere and that of Aconite intersect and overlap each other at this point, and the greater rapidity of the action of the latter would seem to turn the scale in its favour.

The power of rectifying the disordered balance of the circulation shown in these instances gives Aconite an important place in the treatment of many morbid conditions not strictly febrile. In apoplexy and in puerperal convulsions, where there is much arterial excitement, Aconite will do everything for which the lancet used to be thought indispensable. In suppression of the menses from a chill, with its accompanying congestive phenomena, there is no more valuable medicine. Again, where the tension is in the nervous system alone, Aconite (especially in the higher dilutions) is of signal service. Dr. Bayes speaks well of it in the insomnia of aged persons, and Dr. Guernsey in erethistic states occurring during dentition and parturition; while Hahnemann writes—"It produces

* *Annals*, v. 57.

† *Bull. de la Soc. Méd. de France*, 1865, pp. 604 and 652. See also Dr. Cramoisy's further experience in *L'Art Médical*, xlviii., 414.

all the morbid states which are manifested in persons whose minds have been excited by fear, joined with vexation ; and it is also the surest means of curing them rapidly." Fear itself (especially the fear of death), when urgently present, has been found an unerring indication for it.

This leads me to say a few words upon the action of Aconite in the musculo-motor sphere of the nervous system. We find here a similar tension induced to that already seen in the vaso-motor division. Not paralysis, but spasm, is excited, and that nearly always of a tonic character. Trismus is a common symptom in cases of poisoning ; the sufferers frequently complain of constriction at the throat, of local cramps and spasms, and of stiffness and difficulty of moving the limbs ; and there are several cases on record in which complete opisthotonos existed, and the pseudo-tetanic state was induced as completely as by Strychnia. There is, however, none of the reflex excitability present which characterises that medicine.

These statements as to the musculo-motor action of Aconite (which I have always made) are of course in direct opposition to the common notions about the poison, which assume it to be a pure paralyser. They are fully borne out, however, by the most recent experiments with it on animals—those of Drs. Harley* and Mackenzie.† The former infers from his observations that Aconite affects the cranio-spinal axis from the centres of the third nerves to the origin of the phrenics, as Strychnia does the whole ; and exhibits well the spasmodic dysphagia and dyspnœa which result from its administration. Dr. Mackenzie extends the statement to the whole sphere under consideration. "In the earlier stage of aconitism," he writes, "the irritability of the muscles and motor nerves is augmented ; their excessive functional activity induces a period of exhaustion, which disappears, however, if they be allowed time for recuperation."

Correspondingly, Aconite has considerable power over some spasmodic affections. Its usefulness—generally in alternation with other more locally acting medicines—in the incipience of the neuro-phlogoses we call croup and whooping-cough is probably to some extent of this kind. In the asthmatic paroxysm, and in that of the so-called "spasmodic croup" (not real laryngismus stridulus), when excited by cold dry air, it will often give relief. In simple trismus and many other local cramps and spasms, especially when owning a similar origin, it should always be thought of: Teste relates a striking case

* *St. Thomas' Hospital Reports*, vol. v.

† *Practitioner* for 1878-79.

of the kind in which the pectoralis muscle was at fault, and simulated cardiac disease. But, above all, it bids fair to be a valuable medicine in tetanus. There are seven cases of the traumatic form of the disease now on record, in which Aconite, in ordinary doses, was the main remedy used; and in six recovery was the result. It would be still more suitable to the idopathic form of the disease, from exposure to cold and wet; and to the "tetany" described by Trousseau. The numbness and tingling with which the spasms of the latter begin, their probable rheumatic origin, the occasional presence of febrile symptoms, and the benefit observed from blood-letting—all point to Aconite.

We come next to the action of Aconite in the sensory sphere of the nervous system. To the mind of a physician of the old school, this is a very simple matter. In poisoning by the drug, he would say, and in experiments with it upon animals, loss of sensibility is one of the most obvious phenomena. Aconite, accordingly, is a paralyser of the sensory nerves; and may often prove useful in neuralgia and other simple pains, to which—when the affected parts can be reached—it is best applied locally.

But a little further enquiry will show that such a conception is simple only because of its poverty, and that it fails to embrace the whole series of facts under notice. In experiments on animals, indeed, loss of sensibility of the skin is always noted. But no better instance can be given of the inadequacy of this mode of pathogenetic research than the present. You have only to read a few cases of poisoning by the drug to find that, while the surface of the patient's body is insensible to external impressions, it is not so to his own consciousness. He will complain of at least an uneasy sense of numbness and tingling, or of pricking and burning; and not seldom of actual pain. The condition set up is evidently a dysæsthesia, and not a mere impairment of sensation. Still more evident is this when we come to deliberate provings on the human subject. Those of Professor Schroff have most bearing on the point. "Aconitine," he says, "produces a peculiar feeling of drawing and pressure in the cheeks, the upper jaw, the forehead—in a word, in the parts supplied by the trigeminal nerve. This feeling increases little by little in intensity, and is transformed at first into a remittent pain which shifts its place, later into a continued pain of considerable severity." In one of his provers the extract of *Aconitum neomontanum* caused "drawing and tension in the range of the fifth nerve, which soon gave place to a lancinating pain,"

and Rothansel, in the Austrian experiments, experienced a similar effect.*

The action of Aconite upon the sensory nerves is thus to develop in them that morbid condition which shows itself in neuralgic pain. Nor need its production of anæsthesia be regarded as in any way inconsistent with this statement. It has often been shown (and by none better than the late Dr. Anstie) that pain is not hyperæsthesia, but something entirely different if not opposite; and that neuralgic pain especially is nearly always associated with diminution of healthy function, and may even exist in the presence of almost entire destruction of the nervous substance which is its seat. That Aconite causes anæsthesia, therefore, is in favour of rather than against its development of neuralgia; and, therapeutically, it suggests its appropriate place to be in those instances where the two conditions most obviously coincide.

And now again,—if Aconite showed itself useful in neuralgia only when applied to the painful nerve, its operation might be conceived of as a mere local benumbing. But its chief reputation in this disease has been obtained by its internal use. In an article in the *Gazette Médicale de Paris* for 1854, Dr. Imbert Gourbeyre has collected numerous testimonies to its efficacy; and at the present day Professor Gubler† declares it “almost specific” in facial neuralgia, especially of congestive form, saying that he has yet to see a case in which it fails to be of at least some benefit, even if it does not cure. Dr. Ringer concurs with him that it is where the fifth nerve is affected that it proves most useful; and this exactly corresponds with Schroff’s statement, that “Aconite, as also aconitine, given internally, appears to have an elective and special action upon the trigeminal nerve, producing in all parts animated by the sensitive branches of this nerve peculiar sensations, most frequently painful.” But the general pains experienced by many subjects of its influence show that it has in some degree the same action everywhere; and Dr. Imbert Gourbeyre’s collection of evidence proves that its efficacy is not limited to prosopalgia. It has proved very useful, for instance, in sciatica.

The kind of neuralgia to which Aconite is homœopathically appropriate has been sufficiently exhibited. It is most suitable to recent cases, occurring in comparatively young subjects, and especially when traceable to cold draughts. Dr. Gubler’s experience, however, may lead us to trust to it—especially in the form of aconitine—in more chronic and deeply-rooted cases.

* See Allen, s. 419. † *Bulletin de Thérapeutique*, Feb. 25, 1877.

The numbness and tingling of Aconite may have another significance: they may suggest that which, felt in the extremities, is so frequent and grave a warning of impending apoplexy or paralysis. Dr. Hempel has laid much stress upon this; but I confess that I rather thought of the anæsthetic influence of the drug as being exerted upon the extremities of the sensory nerves, reaching them through the blood which bathes them. Liegois and Hottot,* however, seem of late to have demonstrated that it produces the effect by acting upon a supra-spinal sensory centre—possibly the optic thalamus. If this be so, we have in aconitism a condition precisely similar to that which obtains in threatened hemiplegia, into which in two of the older records of poisoning cited by Hahnemann—those of Matthiolus and of Richard—it seems to have actually developed; and Dr. Hempel is quite justified in urging us to use it as a homœopathic remedy in corresponding morbid states. He relates several cases of cerebral paralysis, imminent or present, in which its use was of the utmost advantage.

You will also think of Aconite whenever you meet with anæsthesia as such, general or local, at any rate when it is complained of. It would hardly be suitable to the form of it met with in hysteria, which has of late excited so much interest in connection with the “metallo-thérapie” of Burq; for here the patient is unaware of the loss of sensibility till it is ascertained from without. But whenever an “anæsthesia dolorosa” is present, give its subject the benefit of Aconite.†

Yet another application of the elective action of Aconite on the trigeminus has been made by Dr. Dekeersmaecker, of Brussels, when he reports its efficacy in incipient glaucoma. It is when the ocular affection is associated with anæsthesia or neuralgic pain in the parts supplied by the fifth that he finds it so useful; and these symptoms obviously suggest its dependence on disorder at the origin of that nerve.‡

I cannot pass from this part of my subject without pointing out to you how beautifully the facts which have just come before us illustrate the method of Hahnemann. By the proving on the healthy human body which medicine owes to him the *modus operandi* of a valuable piece of practice is ascertained, and hence rendered more sure and definite for the future; while, by applying the results obtained according to

* The later experiments of Drs. Ringer and Murrell lead them to a similar conclusion.

† See a case of my own in vol. viii. of the *Annals*, p. 491. This patient has since continued almost entirely free from her ailment.

‡ See *L' Hom. Militante*, i., 271.

the rule of similarity he has enunciated, other uses of the medicine are gained which give us a remedy for morbid conditions, one of which is of the utmost importance.

We pass now to another great sphere of the action of Aconite,—its anti-rheumatic virtues. It cannot be said that these also were proclaimed by Hahnemann, or are discoveries of the law of similars. The names of Störck,* Lombard† and Fleming are most prominent as advocates of Aconite in this connection. The first found it curative in many old rheumatisms, improvement generally setting in with critical sweats or eruptions. The second ascribed to it a specific action against acute articular rheumatism. And the third says of its use in the same affection that the average time required for cure is from five to six days; that the drug seems to protect the patient from cardiac complications; that the convalescence is very short; and that much less stiffness of the joints is left than under the ordinary treatment.

Nevertheless, though otherwise arrived at, the anti-rheumatic virtues of Aconite are truly homœopathic. Aconite is an irritant as well as a neurotic poison; and the tissues its irritation affects (when introduced into the circulation) and the kind of trouble it causes are distinctly those of rheumatism. Pains in the joints, muscles, and fibrous tissues generally, of a cutting, tearing, and shooting character, are very frequent in the provers; and they are attested by Ringer and Schroff. Schneller, in the experiments of the Vienna Proving Society, developed genuine muscular rheumatism in his own back and loins.‡ One of the Austrian provers had, alternating with his articular sufferings, painful palpitation of the heart and præcordial anxiety; and Dr. Jousset says that he has introduced into the circulation of rabbits increasing doses of the extract, with the invariable result of producing lesions of the mitral valve. Very painful hyperæmia of the eyes has been more than once observed,§ and looks like rheumatic ophthalmia. Lastly, in post-mortem examinations decided evidences of inflammation of the pleura and peritoneum have been found; and the symptoms elicited by some of the provers are in full harmony therewith.

All this is in closest analogy with the action of the rheumatic materies morbi; and in the hands of those who avail

* *Exp. et Obs. circa usum internum Stram., Hyosc., et Aconiti.* 1762.

† *Gazette Médicale de Paris*, 1835.

‡ *Brit. Journ. of Hom.*, vi., 271.

§ See case 7 in the *New Materia Medica*, and Cases XV. and XVI. in the Appendix to Fleming's monograph.

themselves, of the lower potencies, Aconite is reckoned the prime homœopathic remedy for acute rheumatism. In higher attenuations it seems to have less power, and is thus little favoured by Wurmb: there is indeed none of the nervous tension here which seems indispensable if it is to act well in infinitesimal doses. But there is fever, with which is increase of the fibrin of the blood; it is (ordinarily) of synochal type, and would by itself demand the remedy. It is as yet unknown whether Aconite can subdue the dangerous hyper-pyrexia sometimes observed in this disease; but I should think it likely to impede its supervention by moderating the ordinary rise of temperature, which it unquestionably does. The rheumatic being a toxæmic fever, and not departing in its characteristic perspiration, cannot be expected to disappear under the Aconite in a few hours; but it will yield in good time. It is obvious, moreover, that the supervention of any of the common complications of acute rheumatism would not render this medicine less truly indicated; for we have seen it acting similarly on the heart and the serous membranes. It may, however, be sometimes aided by medicines acting more powerfully upon the tissues affected, as Bryonia in pleurisy, Colchicum in pericarditis, Spigelia in endocarditis.

In acute local rheumatisms, moreover, Aconite is often most effectual, as in stiff-neck or lumbago resulting from a draught, and in sciatica where the sheath of the nerve is affected. It is also of great value in the primary stage of rheumatic ophthalmia. It is not so effective in iritis as in what we used to call sclerotitis. We are now taught that the sclerotic is rarely inflamed, and that the redness of its hyperæmia appears in patches. But clinically I mean by sclerotitis a *painful* inflammation of the eyes, brought on by exposure to cold, and presenting a crimson and straight-lined injection of the ball instead of the scarlet network of catarrhal ophthalmia. Here Aconite—*meipso teste*—is most effective. It is also highly praised by oculists of both schools* for its power of checking incipient inflammation of the eye after mechanical injury, whether accidental or operative. Look out, says Dr. Vilas, for the ciliary zone, and directly it appears put in your Aconite. Homœopathy has hardly put it to the proof in those chronic rheumatic conditions for which Störck and his followers have so lauded it; and what are the nature and conditions of its action here remains to be seen.

I have only yet to speak of the action of Aconite on the

* See the experience of Dr. Cade in *Journ. des conn. méd.-chir.*, 1856, Nos. 9 and 10.

heart. It has hitherto been generally assumed that it depresses and ultimately paralyses this organ. But such conclusions have been arrived at from cases of poisoning, and from experiments on animals with large quantities. Schroen, Arnold and Sharp* in the homœopathic school concur to testify that in small doses it quickens the cardiac action in man, at any rate at first; and Rudolph Boehm has lately obtained similar results from fractions of a milligramme of aconitine in frogs.† The acceleration cannot be, he says, from removal of inhibition through paralysis of the vagi; as atropine, which effects this, leaves the number of beats unaltered in the frog. It can only be, therefore, from excitation of the motor nervous supply of the heart. This is further confirmed by the second stage of the phenomena resulting from these minute quantities. Spasms of the heart set in, and these "far more decided and outspoken than with larger doses." The ultimate stage is, indeed, diastolic absence of motion; but this, he says, is clearly a cessation from weariness,—the heart showing all the characters of an organ semi-paralysed and tired out by excess of activity and irritation. He calls attention, moreover, to the remarkable consonance between the action of higher degrees of *heat* (as observed by Cyon) and that of aconitine upon the heart. The "palpitation" so constantly noted by the provers of Aconite points in the same direction; and the whole phenomena are precisely analogous to those observed by Dr. Mackenzie in the muscles generally.

Aconite is thus perfectly homœopathic to the condition of the heart which obtains in the sthenic fevers; but it also has an important place in primary disorder of that organ. Of its value in the cardiac inflammations of acute rheumatism I have already spoken. It is very useful in all diseases of the heart characterised by increased action, especially where the left side is chiefly involved. Its continued use gives much relief to the distress of hypertrophy. In one case of the rare spasm of the heart I saw almost instantaneous relief follow its administration; and in palpitation, where the heart retains its vigour, it is the best soother.

The therapeutic powers of Aconite have now been passed in review. The conclusion is that—beyond many other applications—it is the precious remedy which fills that important

* Dudgeon, p. 27, note. *Monthly Hom. Rev.*, xvii., 603.

† *Briť. Journ of Hom.*, xxxi., 194. The full account of these experiments gives a very different impression from that conveyed by Dr. H. C. Wood's *résumé* of them.

place so long occupied by venesection. It was Aconite which, in days when the lancet was in universal use, enabled Hahnemann and his disciples to dispense with it; and it is Aconite only which will prevent its revivification now. Ten years ago I should have said that the revival of venesection was far from improbable; for, save our present drug, no such potent antipyretic exists. Wilks and Ringer had merely repeated what Fleming and Routh in their time had proclaimed; and with these as with those it seemed likely that, from want of knowledge how to use the remedy, they would let it go again. But a deeper and wider impression seems now to have been made; and it may be trusted that throughout the profession the conviction is growing that in Aconite we possess a remedy which has all the energy without the inconveniences of bleeding, so that by it the place of the lancet is irrevocably taken.

As regards allied medicines, it seems to me that Aconite is perfectly unique in its action in the sphere of the circulation, and the same thing may be said as to its action upon the sensory nerves. In the musculo-motor sphere, it may be compared with *Cicuta* and *Hydrocyanic acid*. Its relation to rheumatism classes it with *Bryonia* and *Actœa racemosa*; and in its influence upon the heart it resembles somewhat *Cactus grandiflorus*, *Naja*, and *Spigelia*—which last acts like it upon the fibrous tissue of the eye-balls.

And now as to dose. I cannot deny that Hahnemann and his immediate successors seem to have found success from the plan recommended by him, of administering in fever a single dose of a high dilution of Aconite (18th to 30th), and allowing it to act. But it is no less certain that the homœopathic practice of the present day in all countries is to give frequently repeated doses of (generally) a low dilution until the fever departs in perspiration. I have myself never adopted any other practice than this; so that I have no other to recommend to you. The dilutions I use are the 1st, 3rd, and 6th of the decimal scale. The first I prefer in high fever, in acute rheumatism and rheumatic or other inflammations, in cholera, croup, cardiac spasm, and tetanus: also in neuralgia, where I often give Aconitine (3rd decimal) with advantage. The 3rd is sufficient in less violent febrile conditions, or when the anxietas of Aconite is very marked, in whooping-cough and asthma, and when the symptoms requiring the drug occur in young children. The 6th I think best in the febrile chill, in sub-acute circulatory disturbance connected with menstruation, in chronic heart disease, and generally where the medicine has to be taken continuously for some time. I have also, like Dr.

Bayes, used with advantage in nervous excitement the 12th and even the 30th; and Dr. Hempel has shown that in such dilutions it should be used even as an antipyretic when the patient's strength has been much reduced by depleting measures.

LECTURE XI.

ACTÆA, ÆSCULUS, ÆTHUSA, AGARICUS, AGNUS CASTUS,
AILANTHUS.

We begin to-day the consideration of a series of minor medicines which, in our alphabetical order, follow upon Aconite.

The first is the

Actæa racemosa.

By this, its Linnæan name, I venture still to designate the plant; though it is now more commonly called—less beautifully, and with no pleasing suggestiveness—*Cimicifuga*.

A tincture is made from the root. The “concentrated” preparation, *cimicifugin* or *macrotoin* (which is a resin obtained by evaporation of or precipitation from the tincture), seems to contain most, if not all, of the virtues of the plant: it is triturated, or dissolved in alcohol.

Actæa has been fairly proved, and by many persons. Some of the original experiments may be read in the third volume of the *North American Journal of Homœopathy*, and in Dr. Hempel’s *Materia Medica*. Dr. Allen gives a full pathogenesis of it, containing 447 symptoms derived from twenty distinct sources; and Dr. Hale, in the second volume of the fourth edition of his *New Remedies*, supplies a complete account of its therapeutic virtues. Both call it *Cimicifuga*.

Drs. Phillips and Horatio Wood concur in saying that we have little or no knowledge of the physiological action of *Actæa*. This is an ignoring of the labours of homœopaths, because such, which is hardly creditable to either, and which ignorance cannot palliate in the former, as he refers to Dr. Hale’s book. Perhaps it would not be welcome to either to admit that restlessness is so markedly caused by it; for it was first introduced into ordinary practice as a remedy for chorea, and upon the prevailing theory of medicinal action it ought

to exercise a sedative rather than a disturbing influence upon the nervous centres. There is, however, abundant evidence from provings and overdosings to show that the latter is its real action. Agitation and pain are the signs of its influence everywhere. The head aches severely, with especial involvement of the eyeballs; the mind is irritable and distressed, and even a condition resembling delirium tremens has been induced. There is great bodily restlessness, which is next door to jactitation, with pains in the spine, the muscles (including the heart), and the joints. One prover had sharp pleurodynia more than once during his experiments; and another, examining his urine, found urea and uric acid in considerable excess.

Now, if the principle of homœopathy be sound, Actæa ought to prove a remedy for some forms of *rheumatism*, and especially when the nervous centres and the muscles are the seat of the disorder. On the other hand, since it causes no febrile symptoms, it cannot vie with Aconite in rheumatic fever. Well, this is just what experience has established. In the acute and local muscular rheumatisms, as pleurodynia, lumbago, and torticollis, Actæa has gained commendation from all. The only exception is Dr. Ringer; but he extols it highly in some of the sub-acute articular forms of the disease. He specifies rheumatoid arthritis, especially when of uterine origin, and when the pains are worse at night and in wet or windy weather. It relieves these, and the cramps which often accompany them, to a very considerable extent. Another form simulates gonorrhœal rheumatism, but without any history of gonorrhœa. Here not only may the pains be almost immediately relieved, but the joints may become supple and useful again. This by the way; but I am persuaded that it is in muscular rheumatisms that Actæa will best sustain its reputation. Among these must be included the sufferings which the heart and the uterus often undergo from the influence of the rheumatic poison. The provings recorded by Dr. Hempel—the experimenter was a pupil of his—make it evident that Actæa affects the heart very powerfully. When rheumatism attacks this organ, not setting up inflammation, but as it does other muscles, we have a valuable remedy in our present drug. In a case of the kind cured by Dr. Hale the symptoms resembled angina pectoris, the attacks of pain recurring several times a day. Last, it is here (I think) that we must place the undoubted power of Actæa over chorea. The frequency of the rheumatic origin of this disorder is well known; and Dr. Ringer actually states that it is only

when chorea owns this causation that he finds the medicine curative.

He might, however, have extended its efficacy to cases having the *uterus* for their starting-point. Actæa has an undoubted action upon this organ; though in the absence of female provers we can say only that it is abortifacient and ecbolic, producing miscarriage without the inflammatory irritation of Sabina, and exciting in labour less unremitting contractions than Secale. But its therapeutic virtues in this region are numerous and well established. It is especially when the uterus is presumedly rheumatic that it influences it for good, relieving dysmenorrhœa and after-pains, checking the tendency to abortion, and facilitating parturition. When the "irritable uterus" is traceable to this origin, Actæa helps it greatly. But beyond this, when morbid uterine conditions show themselves elsewhere than in the organ itself by the pains and agitations characteristic of the drug, it comes potently to their relief. It cures uterine epilepsy and hysteria; puerperal melancholia (the case published by the late Sir James Simpson is a brilliant instance); the nervousness of pregnancy; and the restless and unhappy state of mind so often seen in uterine patients.* The co-existence of sleeplessness is said by Dr. Hale to be a special indication for it in these mental states. It dissipates the infra-mammary pain in unmarried females, which is to the uterus what pain in the shoulder is to the liver; and also pains in the mammæ themselves so arising. It is above all useful in the sufferings of the climacteric age, relieving the sinking at the stomach (which is one of its marked pathogenetic symptoms), the pain at the vertex and the irritability of disposition better than any other medicine.

While connecting the influence of Actæa on muscular tissue with that of rheumatism, I have no idea of limiting its remedial power to rheumatic myoses. It has removed simple myalgia when not traceable (as with Arnica) to fatigue. Of this Dr. Madden has recorded some instances; and one of very striking character in which the diaphragm was the seat of the affection, and where he was not only physician but patient. The malady had lasted nine years; and the narrative of its diagnosis and cure is one of the most interesting things in medical literature. It is to be read in the twenty-fifth volume of the *British Journal of Homœopathy* (p. 493).

The same remark applies to the nervous centres. It may be only rheumatic chorea in which Actæa is curative, but there

* See cases in *Brit. Journ. of Hom.*, xxvi., 168, 662; xxviii., 159, 248.

are certainly other nervous affections in which no such origin can be traced, and in which nevertheless the medicine acts perfectly well. We have seen this in the uterine neuroses; but it holds good no less elsewhere. Thus Dr. Hale has seen it useful in what he calls "chorea of the heart," in the sleeplessness of children from dentition, and in melancholia of all kinds, and Dr. Phillips in the hypochondriasis of spermatorrhœa: it has also more than once removed the spasms of cerebro-spinal meningitis.

Last, as to the eyes. I have mentioned before the severe aching pain in the forehead and eyeballs caused by the drug; this is, indeed, the characteristic symptom of actæism. Dr. Hale commends it in headaches resulting from loss of sleep or mental strain and worry. It would seem to be the muscles of the eyes in which its pains are situated, and it would be indicated when these were aching from undue exercise or from rheumatic influences. Dr. Angell has been led to use it largely, in the form of macrotin, in accommodative and muscular asthenopia, to remove the evil consequences of prolonged exertion of eyes thus affected, as hyperæmia and photophobia. It should be useful (as Dr. Hale suggests, and as its influence on nervous system plainly indicates) in the ocular hyperæsthesia which Mr. Hutchinson has lately described so well, when it is use of the eyes which brings on the aching. I know not if "muscular rheumatism" ever affects its appropriate parts in the optical apparatus: if it did, Actæa would be quite in place in its treatment.

Actæa may be compared with *Caulophyllum* and *Secale* in its uterine relations, and with *Aconite* in its influence over rheumatic disorders. Its effects on the nervous system somewhat resemble those of the last medicine, and of *Ignatia*, but they are *sui generis*. Physiologically, Dr. Bartholow considers that it acts on the circulation and the unstriped muscular fibre much like *Digitalis* and *Secale* respectively, but less actively than either; and Dr. Stillé compares it to *Colchicum*.

It is used in homœopathic practice mainly in the dilutions from the first decimal to the third centesimal.

We have next to speak of the

Æsculus Hippocastanum.

This medicine—the horse-chesnut—is known only in homœopathic practice. A tincture is prepared from the nut,

and is certainly efficacious. Pharmaceutically, however, it would seem better to make triturations; which indeed were mainly used in the provings.

Æsculus was first proved—on seven persons—by Dr. Buchmann; an account of his experiments is translated from the *Hom. Vierteljahrschrift* in the eighteenth volume of the *British Journal of Homœopathy*. In the second edition of Dr. Hale's *New Remedies* six more provings are detailed, and the many reports of its clinical use which have appeared in Homœopathic journals are brought together. Æsculus also forms the first of a very instructive series of "Studies in the *Materia Medica*" which Dr. Dyce Brown has contributed to the *Monthly Homœopathic Review* for 1876 and the subsequent years.

The region most constantly and strongly affected by the horse-chestnut is that of the *rectum* and *anus*. No prover escaped its influence there; and beyond the many forms of distress experienced by others—dryness, fulness, constriction, sense as if a foreign body were there, heat, itching, in two, one of whom had never had piles before, these morbid growths were produced. Correspondingly, Æsculus has acquired a high reputation in the homœopathic school as an anti-hæmorrhoidal medicine. I have several times affirmed and illustrated its value,* and Dr. Hale cites numerous testimonies of like import. The form of the disease in which I have found it specially efficient is that in which the only connected symptom or appreciable cause is constipation, and where there is much uneasiness and pain but little bleeding. Dr. Hale, who agrees with me in the latter qualification, disputes the former, maintaining that the hæmorrhoids of Æsculus belong to congestion of the liver and portal system, in which he is supported by Dr. Hart, of Wyoming.† Dr. Minor, of New York, too, gives "absence of constipation" as an indication for Æsculus, distinguishing it thereby from *Collinsonia*.‡ Putting all these things together, it would seem that our medicine has a very wide range of anti-hæmorrhoidal activity. I think, too, that we may carry it a point farther. The older authors used to describe an hæmorrhoidal diathesis, of which the local occurrence of these excrescences was but the main feature. Dr. Jousset, in his *Eléments de Médecine Pratique*, maintains that we have suffered loss by losing sight of this conception, and

* *Brit. Journ. of Hom.*, xxiii., 294, 485; xxv., 428. *Manual of Therapeutics*, (1st ed.), p. 280.

† *Amer. Hom. Observer*, xi., 208.

‡ *Brit. Journ. of Hom.*, xxxv., 141.

draws a picture of the "hæmorrhoidaire." Now if side by side therewith you will read Dr. Brown's description of the "person under the influence of Æsculus," you will observe a close correspondence to one aspect of the hæmorrhoidal diathesis, viz.: that which in its depression, irritability, portal congestion and catarrh of mucous membrane approaches to the gouty. The other elements of the picture—the varicosis and hæmorrhages—are supplied by Hamamelis, which takes the place of Æsculus in bleeding piles. We may then add these two medicines to Nux vomica and Sulphur as remedies for the hæmorrhoidal diathesis.

Aching in the lumbo-sacral region is very marked in the provers of Æsculus, and is a well-known concomitant of hæmorrhoids. Dr. Guernsey attaches great importance to this pain as a "key-note" for the remedy. He considers it situated in the sacro-iliac symphysis. "The pain," he writes "in this region is not severe, more a sensation of painful weakness, and is brought on by exercise and relieved by rest. When attempting to walk about or attend to usual occupations the back 'gives out,' and the patient is obliged to rest." When this symptom occurs in connection with disorder of the rectum or the sexual organs, we are (he says) to think of Æsculus.

When first writing about Æsculus I called attention to its action on the throat, where it has caused a dark-red congestion of the fauces, with dryness and soreness, similar to that which is set up in the rectum. I mentioned then a case in which it had removed such a condition when occurring idiopathically; and Dr. Meyhoffer has since put another on record, in which constipation and hæmorrhoids co-existed, and all yielded to the remedy.* The case was one of follicular pharyngo-laryngitis; and Dr. Meyhoffer mentions that other means were required to remove the granulations. In the *Monthly Homœopathic Review* for September, 1877, Dr. Brown highly commends Æsculus in this affection of the pharynx; and, with an interesting consilience of thought, Mr. Clifton contributes to the same number a series of eleven cases of the disease, occurring as a recent affection and within a short space of time, where he was led by the similarity of the symptoms to give the horse-chestnut, and with rapid success. "Angine granuleuse," I may mention, is one of the local manifestations, according to Dr. Jousset, of the hæmorrhoidal diathesis.

The paper to which I have referred, by Dr. Hart, of

**Brit. Journ. of Hom.*, xxvii., 549.

Wyoming, has some interesting remarks on Æsculus. He extends its sphere to all active abdominal and pelvic congestions, especially when characterised by a sense of throbbing; and speaks warmly of its value herein.

Æsculus seems to act the better for dilution to some extent. The second and third potencies have been those I have used, and Dr. Hart gets his results with the sixth.

I have next to speak of the

Æthusa cynapium.

This is the "garden hemlock," the "fools' parsley" of popular nomenclature. The tincture is prepared from the whole fresh plant for homœopathic practice, in which alone it is used.

A pathogenesis of Æthusa was published by Hartlaub and Trinks in the fourth volume of their *Annalen* (1833). An analysis of this, with the sources of the cited symptoms in full, is given by Dr. Roth in the second volume of the *Révue de la Matière Médicale Spécifique*. In 1847 Dr. Petroz published another pathogenesis, consisting of symptoms observed by himself.* Dr. Roth has combined the two collections, with revision and additions, in his *Materia Medica* (I. 169). His article is translated by Metcalf. The cases of poisoning on record are pretty fully given by Hempel; and Allen, in his supplement, adds some new provings.

The result of Dr. Roth's examination of the pathogenesis of Hartlaub and Trinks was to discredit it sadly; as nearly all the symptoms were supplied by Nenning, whose contributions to the *Materia Medica* are in his eyes of very dubious value. But Dr. John Harley would leave us still more destitute. In an article in the fourth volume of the *St. Thomas's Hospital Reports* he examines the recorded cases of poisoning by Æthusa, and records sixteen experiments of his own in which large doses of the juice were entirely inoperative; coming to the conclusion that toxicologists have hitherto been under a delusion, and that the fools' parsley is a harmless plant. I must confess that his experiments have much negative force, and they have been repeated with similar results by Dr. Allen.† I do not, however, feel satisfied with the principles on which he determines the validity of the poisoning cases, and must think the question still *sub judice*. However it be settled, the

* See his *Etudes de la Thérapeutique*, and also Teste's *Materia Medica*.

† *Encyclopædia*, x., 262.

therapeutic virtues of the drug may yet be believed ; and you must allow me for the present to connect them with its physiological effects as hitherto accepted.

Supposing this acceptation to be well-founded, Æthusa is a poison of no mean intensity. One of the narcotico-acrids of toxicology, its irritant influence is manifested not so much by inflammation as by pain, which is generally very severe. The nervous symptoms are convulsive, somewhat epileptiform in character ; in one case (in a child) it is noted that the thumbs were bent inwards, and the eyes turned downwards. The lower jaw is tetanically fixed. In less severe cases there is much complaint of headache ; the face is usually red, and in one instance the eyes were painfully inflamed and the cheeks œdematous. As regards the provings, I have nothing to say of those of Hartlaub and Trinks. No information is given as to the manner in which Petroz' observations were made ; nor is there anything very specific about them, except pain and swelling in the axillary and other glands. Dr. Allen's provers experienced little but gastric disturbance. Æthusa has been seldom used in practice. From Petroz' experience it would seem most useful in subacute inflammations of the ocular and palpebral conjunctiva, associated with swelling of the glands and cutaneous eruptions, —in a word, in mild cases of strumous ophthalmia. Dr. Roth also reports a cure of this malady. The action of Æthusa on the eyes deserves further investigation. Kallenbach speaks very highly of its value in intolerance of milk in children.* I agree with Mr. Clifton† that the inference as to this from the pathogenetic symptoms is a misunderstanding ; but it may be a true action nevertheless. Dr. Guernsey entirely confirms it, and esteems Æthusa highly in cholera infantum. He says that "this remedy is one of the most important in the *Materia Medica*, and is not so well known as it should be." He gives as indications for it, great anguish and crying ; disposition to jump out of bed or escape from the room ; great anxiety expressed by the face, often accompanied with the *linea nasalis* ; regurgitation of food an hour after it has been taken ; swelling of external glands with lancinating pains ; startings preventing sleep ; heat without thirst. It should be of service in the convulsive affections of childhood : Mr. Clifton reports it useful in these, when gastro-enteric irritation is present.

Hahnemann mentions facts about Æthusa which suggest that it has some action upon the brain. After saying that it

* *Gazette Hom. de Paris*, 1850, No. IX.

† *Monthly Hom. Review*, xii., 399.

specifically produces imbecility, and should be of use in this condition, he goes on to state that once when he found himself, from much mental work of various kinds coming upon him in rapid succession, distracted and incapable of reading any more, he took a grain of a good extract of it, prepared by himself. The effect was an uncommon disposition for mental labour, which lasted for several hours, until bed time; but had passed off by next day.*

Æthusa is comparable with *Cicuta virosa* and *Ænanthe crocata* in its toxic effects; with *Cistus*, *Bovista*, *Clematis*, and *Sulphur* in its finer actions and curative powers.

The 6th dilution seems to have been that mainly used.

And now, of

Agaricus muscarius.

This is the mushroom popularly known as fly or bug agaric; it is the *fausse orange* of the French, the *amanita* of the Italians. For homœopathic practice (in which alone it is now used) a tincture is made of the fresh, or triturations of the dried fungus.

The pathogenesis of *Agaricus* appears first in the second edition of Hahnemann's treatise on *Chronic Diseases*. He acknowledges ten fellow-observers; and the 715 symptoms recorded belong almost exclusively to these. They are indeed, as Dr. Hering shows,† a selection from several provings of various kinds, previously published. There are but twenty-one symptoms from authors; so that little use has been made of observations of poisoning by the fungus. In the tenth volume of the *Vierteljahrsschrift*‡ Dr. Roth has analysed the pathogenesis with condemnatory results, and has given a schema of what he considers the genuine effects of the drug. Since then, it has been re-proved by the Austrian Society in their usual exhaustive manner, under the auspices of Prof. Zlatarowich. Nineteen persons took part in these experiments, the record of which appeared in the *Zeitschrift d. Ver. d. Hom. Ärzte Cest.* for 1863. An account of them is given by Hempel (in his second edition); and in Allen's *Encyclopædia*

* *Lesser Writings*, (trans. by Dudgeon), p. 318.

† *Guiding Symptoms*, i., 144.

‡ Trans. in *Brit. Journ. of Hom.*, xviii., 268.—Dr. Roth shows that five of the symptoms were supposed to have resulted from holding a solution of *Agaricus* 9 or 30 in a full glass before the opened right eye of the patient!

the symptoms obtained are incorporated with Hahnemann's and those of poisonings (the last fully given by Marcy and Peters), making a grand total of 2495. Upon this important pathogenesis Dr. Brown has given us another of his valuable studies.*

Agaricus appears, from the poisonings and Austrian provings (which alone I feel able to use as materials), to exert its chief influence upon the nervous centres. Upon the brain it acts as an intoxicating agent, like alcohol, opium, and hashisch : it is used for the purpose by the Kamschatkans. The drunkenness is more vertiginous at the outset, and more delirious afterwards than that induced by alcohol : it is often accompanied by increased muscular force. The disordered exaggeration of function ending in suspension, which intoxication implies in the cerebral centres, is also manifested in the other divisions of the nervous system. Neuralgic pains are experienced as though sharp ice touched the parts, or cold needles ran through the nerves—in this contrasted with the Arsenic neuralgia, in which the imaginary needles are red-hot : or again, the sensory nerves lose their elasticity and power of resistance, so that when even feeble pressure is applied to a spot, it pains a long while after. The motor centres suffer quite as severely. Tremors and choreiform twitchings are produced by it ; convulsions of epileptiform type are not uncommon in poisonings ; and in several of the provers were developed symptoms of a profound affection of the spinal cord. Here are the symptoms obtained by Baumgartner :—while taking some of the lower decimal attenuations he had pain between the eighth and ninth dorsal vertebræ, heaviness and langour in the lower extremities, and a sensation of coldness in the glutei muscles. Under large doses of the mother tincture the latter symptoms increased, the gait became unsteady, and formication was felt in the feet. The pain was then felt also in the region of the first and second lumbar vertebræ, and in the sacrum. Next followed paralytic weakness of the sphincter ani and involuntary dribbling of the urine. Three hundred drops caused, among other symptoms, “lassitude and trembling of the lower extremities ; coldness and insensibility of the glutei muscles ; continual twitching in the small of the back and the lower extremities ; sensation as if a cool current of air were passing from the spine over the whole body.” The prover experienced a fulness and a sensation of weight, with pressure, in the small of the back, a creaking in the fingers and toes when moving

* *Monthly Hom. Rev.*, xx., 334.

them, with stinging pains in the same, and in the integuments generally. Another prover, after taking ten drops of the mother tincture, was suddenly attacked with a violent stitch in the small of the back, attended with vertigo and nausea, so that he had to vomit; the pain gradually extending along the whole spine, as far as the medulla oblongata. On touching the vertebral column, it was painful in several places. Prof. Zlatarovich himself had "crawling and pricking sensation in the nerves, a feeling of painful tension in the fascia of the thigh, painful sensitiveness of the spinal column, drawing and tensive pain in the spinal cord, and occasional fugitive pains in the track of the spinal nerves."

There are many other characteristic symptoms induced by Agaricus, which as yet defy classification. Thus the mucous membranes are found coated with a yellow mucus; on the skin a lichenous eruption (*lichen pilaris urticatus*) has been developed, with crawling, stinging, and burning; the liver is seen in autopsies greatly enlarged; pains, as though innumerable splinters were in them, are felt in the muscles, especially in the deltoid, where a small abscess even developed itself; and great constriction was complained of in the chest. The testicles were much retracted in several provers; and the urine often had a whitish sediment, which one tested and found to be phosphate of magnesia.

The employment of Agaricus has been hardly commensurate with its physiological importance. It is quite disused in ordinary practice, though formerly reputed in epilepsy, to which it is homœopathic enough. In our practice it has often cured chorea, to the idiopathic form of which it is a precise simile: it is said to be especially indicated when the twitchings cease during sleep, but this they almost always do. Drs. Allen and Norton commend it highly in spasmodic affections of the eyelids and muscles of the eye-ball, especially of the internal recti. Dr. Roth, from his study of its toxicological effects, recommended it in ataxic typhus; and Dr. Drysdale has recorded two cases of this form of the fever in which it proved effective in his hands.* Dr. Simmons has communicated a still larger experience of the same kind; and an American writer has followed suit. All agree that tremor, restlessness and constant desire to get out of bed are the indications for it; and that the mother-tincture must be used for the purpose. Some of its spinal symptoms point to congestion of the cord; but most of them, I think, belong to that ill-understood condition which we call spinal irritation. I am glad to find that in this

* *Brit. Journ. of Hom.*, xxi., 401.

opinion I have the concurrence of Dr. Brown. Mr. Clifton, in some interesting observations on Agaricus,* speaks of having gained much advantage from its use in this complaint. He also commends it from experience in delirium tremens and its non-alcoholic analogue, in enlargement of liver and spleen, and in chilblains. It is thoroughly homœopathic to the last-named trouble, judging from S. 492, 1947, and 2250 of Allen's pathogenesis, which show such a condition of skin in ears, hands and feet; and Dr. Guernsey considers chilblains a keynote for the remedy. Hahnemann says—"Apelt has found this drug serviceable in pains of the upper jaw-bone and the teeth; also in pains of the bones of the lower extremities (as if in the marrow), in confluent eruptions of itching papules of the size of a millet-seed, and in lassitude after coition."

Dr. Brown's article is very suggestive in respect of further uses of Agaricus. Amongst other things, he thinks it likely to be useful in spasmodic conditions of the respiratory organs, with some irritation of the mucous surface, herein resembling Ipecacuanha. I cannot quite follow him in expecting good from it in the "douleurs fulgurantes" of locomotor ataxy; the inflammatory induration which is at the basis of these pains lies, I think, beyond the range of the action of the drug. The pains of Agaricus radiating from the cord seem rather those of "spinal irritation."

The medicines most allied to Agaricus seem to be *Actæa*, *Cannabis Indica*, *Hyoscyamus*, and *Opium*.

The lower medium dilutions (3-6), and not uncommonly the mother tincture, have been employed.

Before leaving Agaricus, I must say a few words about the alkaloid which has been recently obtained from it and called

Muscaria. It had been noted of old† that in some cases of poisoning by fungi the power of the vascular system was remarkably depressed. The provers, also, invariably report reduction of the frequency of the pulse. Physiological experimentation has now proved that this property resides in the muscaria of the fungus, and that its rationale is excitation of the inhibitory nervous apparatus, slowing the heart's action, and ultimately arresting it in diastole. The irritability of the organ itself is unimpaired; and a dose of atropine, which depresses the inhibition, sets it going again. M. Prevost, of

* *Monthly Hom. Review*, xii., 400.—In a later communication (vol. xxiii., p. 255), he speaks of obtaining continued success with it in splenic congestions and enlargements.

† See Pereira, ii., 59.

Geneva, has lately instituted experiments on animals which, confirming these results, show that muscaria has much power over the secretions, increasing the lachrymal, salivary, hepatic, and pancreatic, but diminishing the renal to entire suppression. Atropine is antidotal to it on all sides in this sphere also; so that the whole action is neurotic, and probably connected with variations in the blood-pressure, which atropine increases, and muscaria lowers.

Still more recently,* Drs. Ringer and Morehead have experimented with muscaria, and on the human subject, injecting fractions of a grain subcutaneously. They confirm M. Prevost's results as regards lachrymation and salivation, but find that it also acts as a sudorific, producing perspiration almost as constantly and as profusely as Jaborandi. Not much influence was noted on the pulse. The pupils were contracted; but, when a ten per cent. solution was locally applied, they became widely dilated. In this respect muscaria corresponds with Gelsemium, and differs from pilocarpia—the alkaloid of Jaborandi—which contracts the pupil whether internally or externally exhibited. Its internal administration, however, has not so potent an effect of this kind as has that of muscaria. The pupillary changes of the latter drug are unaccompanied with disturbance of vision, so that it probably has little action on the accommodative apparatus. In animals great dyspnoea has been observed from muscaria, and Dr. Brunton has found the pulmonary blood-vessels strongly contracted, the lungs blanched, and the right heart much distended; but no disorder of respiration was noted in the four men on whom Drs. Ringer and Morehead experimented. On the whole, muscaria possesses properties closely analogous to those of pilocarpin and eserine—the alkaloid of Physostigma, and antagonistic to those of atropine.

No application has yet, to my knowledge, been made of these properties of muscaria. The drug ought to be a useful antipathic palliative for palpitation.

My next medicine is

Agnus castus.

This plant is only used in homœopathic practice. A tincture is made from the berries in the usual way.

The pathogenesis of *Agnus castus* is in Stapf's *Beiträge*; and it is prefaced by a summary of all that is known concerning the drug. The provers were Hahnemann and six others.

* *Lancet*, Aug. 11, 1877.

The name of this plant hints at its special action ; and its history points the same way. It was used by Athenian women during religious solemnities, and by mediæval monks, to repress carnal desire. Its provings show that it really has this property, depressing sexual instinct and energy without previous excitation. It is even reported to have caused in one case permanent extinction of virility. Its therapeutic use has accordingly been directed against atonic conditions of the sexual organs. In the hands of Drs. Stapf and Marcy it has cured simple impotence in males ; and Dioscorides states that it promotes menstruation and the secretion of milk. Its elective affinity for the sexual organs seems even to render it effectual against their local diseases ; for it is said to have been occasionally curative of gonorrhœa, gleet, induration of the testes, and leucorrhœa. Dr. Guernsey considers as characteristic of *Agnus castus* a mental state in which the patient thinks that it is of no use to do anything, as death is sure to come soon (this is different from what obtains with *Aconite*, where there is fear of immediate death). It might thus be useful in some cases of sexual melancholia.

Camphor, *Conium*, *Kali bromatum*, *Nuphar luteum* and *Phosphoric acid* are the medicines which in the sexual sphere invite comparison with *Agnus castus*.

Drs. Marcy and Stapf both report the 6th dilution as that with which their success was obtained.

I have last to introduce you to the

Ailanthus glandulosa.

A tincture is prepared from the flowers of this "tree of heaven," as it is popularly called.

Some few provings of *Ailanthus* have been made, and are collected in the article on it in Allen's *Encyclopædia*. But its real history as a medicine is to be found in the three papers to which I shall presently refer.

The story of *Ailanthus* is a very interesting one. One of our most accomplished American physicians, Dr. Wells of Brooklyn, supplies its first chapter.* A child of his own was seized with all the symptoms of the invasion of malignant scarlet fever. There was "violent vomiting ; severe headache ; intolerance of light ; dizziness ; hot, red face ; inability to sit up ; rapid, small pulse ; drowsiness, and at the same time great restlessness ; much anxiety ; two hours later, the drowsiness

* *Amer. Hom. Review*, iv., 385.

had become insensibility, with constant muttering delirium ; and she did not recognise the members of her family. She was now covered, in patches, with an eruption of miliary rash, with efflorescence between its points, all of a dark, almost a livid colour ; the eruption was more profuse upon the forehead and face than elsewhere." Dr. Wells gave up his child for lost. But in a few hours a change came about which gave a new aspect to the case ; and inquiry ascertained that she had largely sucked the juice of the stalks of the Ailanthus. Dr. Wells ends his tale by suggesting that we have here a possible aid in those frightful cases of scarlatina which prove fatal in the first stage, with the symptoms of cerebral toxication.

This was written in 1864. But, published in a journal little known, it seemed to have made no impression. In 1867, however, Dr. Pope, discerning the significance and value of these facts, called the attention of English readers to them.* His remarks soon bore fruit. In 1868, Dr. Chalmers found himself in the midst of an epidemic of malignant scarlatina. New at that time to the use of homœopathic remedies, he was disappointed (as we all have probably been) at their action here ; though the traditional practice had nothing better to offer him. His attention was then called to Dr. Pope's paper. He procured the Ailanthus, and at once found that he had the agent he needed. The fever was characterised by a dark-coloured and partial eruption ; and the effects of the medicine were constantly shown in the change of this to a rash more bright-hued and general. With this there was a marked diminution in the frequency, with more regularity and firmness, of the pulse, along with restoration to consciousness. "The result of the treatment by this drug was, and is, to me" he writes "a source of sincere gratification and thankfulness."†

I have seen no records of the use of Ailanthus since ; but from private information I have reason to know that it fully answers expectation. Dr. Madden used to tell me—and there was (alas ! that it should be "was") no better observer—that from what he had seen of its action in London, he had no doubt of its direct specificity and eminent value. Dr. Fischer, of Sydney, who was present the last time but one that I lectured on this drug, informed me afterwards that he had had large experience with it in scarlatina, and could entirely corroborate the favourable reports of its use which I had mentioned. He said, however, that he found it necessary to discontinue it when once the eruption had began to decline,

* *Monthly Hom. Review*, xi., 286.

† *Ibid.*, xii., 713.

under the penalty of causing a pemphigoid rash to annoy the patient during or after desquamation.

I should have let this main use of Ailanthus stand by itself, illustrating so vividly as it does the fruitfulness of the law of similars. But Dr. Dyce Brown, who has made the drug the subject of one of his "Studies,"* has directed our attention to the symptoms it produced in several of the provers, as forcibly suggesting its probable usefulness in some forms of cerebral and spinal congestion. Its effect on the head and mental faculties is very like the dull heavy headache, with confusion and incapacity for labour, which arises from brain—fag or over-worry; while the pains in the back, all up the spinal column, the contractive feeling in the chest and abdomen, and the numbness and tingling in the upper and lower extremities are the symptoms of spinal congestion, and give us another remedy for it in addition to Gelsemium. Dr. Brown also suggests it in bad cases of measles, where the eruption fails to come out, or retrocedes suddenly, or is livid; in diphtheritic and other low forms of sore throat; and in epidemic cerebro-spinal meningitis. Such an action as that which it displays in malignant scarlatina certainly ought not to stand alone.

In Dr. Chalmers' cases, and by Dr. Madden, the first decimal dilution was used.

* *Monthly Hom. Review*, xxi., 288.

LECTURE XII.

ALLIUM CEPA AND SATIVUM, ALOES, ALUMEN, ALUMINA, AMBRA, AMMONIUM CARBONICUM AND MURIATICUM, AMYL NITRITE, ANACARDIUM, ANGUSTURA.

You may be amused when, as my first medicine to-day, I mention the common onion. You will find, however, if you read Dr. Hering's preface to its proving, that this vegetable was highly esteemed as a remedy by the ancients, and was credited with considerable pathogenetic activity. We prepare the

Allium Cepa

by making a tincture from the mature bulb of the red onion.

Dr. Hering proved the onion, chiefly in the mother tincture, on some dozen persons in 1847. His results, with the statements of old authors about it, form one of the pathogeneses of his *Amerikanische Arzneipruefungen*, and are translated therefrom in the fifth volume of the *American Homœopathic Review*, and in Allen's *Encyclopædia*.

It is evident from this proving that the well-known irritation of the eyes and nose produced by the emanations from the onion are specific effects, as they also result from the internal use of the tincture. It is hence recommended for fluent coryza and other nasal defluxions,—Dr. Guernsey says, with acrid secretions. Whether it is needed to occupy a place in the treatment of these conditions which Euphrasia, Arsenicum and Kali iodatum do not already fill, experience only can decide. Dr. Dunham describes clearly* a catarrhal condition which he considers suitable for it,—a dry cough causing splitting sensation in the larynx being its most noteworthy feature.

The medicines I have named are the analogues of Cepa in its relation to the conjunctival and nasal mucous membranes. Dr. Hering thinks it occupies a middle place between Aconite and Ipecacuanha.

* *Lectures*, ii., 105.

The transition from onions to garlic is as natural as it is alphabetical. We will speak of

Allium sativum.

A tincture prepared like that of *Allium Cepa* is used in homœopathic practice.

A pathogenesis of garlic, with clinical remarks, was presented by the late Dr. Petroz to the Société Gallicane in 1852, and published in the third volume of its journal. It is translated, with additional symptoms and therapeutic notes, by Teste in his *Materia Medica*; and some further additions are made by Allen.

Eructions with salivation; profuse whitish urine, which becomes cloudy on the addition of nitric acid; much cough, with glutinous mucus and pains beneath the ribs; swelling and tenderness of the mammæ, and severe pain in the conjoined psoas and iliacus muscles when put in action—these seem the most characteristic symptoms of *Allium sativum*. It has cured chronic cough, with profuse mucous expectoration; and morbid sensibility to the influence of cold air. Petroz wrote of it—“*Allium sativum* has been of remarkable service in cases where the herpetic diathesis has manifested itself in the respiratory or digestive mucous membrane.” He considered a pale red appearance of the tongue, with effaced papillæ, pathognomonic of this affection. The old authors esteemed garlic an excellent remedy for “phlegm.”

The 6th dilution was most probably that used by Petroz and Teste.

My next medicine is one familiar to you as a purgative, though new as a specific remedy. I speak of

Aloes.

Of the best Socotrine Aloes we make a solution in proof spirit for our tincture.

A copious pathogenesis of Aloes, obtained from twenty-four provers, mainly with material doses, is contained in Hering's *Amerikanische Arzneipruefungen*. Some fresh provings are incorporated in Allen's *Encyclopædia*, where the medicine has 1180 symptoms

Although, as I say, you have hardly thought of Aloes as a specific remedy, you yet know a good deal about its specific

action. You know that it is no mere aperient, but has peculiar properties. That it purges, however introduced into the system; that it affects the large intestine only, especially the rectum; that here also it excites the action of the muscular coat rather than the secretions of the mucous membrane, being thus (as Dr. Druitt calls it) "eccoprotic;" that it not unfrequently irritates the rectum and anus, causing heat, tenesmus, and even hæmorrhoids; and that the determination of blood it induces towards the lower bowel extends itself also to the other pelvic viscera, so that the bladder becomes irritated, and menstruation excited,—these are the teachings of every work on *Materia Medica*. Our provings confirm them in every particular. They add evidence that the sexual instinct also is excited: that the whole abdomen shares though to a less degree in the congestion of the pelvis, becoming distended and tender; and that, probably in sympathy with the latter affection, a heavy headache is caused by the drug.

They also support what Wedekind and Giacomini have maintained, but which is much forgotten at the present day, that Aloes has a decided action upon the liver. Uneasiness, heat, pressure and tension are occasioned there; and the stools betray evidence of increased secretion of bile, which indeed Dr. Rutherford has lately ascertained to be the effect of Aloes on animals. They enlarge, moreover, our knowledge of the action of the drug upon the rectum, showing its tendency to produce such weakness of the sphincter ani as leads to involuntary stools. "The diarrhœa of Aloes," writes Dr. Dunham, "occurs especially in the morning, say from 2 A.M. to 10 A.M.: the desire for stool is sudden and extremely urgent, being felt in the hypogastrium and in the rectum, and being so urgent that the patient can scarcely retain the fæces long enough to effect the necessary strategic 'change of base': during this brief interval, he fears to evacuate wind by the anus, or to make any physical exertion, or even to strain to pass water, lest he should have an involuntary evacuation of the bowels. . . . There is also a similar frequency or urgency of the desire to pass urine, with a similar uncertainty in the tenure of that excretion."*

The use of Aloes in the homœopathic school has been mainly carried on in the treatment of hæmorrhoids, of diarrhœa of the kind above described, and of dysentery. Heat, rawness and soreness of the parts, with loose motions, indicate it in piles; and in dysentery it is preferable to other medicines where the rectum is much affected, the tenesmus severe, and

* *Lectures*, sub voce.

where there is faintness after each stool. Dr. Holcombe writes—"Aloes 3rd, a single pellet, once cured for me almost instantaneously a tenesmus which had endured for a week or ten days after recovery from dysentery." The want of confidence in the sphincter ani of which I have spoken is a characteristic symptom for it, if present, in all these affections; and a similar condition is a sense of insecurity in the bowels, as if diarrhœa might occur at any minute, for which Dr. Wells recommends it, and which he says is especially prevalent during an epidemic of Asiatic cholera. The same physician has found it useful in the kind of headache it causes—a peculiar, heavy, dull, pressing pain in the forehead, of no great severity, but which indisposes to or even incapacitates for all exertion, especially for intellectual labour. Dr. Dunham had a case in which such a headache, prevailing in winter time, alternated in summer with the characteristic Aloes diarrhœa; and the remedy cured both. He mentions also a feeling as if it were necessary to contract the eyes and make them very small in order to see as characteristic for it here.

Aloes should, I think, be more used in hepatic, abdominal, and pelvic congestions than it has been. I have recorded a case in the twenty-seventh volume of the *British Journal of Homœopathy* in which the last-named yielded very satisfactorily to its use. It is a sub-acute condition which it sets up, and *heat* is its chief subjective symptom. Dr. Guernsey commends it in what might be called rectal catarrh, *i.e.*, where masses of mucus come frequently away by stool.

Teste promulgates some curious experience relative to the power of Aloes in causing and curing falling of the hair, but it does not seem to have been confirmed by others.

Æsculus, *Collinsonia*, *Nux vomica* and *Sulphur* compare with Aloes.

In dysentery, the potencies from the 1st to the 3rd have been used; but Drs. Dunham and Wells have obtained their successes from the 200th.

We have next the well-known sulphate of aluminium and potassium,

Alumen,

or, as commonly called, alum. It was prepared by trituration in the provings, but the British Homœopathic Pharmacopœia directs aqueous solutions to be made.

Alum has been proved by ten persons in the third and

higher attenuations. The symptoms obtained were published by Dr. Hering in his *Materia Medica*, and are also to be found in Allen's *Encyclopædia*.

Of this proving I cannot say much as yet; and little use has been made of the medicine in homœopathic practice. I should not have thought that it had any action beyond that which it exerts as an astringent, were it not for the high commendation it receives from many quarters in lead colic and constipation, where it must surely act as a *simile*. It is not as a chemical antidote to lead that it operates, for it is praised by others as a remedy for simple constipation and for enteralgia in general. It should be tried for the disorder in small doses, should Opium ever fail in our hands. The rectal symptoms of the drug also seem worthy of attention.

I can, of course, say nothing at present of allied medicines or dose.

And now for

Alumina,

the oxide of aluminium. It is prepared by trituration.

Alumina was proved by Hahnemann for the second edition of the *Chronic Diseases*, where it has 1161 symptoms from himself and five fellow-observers. I think you will learn most of the drug's sphere of action by reading the clinical remarks of Teste, of Marcy and Peters, and of Hoyne, in their articles upon it.

Alumina seems to affect chiefly the sexual system and the mucous membranes. Teste says, "I have often derived the greatest advantages from the use of this drug in the case of aged females, against diseases that had been apparently seated in the sexual system, but whose primary symptoms had disappeared with the complete cessation of the menstrual periods." It has cured in his hands chronic gonorrhœa and leucorrhœa, chronic post-gonorrhœal induration of the testicles, and "raised itching spots" in the vulva and vagina. In the mucous membranes, the characteristic feature indicating Alumina seems to be *dryness* with more or less irritation. Thus it has proved curative in morbid sensitiveness of the nasal mucous membrane to cold; in chronic dry catarrh of the conjunctiva, even when it is granular; in chronic pharyngitis where the membrane looks dry, glazed, and red; in dry hacking coughs from pharyngeal or laryngeal irritation; in dyspepsia from deficiency of gastric juice; and in constipation

from lack of intestinal secretion. It has also cured a frequent desire to urinate during the night, occurring in an old paralytic.—All the affections to which Alumina is suitable are of a chronic character, and occur in old people, or in dry and thin subjects. I have little experience of the drug myself: it is but rarely used. Dr. Guernsey says that great difficulty in the expulsion of stools, even when soft, is characteristic of it; also an inability to pass water except when straining at stool. It is commended by him when a similar condition to that of the rectum exists in the œsophagus, causing dysphagia. Dr. Hoyne has some good illustrations of its value in violent dry coughs,—Dr. Dunham recommending it for these when excited by an elongated uvula. He himself affirms that “for the sore-throat of clergymen and other public speakers who are thin in flesh there is no remedy equal to it,” and says the same of the constipation of infants, whether naturally or artificially nourished.

Its analogues are *Baryta*, *Conium*, and *Plumbum*, and, as regards the rectum, *Veratrum album*; and its dilutions those high in the scale.

We will now speak of ambergris,

Ambra grisea.

The substance, as met with in commerce, is triturated for homœopathic uses.

The proving of Ambra is in the sixth volume of the *Materia Medica Pura*: the symptoms (490 in number) were furnished by Hahnemann himself and von Gersdorff. Dr. Marcy, in the *New Materia Medica*, contributes some therapeutic information concerning the drug.

Ambrogris is one of those strongly scented substances, like musk, castor, and valerian, which disturb sharply but superficially the functions of the nervous system. The symptoms of its pathogenesis all answer to this description. “Choking and vomiting can hardly be avoided when hawking up phlegm from the fauces;” frequent tenesmus, whatever be the character of the stool; frequent micturition of pale and copious urine; some sexual excitement (it was esteemed of old as an aphrodisiac) and irritation of the female genitals—are symptoms of this kind. Ambra is obviously what the therapists of the old school call a “nervine:” it finds its place in the treatment of nervous and hysterical affections. Depression, with anxiety, sleeplessness, diminished sight and hearing from

mental trouble, spasmodic choking and convulsive cough in hysterical subjects,—are some maladies of this kind which Ambra is reported to have cured. Dr. Lawrence Newton has communicated a case in which Ambra relieved retention of fæces, from nervous causes, after parturition.* Ambra is also much commended for nervous vertigo, especially in old people.

Dr. Guérin-Méneville has recently given us, in the fortieth volume of *L' Art Médical*, an interesting study of Ambra. But he has made a mistake in directing our attention to an article in the *Gazette des Hôpitaux* for 1871, by Dr. Révillout, in which "ambre" is much praised as a subduer of excited reflex action. The author is speaking there of amber (succinum), not of ambergris. We are indebted to Dr. Ozanam for pointing out this error, into which I confess myself to have fallen, though I consulted the original article in the *Gazette*. He is to the point, however, when he calls attention to the irritation of the skin caused by Ambra, and refers to a case of Croserio's, where an obstinate prurigo was cured by it. The pudenda seem especially affected in this way by the drug, and Dr. Guernsey commends it in pruritus vulvæ. I am also indebted to this writer for another indication for Ambra, viz., tendency to sanguineous flow on the least provocation during the menstrual intervals, which led me to it with great advantage in a troublesome case.

As I have already suggested, Ambra is closely allied with such medicines as *Asafætida*, *Moschus*, and *Valerian*.

Hahnemann recommends the third potency, and Marcy the sixth and twelfth.

I have now to give you some account of the homœopathic uses of ammonia and its salts. The specific properties of these substances are few compared with those of a chemical nature: hence they play a far less important part in homœopathic therapeutics than in those of the old school. Nevertheless, they exert some dynamic action, of which we must take cognizance.

There are two salts of ammonia which have been proved, and of which we have some slight clinical knowledge. The first is the carbonate,

Ammonium carbonicum,

of which we make at first watery and subsequently spirituous dilutions.

* *Brit. Journ. of Hom.*, xxvii., 364. See Hahnemann's S. 185.

from lack of intestinal secretion. It has also cured a frequent desire to urinate during the night, occurring in an old paralytic.—All the affections to which Alumina is suitable are of a chronic character, and occur in old people, or in dry and thin subjects. I have little experience of the drug myself: it is but rarely used. Dr. Guernsey says that great difficulty in the expulsion of stools, even when soft, is characteristic of it; also an inability to pass water except when straining at stool. It is commended by him when a similar condition to that of the rectum exists in the œsophagus, causing dysphagia. Dr. Hoyne has some good illustrations of its value in violent dry coughs,—Dr. Dunham recommending it for these when excited by an elongated uvula. He himself affirms that “for the sore-throat of clergymen and other public speakers who are thin in flesh there is no remedy equal to it,” and says the same of the constipation of infants, whether naturally or artificially nourished.

Its analogues are *Baryta*, *Conium*, and *Plumbum*, and, as regards the rectum, *Veratrum album*; and its dilutions those high in the scale.

We will now speak of ambergris,

Ambra grisea.

The substance, as met with in commerce, is triturated for homœopathic uses.

The proving of *Ambra* is in the sixth volume of the *Materia Medica Pura*: the symptoms (490 in number) were furnished by Hahnemann himself and von Gersdorff. Dr. Marcy, in the *New Materia Medica*, contributes some therapeutic information concerning the drug.

Ambra is one of those strongly scented substances, like musk, castor, and valerian, which disturb sharply but superficially the functions of the nervous system. The symptoms of its pathogenesis all answer to this description. “Choking and vomiting can hardly be avoided when hawking up phlegm from the fauces;” frequent tenesmus, whatever be the character of the stool; frequent micturition of pale and copious urine; some sexual excitement (it was esteemed of old as an aphrodisiac) and irritation of the female genitals—are symptoms of this kind. *Ambra* is obviously what the therapeutists of the old school call a “nervine:” it finds its place in the treatment of nervous and hysterical affections. Depression, with anxiety, sleeplessness, diminished sight and hearing from

mental trouble, spasmodic choking and convulsive cough in hysterical subjects,—are some maladies of this kind which Ambra is reported to have cured. Dr. Lawrence Newton has communicated a case in which Ambra relieved retention of fæces, from nervous causes, after parturition.* Ambra is also much commended for nervous vertigo, especially in old people.

Dr. Guérin-Ménéville has recently given us, in the fortieth volume of *L' Art Médical*, an interesting study of Ambra. But he has made a mistake in directing our attention to an article in the *Gazette des Hôpitaux* for 1871, by Dr. Révillout, in which "ambre" is much praised as a subduer of excited reflex action. The author is speaking there of amber (succinum), not of ambergris. We are indebted to Dr. Ozanam for pointing out this error, into which I confess myself to have fallen, though I consulted the original article in the *Gazette*. He is to the point, however, when he calls attention to the irritation of the skin caused by Ambra, and refers to a case of Croserio's, where an obstinate prurigo was cured by it. The pudenda seem especially affected in this way by the drug, and Dr. Guernsey commends it in pruritus vulvæ. I am also indebted to this writer for another indication for Ambra, viz., tendency to sanguineous flow on the least provocation during the menstrual intervals, which led me to it with great advantage in a troublesome case.

As I have already suggested, Ambra is closely allied with such medicines as *Asafœtida*, *Moschus*, and *Valerian*.

Hahnemann recommends the third potency, and Marcy the sixth and twelfth.

I have now to give you some account of the homœopathic uses of ammonia and its salts. The specific properties of these substances are few compared with those of a chemical nature: hence they play a far less important part in homœopathic therapeutics than in those of the old school. Nevertheless, they exert some dynamic action, of which we must take cognizance.

There are two salts of ammonia which have been proved, and of which we have some slight clinical knowledge. The first is the carbonate,

Ammonium carbonicum,

of which we make at first watery and subsequently spirituous dilutions.

* *Brit. Journ. of Hom.*, xxvii., 364. See Hahnemann's S. 185.

A pathogenesis of Ammonium carbonicum appeared in the first edition of the *Chronic Diseases*, containing 159 symptoms. It was subsequently proved by Nenning on several persons; and 479 symptoms from him, including a few from the editors, appear in Hartlaub and Trinks' *Arzneimittellehre*. In the second edition of the *Chronic Diseases* the foregoing observations are united with some fresh ones from Hahnemann himself and three others to make a total of 789. The drug has since been proved by Professor Martin of Jena on himself and eleven pupils. The results may be read translated from the *Vierteljahrsschrift* in the eighteenth volume of the *British Journal of Homæopathy*. The symptoms from all these sources are incorporated in Allen's article, making a total of 1010.

Very little result followed the doses of a few grains of the salt taken by the last-named provers. The elective affinities of Ammonium carbonicum appear to be with the mucous membranes of the respiratory tubes and of the small intestines. Wibmer found it to cause, on himself, an irritative cough and increased secretion of bronchial mucus; and bronchitis is a frequent occurrence in poisonings by ammonia, even where there has been no inhalation of the fumes. In both schools of medicine it is in repute for bronchitic conditions: its cough is an incessant one, excited by a sensation as of down in the larynx. A specific action on the small intestine has been ascertained by Mitscherlich in his experiments with it on animals; but has not been utilised in practice. It converts, he says, its epithelium into reddish mucus.

The power of this salt in moderate doses over scarlatina is vouched for by so many practitioners that there can be no doubt of its reality; and homœopaths have not unfrequently used it with advantage in this disease, especially where throat symptoms of a malignant character were prominent.

Dr. Hoyne commends it in the coryza of children, when the nares are seriously obstructed.

Carbonate of ammonia in full doses causes headache;* and in small ones relieves nervous forms of the malady, particularly when (Dr. Guernsey says) increased by closing the teeth. This well corresponds with the fact that the tension and throbbing of the headache ammonia causes is chiefly felt in the temples.

The lowest dilutions have been generally employed.

The other ammonia salt whose proving has given it a place

* See Allen, x., 286.

in the *Materia Medica* of Homœopathy is the chloride, sal-ammoniac, or, as we call it,

Ammonium muriaticum.

A trituration of the crystals or a solution in rectified spirit is used in our practice.

The pathogenesis of *Ammonium muriaticum* is in the second edition of the *Chronic Diseases*, and consists of 397 symptoms from Hahnemann and three fellow-observers. Some other experiments with it have been used by Dr. Allen, bringing the number in his *Encyclopædia* to 600.

From the experiments of Gumpert it would appear that sal-ammoniac has the property, in large and long-continued doses, of causing a morbid increase in the secretions of all the mucous membranes in the body, a "status pituitosus," as the Germans call it. This is accompanied with chilliness; lassitude, sluggishness, and prostration; loss of appetite; and profuse sweating and urination. Later on, a true intermittent fever was induced, having the curious character of recurrence every seventh day. From Böcker's researches it would appear that *Ammonium muriaticum* greatly increases the elimination of urea.

Many of the uses of *Ammonium muriaticum*, though in large doses, are certainly dynamic. It exerts great power over the chronic catarrhs (the mucous flux of Chambers) which its pathogenetic effects so much resemble. As Dr. Ringer writes, "All the chlorides of the alkalis increase considerably the secretion of mucus from the digestive mucous membrane, and, indeed, do so from all the membranes of this class. They may even excite catarrh. This is notably the case with chloride of ammonium. . . . These substances, and especially sal-ammoniac, are not uncommonly used to remove catarrhal conditions of the intestines." It is in considerable repute for neuralgia of various kinds, particularly migraine, clavus, and prosopalgia; and, if the German physicians are not mistaken, it exerts an influence upon the liver which is doubtless of a specific character. Dr. Anstie found it very useful in the pain in the liver, with great depression of spirits but no other symptoms of functional disorder of the organ, which he calls hepatalgia. He also esteems it highly in myalgia. In these four spheres the action of the drug needs investigation, and its trial in small doses might be essayed. Dr. Dunham speaks of having had great success with it in sciatica, where the pain was worst in sitting,

relieved somewhat by walking and entirely by lying down, Dr. Guernsey considers sense of contraction or actual contraction of the legs a prominent indication for its use. This physician also mentions loss of blood by stool during the catamenia as a special symptom calling for it.

Sal-ammoniac has some repute against intermittent fevers: it should be useful in those seven-day agues which are sometimes left after the suppression of quotidians by quinine.

In its action on the mucous membranes, Ammonium muriaticum closely resembles *Antimonium crudum* and *Pulsatilla*. Its dosage is undetermined.

The acetate of ammonia—*Ammonium aceticum*, as we should call it—has not been proved; but I would suggest that its remarkable power of relieving dysmenorrhœa, as shown by the authorities cited by Marcy and Peters, is of a specific character. It may be given in the well-known “*Spiritus Mindereri*.” The plain solution of ammonia—*Ammonium causticum*—is rarely used but in veterinary practice. Mr. Moore seems to esteem it highly in acute bronchial and pulmonary affections of a severe type occurring in animals.

I have next to speak of the nitrite of amyl—

Amyl nitrosum.

This now well-known substance—prepared by the action of nitric acid on fusel oil—is dissolved in rectified spirit for internal administration.

The history of Amyl nitrite as a remedy exhibits well the working of the two cardinal principles of therapeutics—the antipathic and the homœopathic method; and for both is contained in the literature of the dominant school.

Amyl nitrite, when inhaled, was found to cause (after the fashion familiar to us in Glonoin) a rapid dilatation of the arteries in the head and also throughout the body, with quickened but weakened circulation. It was at once perceived that it might be useful in those morbid conditions in which the blood-vessels are spasmodically contracted. Such is the epileptic paroxysm and the cold stage of intermittents, and such are some forms of angina pectoris and of migraine. The inference was acted upon, and with most gratifying success. Angina is for most sufferers robbed of half its terrors by this means of relief. Migraine and other neuralgiæ accompanied with cold pallor of the surface are often arrested in their progress by it. When the epileptic aura precedes by an

appreciable interval the actual paroxysms, and when the *petit mal* and even the *grand mal* are recurring frequently, a resort to this medicine does much to avert the mischief. The shivering aguish subject warms up under its influence, and his paroxysm is materially shortened. Its use has been occasionally beneficial in other spasms, as in asthma and spasmodic gastrodynia and dysmenorrhœa.

All this is pure antipathy, and affords an exquisite example of the method, both in its strength and in its weakness. In its strength—for the relief afforded is great and rapid; in its weakness—for it is palliative and temporary only. The amyl arrests or mitigates the paroxysms; but it does little to prevent their recurrence—to cure the disease. It has generally to be given in ever-increasing doses; and though sometimes the reverse holds good, and the attacks gradually diminish in frequency, as a rule its influence is in time worn out, and it ceases to benefit. Nevertheless, such as it is, we thankfully avail ourselves of its aid. It is an utter mistake to suppose that we of the school of Hahnemann debar ourselves—it is an utterly false assumption to say that we are debarred—from using any remedy, whatever be its *modus operandi*, which promises good to our patients. We are as free as others to use antipathic palliatives: only we know them for what they are, and do not allow their fascination to lead us to abuse them, or to neglect to seek a more excellent way.*

This better way is the homœopathic and curative; and in the case of nitrite of amyl it has been trodden for us by Dr. Ringer. There is a paroxysmal affection whose essence is not contraction, but dilatation, of arteries. It is the “flushing” so common in women at the change of life, but occasionally troubling them at other times also. This is just the condition which amyl nitrite causes; and—administered in ordinary doses in the attack itself—it certainly would not benefit. But given every three hours, and in minute quantities, Dr. Ringer has found it of the utmost service in preventing the recurrence of the flushings. What he says about dose is very interesting. “The author began with a minim dose, but was obliged to reduce this quantity, and he ultimately found that, for the most part, these patients can bear one third of a minim without any disagreeable symptoms, but that a tenth, nay even a thirtieth, of a minim will in some patients produce the

* I am glad to see that the veteran Constantine Hering, generally reputed of the “straiter sect” of homœopathists, speaks out boldly in favour of the palliative use of amyl nitrite (*North Amer. Journ. of Hom.*, Feb., 1879).

desired effect on flushing." This is just the experience of Hahnemann and his school with medicines generally.

Among ourselves amyI nitrite has found the ground of flushings pre-occupied by the similarly-acting Glonoin, and by Lachesis. Nevertheless, it may have a shade of difference in its action peculiar to itself, and so help us in an occasional *non-plus*. Dr. Edward Blake, who was quick to perceive its suitability to the affection in question,* has obtained very good results from it therein. He has also lately communicated to the *Practitioner* a case of exophthalmic goitre, in which great relief has been given to the patient's subjective sufferings by the remedy. Of a piece with this is Dr. Conrad Wesselhœft's testimony to its usefulness in tumultuous though feeble action of the heart, such as that which it causes.† This physician has given us several provings of the drug administered internally in diluted form.

In naming *Glonoin* I have mentioned a very close analogue of AmyI nitrite. I defer comparison between them till I come to speak of the former drug.

The drug I have next to introduce to you is one of the many of high repute of yore which had fallen into disuse, but which the Hahnemannian method has restored to its due place in medicine. It is the product of the marking-nut-tree,

Anacardium orientale.

This must not be confounded with the cashew nut (*A. occidentale*). The oily, dark substance which separates the husk from the kernel, and in which the active virtues of *Anacardium* seem to reside, is triturated with sugar of milk.

A pathogenesis of *Anacardium* appeared in the second volume of the *Archiv* (1823), containing 484 symptoms obtained from the powdered bean and tincture by Stapf and seven others, among whom was Hahnemann himself. The latter has reproduced these provings in the second edition of his *Chronic Diseases*, adding 138 fresh symptoms obtained in his later manner. Dr. Allen supplies some observations from three other sources as to the effects of *Anacardium* when applied to the skin, and some further information on this head is supplied in the *New Materia Medica* of Drs. Marcy and Peters.

The ancient reputation of *Anacardium* was as a remedy for

* *Monthly Hom. Review*, xv., 166.

† *New Engl. Med. Gaz.*, xi., 387.

weakness of the mind, memory, and senses : a preparation of it was known as the "confectio sapientium." Noack and Trinks mention that Caspar Hoffman called it rather "confectio stultorum," because many had lost their memory and become mad on account of using it too often and inconsiderately. They, therefore, fairly claim its remedial powers for homœopathy. Our provings and therapeutic records confirm these observations of the old physicians. Anacardium appears from its pathogenesis to depress the cerebral centres (especially as regards memory) and the organs of special sense ; and it has frequently proved remedial in weakness of the brain caused by onanism, or remaining after acute diseases. Dr. Bayes writes—"When in Cambridge I found it very useful in steadying the nervous system in *funk* previous to examination, as also in removing nervous exhaustion induced by over-study. In sexual debility it is invaluable ; also in cases of nervous prostration following seminal emissions (whether involuntary or not)." He gave the 12th dilution. It is an important remedy in dementia, and in too rapid loss of memory and mental vigour in old persons ; also in amblyopia and nervous deafness. It has removed an hallucination of a dyspeptic, which took the form of a belief that a demon was pursuing him ; and is said to have cured "paralysis of the tongue"—whatever that may be.

Later researches have shown that Anacardium has a remarkable influence on the skin. When taken internally, indeed, it has not been proved to do more than cause the burning itching noted by Hahnemann. But the effects of its external application, however slight or limited, are so extensive as to leave no doubt of its being a specific cutaneous irritant. Dr. Yeldham has recently recorded a case in point, which you may read in Dr. Allen's supplement ; and where, while the earlier part of the narrative exhibits well the dermatitis induced by the drug, the last paragraphs show the mental symptoms coming in. When painted locally on the skin, in its slightest degree of action it causes the appearance of wheals like those of urticaria tuberosa, with itching, burning, and swelling, terminating in desquamation. When operating more intensely it develops eczematous vesicles, and even bullæ.

I am not aware that Anacardium has been used much as yet as a cutaneous remedy* ; but it deserves attention in some forms of nettle-rash, eczema, and pemphigus,—perhaps also in

* A cure of eczema by it is mentioned in *Brit. Journ. of Hom.*, xxxiii., 546.

erythema nodosum and vesicular erysipelas. Dr. Sircar, after relating some instances of dermatitis provoked by the juice, mentions that in Hindoo medicine it has some repute against leprosy; while yet the native doctors are afraid of handling the drug for fear of getting this very disease, which, he has been told by his friends among them, has actually occurred in some instances. He adds that he has been using the drug in leprosy (in the 6th dilution), and can report remarkable benefit from it.

Dr. Allen emphasises a sensation felt in several parts of the body by Gross—"dull pressure, as of a plug being forced in"—as characteristic of *Anacardium*. Dr. Dudgeon has communicated a cure of gastralgia by it,* and Dr. H. N. Martin praises it highly in dyspepsia, when the symptoms disappear during eating, and return again in two hours.

In the cerebral sphere *Anacardium* resembles *Phosphoric acid* and *Zinc*; in its action on the skin, *Apis*, *Croton*, *Mesereum*, *Rhus*, and *Urtica*.

Both high and low dilutions seem to have been used with advantage.

I have last to say a few words upon a medicine with which, were it not one of Hahnemann's, I should not have burdened your memory by introducing it here. It is

Angustura.

By this name I intend the *Angustura vera*, or *cusparia*, the bark of the *galipæa officinalis*. The "vera" is necessitated because of the occasional substitution of an *Angustura spuria*, which is pretty certainly identified with the bark of the *strychnos nux vomica*, or some allied species having the same physiological action. Hahnemann, saying that the true *Angustura* likewise possesses great medicinal powers, cites in illustration the symptoms of a case of poisoning by it, which are evidently those of the spurious kind!

The true *Angustura* was proved by himself and eight associates: the 299 symptoms obtained are recorded in the sixth volume of the *Reine Arzneimittellehre*. Dr. Allen adds some from two other sources, but of equally unexplained origin. There is little that is distinctive about any of them, nor has *Angustura* any recognized therapeutical place. It is used in its native marshes as a substitute for *Cinchona* in the treat-

* *Brit. Journ. of Hom.*, xxxvi., 159.

ment of remittent and intermittent fevers. Homœopathy has nothing to add to this, save one case of prosopalgia cured by it (in the first dilution) recorded by Dr. Marcy in the *New Materia Medica*. Indications for it in spinal affections—as those of Noack and Trinks—are untrustworthy, being based upon the effects of the spurious bark. *Angustura vera* has no spinal action.

It is prepared in tincture, but the Pharmacopœia recommends triturations as preferable.

LECTURE XIII.

ANTIMONIUM CRUDUM AND TARTARICUM, APOCYNUM.

Having now run rapidly through our minor medicines, we will address ourselves for the main portion of this lecture to the important remedies afforded by the preparations of Antimony.

Of these we have two in common use,—the ter-sulphide, *Antimonium crudum*; and the potassio-tartrate, *Tartar emetic*. The former may be considered to represent the various preparations of the metal—"butter" and "glass of antimony," "crocus metallorum," "kermes mineral," and so forth—which gained its repute of old, and are still in use in France and Italy. The latter, while partaking of these properties, has a field of action all its own.

First, then, of

Antimonium crudum.

The purified ore is triturated for our use.

Antimonium crudum is the subject of one of the new pathogeneses of the second edition of the *Chronic Diseases*. But this is not therefore to be ignored; for more than four-fifths of it are taken from an earlier pathogenesis, contained in the first volume of the *Arzneimittellehre* of Hartlaub and Trinks, and the symptoms therein are stated to have been observed on healthy persons taking fractional doses of the crude drug triturated with milk-sugar. These, therefore (appearing under the guarantee of Hartlaub and Caspari), may be accepted; while the additions of Hahnemann and Langhammer may be passed by for the present. Hahnemann's pathogenesis also contains 71 symptoms from authors (of which 50 were collected by Hartlaub and Trinks). These are from various preparations,—most commonly from the so-called "glass of antimony," a sulphuretted ter-oxide, containing silica. They must be used with caution, as being too often

the mere mechanical effects (as deafness and hernia) of the violent vomiting induced by the drug. With the pathogenesis of Antimonium crudum may be read a proving of the golden sulphide, in doses varying from gr. $\frac{1}{8}$ to gr. x, by Dr. Mayerhofer. It is translated from Hirschel's *Zeitschrift* (xix, 27) in Allen's *Encyclopædia*.

The condition set up by Antimonium crudum seems to be one of depressed vitality of the mucous membranes and the skin. The action hardly goes on to inflammation. The mucous membranes are loaded with mucus, giving rise to slow digestion with fermentation of the food, nausea, and occasional vomiting; alternate constipation and diarrhœa, with mucous discharge from the anus; much hawking and expectoration of phlegm; and irritability of the bladder with mucous sediment. The secretions and the flatulence are of a foul odour; and there is drowsiness, and loss of flesh and strength. This is the "mucous flux" I have already spoken of while upon Ammonium muriaticum; but here there is no tendency to fever. The condition of mucous membrane described finds its parallel in the cutaneous disorder caused by Antimonium crudum. Parts readily become sore; and pimples, tubercles, and pustular eruptions are developed. When these gastric and cutaneous affections appear in practice, Antimonium crudum will often prove an excellent remedy. I have the utmost confidence in it in chronic gastric catarrh, where the tongue is thickly coated with a milky or granular white fur. Eructations tasting of the ingesta are a symptomatic indication for it here. It is useful, says Dr. Hempel, in that "diseased condition of the intestinal lining in children which favours the development of worms;" and Dr. Guernsey esteems it in diarrhœa when amidst the watery evacuations there is frequent passage of solid hard lumps. Among skin affections it has cured nettlerash when dependent on gastric disorder; the sore eyelids, ears, and nose of scrofulous children; and not unfrequently eczema.* Dr. Clotar Müller speaks of "its extraordinary efficacy in affections of the skin. I have reason to think," he writes, "that Antimonium crudum is an invaluable remedy in all cutaneous affections where pimples, pustules, pocks, or furuncular elevations arise primarily or secondarily, especially when at the same time there is severe continued pricking itching of the skin, and after rubbing tenderness and soreness."† It is particularly useful, he adds,

* See two cases of eczema impetiginodes cured by it in *Brit. Journ. of Hom.*, xxiv., 312.

† *Brit. Journ. of Hom.*, xxxii., 241.

when such phenomena occur on the face or the genitals, as in impetigo scroti. We shall see that these are the favourite habitat of the specific eruption of Tartar emetic.

A curious symptom recorded by Caspari is—"large horny places on the skin of the soles of the feet, close to where the toes commence, which pained like corns, and always returned after having been cut out." Hahnemann lays stress on a tendency to these callosities as indicative of Antimonium crudum; and Hartlaub and Trinks mention several instances of their cure by it. A striking case of the kind is recorded by Dr. Alvarez Gonzales, where one of twenty years' standing, involving the entire sole, and very sensitive, was soon cured by the drug.*

Antimonium crudum may yet find a place in some of those syphilitic and other constitutional affections for which the antimonial preparations were of old reputed as alteratives, and which gave the metal its "currus triumphalis" in spite of the opposition of the profession.

Its analogues are *Ammonium muriaticum*, *Kali bichromicum*, *Petroleum*, and *Pulsatilla*.

The attenuations from the 3rd to the 12th have been most in use: I myself have generally employed the 6th.

And now of

Antimonium tartaricum.

Under this heading we will consider the "Tartar emetic," which is still the common name of the salt. As regards its preparation, "the 1st, when required, must be a trituration, but its solubility in water admits of 1 being a solution. Dilute alcohol may be used after 2." So speaks the British Homœopathic Pharmacopœia. The "antimonial wine" of the old pharmacy is a convenient form: it contains two grains to the ounce, *i.e.*, about one part in 240.

Tartar emetic has no place in any of our classical collections of pathogenesis; but provings of it have been made from time to time in our body, from Hahnemann downwards. These are collected, together with numerous poisonings, in the article on it in Allen's *Encyclopædia*, which has 970 symptoms. In addition to this, I would direct attention to the large collection of facts about its over-action contained in the *New Materia Medica*; to a study of its influence on the skin, by Dr. Imbert-Gourbeyre, translated from the *Gazette Médicale de Paris* in

* *Amer. Journ. of Hom. Mat. Med.*, iii., 38.

the nineteenth volume of the *British Journal of Homœopathy*; and to a monograph on Antimony, by Dr. Madden and myself, in the twenty-fifth volume of the last-named periodical.

The best known action of Tartar emetic—that to which it owes its name—is its power of producing nausea and vomiting. The nausea which it causes is very intense and long lasting. Dr. G. Wood thus describes the general condition, which, in addition to the peculiar sensation referred to the epigastrium, is known as “nausea.” “The face,” he writes, “is pale, the skin cool, moist and relaxed, the pulse feeble, frequent, and often irregular, the saliva flows copiously, and feelings are usually experienced of gastric uneasiness, languor, and unusual weakness, which are sometimes in the highest degree distressing, so much so as, if long continued, to render the patient utterly prostrate in body and mind, and indifferent to all things around him, even to life itself.” To these symptoms should be added universal muscular relaxation. The vomiting of Tartar emetic comes on comparatively late, though sooner than from Ipecacuanha. When it once begins it is energetic, effectual, repeated, and prolonged. The vomited matters are often bilious, from extension of the action to the duodenum.

The emetic influence of tartarized Antimony appears to be purely neurotic in its *modus operandi*. The numerous muscular movements whose harmonious play produces the complex act called vomiting are under the control of the nervous centres at the base of the brain and in the medulla oblongata. That Tartar emetic acts directly on these centres is shown by the fact that it causes vomiting when injected into the veins or rectum, or rubbed into the skin, as well as when introduced into the stomach, and in the latter mode of administration is emetic in doses too small to irritate the mucous membrane; and, further, that (like Apomorphia, but unlike Ipecacuanha), it produces the same effects when communication with the stomach is severed by dividing both the vagi,* and even when the stomach itself is replaced by a bladder. How the complex act of vomiting is brought about, and how the general condition called nausea is connected with it, are problems which physiology has not yet solved, and with which, therefore, pharmacology may not trouble itself.

Entirely independent of the above phenomena, though moving in the same sphere, and sometimes consentaneous with them, are the remarkable effects of Tartar emetic upon the circulation and respiration.

When this drug is administered in large doses, there is either

* See *Practitioner*, xiii., 281.

an entire absence of nausea, vomiting, and purging; or, after a short time during which these symptoms continue, the system appears to become tolerant of the drug, and they subside. Then the pulse is found to have fallen one fifth or even one fourth of its normal number of beats, and the respiration to be lowered in even a greater ratio. Trousseau has known it fall from twenty and twenty-four times in a minute to six. It is rather curious that a corresponding effect on the respirations was observed by Dr. Sharp on his own person from a dose of the hundredth of a grain. Their number was reduced from 18 to 6 in fifty minutes, and they became "deep uncomfortable sighings." The pulse was hardly affected.* "It is singular," writes Dr. Wood, "that under these circumstances of great circulatory and respiratory depression the mind is wholly unaffected, the muscles retain their strength, and the organic functions, with the exception of the two referred to, appear not to suffer. Thus it is seen that this condition differs *toto cœlo* from that induced by nausea." It should be added that the force as well as the frequency of the heart's action is diminished by the drug, and that "sometimes, instead of being reduced regularly, the pulse becomes at first irregular and intermittent under its use," as is often noticed with *Digitalis*.

In seeking to explain these phenomena, we must obviously look for some source of influence common to the cardiac and respiratory movements, by means of which Antimony may consentaneously reduce the frequency of both; and this we have in the pneumogastric nerves. It is well known that a moderately strong galvanic current passed through these nerves towards the heart will retard and ultimately stop the movements of the latter organ. It is not so well known that a strong current passed centripetally along these same nerves will stop the movements of respiration, the stimulus being reflected upon the diaphragm and the muscles of expiration, causing general tonic spasm. A less degree of the same excitation will simply retard the respiratory movements. We have only then to suppose that Tartar emetic excites centripetally the pulmonary and centrifugally the cardiac branches of the vagi, and we have its circulatory and respiratory depression explained. If it act upon the central origin of these nerves, it cannot but affect the pulmonary branches, which are centripetal, centripetally, and the cardiac branches, which are centrifugal, centrifugally; and that it does act at this spot we have already shown when speaking of its power of producing vomiting.

* *Essays in Medicine*, p. 726.

The interest of these last phenomena is physiological rather than practical. The "contro-stimulant" method of Rasori, to which they belong, is rarely practised now; and in the school of Hahnemann was excluded from the first. Nor does the emetic power of the drug play so important a part in homœopathic therapeutics as might be expected. We use it, of course, to check the kind of vomiting it causes; but this rarely comes before us in comparison with that of *Ipecacuanha*, of *Kreosote*, and of *Apomorphia*. Nevertheless, when it occurs—as in cases recorded by Drs. Bayes and Nankivell—Tartar emetic will do all that is required of it. The presence, moreover, of nausea and vomiting in diseases otherwise calling for it will always indicate it additionally; and these will, as Dr. Ringer states in reference to bronchitis, be amongst the first symptoms to yield to its use. But its most important sphere of action for homœopaths lies in the mucous membranes and the skin (herein resembling *Antimonium crudum*, but acting much more sharply); and in the lungs.

1. There are two forms of morbid action set up by Tartar emetic in the mucous membranes. The first is that peculiar kind of inflammation we call catarrhal. In the second we have on the mucous membranes the same pustular eruption on an erythematous base which we shall see to be the specific effect of the drug upon the cutaneous tissues.

Thus, in the alimentary canal (in poisonings and experiments on animals) a catarrhal gastritis and enteritis are set up, which Dr. Richardson has found to occur however the drug is introduced into the system: the stomach and intestines are found after death lined with a whitish-yellow viscid secretion. In two cases of poisoning observed by Dr. Wood, the matters vomited and purged were white and liquid, without a trace of bile, resembling opaque rice-water. Post-mortem appearances show the stomach and small intestines to be most affected; the glands of the latter, especially those of the ileum, have not uncommonly been found enlarged. The subjective sensations accompanying these effects are best described by Dr. Mayerhofer, who took the drug in increasing doses, beginning with the hundredth of a grain. "When the quantity," I quote from *Stillé*, "was gradually augmented until an emetic dose was reached, the following effects were observed: the malaise and nausea, which had before existed, increased, with frequent eructation, and retching followed by vomiting; the stools were frothy, and consisted of mucus and bile; the abdomen was distended and painful; the urine, which at first had been copious, became

scanty; the region of the liver was tender upon pressure; rumbling and cooing sounds proceeded from the abdomen, which was the seat of cutting, tearing, and griping pains; there were pains also in the lower limbs. There was an increased sense of warmth, alternating with chilliness, over the whole body, and the skin itched. Anorexia was complete, and if any food was taken, it renewed the nausea. The throat felt raw, and deglutition was somewhat difficult and painful. The tongue was covered with dirty mucus, and there was a pasty and insipid taste in the mouth." On the other hand, the pustular eruption characteristic of Antimony has been seen in the jejunum, the stomach, and the lower third of the œsophagus, but is most severe and constant about the mouth and throat. In this latter region it begins with a feeling of tension, and other disagreeable sensations, and a metallic taste; patches of erythematous inflammation then appear, upon which come aphthæ, vesicles soon going on to pustules, and even false membranes. Upon the respiratory mucous membrane the influence of Tartar emetic is almost purely of the catarrhal character, though pustules are said to have been seen in the larynx. The nares escape untouched; but the inflammation, beginning in the larynx, becomes intense in the trachea and bronchi. The production of this inflammation under the influence of Tartar emetic has been established, not only by post-mortem appearances in animals, but by the symptoms of the living, as in the experiments of Dr. Molin of which I shall immediately speak. Irritation of the genito-urinary mucous membrane is not marked among the effects of Tartar emetic.

And now what of the lungs? Does the irritant influence of Tartar emetic upon the respiratory mucous membrane extend to the air-cells themselves, so as to set up pneumonia? The importance of the question is obvious, as its answer in the affirmative would claim for homœopathy one of the most cherished pieces of practice known. You are probably aware that Majendie so answered it. In the dogs poisoned by him he states that the lungs were always more or less affected: they were of an orange-red or violet colour (according to the age of the animal) throughout, destitute of crepitation, gorged with blood, and in some parts hepatized. Before death the respiration had been embarrassed and hurried. Lepelletier independently confirmed these observations; and naïvely remarked—"One would imagine that, admitting its action in man to be similar, far from being useful, its administration would be particularly pernicious in pneumonia; but it is

not so, for, instead of favouring engorgement of the lung, it promotes its resolution."

Such facts were too unpalatable for reception, although Majendie was an accredited observer, and his description of the phenomena unmistakable. Counter experiments were performed by Rayer and Campbell, in which no pneumonia was set up by Tartar emetic; and Ackermann has more recently promulgated the same experience. But Dr. Molin of Paris, in an able thesis on the subject,* points out that the large doses used by Rayer produced death so rapidly that the inflammation of the lungs had no time to develop itself. His own experiments, in which the animals were slowly poisoned, corroborate those of Majendie: the post-mortem investigation showed pneumonia in its first or second stage, together with an intense tracheo-bronchitis characterised by abundant exudation. Still further to clear up the subject, Dr. Molin instituted some careful provings on his own person with small doses of the drug (gr. $\frac{1}{2}$ — $\frac{1}{4}$). On two successive occasions he developed in himself all the signs, rational and physical, of the first stage of broncho-pneumonia, with marked inflammatory fever.† Some experiments on rabbits by Dr. Nevin, recorded by Marcy and Peters, corroborate those now stated. He says—"The lungs and trachea were frequently congested, sometimes highly inflamed, the two lungs seldom alike." I should mention that in Dr. Molin's experiments the inflammation of the bronchial tubes was observed, even where the animals died before the pneumonia had time to be developed.

The facts seem proved; and Ringer and Nothnagel in our own day accept them. Their moral is obvious. The well-known curative action of Tartar emetic in bronchitis and pneumonia is after all an instance of the law of similars. You have hitherto in all probability been taught that it acts in these cases by its general antiphlogistic power, in virtue of its depressing influence upon the circulation and liquefacient action on the blood. But were this its only or even chief *modus operandi*, it ought to be beneficial alike in all inflammations, wherever occurring. That it is not so, the therapeutists of the old school freely admit. In inflammations of the respiratory mucous membrane it is invaluable; when other parts, as

* *Des Specificques en Médecine.* 1847.

† An account of Dr. Molin's experiments is given in the sixth volume of the *Brit. Journ. of Hom.* Dr. Allen, who uses some subsequent provings by the same physician made with the dilutions, seems to have overlooked these.

the serous membranes, are affected, it does little or nothing. Even from this alone it would appear that the drug has some specific relation to this part of the organism. Nor will the theory that its influence here, though direct, is antipathic hold good. The "relaxed" condition we have seen it causing in skin and mucous membrane is part of the nausea it excites; while Dr. Bartholow expresses the general experience of the practitioners of the present day when he says that doses from the twentieth to the twelfth of a grain suffice here, "for it is not necessary that nausea should be excited." Now as we have, on the other hand, seen Tartar emetic acting as a specific irritant of the trachea, the bronchi, and the lungs, we seem warranted in concluding that it must be in virtue of its homœopathicity that it proves curative—whenever it does so—in tracheal, bronchial, and pulmonary inflammations. In actual homœopathic practice it has not played so prominent a part in the treatment of these maladies as in that of the old school,—mainly, in all probability, because we have better remedies for some of their forms and stages. But there is very general agreement as to its value in the second stage of bronchitis occurring in infants and aged persons, when the mucus is profuse and the expulsive power feeble, so that much rattling of phlegm is audible. As regards pneumonia, Bähr's statement well expresses the general view. "In uncomplicated pneumonia Tartar emetic is scarcely ever indicated in the first stage, nor even at the beginning of the second. The time for this remedy commences with the resolution of the exudation. If this take place rapidly, and the reabsorption be slow, the dyspnoea generally becomes quite considerable, because the lungs are unable to remove the copious contents from their cells. If now great dyspnoea be present, and a spasmodic cough with expectoration that affords some relief, Tartar emetic will have a fine effect. This termination of pneumonia is generally characterised by a sinking of the temperature with an increased frequency of the pulse, great anxiety and restlessness, with a copious, cool perspiration, cerebral congestion with a livid or at least a strikingly pallid complexion. In contradistinction to Phosphorus, the indications for Tartar emetic point to a deficient reaction; hence it is more suitable for old people than for vigorous and young persons." In broncho-pneumonia Tartar emetic is homœopathic enough, but in acute cases of this dangerous disease it yields in efficacy to Phosphorus. In pleuro-pneumonia I should not have thought it applicable at all, but Kafka seems to esteem it highly. The drug has also

several times proved curative, in the hands of Drs. Wurmb and Caspar, of acute œdema of the lungs. I have myself much confidence in its power of removing this condition when occurring in the course of general dropsy. Tartar emetic is also very useful in chronic catarrhal coughs, when the expectoration is profuse and easy, and of a mucous nature. Dr. Ringer recommends it, in doses of $\frac{1}{16}$ th of a grain or less, for children in whom bronchitic asthma occurs frequently; and Dr. Bayes praises it in catarrhal croup.

We have little experience of Tartar emetic in affections of the alimentary canal. Dr. Dyce Brown has lately put on record a case of acute catarrhal gastro-enteritis, in which its curative action was manifest.* It should be serviceable in aphthous, pustular, and other eruptive diseases of the mucous membrane,—perhaps in the aphthous mouth and throat or those dying from exhausting diseases, as phthisis. The phenomena of over-dosing with it are—superficially—so like those of the collapse of cholera, that it has been natural for homœopaths to use the drug in choleraic affections. Save, however, as regards cholera nostras, I think the resemblance deceptive. The antimonial collapse is a result of extreme nausea, while no such condition is present in cholera; and again, its diarrhœa is caused by the catarrhal enteritis it sets up, while cholera is non-inflammatory. Similar objections hold good to its employment in “cholera infantum,” where it is (according to my experience) of little service.

2. I have yet to speak of the action of Tartar emetic upon the skin. You have been told of the peculiar pustular inflammation which is excited by the local application of the drug. If your memories need refreshing as to its characters, you will find them described at length in our article. But it may be a new idea to you, that this effect of Tartar emetic belongs to it, not as a mere local irritant, but as a dynamic agent. Nothing, however, can be more clearly demonstrated than is this thesis by Dr. Imbert-Gourbeyre, in the paper I have already referred to. He first quotes nineteen observations to show that, when Tartar emetic is used locally, pustular eruptions are apt to occur on other parts of the body, especially about the scrotum and labia, and the anus; and this without the possibility of the mechanical transference of the ointment. He then cites five instances in which eruptions, closely resembling those produced by Tartar emetic ointment (and that also which characterises variola), have appeared during

* See *Monthly Hom. Review*, xxi., 153.

the internal administration of the drug.* Lastly, he adduces evidence to prove that the local effect of the drug is not produced till after a day or two, and sometimes does not appear at all at the spot of application, but on some other part of the body. Coupling these facts with the peculiar and specific character of the eruption, and with the frequent occurrence of similar pustules on the internal mucous surfaces under the use of the drug, he comes fairly to the conclusion that Antimony is a specific and dynamic "exanthematogenic,"—its characteristic eruption being pustular. I shall have to tell you, when I come to Arsenic, how these observations as to the specific action of Tartar emetic upon the skin have been supported by the results of experiments 'on animals and microscopical examination of the tissues as affected by it.

The precise form of cutaneous eruption to which Tartar emetic corresponds is *ecthyma*. "The pustules," says Erasmus Wilson, "following the irritation of tartarized antimony are ecthymatous." A case of this disease cured by Tartar emetic is given in the *New Materia Medica*. It is less suitable or serviceable in impetigo, save in one form of the disease, the impetigo erysipelatodes; where I have found it as curative as it is homœopathic. Dr. Dudgeon, however, has (*Brit. Journ. of Hom.*, xxiv., 311, and xxix., 405) recorded two excellent cases of cure with it (given in the first and second triturations) of those disfiguring pustular eruptions which haunt the faces of young people. In the second case, the genitals also were involved. But the deepest interest of Tartar emetic in this sphere lies in its relation to *variola*. Not only does it cause a specific pustular eruption closely resembling that of smallpox, but its pathogenesis has also the vomiting, the pustules of mouth and throat, the viscid mucus clogging the air-passages, and the hypinosis of the blood, which no less characterise the disease. Still further, the inoculation of the lymph of Tartar emetic pustules appears to effect results analogous to those of vaccination. The pustules produced are precisely similar in appearance to those of cow-pock, and they in their turn can excite fresh pustules by inoculation; though I cannot accept the statement that they further confer the same protection from smallpox. Correspondingly with this close homœopathicity, the power of Tartar emetic as a remedy for variola is very great. Testimonies to its value are collected by Drs. Marcy and Peters; it is said to be especially useful in cases where the respiratory mucous membrane

* Two additional cases of this kind are cited in the *New Materia Medica*, and Tardieu recognises the fact.

is much affected. I myself have invariably used Tartar emetic (in the first trituration) as the medicine for smallpox, and have rarely had occasion to substitute any other. I cannot say that it cuts short the disease; it is doubtful whether any medicine can. But it seems to me to conduct the cases through in a very satisfactory manner, decidedly mitigating all the incidental troubles, and leaving (even in non-vaccinated subjects) very little pitting behind.*

I have now described the three great spheres of the action of Tartar emetic,—the medulla oblongata, the respiratory mucous membrane, and the skin. There are other forms of disease in which it is often curative. One of these is delirium tremens, where much gastric disorder of saburral kind is present, as when beer has been the intoxicating drink employed. Another is lumbago, and similar so-called “muscular rheumatisms,” in which Bähr and Lawrence Newton have praised it highly. It is also reckoned by Dr. Angell a prime remedy for photophobia; I have recently had a good opportunity of verifying his recommendation. In connection with this it may be mentioned that Dr. Ringer recommends it, in doses of gr. $\frac{1}{32}$ to $\frac{1}{16}$, in strumous ophthalmia.

The correspondences and divergences of the application of Tartar emetic in the two schools respectively are surely very instructive. The drug is known as an emetic, a depressant of the circulation, and a specific remedy in acute pulmonary affections. Ours is the direct opposite of the first of these three uses; for we cure vomiting with the drug instead of causing it. The second we reject utterly. The third we claim for homœopathy, and, in the light of the law of similars, define its range and precisionise its application.

Ipecacuanha is the medicine most closely allied to Tartar emetic. Then we have, as acting like it on the medulla, *Digitalis*, *Lobelia*, *Tabacum*, and *Veratrum viride*; on the respiratory organs, *Phosphorus*; on the skin, *Antimonium crudum* and *Clematis*.

The success of old-school practice with Tartar emetic in laryngitis, bronchitis and pneumonia shows that these diseases do not need very infinitesimal doses of the drug. In these, and in variola, the homœopathic school has generally used the second, rarely the third decimal potency. Higher dilutions (12—15) seem to answer well in œdema pulmonum.

My next medicine in alphabetical order would be Apis. But as I cannot begin so important a remedy at the fag end of a

* See case in *Manual of Therapeutics*, 2nd ed., i., 49.

lecture, I will skip it, and conclude our talk to-day with a few words upon the

Apocynum cannabinum.

This plant is often called the "Indian hemp," but it must not be confounded with the *Cannabis Indica* of Hindustan. It is a Canadian herb, from whose root we make a tincture with proof spirit.

Dr. Allen's *Encyclopædia* gives pathogenetic symptoms obtained from Apocynum by four provers; and Dr. Hale's *New Remedies* relates all that is known regarding its clinical use.

And (almost) all that is known is just this, that Apocynum has virtues of a remarkable kind in the treatment of all varieties of *dropsy*. Anasarca, hydrocephalus, hydrothorax, and especially ascites, of all kinds and from all causes, occur repeatedly among the cases cured by it which Dr. Hale has collected in his second edition. I am unable at present to distinguish the precise form of action of Apocynum in this sphere; and still less to suggest its rationale. It seems always to require to be given in substantial doses, yet it is no diuretic, that is, in healthy persons; and, when proved by Drs. Peters and Marcy, it actually diminished the urinary secretion in both. I have not found it of any service in the hydrocephalus of tubercular meningitis or the ascites of hepatic cirrhosis—conditions for which we sadly want medicinal help; but I have seen simple hydrocephalus supervening upon typhoid clear away very satisfactorily under its use. It is impossible to read Dr. Hale's cases without feeling assured that Apocynum has a true place as a specific remedy for some forms of dropsy. He himself thinks it permanently curative in renal dropsy only; and supposes that it temporarily relieves other forms of the disease by its action on the kidneys.

Apocynum has also cured menorrhagia, to which it seems homœopathic, and "stuffy" colds in the head. I have found it of occasional service in dyspepsia where there is much bloating after meals, and a frequent sensation of sinking at the stomach—these two symptoms being very marked in the provings of Drs. Peters and Marcy respectively.

Apis and *Helleborus* seem the most analogous medicines. As regards dose,—the mother-tincture, from one to five drops at a time, has sometimes proved effectual; but more frequently it has been found necessary to use the preparation known as

“ Hunt's decoction,” or to prepare an infusion from the fresh root (an ounce to a quart of water).

[The supplement to Dr. Allen's *Encyclopædia* contains several fresh provings of Apocynum, the mother-tincture or an infusion being taken in every case. The most marked effect was great relaxation of the bowels,—the abdomen seeming to fill with wind and fluid, which must be hastily and explosively discharged. Great and lasting weakness of the sphincter ani was induced in connection therewith, somewhat resembling that we have seen under Aloes ; but the motions of Apocynum are much more copious, and they occur after food throughout the day, and not in the morning only. Apocynum ought to find place in the treatment of diarrhœa.]

LECTURE XIV.

APIS, ARGENTUM METALLICUM AND NITRICUM.

We will begin to-day's lecture with

Apis mellifica.

This is the poison of the honey bee, and is (it need hardly be said) peculiar to homœopathic practice. It is prepared for use in more than one way. A trituration of the whole bees, dried, and a tincture prepared by macerating their hinder parts, after killing them while in a state of excitement (which last is the preparation of our own Pharmacopœia), have been used, and seem to contain the virtues of the medicine. A better preparation still would be a solution of the virus itself in alcohol or glycerine. It can be obtained, as Dr. Hering suggests, by seizing the bee by its wings and causing it to eject its poison upon a piece of sugar, or by grasping the sting of a stupefied bee with a small pair of nippers, and gradually drawing out the sting and poison bags together.

Apis has been proved, both in trituration and in the solution of the virus above mentioned, by the Central New York State Homœopathic Society. The results, published in its *Transactions*, appear in schema form in Metcalf's collection. They are also published, incorporated with effects of bee-stings and with new symptoms obtained on the healthy or observed on patients taking the drug, in Hering's *Amerikanische Arzneipruefungen*, and again in Allen's *Encyclopædia*. Numerous clinical cases are appended to Metcalf's arrangement; and others are to be read in Marcy and Peters, in the eleventh and twelfth volumes of the *British Journal of Homœopathy*, and in the *Bibliothèque Homœopathique* for 1874-75. We have, moreover, a special monograph on the therapeutic virtues of the honey-bee by Dr. C. W. Wolf, which has been translated into English.

The medicine now to be discussed differs in important respects from the substances we have been accustomed to

regard as drugs. We have to believe that the symptoms known to result from the sting of a bee are also in some degree produced when the virus of the insect, in a diluted form, is taken into the stomach. In noting, moreover, the homœopathic indications for the remedial use of the virus, we shall depend much upon the phenomena of bee-stinging; and shall take it for granted that similar phenomena occurring in disease are properly treated by the internal administration of the poison. Such assumptions at one time raised considerable difficulty, on the ground of the supposed inertness of animal poisons when introduced through the digestive mucous membrane: and on former occasions I have had to discuss the subject. It is now needless to do so; for, as Drs. Brunton and Fayer state,* it has been clearly shown that serpent-poison does act when introduced into the stomach, or when applied to a mucous or serous membrane. "The idea," say they, "that it is only effective when injected directly into the blood is erroneous; though it is, no doubt, more certainly and rapidly fatal when it enters the blood direct."

Let us consider the local effects of a bee-sting. The part rapidly swells up, becomes more or less hot and red, with a tense pain, and often considerable burning, tingling, and itching. This is the simplest and most characteristic form of the pathogenetic influence of Apis. It is an *acute œdema*, the cellular tissue being more affected than the skin. Whenever a similar condition occurs idiopathically, whether on cutaneous or mucous surfaces, Apis will be found curative. Acute œdema occurring on the skin is a form of *erysipelas*; and in this disease Apis is a prime remedy. It stands between Belladonna and Rhus, not controlling intense cutaneous inflammation like the former, or the tendency to form vesicles like the latter, but acting most efficiently in its own sphere of œdema. It is of course to traumatic erysipelas that Apis is especially suitable, and Dr. Bojanus—our eminent Russian confrère—highly eulogizes it here. "Since we have fully known the virtues of this remedy," he says, "we have undertaken plastic operations with much more confidence, all fear of bad results from erysipelas being removed." Dr. Kafka records a good case in which the disease followed upon circumcision, and was rapidly controlled by the remedy. Dr. Wolf—who esteems it specific against erysipelas of all kinds—suggests it in that fatal form of the malady which attacks new-born children, spreading from the umbilical wound.

* Trans. of Royal Society for Jan. 22, 1874, reported in *Lond. Med. Record*, ii., 109. See also *Monthly Hom. Review*, xvi., 673.

Then there is a species of sore throat in which *Apis* is specific. There is no very great redness or pain as with *Belladonna*, nor is the parenchyma of the tonsils inflamed as when *Baryta carbonica* is the remedy; but there is general œdema of the submucous cellular tissue covering the tonsils, uvula, soft palate, and even the posterior portion of the hard palate. When you look at the throat it seems as if a bee had flown in and stung the patient there. If the numerous cases of angina cured by *Apis* which have been put on record be studied they will be found to have been of this character. Such a sore throat is not uncommonly an extension of erysipelas, as the late Dr. Todd describes it in his *Clinical Lectures*. It is often, also, the beginning of œdema glottidis, in which *Apis* is the great remedy. It has proved curative in more than one instance of this affection, where the cause was drinking boiling water from a kettle.* Such cases are commonly fatal.

There are two specific diseases in which the throat is often affected in the way of acute œdema, and to which *Apis*, thus indicated, bears an important therapeutic relation. These are *diphtheria* and *scarlatina*. Facts are accumulating which point to *Apis* as a prime remedy in the former disease. Drs. Baumann and Veith Meyer in Germany, Kallenbach in Holland, and Jahr in France, have concurred in esteeming it the best anti-diphtheritic we have;† and my own experience points in the same direction.‡ In the last case I had I found it remove everything but the coryza, which yielded to *Kali bichromicum*. The great prostration, faintness, and even tendency to death by syncope, noticed in those stung by bees, show that *Apis* has more than local homœopathicity here. In *scarlatina* *Apis* is obviously indicated for the anginose form, where there is more œdema than ulceration. But it has also the action on the kidneys and skin characteristic of this poison. Dr. Chepmell narrates a case of bee-sting causing scarlatinoid rash and anasarca, which is so instructive as to the action of *Apis*, that I will read it to you, as it is not given by Allen.

“Mr. D—, a middle-aged gentleman, of a bilious *sanguine* temperament, who rather prided himself upon his practical knowledge of bee-keeping, had invited me to an inspection of his hives, warning me at the same time that the bees were in a very excitable state, owing to their having been disturbed some days before. Of this we soon had experience; for on approaching the hives we were immediately warned off by a swarm of bees hovering angrily about us. Under the circum-

* *Monthly Hom. Rev.*, xiii., 364. *Hom. World*, xiv., 427.

† See *Brit. Journ. of Hom.*, xxviii., 613, 775.

‡ *Ibid.*, p. 738.

stances we thought it best to beat a retreat, if haply we might escape the penalty of our rashness. After a time I was fortunate enough to get comfortably quit of some dozen bees, which were becoming more familiar with my physiognomy than I quite liked; and so was my friend, in respect of about an equal number similarly engaged upon his own face, with the exception of one eccentric *flaneur*, which persisted in a walking excursion behind his left ear. Annoyed by the obstinacy of this insect, he at last succeeded in brushing it off by a sudden dash with his hand. At the time he remarked to me that he was not quite sure whether he had or had not been stung; but he seemed to think no more about the matter when, shortly after, I took my leave. About half an hour later I was hastily summoned to attend him, as he had become seriously indisposed.

"I found my friend in bed, very anxious and alarmed about himself, although at times he was in a half unconscious state; and slightly delirious. He was *swollen all over*, but more especially about the face and neck, the abdomen, and the upper and lower extremities. The entire skin was covered with a *red rash, very much resembling scarlatina*, only, if anything, of a less bright colour and somewhat rougher to the feel than the common type of that exanthem (the smooth scarlatina of Sydenham). The skin was hot and dry, the breathing oppressed, and the pulse quick, but somewhat weak. He complained of fulness and confusion in the head; the face was flushed, and the eyes suffused. His wife informed me that, soon after I had left him, a sudden dizziness came over him, and his head began to feel so full, that he thought he was going to have a fit. These symptoms were succeeded by *rigors*, when he felt so ill and weak that he at once undressed and went to bed, not without considerable assistance. There was reason to believe that a suppression of the renal functions had also taken place; for he made a useless attempt to urinate, and the swelling and eruption almost immediately followed. I gave him, two or three times in succession, three drops of camphor tincture, at intervals of a few minutes; and then prescribed *Bell.* six drops, third solution, in doses of a sixth part, at first every ten or fifteen minutes; then every half-hour, hour, to two or three hours, according to circumstances. Under this treatment a speedy and salutary reaction took place; so that when I left him, at the end of an hour, he was quite comfortable and reassured about himself. In the meantime, all the discomfort about the head and the oppression of the breathing had ceased; and he had passed an unusually large amount of urine; after which (as I subsequently learnt) a gentle *diaphoresis* followed, and the swelling (*anasarcous* as it really was) seemed to subside as rapidly as it had arisen. He then fell into a refreshing sleep, which lasted some hours; and, when he awoke, all trace of his indisposition had vanished. I can only account for this extraordinarily severe effect of the sting of a single bee on the supposition that the poison must have been immediately carried, undiluted, into the cerebral circulation by the *internal carotid artery*. In whatever way this must have happened, the *pathogenetic* experiment is not the less interesting or instructive."

Mr. Nankivell noticed in a patient affected by it that a patch of skin on the arm remained white amid the surrounding redness, and was informed that this spot had been a short time previously the seat of the inflammation resulting from

the sting of a bee. Both these gentlemen, as well as others, have used it here with success. It is especially indicated in irregular and adynamic forms of the disease, as when the eruption is repelled, or does not come out well: a typical case of the kind is given by Dr. Chepmell in his *Hints*. Dr. Guernsey says that the alternation of perspiration and dryness of the skin is characteristic of it here. Dr. Wolf goes so far as to say that "thanks to the curative powers of Apis, scarlatina has ceased to be a scourge to childhood."

Other forms of acute œdema are inflammations of the tongue and of the labia pudendi, in both of which Apis has been found curative (glossitis has frequently resulted from bee-stings in other parts of the body). Indeed, if this pathological condition be borne in mind as the keynote of the medicine, it will rarely be used in vain.

We have still remaining the burning, itching, and tingling of our bee-sting,—features by no means common in idiopathic œdema. They rather point to cutaneous dysæsthesiæ and eruptions, into which, indeed, in the provers they are seen developed. The exanthem induced (both in these and in persons stung by bees) generally resembles *urticaria*, in which disorder Apis is our great remedy. The following case is instructive in this connexion:—

"I was called to Mr. L. Stewart, banker, of this city, to see his little son, who, the messenger stated, was suffering from 'a rash of some kind.' Knowing it to be the first time a homœopathic physician had ever been called upon professionally by this family, I hastened to the bedside of my patient, and found a little boy about ten years of age, suffering from a severe attack of urticaria. He was covered from head to foot with elevated, circular, and oblong blotches, which soon ran together, forming one entire blotch over the entire back, arms, and legs. The character of the eruption on its first appearance was white, but on rubbing the parts the colour would change to a pinkish cast. The eruption was accompanied with intense itching, stinging, and burning, which caused the little fellow to scratch and rub himself continually; the pulse was but slightly accelerated; tongue clean. The child appeared to feel well apart from the symptoms caused by the eruption.

"*Apis mel.* seemed to be so plainly indicated that further investigation appeared to be useless, and I was about to prescribe, when Mrs. S— inquired as to the cause of urticaria. After making a satisfactory explanation, I inquired of my patient as to what he had been doing through the day. His reply was that he had done nothing except swimming in the river, and that while dressing, a 'yellow jacket' had stung him on the right hand, and that immediately he commenced itching and burning all over, and when he got home 'he was all broke out,' and that was all he knew about it. This bit of information changed the programme. Here was a part of the *pathogenesis* of almost the very remedy I was about to prescribe. Instead, therefore, of giving *Apis* 4th, I prescribed *Ledum pal.*, 5th, gtt. x. in half-a-glass of water,

a teaspoonful every half-hour. I called again after two hours, and finding a decided improvement, I directed that a teaspoonful be given at eight o'clock, and another at bed-time, and the medicine then discontinued. Early on the following morning I was notified by a messenger that my patient was entirely well, and that it would not be necessary for me to call."*

Apis has also cured cases of lichen and of erythema nodosum; and is generally indicated in skin affections not going on to destruction of tissue, but accompanied with excessive itching, especially of a burning and stinging character.

Urticaria, like erysipelas, may manifest itself internally. Here also we have acute œdema, but without the tendency to suppuration belonging to the erysipelatous form. The distressing and sometimes even dangerous symptoms arising from this cause have several times been successfully encountered by Apis.†

In acute œdema, erysipelatous and urticarious, we have the pathological condition most characteristic of Apis; and upon this I am desirous of fixing your attention. But both provings and therapeutic records credit the medicine with a range far wider than this, as will appear from what follows.

1. The mucous membranes are not influenced in their general extent by Apis; but at certain spots it manifests great power. It has frequently proved curative in catarrhal and scrofulous ophthalmia. It is where the cornea is much involved that its most striking curative results are seen. Dr. Casal, of Mentone, has recorded a case where the sting of a wasp (which seems pathogenetically identical with that of the bee), inflicted near the right eye, caused—after a lapse of some days—a sub-acute keratitis, first on that side and then on the other. Dr. Jousset expresses great confidence in Apis as a remedy for strumous ophthalmia affecting the cornea; and finds it important in these cases to use the solution of the virus, and not the trituration of the whole bee. It causes hoarseness and dry cough; and is often useful in subacute and chronic laryngo-tracheal irritation, of a mild type (it may be compared here with *Rumex crispus* and *Carbo vegetabilis*). It irritates the stomach, and somewhat the bowels: it is one of the best remedies for diarrhœa *recurring every morning*, the motions greenish-yellow and painless (here again corresponding with *Rumex crispus*). Dr. Wolf commends it highly in acute gastro-enteric catarrh, and in dysentery. It is very decidedly

* Dr. F. B. Smith, in *Hahn. Monthly* for Sept., 1875.

† See Erasmus Wilson, *Diseases of the Skin*, article "Urticaria," and cases 14, 16, 28 in Dr. Metcalf's paper.

irritant to the kidneys and neck of the bladder (like *Cantharis*). Dr. Marcy recommends it in incipient Bright's disease, in inflammation of the neck of the bladder, and in "irritable bladder."

2. *Apis* acts rather powerfully in the *ovario-uterine* sphere. Few medicines cause so many ovarian symptoms; and it has more than once provoked miscarriage when given to pregnant women. It has proved curative in amenorrhœa, dysmenorrhœa, and menorrhagia, when resulting from active congestion of the ovaries; and even in inflammations of the latter organs. The presence of a "stinging" pain is said to indicate it here.

3. I come now to the important question,—what power has *Apis* over *dropsy*, general and local? It is credited with almost unbounded curative virtues in this disease; but I think discrimination is needed. Its action on the kidneys is sufficient to make it a most useful, because homœopathic, remedy in acute febrile dropsy from a chill, in post-scarlatinal dropsy, in that of incipient Bright's disease, and in that which sometimes appears in the later months of pregnancy and lays the foundation of future puerperal convulsions. In all these forms of dropsy *Apis* has been used successfully, its curative action being generally announced by a great increase in the secretion of urine. Absence of thirst is regarded as a characteristic symptom for it in recent dropsies. Then there are the serous dropsies,—ascites, hydrothorax, hydrocephalus. These may be mechanical, from obstruction of the circulation; as when ascites results from cirrhosis of the liver. In such cases, I cannot conceive of *Apis* dispersing the effusion; nor do I see sufficient evidence that it has ever done so. It is otherwise when the dropsy is the unabsorbed effusion remaining after serous inflammation. There seems little doubt but that *Apis* acts specifically upon the serous membranes. I do not know that it has been much used in their acute inflammations; but in ascites and hydrothorax remaining behind after peritonitis and pleurisy it has over and over again proved curative, and there is some reason to suppose that it has removed the effusion in cerebral meningitis (probably non-tubercular). Dr. Wolf speaks in the highest terms of it here. It must be remembered that in full doses *Apis* is diuretic, and in this way may remove—at any rate temporarily—dropsical effusions unconnected with the kidneys or the serous membranes, such as cardiac and ovarian dropsies, both of which are reported to have yielded to its use. Here, however, it must not be given in dilution; and the Indian experience from which the remedy was first obtained suggests an infusion or trituration of the entire bee as the best preparation.

Apis seems to have the same action on the synovial as it has on the serous membranes. A lady who took two doses of 15 drops of the tincture found next morning her second right finger begin to swell, the middle joint especially being red and hot. Several cases of acute synovitis have been reported in which its curative powers were evident.* Whether, as Wolf thinks, it will meet the synovitis of morbus coxæ and white swelling of the knee, is a question.

Apis has some repute in intermittent fevers. Dr. Wolf declares it a universal specific for them. Dr. Nichol, of Montreal, considers that it is rarely suitable for malarial intermittents, but heads the column of the remedies with which we combat those of non-malarial origin. Its chief indications seem to be the commencement of the attack in the afternoon, absence of thirst, and a sensation during the chill as if the hands were dead. He relates a good case so characterised and speedily cured by it.†

We have once more in the case of Apis the advantage of one of Dr. Brown's "Studies." The only additional hint I can cull from it, however, is his suggestion of the drug as a remedy for dry catarrh of the nose and larynx, based on the view that the œdematous condition characteristic of the drug is present here.

I have indicated many of the medicines which in particular spheres of action correspond with that of Apis. Thus *Cantharis* and *Terebinthina* in the urinary organs, and *Rumex* in the morning diarrhœa and laryngeal symptoms, closely resemble the present medicine. For the cutaneous symptoms, *Anacardium*, *Belladonna*, *Croton*, *Rhus*, and *Urtica* may be compared; and for the affections of the serous membranes, *Apocynum*, *Mercurius corrosivus*, and *Bryonia*. As a whole, the action of Apis more nearly resembles that of *Arsenic* than of any other drug.

The 3rd decimal dilution is that which I always employ in acute œdema in all its forms. In dropsies, Dr. Marcy prefers the lower dilutions, from the 3rd downwards; in cutaneous affections, from the 3rd upwards; in irritation of the bladder he says we ought never to go lower than the 6th. The most striking cures of ophthalmia have been made with the higher dilutions. Dr. Wolf uses the 3rd or the 30th according to the sensitiveness of the patient, and in most acute affections advises its alternation with Aconite to avoid excessive re-action.

* *N. Engl. Med. Gazette*, xii., 20: Jousset, *Leçons*, p. 478.

† *Monthly Hom. Review*, xxi., 175.

Of the preparations of silver we use two, the pure metal itself, and the nitrate. First, of

Argentum metallicum.

The finest silver leaf was the form in which metallic silver was proved by Hahnemann. The precipitated metal is allowed as an alternative form by the British Homœopathic Pharmacopœia. Either is triturated for our use.

Metallic silver was proved, in the first trituration, by Hahnemann and seven others: the pathogenesis, containing 224 symptoms, appears in the fourth volume of the *Reine Arzneimittellehre*. Some later provings by Dr. Huber, in the potencies from 1 to 6, are recorded in the second volume of the *Österreichische Zeitschrift*, and amalgamated with Hahnemann's by Allen.

Dr. Huber sums up his proving by suggesting that the chief action of Argentum is on the articulations and their component elements,—bones, cartilages, ligaments, &c. It seems to produce arthralgia rather than arthritis; and might be serviceable in hysterical joints. Dr. Sharp writes:—"a very long-lasting and severe case of coxalgia in a young woman, and another nearly similar affection of the knee, have been cured by it in my hands." It also causes some diuresis; and—as Hahnemann suggested—is occasionally useful in diabetes (not *mellitus* indeed, but *insipidus*). Another sphere of its action is the larynx, where it has cured hoarseness and chronic laryngitis. Easy expectoration, looking like boiled starch, is said to indicate it.

We have yet to learn the influence of Argentum on the uterus, as there were no women among the provers. But Pereira's statement, that "in uterine diseases, especially when there are augmented discharges and great irritability, it has been beneficial," suggests a specific action here; and Teste has related an interesting case of uterine cancer, in which the relief afforded by the drug was so great that for a time a cure seemed about to result.

Aurum, *Platinum* and *Selenium* are analogues of Argentum; less so *Zincum*.

I know of no recorded experience from which to suggest the dose. Hahnemann recommends the 2nd trituration.

And now, of

Argentum nitricum.

This salt of silver is prepared in aqueous solution, and pre-

served with the usual precautions—yellow actinic bottles being recommended. It is sometimes triturated; but the preparation must be uncertain.

Nitrate of silver only obtained a few symptoms in Hahnemann's hands, the 15th dilution being employed. But it has received an exhaustive proving from Dr. J. O. Müller, of Vienna, the record of which was published in the second volume of the *Österreichische Zeitschrift*, and may be read in Hempel's translation of Stapf's *Beiträge*. Four men and two women took part in it, using both the crude drug and the attenuations. Some physiological experiments with fractions of a grain ($\frac{1}{10}$ — $\frac{3}{8}$) are related by Kraemer in his monograph on silver,* and may be read in Allen's supplement. The primary article in the latter's *Encyclopædia* adds to these numerous symptoms from poisonings.

I would first speak of the local application of nitrate of silver. Most of you would probably be loth to lose the advantages of the practice, and would wish to know if homœopathy forbids its continuance. She certainly does not; but, on the contrary, claims it for herself. Let Trousseau be witness on the point. "Solutions of nitrate of silver," he says,† "at first applied to the pharynx and mucous lining of the mouth, passed into every-day use in the treatment of inflammations of the mucous membrane of the nose, eyes, urethra, vagina, and even of the intestines. . . . It was soon perceived that the primary effect of this and similar agents was analogous to that produced by inflammation, and it was easy to understand that inflammation artificially induced in tissues already the seat of inflammation led to a cure of the original inflammatory attack. When this view was once acquired, there flowed from it the great therapeutical principle of *substitution*, which, at present, reigns supreme in medical practice." If we needed to know what Trousseau meant by "substitution," we should find it in what he says in his *Matière Médicale*:—"if now arsenic is employed" in inflammations "locally in very small proportions, *il agit homœopathiquement, c'est-à-dire, substitutivement.*"

Nevertheless, it is rarely that the disciple of Hahnemann has to avail himself of such medication. To direct his "substitutive" agents to the parts affected, he uses the elective affinities of drugs. He thus has a far wider range, and also a more radical kind of operation. Local cure of inflammation can be satisfactory only when the disease is of local origin. If, as so often happens, the inflammation is but an expression

* *Das Silber als Arzneimittel betrachtet*, von Dr. L. Kraemer. 1845.

† *Clinical Lectures* (New Syd. Soc.), ii., 19.

of blood—changes farther back, it is poor practice to blight the efflorescence while root and stem are untouched. A *simile* which acts from without can do this only. But one which acts from within will, if it be a true one, track the whole course of the disease, and “cover” it from its first origin to its ultimate manifestation; for after a like manner itself is wont to behave. Hence, if it cures, it will do so thoroughly.

If, therefore, a beginner in homœopathy should ask me about the local use of nitrate of silver, I should reply, first of all, that homœopathy is affirmative, not negative. She forbids nothing—not even bleeding and blistering: she ousts them merely by curing without their aid. So, by all means, if you have an ulcer or a local inflammation which you cannot cure by specific internal medication, apply your lunar caustic. But try the internal treatment first. I venture to predict that, as that becomes perfected, the local treatment will cease to be required; and the *porte-caustique* will take its place with the phlebotomy lancet among the disused instruments of torture.

We turn now to the internal use of our drug. What is generally known of it is that it inflames the gastro-intestinal canal, causing (in Pereira’s words) “if the dose be too large, gastrodynia, sometimes nausea and vomiting, and occasionally purging;” and that, when absorbed, it disorders the nervous centres, producing affections of a convulsive and paralytic character. Its uses are—according to the same authority—to allay chronic vomiting and relieve gastrodynia, while it occasionally displays curative powers in epilepsy and chorea. It is hardly necessary to argue that the virtues of the salt depend upon the operation of the law of similars.

But homœopathy requires more precision than this; and we must look closer at both the irritant and the neurotic phenomena. As regards the former,—locally the nitrate may, of course, inflame and even ulcerate the whole alimentary canal. There is no evidence, however, of its elective affinity for any other parts of the tract than the mouth and throat, and the duodenum, which last was found inflamed in Orfila’s dogs when the salt was injected into the veins. It provokes the throat looks dark red, and feels dry, and as if a splinter or ulcer were there; the tongue is sore, and the papillæ elevated. Tender and easily bleeding (but neither painful nor swollen) gums have been observed in patients under its influence, and in dogs treated by Krahmer like Orfila’s. Other mucous membranes feel its influence, especially that of the eye. Dr. Müller himself had, from the second decimal trituration, a

sharp attack of conjunctivitis, most severe in the canthi and carunculæ; there was even an approach to chemosis. Symptoms of urethritis were experienced by the same prover: the canal was swollen, hard, and knotty to the touch, and the right testicle was enlarged and hard.

Then as to the nervous centres and nerves. "Both convulsions and paralysis are present," writes Dr. H. C. Wood, "in *argyria*, or silver-poisoning." The convulsions he describes as reflex, excited by the least peripheral irritation; and as persisting after the complete abolition of voluntary movements. "Portal," says Stillé, "relates a case in which the exciting cause of epilepsy appeared to be a poisonous dose of lunar caustic." The paralysis is general, and is especially seen in the pulmonary branches of the vagi—death ensuing from asphyxia, with the same condition of the lungs as when their nerves are divided. In the provers the neurotic effect of the drug was manifest in headache deep in the substance of the brain, with low spirits; vertigo; want of mental power; restless, dreamful sleep; weakness of the spine, with pain at the small of the back; and very marked debility of the lower extremities, almost approaching to paraplegia. In Dr. Müller this last was accompanied with emaciation of the legs. Krahmer developed in himself a long-lasting (left) infra-orbital neuralgia; but as this succeeded to much gastric weakness and heartburn, it was probably sympathetic only.

But we have not yet exhausted the pathogenetic power of nitrate of silver. Dr. Bogolowsky, of Moscow, has recently experimented with it largely in rabbits, to ascertain its deeper and more chronic effects.* From these it appears that the salt has a direct and primary influence on the red corpuscles of the blood, causing their colouring matter to escape into the plasma, and so leading at first to ecchymosis and effusions, and later to interference with oxidation and ultimate chlorosis. As a result of the deficient nutrition (so he thinks) there occurs catarrh of the mucous membranes generally, and degeneration—rather of a granular than a fatty kind—of the renal and hepatic cells, and of the muscles, including the heart. There is also found a universal venous blood-stasis.

The therapeutic virtues of *Argentum nitricum* may be ranged in the same three categories.

I. Its previous repute in affections of the stomach seems well sustained in the present day, and some of it is echoed from the homœopathic ranks. In chronic inflammatory states of the organ its action must be local, and crude doses are

* See Virchow's *Archiv*, vi., 4, 1869; and *Practitioner*, iii., 65.

required. Its virtues in the round ulcer of the stomach are, as I shall show, no exception to this statement. But the marked gastric sufferings of the provers seem to show that the drug affects the nervous supply of the viscus, and may—in doses too small for local effect—modify its functional derangements. The same thing appears from the fact that many therapeutists ascribe no less virtue to the oxide of silver than to the nitrate. Dr. Bayes speaks highly of its power over what he calls “irritative flatulent cardialgia,” where the wind comes away easily, rushing upwards through the mouth.* Dr. Holland communicates two excellent cases of cure by it of chronic dyspepsia disordering the heart’s action.† This was a condition strikingly developed in Krahmer’s provings. His chief trouble was heartburn; and the excess of acid on which this symptom usually depends was the prominent feature of two cases of gastrodynia recorded by Mr. Harmar Smith as cured by the nitrate.‡

The virtues ascribed by many writers to nitrate of silver as a remedy in chronic diarrhœa—as that of phthisis—must be referred to homœopathy, as all admit that in full doses the salt purges. But the action is probably, here as in the stomach, local only, and substantial though moderate doses are required. There is, however, a form of diarrhœa occurring in young children, in which the motions are green, like spinach in flakes; and in this Dr. Lippe finds the higher infinitesimals perfectly efficacious.

The specific irritant influence on the conjunctiva which Dr. Müller’s experiments revealed led Dr. Dudgeon (in 1848) to argue that its local application, as practised in the old school, acted after a true specific manner, pointing out that, owing to the chemical and mechanical action of the lachrymal secretion upon it, the action of the caustic upon the eye is but momentary, and its quantity infinitesimal.§ I myself have been so satisfied with even its internal effects in ophthalmia neonatorum, that I have never had to resort to any external measures beyond those needed for cleanliness. The experience of our American oculists is quite confirmatory of its power over such purulent inflammations of the conjunctiva. Dr. Angell commends the remedy “in affections of the lining membrane of the lids, and of the lachrymal duct and sac, *when there is an abundant discharge of*

* *Brit. Journ. of Hom.*, xxx., 143.

† *Ibid.*, xxxii., 85.

‡ *Ibid.*, xxv., 504.

§ *Brit. Journ. of Hom.*, vi., 216.

pus;” and Drs. Allen and Norton write:—“The greatest service that Argentum nitricum performs is in *purulent ophthalmia*. With large experience in both hospital and private practice, we have not lost a single eye from this disease, and every one has been treated with internal remedies, most of them with Argentum nitricum of a high potency, 30th or 200th. We have witnessed the most intense chemosis with strangulated vessels, most profuse purulent discharge, even the cornea beginning to get hazy and looking as though it would slough, subside rapidly under Argentum nitricum internally.”

It is possible that there may be other mucous tracts to whose inflammations nitrate of silver is ordinarily applied locally, but where it acts by elective affinity. Such is certainly the throat, whose appearance and sensibilities in the provers are very like those of the follicular pharyngitis in which it is so much used, and probably the larynx, in whose chronic (even tubercular) affections Dr. Meyhoffer praises the drug given internally as well as by spray. Dr. Guernsey takes the same view of ulceration of the cervix uteri, in which he often gives the 200th dilution with marked results.

2. The anti-epileptic virtues of this salt have yet to be defined. They are undoubted, though only occasionally seen. Nor are large doses always required. A case of forty years' standing is cited by Hempel, in which the cure was effected by swallowing a silver coin which was ejected twenty months later but little diminished in size. The only contribution from the homœopathic school is that of Dr. Gray, of New York, who asserts that epilepsies originating in the brain may be promptly and durably cured by a few small doses, while those proceeding from abdominal irritation can be barely palliated by large quantities. In the paralytic sphere, considerable interest attaches to the medicine on account of its having been strongly recommended of late in locomotor ataxy. Some cases by Wunderlich and others have been published (you may read them in the twenty-first volume of the *British Journal of Homœopathy*), in which there appears no doubt of the nature of the disease, nor of its cure or great mitigation by the use of the nitrate of silver.* Trousseau, however, states that he has been disappointed in it. Dr. Bazire gave it in six cases: a very marked improvement took place in one, and a less marked one in another, but no appreciable result in other instances. Topinard, also, found an entire failure in twelve cases out of seventeen; and in three only of the remaining five was the improvement decided.

* See also Ludlam's translation of Joussett's Clinical Lectures, p. 420.

Friedreich's experience is still more negative. It is certain, therefore, that nitrate of silver is no specific remedy against locomotor ataxy as such; nor is it homœopathic thereto, as the proving points to a true paralysis of the legs as the effect of the drug, rather than a disorder of movements with retention of energy. In simple paraplegia from exhaustion I have more than once found it of signal service; and it has cured this condition when resulting from concussion or alcoholic excess, and also hysterical and diphtheritic paralysis. In dull chronic headaches of literary and business men *Argentum nitricum* is much commended. Dr. Guernsey indicates it in giddiness on the least mental or bodily exertion, and when time seems very long to the patient. Dr. Seip, of Alleghany, has recorded several interesting cures by the drug of hypochondriasis in men, traceable to alcoholism or venery;* and Dr. Woodyatt, of Chicago, speaks highly of it in paralytic weakness of the ciliary muscle, causing imperfect accommodation of vision.†

3. But a no less interesting and important sphere of our medicine is that in which its influence on the blood and on nutrition is brought to bear. Not long before Dr. Bogolowsky published his results, Dr. von Grauvogl's *Lehrbuch der Homöopathie* had appeared in Germany. This able work is, by the labours of Dr. Shipman, of Chicago, accessible to us in an English dress. The author—now (alas!) taken from us—considers that there are three principal “morbid constitutions;” that one of these is the carbo-nitrogenous, in which the oxidation of the blood is obstructed, giving rise to accumulation of carbon and nitrogen in excess; and that the chief remedy for this condition is nitrate of silver. Whatever may be thought of his pathological theory, the cases he gives amply bear out his commendation of the remedy; and the experiments of Dr. Bogolowsky supply the missing link by demonstrating its homœopathicity. We have thus another true *simile* for chlorosis and defective oxidation of the system; and from what I have myself seen I believe that the medicine will fully answer expectation in this direction. Shortness of breath (without lung or heart affection), as observed by Dr. Grauvogl, and sallowness rather than pallor of complexion, have proved my special indications for it. It is here that I will speak of the action of the drug in gastric ulcer, in which several of us think it almost specific. It is now well-known that this lesion is not of inflammatory nature, but a local

* See *Brit. Journ. of Hom.*, xxxiv., 347.

† *Ibid.*, xxxii., 739; *Monthly Hom. Review*, xxii., 143.

innutrition ; and that the patients most liable to it are young women who are the subjects of chlorosis. Upon this point I would refer you to some excellent remarks by Dr. Cooper, in connection with a case of the kind cured by our medicine reported in the thirty-fourth volume of the *British Journal of Homœopathy* (p. 485). He would, I think, quite concur with me that *Argentum nitricum* is appropriate to gastric ulcer just when it supervenes upon general chlorosis.

Argentum nitricum has obvious points of analogy with *Arsenic* and *Mercury* ; with *Phosphorus* ; and with *Hydrocyanic* and (as I have pointed out) *Picric acid*.

The potencies from the third decimal to the third centesimal have been those chiefly employed ; but von Grauvogl gave several drops of the first for a dose.

LECTURE XV.

ARNICA—ARSENIC.

Our attention is first to be directed to-day to the "leopard's bane,"

Arnica montana.

The tincture of the British Homœopathic Pharmacopœia is directed to be made either from the entire fresh plant, or from the dried flowers. Dr. Hering has recently shown good reason why the root, and this only, should be employed for the purpose. It seems that an insect is in the habit of depositing its eggs in the flowers, and that these have a peculiarly irritant effect on the skin; so that some at least of the disagreeable effects occasionally produced by its use are to be thus explained, and may be avoided by the exclusive selection of the root for pharmacœutic purposes.

Arnica has been well proved. Hahnemann supplies a pathogenesis of it in the first volume of the *Reine Arzneimittelehre*, to which nine persons besides himself have contributed. It contains (in the third edition) 638 symptoms, of which 47 are taken from authors, and are chiefly collateral or excessive effects of the drug when given to patients. Then we have the provings of Jörg and thirteen of his pupils, which were made sometimes with an infusion of the flowers, sometimes with the tincture of the root. Last come the experiments of Schneller and other members of the Vienna Proving Society, of which an account is given in the sixth volume of the *British Journal of Homœopathy*. Dr. Allen unites the symptoms from all these sources with many of its idiosyncratic effects upon patients in his Encyclopædia. A valuable study of Arnica, by Dr. Imbert-Gourbeyre, may be read in the forty-fourth volume of *L'Art Médical*.

Of the physiological effects elicited in these provings I shall best speak as I discuss the therapeutical powers of the drug. Of these let us take first the best known,—its remedial action in mechanical injuries.

1. This property of Arnica has come to be (in our own country at least) associated with homœopathy. But the method of Hahnemann cannot take credit for its discovery. He himself tells us, in the preface to his proving, that it had become known to the "common man," and the plant named "Fallkraut" accordingly; and that two hundred years before his time, a physician (Fehr) communicated this discovery of domestic practice to the profession, who then named the herb *panacea lapsorum*. The only credit homœopathy can claim in connection with Arnica is that she has kept the tradition alive. Satisfied with Hahnemann's inference from his provings, that "all the symptoms attending violent contusions and tearing of the fibres are analogically produced by Arnica in the healthy organism," and with the fact noticed by the older observers that the pains of such injuries were always at first aggravated by the full doses given, she has adopted the popular remedy into her list of similars. With her adherents to this day Arnica is to an injury what Aconite is to a chill; and the most gratifying results are continually being obtained from it. In contrast, it may be mentioned that Ringer and Horatio Wood (in his first edition) omit Arnica altogether; while Dr. Phillips "considers it a great pity that it has not (1874) come into more general use" in this direction.

I have said that Arnica is to an injury what Aconite is to a chill: that is, it will almost infallibly obviate the ill-effects, if given before organic mischief has been set up. It becomes thus the great remedy to be administered in all cases of concussion, sprain, or other suffering from violence. It removes, as Hahnemann says, "the pernicious consequences which often attend falls, contusions, blows, thrusts, straining, twisting or tearing the solid parts of our organism." But, unlike Aconite, it will follow up the cause to many of the changes it effects, even when of long standing and profound character. Such are those instanced by Dr. Bayes in his interesting article on the drug, viz.: the chronic muscular stiffness—called rheumatism—of old labourers,* and the cardiac hypertrophy of boating men. Mr. Nankivell has illustrated the same thing by some of the thoracic affections of the Cornish miners.†

The tissue affected in all these instances is the *muscular*; and upon this Arnica specially acts. It is above all things a myotic. I learn, from Dr. Imbert-Gourbeyre, that the great organopathist, Rademacher, makes a similar observa-

* See also *New York State Hom. Society's Transactions*, viii., 473.

† *Brit. Journ. of Hom.*, xxiii., 177.

tion. It thus becomes the main remedy for those numerous affections which Dr. Inman has so well described under the term *myalgia*. Over-exertion of healthy muscles, or the normal use of weak muscles, will bring on these pains; and Arnica will almost infallibly relieve them. As their occurrence is very common, it is a medicine in daily use. I need only specify two of them. One is the form of pleurodynia known as spurious pleurisy. This may readily be induced by over-exertion, as in the following case reported by Dr. Inman. "A party of gentlemen on a severe pedestrian excursion were all tired on the first day, and that was all; on the second day some began to have frequent stitches in the side, could not sleep on the side, but only on the back; on the third day the pains in the side were terribly increased, with so much tenderness that they could not bear the weight of the clothes." In this not uncommon form of pleurodynia—the "rheumatic pleurisy" of the old writers—Arnica gives rapid relief. It must be distinguished from the muscular rheumatism so called, which yields much more satisfactorily to Bryonia or *Actæa racemosa*. Another myalgia which I would specify is one of the forms of pain after food. The pain comes on immediately, even during the act of swallowing;* the patients are weak and of lax fibre; and they often have or have had myalgia elsewhere. Here too Arnica is an admirable remedy.

In this connexion I would recommend the perusal of an excellent paper by Dr. Madden on "Myalgia," in the twenty-fifth volume of the *British Journal of Homœopathy*. He, too, places Arnica first among the anti-myalgics; and agrees with Dr. Bayes in finding heart affections consequent on over exertion amenable to its use. I may also mention that Dr. von Grauvogl praised it highly for the "clergyman's sore throat," or any other induced by loud speaking; and that I myself have cured with it a chronic tenesmus of the bladder produced by frequent long retentions necessitated by the patient's business. Drs. Small and Hoyne have obtained great relief from it in the passage of urinary calculi or gravel. It is, moreover, serviceable against simple muscular debility, such as shows itself in prolapsus and in involuntary evacuations. It ought to be useful in asthenopia, from over-exertion of the eyes.

But, though Arnica affects the muscles chiefly, we must not limit its influence to these. It will check the hæmorrhages of mechanical violence; quiet the nervous startings of a fractured limb; and obviate the danger of re-action in concussion of

* See *Hoyne*, i., 200.

the brain and sudden apoplectic extravasation. It seems, moreover, to cover the whole remote effects of an injury. Give it to one whose frame cannot forget the shock of a far-back railway accident; and you and he will be alike delighted with the effect.

In external injuries Arnica may be used locally as well as inwardly; and will give speedy relief to pain, while promoting the restoration of the bruised part to its normal condition. Any one who has tried it when his finger has been jammed in a door will bear witness to the statement.* How it effects this is a difficult question. Dr. Garrod has shown that it has no "absorbent" power over mere sanguineous effusion, such as dry-cupping can produce. Violence seems always needed to call forth its remedial powers; but then they are indubitable.

In old times, the use of Arnica in injuries was extended to the suppurations and hectic therefrom resulting. Stoll declared it most effective in such conditions, and Dr. von Grauvogl—who was an army-surgeon—has revived its use and reputation. Let me read you what he says of it:—

"The results of Arnica provings on the healthy offer an array of symptoms so similar to traumatic fever and septicæmia by purulent infection, that hardly a better description of these states is to be found in works on surgery and obstetrics, and where there is traumatic fever there must have been previously, or still present, wounds; consequently Arnica is indicated according to the law of similars in wounds, and not only in their consequences, and in this respect it is an old renowned homœopathic remedy. Traumatic fever runs its course at first without any rise of temperature, which cannot therefore be accepted as the invariable sign of fever. It begins at once after every considerable mechanical inquiry, with which the whole habitus of the wounded person is shaken and often altered, so as to be unrecognisable. This condition improves manifestly under the use of Arnica, as also all signs of actual absorption of the decomposing elements of the secretions from the wound. Of all the ordinary mechanical injuries, compound fractures give the most profuse suppuration, and the attendant lacerations of the soft parts, that are often very extensive, like large operation wounds, predispose to the occurrence of pyæmic, or septicæmic fever. We do not always see these cases at the commencement, in the country generally not till after the lapse of several days, after the country doctor has done his best, and then we meet with most extensive suppurations. If here we give Arnica 30 x, four to five drops every hour, and apply compresses moistened with the same dilution, the patient feels a considerable alleviation of his pains in two, or at most four or five, hours, and the following day the suppuration is manifestly diminished. It decreases daily, and after a few days is reduced to a small quantity, during which time the wounds become cleaner. Things go on much more rapidly if we give every hour four to five drops of the 1 x dil., and

* See *Brit. Journ. of Hom.*, xviii., 132.

the same as a compress. On the following day, at latest in twenty-four hours, the suppuration is, as a rule, reduced almost to nothing, and the most favourable condition in every respect established. In the military hospitals I directed the attention of the surgeons to the efficacy of this treatment, and showed them that this favourable effect would at once disappear, and a large quantity of pus be found on the bandages, on leaving off the Arnica. This happened constantly, so that the very next day the former quantity of pus was there, and the wounds of the soft parts gaped again, after they had nearly closed, so that I could not withhold any longer the employment of Arnica internally or externally.

“The renewed employment of this medicine had the same effect as before, and the cure took place in the shortest space of time, and to the astonishment of the allopathic lookers on, without further suppuration, granulation, or retraction of the edges of the wound, therefore quite differently to what they had hitherto been taught and had observed. I had ample opportunity of seeing the same thing done during the French war, but I found no imitators. The effect of Arnica in all sorts of wounds consists in this, that not only does the exudation of white corpuscles and the mortification of the injured parts, and consequently all suppuration, cease, but that the intercellular fluid dries up by continually parting with water to the blood-vessels and lymphatics; that in consequence of this, the inflammatory swelling of the wound generally declines after a few hours; therefore all the wounded part consolidates, and the edges, when they can be brought together, agglutinate very rapidly, or when that is not the case, spontaneously approach ever nearer to union, whilst the loss of substance is supplied without suppuration or rank granulations. For these reasons the primary inflammation cannot extend, and where there is no inflammation there is no fever; further, when there is no water there is no pus, no absorption of injurious substances; thus diphtheria and septicæmia cannot occur. The relapse on leaving off the Arnica, especially externally, causes erythema, with formation of vesicles; internally, in fractures of the bones, it causes a soft and scanty callus. It is doubtful if Lister's vaunted carbolic-acid method can show such favourable results as the Arnica treatment.”

2. The next most familiar action of Arnica is that which it exerts on the skin. There is first an eruption, which in some susceptible persons results from its external application. The very scent of it is sometimes enough; and I have known the eruption follow the internal use of the first dilution, while Dr. Dyce Brown has seen it result from still more attenuated doses.* It consists of a number of very fine vesicles on an erythematous base, with much heat, pricking, and itching. Dr. Phillips thinks that an aqueous infusion of the plant, by excluding the arnicine and etherial oil (which are insoluble in water), is preferable to a lotion made from the tincture for external application, as being non-irritating.

The precise Arnica-erysipelas is rarely met with as an idiopathic affection, and hence the drug is little used in this com-

* *Monthly Hom. Review*, xxii., 171.

plaint. Dr. Cooper thinks it unjustly neglected, and says that he gets more decisive results from it than from any other remedy. Hahnemann points out the resemblance of another of its cutaneous effects to a boil; and recommends it as preventive and curative in that complaint. Dr. Müller found compresses of a drop of the tincture to an ounce of water very effectual to resolve these troubles. Teste cured with it an angina which seemed to result from the retrocession of boils, and von Grauvogl states that repeated doses will often abort a carbuncle.

3. Less known is the action of Arnica on the nervous tissue. It is reputed in Germany as a stimulant to the brain and spinal cord; and seems to have cured in Collin's hands* many cases of amaurosis and paralysis. Improvement was generally preceded by peculiar sensations in the affected parts, as tingling and electric shocks. The provers suffered from congestive vertigo and headache; and from pains down the spine. In one, the lower dorsal vertebræ became very sensitive, and pressure on the last caused radiating pains and sense of oppression of the chest. Van der Kolk (according to Phillips) found Arnica "invaluable in that condition of idiopathic mania where, the first excitement having diminished, the head nevertheless remains hot, and where a tendency to imbecility or to paralysis is shown." Hahnemann cured a chronic vertigo with it; it was known of old by the name of "Schwindelkraut."

4. Arnica causes, according to both Jorg and Hahnemann, violent urging to stool, with scanty and natural fæces, as if the muscular coat only of the bowel was excited. This suggests the homœopathicity of its action in dysentery, for which it has long been in repute—Stoll calling it a specific anti-dysenteric. Hahnemann recommended it here himself; but it had almost dropped out of use until it was revived in America by a curious accident, and has been highly esteemed there since.† Tormina and tenesmus would especially call for it.‡ It acts similarly on the stomach, causing contractive pain, flatulent distension, and hiccough.

Arnica has yet some minor actions, which may be briefly

* *Obs. circa morbos*, iv. and v.

† See *Philad. Journ. of Hom.*, ii., 94, 179.

‡ S. 261 of Hahnemann's pathogenesis ("purulent and bloody stool") must not be regarded as proving the homœopathicity of Arnica to dysentery. It occurred in a child to whom Arnica was being given for a fall from a height. The reporter regarded it as a sign of internal contusion or extravasation.

mentioned. It causes two other marked gastric sensations,—a sense of repletion, and a feeling of canine hunger with (nevertheless) no appetite for food; also eructations, smelling as of rotten eggs. It is recommended in whooping-cough, when children begin to cry as soon as they feel the cough coming on. It causes several kinds of hæmorrhage (especially epistaxis), and often finds place in the homœopathic treatment of this accident. It plays some part in the therapeutics of intermittents; it was known of old as “le quinquina des pauvres,” and is often useful when that drug has been abused.* It probably has some direct action upon the heart. Dr. H. N. Martin recommends it in angina pectoris, and Dr. Liedbeck confirmed in his own person Kafka’s recommendation of it for the dyspnœa accompanying fatty states of that organ.† Dr. Guernsey considers it as truly indicated when the patient feels “as if bruised,” as when there has been actual mechanical violence. He also specifies heat of head with coolness of the rest of the body as a keynote for it, and recommends it when pregnant women feel pain from the movements of the child, in the varices which form in their vulvæ or vaginæ, and in simple cases of painful nipples. I need hardly say that he, in common with every homœopathic accoucheur, invariably gives it immediately after childbirth, and testifies to the good effects of so doing.

A sensitiveness of the body to pressure, so that everything on which the patient lies seems too hard, is another recognised symptomatic indication for Arnica. This feature is often met with in low fevers, and the medicine was not without repute in such disorders among the older homœopathists. A tendency to hæmorrhage is regarded as indicating it here.

Besides ordinary vertigo, Arnica has been suggested by Dr. Ravel as suitable for that associated with disorder in the semi-circular canals of the ear; ‡ and Dr. Brown has recorded a case of the kind in which it was curative, being indicated by the apparent origin of the symptoms in a fall.§ I have myself had a similar case, in which I was led to try it by the circumstance of the patient having had several falls in the hunting-field.

In its antidotal power against mechanical violence Arnica is almost unique, finding only a point of contact here and there with *Rhus* and *Hypericum*. In its action on the muscles *Bryonia* and *Actœa* resemble it somewhat; as a cutaneous irritant it is allied again to *Rhus*, and to *Croton*.

See *Brit. Journ. of Hom.*, xxxiv., 719. † *Ibid.*, p. 738.

‡ *L'Art Médical*, xlv., 282.

§ *Monthly Hom. Review*, xxii., 595.

In all recent affections Arnica may be given in small or fractional doses of the mother tincture. But I must agree with Dr. Bayes, that if we desire to get good from it in the remote effects of injury, we must ascend to the region of infinitesimals.

We have now to gird up our loins, and summon all our strength, that we may master the greatest of medicines, because the greatest of poisons,

Arsenicum.

By this name a homœopathist means arsenious acid, the Arsenicum album of the old nomenclature. The British Homœopathic Pharmacopœia follows Hahnemann's original directions, and directs the primary (first centesimal) solution to be prepared by boiling. I incline, however, to think that its compilers would have done better to have gone on with him to his later practice, and to have ordered triturations to be made. Either form can be obtained of the homœopathic chemists.

The homœopathic literature of Arsenic is very extensive, and abounds in both original and collected material. Hahnemann published a proving of it in the second volume of the *Materia Medica Pura*, and subsequently another in the second edition of the *Chronic Diseases*. The former, in its latest shape (1833), consists of 1079 symptoms, of which 697 are from Hahnemann himself and seven fellow-observers, and 382 are cited from authors. Many of these last belong to records of poisoning with arsenious acid itself, or with other preparations of the drug—as orpiment, realgar, and cobalt. But a good many are vitiated by having been observed in sufferers from intermittents treated by the drug, where it is very difficult to decide how much is ague and how much Arsenic. The pathogenesis in the *Chronic Diseases* (1839) contains 202 additional symptoms, of which 79 are from a case of poisoning involving a whole family (Kaiser's), and the rest from observations made on patients taking globules of the 30th by Hahnemann himself and by Hering. Several studies and supplementings of Hahnemann's pathogenesis of Arsenic have been made. Dr. Wurmb has contributed one of the former, which may be read in English in the third and fourth volumes of the *British Journal of Homœopathy*. Dr. Black has given us a most valuable arrangement of the drug in the first part of the *Hahnemann Materia Medica*, where its

symptomatology is revised and augmented, and illustrated by clinical comments. Dr. Roth has criticised Hahnemann's toxicological material, and has incorporated what he considers trustworthy in it with all that has since appeared in a schema of the drug which contains 1056 symptoms.* The matter from all these sources, with a more complete revision and illumination of Hahnemann's cited symptoms, is embodied in the article on Arsenic in Allen's *Encyclopædia*, where the list has swelled to 2872. Dr. Berridge has furnished a series of cases of poisoning by it as an appendix to the *British Journal* for 1875 and onwards to the present time. But, next to Hahnemann himself, the most eminent and fruitful worker in the field of arsenical action has been Dr. Imbert-Gourbeyre, professor in the medical school of Clermont-Ferrand. His numerous writings on the subject—appearing during the last twenty years in the *Gazette Médicale de Paris*, the *Moniteur des Hôpitaux*, *L'Art Médical*, and other journals—I shall cite as I come to the several points of which they treat.

In considering how I should best present this abundant material to your notice, the history of Arsenic as a medicine seems to suggest the most instructive way. We find it to have been used of old, in China for ague, in India for chronic cutaneous diseases; while at the present day it is chiefly esteemed as a "nerve-tonic" in such disorders as neuralgia and chorea. Now ague is a fever; chronic skin affections are inflammations; and neuralgia and chorea are neuroses. It has appeared best to me that I should discuss the action of Arsenic in reference to these three types of disease, bringing its pathogenetic effects before you in connection with its curative virtues. I think that from this clinical point of view we shall get a better idea of the great medicine before us than if we attempted to draw a detailed sketch of its physiological action, and then studied its therapeutic powers in corresponding categories.

But, before we pass to such considerations, I must bring before you certain general characters of the action of Arsenic which belong to it more or less in every sphere of its activity, and are of great importance as indications for its choice. I do not say that their presence is indispensable, nor that, when it obtains, it absolutely determines the prescription of the remedy. But I do claim for them a prerogative rank among the features which lead us to its use, and they may sometimes weigh so heavily as alone to turn the scale in its favour. They are seven in number.

* See *Brit. Journ. of Hom.*, xx.

1. The first is *periodicity*. Arsenic is—as we shall see—one of the few medicines capable of inducing a true recurrent fever; and remissions, intermissions, and more or less regular returns of the symptoms are noted by all observers of its poisonous action, and are manifest in its provings. Periodic recurrence is thus a true feature of its pathogenetic influence, and experience has shown the same character to belong to its therapeutic activity. It is not merely that such a phenomenon suggests the influence of malaria, and so guides to the drug as one of the antidotes for that poison. It is very true that it constitutes one element in the homœopathicity of Arsenic to malarious affections;* but even in the absence of all such influence it both manifests itself, and *cæteris paribus* calls for Arsenic. “In typical diseases of all kinds,” wrote Hahnemann in 1796, “the type-exciting property of Arsenic in small doses becomes valuable.”

2. The second is *adynamia*. Christison long ago pointed out that there were a set of cases of arsenical poisoning in which there was little sign of irritation in any part of the alimentary canal, but the patient was chiefly or solely affected with excessive prostration of strength and frequent fainting, death being seldom delayed beyond the fifth or sixth hour. This effect of the drug is doubtless traceable in part to the paralysing influence it has been found to exert upon the heart. But it seems something more than this; and it characterises (as Wurmb has shown) a great many of the symptoms observed by the provers. It has become a well-established indication for the remedy in practice, finding its analogue in the intense prostration characteristic of certain diseases—as influenza, diphtheria, &c.—which is in many cases quite out of proportion to the substantive disorder which accompanies it. “Great exhaustion after the slightest exertion” is the symptomatic way of describing it. We shall have numerous instances of its practical value.

3. The third is *malignity*. This is a feature of disease more easy to recognise than to describe. I do not mean by it so much that fatal onward march of a malady which Dr. Frédault denotes by the name, that “grave state in which there are no

* “Dr. A. T. Thomson states that the action of Arsenic is liable to exacerbations and remissions, and sometimes even intermissions. Thus we may suppose that there is a certain degree of analogy between its operation and that of the malarious poison, by virtue of which it may perhaps exert a corrective power over the working of the latter in the blood” (Headland *On the Action of Medicines in the System*, p. 224).

gleams of true amendment, no crises which give a respite, no signs of relief which encourage hope, and where there is an utter lack of amenability to treatment.”* I mean rather that condition which may appear in any acute disease—as scarlatina or diphtheria—and which leads us to name them “malignant,” a condition especially shown by darkened colour of the blood and fœtor of its excretions and exudates, with corresponding prostration and disorder of the nervous system. In all fevers, exanthemata, and inflammations where this tendency to putrescence and decomposition shows itself, Arsenic is one of the first remedies of which we think and on which we depend.

4. The next is *restlessness* and *anguish*—a feature constantly noted in the subjects of arsenical poisoning, and seldom absent from any acute morbid condition, not purely local, to which it is otherwise appropriate. It is something like that which I have described as the characteristic of Aconite, but more intense. I have advisedly used the term “anguish” to designate it, rather than “anxietas” as with the other medicine. Either, of course, is employed in its physical sense,—not in that of the emotional disturbance which by analogy has been similarly named; and there is a difference, slight but real, between them. I can hardly put it into words, but you will feel what is anguish in a patient’s condition, and what is anxietas.

5. The foregoing are characters belonging to the symptoms of Arsenic generally. I have now to speak of certain characteristics of its pains. The first of these is that they are most frequently *burning*. This has been accounted for by the circumstance that it is mucous membrane chiefly which is affected by the drug, and that the pain of inflammation of this tissue is always more or less of a burning kind, as that of serous membrane is cutting. But such an explanation is quite insufficient, for there are other pains indicating Arsenic—notably its neuralgia—which have this same feature, but which certainly do not belong to mucous membrane. Burning pain as such, accordingly, is characteristic of Arsenic. There is one caution, however, to be given, and that is that you do not class under this heading such disagreeable sensations of heat as are caused by acrid fluids, as the bile and the products of gastric fermentation. Patients annoyed by the presence of these irritants will complain of burning sensations, but you must not therefore think of Arsenic for them.

6. Another feature of the arsenical pains is that they are *worse at rest*, and therefore at night, and are *increased by cold*, being

* *L'Art Medical*, Dec., 1876.

of course, conversely, relieved by warmth, and diminishing during exercise. Teste considers these characters of pains to indicate that the drug to which they belong is of a depressing kind, and believes that the action of all such medicines is more marked on the left (as being the weaker) side of the body. How this may be with Arsenic, I cannot say; but I am sure that the aggravation of its pains—especially its neuralgia—during the rest of night and by cold air impinging on the surface is very distinctive of it.

7. The last characteristic of which I have to speak belongs to the *thirst* of Arsenic. This is an early and marked symptom of its action on the healthy body, and is always present in febrile states to which it is suitable. But it has been added that the Arsenic patient, unlike the one whose condition calls for Aconite, “drinks little but often.” This statement is founded, pathogenetically, on observations obtained from Stapf and Wahle in Hahnemann’s proving of Arsenic. It is also cited as from Richard; but in this author’s brief narrative of a case of poisoning to which reference is made I can find no trace of it. Nor does it appear in any of the numerous toxicological records on which Dr. Allen has drawn; and in his *Encyclopædia* the next symptom but two after the “drinks much, but little at a time” of Stapf and Wahle is—“thirst so violent that he drank eleven jugs of water in half a day.” This is from a poisoning case. Therapeutically, I find that the symptom in question has been used as an indication for Arsenic in fevers, and with good results; but there is no evidence that its absence, or the presence of thirst for large quantities, contra-indicates the remedy. Desire to drink, but inability from the irritable state of the stomach to take more than a small quantity at a time, is a frequent symptom of gastritis, and so might truly call for Arsenic when present; while in inflammations occurring elsewhere, and in general fevers, the thirst may be as insatiable as possible without forbidding its employment.

I have now gone through the leading general indications for our medicine. Let me repeat my *caveat* that all such characters are to be taken as suggestive, not as decisive, of the choice of the remedy. Undoubtedly, the more of them that are present, and the sharper their definition (so to speak), the keener will be the action of the drug in removing the morbid state which they characterise, and the more minute may be its dosage. But there may be many a diseased condition in which they are entirely absent, and to which Arsenic is yet thoroughly homœopathic and curative. **Never make such a misuse of**

them as that which we shall see in the case of cholera, where the want of minute symptomatic similarity (among other points, in that very "drinking little but often" whose small value I have shown above) was made a ground* for denying to Arsenic a place in the therapeutics of this disease, which it so truly causes, and which it has so often arrested.

I. We now pass to the special actions of Arsenic; and shall begin, as I said, by considering it as an anti-pyretic. In this capacity it appears as a leading remedy for the types of fever known as malarious, hectic, and typhous, and also for cholera.

The use of Arsenic as a remedy for the intermittent and other fevers arising from malaria is of very ancient date in China and India. In Europe its employment was for a long time popular only, and it was not until the middle of the last century that physicians (among whom our English Fowler was prominent) took it up. Once again, however, as Stillé says, "Arsenic fell into disuse, and was for a long time quite neglected," until, in 1842, Boudin published a work which (in the words of the same writer) "demonstrated its efficacy in periodical fevers, and vigorously advocated its use, giving the first impulse to those numerous researches into the action and uses of the mineral which have since appeared."

Who was this Boudin, and how was he led to revive the forgotten employment of Arsenic in malarious fevers? The answer supplies a curious and interesting chapter in medical history. It is given by Dr. Chargé, of Marseilles, in a communication made by him to the World's Convention of 1876.† Boudin was, in 1840, in chief medical charge of the great military hospital in that city. He one day lamented to Dr. Chargé, with whom he was well acquainted, his want of success in the intermittents of the soldiers returned from African service, with whom at that time his wards were crowded. Our colleague took him at his word, and begged him to try Arsenic prepared according to the homœopathic manner. On his consenting to do so, he took from his pocket-case a tube of globules of Arsenicum 30, and presented it to his friend. Boudin took a few patients just as they came, put upon their tongues a few globules of the medicine, and they were all cured. It is to be regretted that this striking result did not lead him to study and adopt the method of Hahnemann in its entirety; but we know the obstacles which have prevented many a man similarly situated from adventuring on such

* See *Monthly Hom. Review*, ix., 120.

† See *Bibliothèque Homœopathique*, March, 1877.

perilous investigations. However, he did follow up the special therapeutic point now made. In his *Traité des fièvres intermittentes* he writes—"Arsenious acid, *suitably prepared*, preserves in the almost microscopic dose of a hundredth of a grain all its medicinal energy, not only in the treatment of marsh fevers, but also in that of a host of other maladies. Yet more, I have often obtained with a single dose of a hundredth of a grain of this drug the radical disappearance of fevers contracted in Algeria or Senegal, and which had till then resisted the most varied treatment, including sulphate of quinine and change of climate." And what was this "suitable preparation" whereby the virtues of the drug were so preserved or rather developed? Dr. Chargé gives the "formule de Boudin." "Take a centigramme of arsenious acid; add by degrees, and in small portions at a time, a gramme of pulverised sugar of milk. Triturate in a glass mortar for a sufficiently long time (at least ten minutes), and divide into twenty packets, of which each represents a demi-milligramme of arsenious acid." He calls this a hundredth of a grain; but, as the milligramme is about $\frac{1}{87}$ of a grain, it is rather a hundred and thirtieth. But it is obvious that the process is Hahnemann's, and hence the activity of the drug. Dr. Chargé well shows that the larger doses to which Boudin subsequently resorted are explained by the imperfect preparation the drug underwent at the hands of the ordinary chemists of Paris, where his later practice was carried on. While at Marseilles, his Arsenic was supplied him from a homœopathic pharmacy.

This by the way, to show that it was from the school of Hahnemann that Boudin received the impulse which made him the reviver of the use of Arsenic in malarious fevers. But let us now enquire what relation its physiological effects bear to the febrile condition, as such, and to the various forms it may assume.

Dr. Imbert-Gourbeyre has examined this point in an essay "On the febrigenic power of Arsenic,"* and demonstrates that fever is among the most constant and characteristic effects of the poison. It is obvious, however, that in the great majority of the observations he cites it was symptomatic of the gastro-enteric irritation set up, rather than a primary effect. When thus occurring, it is of the hectic type, often having marked evening exacerbations; sometimes chill and heat, with thirst and headache, recur periodically, in somewhat irregular rotation. This is the condition set up in chronic arsenical poisoning, as seen (for instance) in the victims of the *Aqua Toffana*

* *L'Art Médical*, 1865; and *Brit. Journ. of Hom.*, xxiv., 72.

of old. Hahnemann describes the cachexia thus induced¹ in his usual graphic manner. "It is" he says "a gradual sinking of the powers of life, without any violent symptoms; a nameless feeling of illness; failure of the strength; slight feverishness; want of sleep; lividity of the countenance, and an aversion to food and drink and all the other enjoyments of life. Dropsy closes the scene, often with colliquative vomiting and purging."*

But some of the evidence adduced by our author, and other facts elsewhere obtainable, show that Arsenic can cause fever without local irritation. Of this kind is the observation of Dr. v. Grauvogl, who, after some days' use of the 15th attenuation, experienced nothing but an insatiable thirst. From the 5th potency he felt great languor and sleeplessness in addition to the thirst; and it was not until, some weeks after, he descended to the 3rd decimal, that symptoms of the stomach and bowels showed themselves. Then Hahnemann remarked (1796)†—"I have myself ascertained that Arsenic has a great tendency to excite that spasm in the blood-vessels and shock in the nervous system we call the febrile rigor. If it be given in a pretty large dose (one sixth or one fifth of a grain) to an adult, this rigor becomes very evident." It affects the vasomotor nerves as we have seen that Aconite does. But the subsequent phenomena are very different in the two drugs. With Aconite a brief febrile reaction of synochal type occurs, and then all ends with perspiration. But from Arsenic we have either a repetition of the chills at intervals, or a long-lasting fever with typhoid symptoms. Of the former Hahnemann speaks:—"It possesses," he says (*loc. cit.*), "the power, observed by me, of exciting a daily recurring, though always weaker paroxysm, even although its use be discontinued." Thus it may set up an affection undistinguishable from ague, of which instances have been recorded by Boudin, Delaharpe, Imbert-Gourbeyre, Clarus, and Dudgeon.‡ Of the typhoid condition often induced in protracted arsenical poisoning an exquisite example is afforded by one of Orfila's cases. From the eighteenth to the twenty-third day, it is said, "his appearance resembled that of a patient labouring under typhus." By others, moreover (as Dr. Imbert-Gourbeyre shows), poisoning by Arsenic has been compared to the course of low fever; and once it has been mistaken for it. Dr. Hausmann has

* Quoted from his *Arsenik-Vergiftung* by Christison (*Poisons*, 3rd ed., p. 296).

† *Lesser Writings* (tr. by Dudgeon), p. 336.

‡ See (for the two last) *Brit. Journ. of Hom.*, xi., 334, and xx., 204.

also shown, in an essay on the subject in the *Æsterreich. Zeitschrift* (1845), that the intestinal lesions of typhoid have often found their analogues in the autopsies of persons perishing from the effects of Arsenic.

It is thus evident that (as Hahnemann first argued and Boudin admits) Arsenic is homœopathic to the ague it undoubtedly cures; and that, upon the principle of similarity, it ought to be useful in typhus and enteric fever. It is indeed so. My own experience would lead me to lay it down as a canon that what Aconite is to simple fever, that Arsenic is to its malignant form. Whenever the well-known "typhoid" symptoms occur—especially the dry tongue and the (often involuntary) diarrhœa—whether in continued fevers, in the exanthemata, as symptomatic of mortification, or as results of blood-poisoning, my advice is to put in your Arsenic, and use it freely and persistently. I have seen many an apparently desperate case cured by it. Dr. Imbert-Gourbeyre's paper will show that this canon obtains general acceptance in the homœopathic school, and is not without confirmation elsewhere. Fleischmann relied upon Arsenic almost exclusively in the treatment of typhoid at his hospital.

The irritative fever of Arsenic suggests (as Hahnemann perceived and pointed out) its use in hectic conditions, such as those which accompany tuberculosis and chronic mischief in the lungs or intestines. We have always made much use of it in the febrile marasmus of children (usually from mesenteric disease) and in phthisis. Recently it has been much commended in the latter disease, especially as diminishing the hectic. In our own school Dr. Herbert Nankivell has recorded much valuable experience with it, giving it usually in the form of the iodide.* Dr. Ringer confirms the statement that it reduces the temperature in tuberculosis; and states that coincidentally the symptoms are relieved, and even—in some cases—apparent cure effected. Of a piece with this is von Grauvogl's commendation of it in pyæmia†. As regards ague, Arsenic has the highest repute as an anti-intermittent among homœopaths, and in quite infinitesimal doses. Wurmb and Caspar, from their experience in the Leopoldstadt Hospital at Vienna, place it first among the remedies for chronic agues (it is rarely indicated when they are recent). The special indications for it they epitomise thus:—"one stage absent; heat burning; rapid prostration; torpid weakness; dropsical swellings;

* *Brit. Journ. of Hom.*, xxx., 515; and *Monthly Hom. Review*, xvii., 621; xxiii.

† *Op. cit.*, i., 335.

cachexia; abuse of quinine." But they add—"it will often cure when other remedies selected with the greatest care have failed." They were at this time using the 15th dilution exclusively in their wards.* Bähr praises the same potency as sovereign in malarial cachexia; but in recent cases prefers the first three triturations. Of these, besides the ordinary symptomatic indications of the drug, he says—"Arsenicum is indicated the more specifically the cleaner the tongue remains, the more rapidly the strength is exhausted by a single paroxysm, and the sooner the characteristic sallow pallor makes its appearance." To the German authors now cited I may add the testimony of an American, whose residence in the Mississippi valley gives him large experience in marsh-fevers—Dr. Lucius Morse. "For the so-called dumb chills of malarious climates," he writes,† "Arsenic is a foremost remedy. In the outstart of acute attacks of intermittent fever, where the paroxysms are distinctly divided into stages, I have found it of little utility; but as an intercurrent remedy, in the treatment of relapsing cases, I have found it to act admirably. It also deserves attention as a prophylactic of diseases resulting from malarious poisoning." Sensation of coldness of the body is regarded by him as especially significant for its choice. He gives the triturations from the second to the sixth decimal, and, preparing these himself, follows faithfully Hahnemann's injunction to triturate a good while, saying that the labour expended has been well repaid.

Dr. H. Wood praises it in the fever known in America as "typho-malarial."

Before leaving this part of our subject, I must speak of the action of Arsenic in cholera. I think I shall carry most pathologists with me at the present day, in maintaining (as I have long ago done)‡ that Asiatic cholera is essentially a pernicious malarial fever, in which the poison exhausts its influence in a single paroxysm. We have already seen Arsenic causing the primary chill and the consecutive fever of this malady; and we shall hereafter find the cramps, the vomiting and purging, and the suppression of urine reproduced in its pathogenesis.§ So complete is the resemblance that Dr. H. C.

* *Brit. Journ. of Hom.*, vols. xii. xiii.

† *American Homœopathist*, ii., 6.

‡ *Brit. Journ. of Hom.*, xxiv., 485.

§ "Dr. Blachez describes another form of arsenical poisoning, characterised by choleraic symptoms of the intestinal canal, with suppression of urine, cramps, and progressive coldness of body" (Ringer, 7th ed., p. 281).

Wood can truly say that "arsenical poisoning has been mistaken for cholera, not only in life, but also after death, on the post-mortem table." He is probably referring in these last words to a case reported by Professor Virchow, in the forty-seventh volume of his *Archiv*.* The very fungi described by Klob and others as peculiar to cholera were present in the rice-water fluid with which the intestines were filled; and the condition of the mucous membranes was anatomically identical. The phenomena, moreover, which sometimes occur in arsenical poisoning, where the patient dies in a few hours in collapse, without symptoms of gastro-enteric irritation,—*sidération*, as the French call it, have been compared by many observers to the way in which cholera occasionally invades the system.

It is true that this is not always so; and that the vomiting and purging of arsenical poisoning usually depend on gastro-enteritis, which is absent in cholera. Hence (as I have said) the minute symptomatology of the disease does not altogether correspond with that accepted as characteristic of the drug, though the internal burning of which cholera patients so often complain is a point in its favour. It was probably for this reason that Hahnemann, on first hearing an account of cholera when it invaded Europe in 1830, in naming the drugs most likely from their homœopathicity to be its antidotes, specified Camphor, Veratrum, and Cuprum, but omitted Arsenic. Further knowledge of the disease has shown that the features in which there is a true similarity are those of most importance; and Arsenic has accordingly been added to the three Hahnemannian medicines by those who care more for real lesions than for symptomatic minutiae. With such it has become the sheet-anchor in the most desperate cases. In the epidemic of 1849, Dr. Russell at Edinburgh and Dr. Drysdale at Liverpool concurred in giving to Arsenic the chief place in the treatment of cholera, when the time for arresting it with Camphor had gone by; and I believe this to be the general experience of homœopaths. I may add that with malarious fevers Boudin classes, not only cholera, but also yellow fever and plague, as being all "limnhæmic" affections; and accounts Arsenic the great remedy for them all.

We have now completed our consideration of Arsenic as an antipyretic. Before leaving the subject, let me say a few words by way of comparison between it and Aconite in this capacity. You will see at once that the contrast we observed between the pathogenetic effects of the two drugs shows itself

* See *Brit. Journ. of Hom.*, xxviii., 202.

as plainly, and as of the same kind, in their therapeutic virtues. Aconite is the remedy for acute and ephemeral fevers, Arsenic for those of some duration: the only point at which their spheres intersect is (as I have said) in the treatment of cholera. The fever of Aconite is neurotic: that of Arsenic commences in the blood or the tissues, and affects the nervous system secondarily. Aconite rapidly calms the violent but superficial storms to which the circulation is subject: Arsenic goes down with a slower but more penetrating movement into the inmost recesses of the pyrexial process, and there cools its ardour and steadies its agitation. They are both most precious febrifuges; and we should be hard put to it to do without either.

LECTURE XVI.

ARSENIC (*continued*).

At our last meeting we began the consideration of the great medicine supplied us by the metal Arsenic. We dwelt upon certain general characteristics of its action, both as a poison and as a remedy; and then studied its virtues as an antipyretic in connexion with its physiological effects in the same sphere.

II. We come now to the place of Arsenic in the treatment of inflammations. Here its general homœopathicity, at least, is evident; for no more characteristically irritant poison is known. It is only necessary on this score to enquire if the similarity extend to the seat and kind of the inflammatory action.

1. Let us first take the mucous membranes. To this tissue Arsenic may fairly be called a specific irritant; as it affects it in some measure wherever found, and however the poison is introduced into the system. The kind of inflammation produced is not (as with Tartar emetic) muco-purulent, but the membrane is dry, or exudes a thin ichorous discharge; and the further progress of the mischief is towards ulceration rather than suppuration. After this manner the alimentary canal is affected throughout, but more especially the mouth, throat, stomach, duodenum, and rectum. Of these the stomach may be called the central seat of the action of the drug, which has such affinity for it that Brodie found the gastritis more intense when the poison was applied to a wound than when it was swallowed; and yet, Boehm says, it is not eliminated by the gastric mucous membrane. Throughout the canal the inflammation is severe, and causes vomiting, diarrhœa, and dysentery; aphthæ in the mouth; ulceration of the stomach and intestine; and even gangrene at the anus. I should note what Hahnemann says of the arsenical vomiting, that it is more frequently a dry retching, with ineffectual efforts to vomit, than a true emesis: On the respiratory tract the influence of Arsenic is less virulent, save on the uppermost portion; but the whole

extent is affected, as shown by post-mortem redness, and cough and other symptoms of irritation during life. In the frontal sinus the irritation is shown by the dull, tight frontal headache so common in those exposed to its emanations. The arsenical conjunctivitis, which is as well known as the mercurial stomatitis, belongs to this category ; and there is also an arsenical coryza—not merely in those living in rooms papered with it (where it is constant, but might be a local effect merely), but also (as Dr. Imbert-Gourbeyre has shown) from its internal administration, even in infinitesimal doses. In cases of poisoning the conjunctivitis has been seen as purulent, and the coryza to consist of a profuse ichorous discharge, going on to ulceration. The genito-urinary mucous membrane is inflamed throughout, even—as in one case of Christison's—inside the uterus and Fallopian tubes ; in the penis, scrotum, and vulva (as in the anus) gangrene not unfrequently takes place. This last phenomenon is one of those specially studied by Dr. Imbert-Gourbeyre.*

These are the pathogenetic facts ; and now let us turn to those of therapeutics. If *similia similibus* were absurd ; if the presence of inflammation were, according to the old view, a contra-indication for an irritant, Arsenic ought to be utterly eschewed in gastritis and enteritis. Yet it is not so. Mr. Hunt tells us that when his patients with cutaneous disease had also chronic irritations of the alimentary canal, the Arsenic he gave them rather benefited these than otherwise. Dr. Thorowgood writes in the *Practitioner* to extol the medicine in "irritative dyspepsia" (v., 21) ; and Dr. Ringer, supporting this recommendation, adds the morning vomiting of drunkards, chronic ulcer of the stomach, and several other analogous affections, in all of which he says "it allays pain and checks vomiting." These gentlemen have but borrowed a remedy traditional in the homœopathic school. There are indeed few inflammatory diseases of the alimentary canal in which Arsenic is not of great service, though in some it is eclipsed by other remedies. Thus : in the mouth and throat Mercury, Nitric and Muriatic acids, Kali chloricum and Belladonna supersede it on ordinary occasions. But in *can-crum oris*,† in severe forms of aphthæ (especially such as appear at the close of exhausting diseases), and generally in malignant inflammations and phagedænic ulcerations (non-syphilitic) of these parts, Arsenic has no rival. In gastritis,

* See *Brit. Journ. of Hom.*, xxiii., 77.

† In an epidemic of this disease Dr. Arnold found it (in the 4th decimal trituration) of the utmost service (see *Brit. Journ. of Hom.*, xi., 149).

acute and chronic, and in duodenitis, it is the chief remedy; and so in all dyspepsiæ resulting therefrom. In chronic gastric irritability, with such retching as that I described just now, it is often most efficacious. Dr. Guernsey praises it in the condition described by Dr. Chambers as "the indigestion of water." In ulcer of the stomach and intestines it might find a place, but generally yields the palm to Kali bichromicum, and also in the one to Uranium nitricum, and in the other to Mercurius corrosivus; which last, moreover, is superior to it in dysentery, save where the rectum is most affected and where there is much prostration. As the purging caused by it depends upon intestinal inflammation, it is scarcely homœopathic to simple "functional" diarrhœa, however severe. But in most cases of chronic diarrhœa, where there is generally some disorganization, Arsenic is a glorious remedy; and in "English cholera" it is esteemed by Dr. Black, of Chesterfield, a true specific.

Arsenic holds an important place in the treatment of the disorders of the upper portion of the respiratory mucous membrane. Here, too, we have the support of Dr. Ringer, who makes some interesting remarks on a variety of forms of paroxysmal coryza, sometimes running into bronchitis, in which he finds the medicine very useful. The sneezing and wheezing of these affections ally them to hay-fever and its asthma; though here—probably because of the local presence of the specific irritant—remedies do not avail much. Nevertheless, Arsenic has often gained some credit in its treatment.* Dr. Ringer does not mention influenza. This, like cholera, is an epidemic disease characterised by vasomotor disturbance, prostration, and copious flux. To the typical form of this malady Arsenic precisely corresponds; and in my hands has always proved rapidly curative of it, unquestionably cutting short its progress. In sporadic coryzas approaching this type it is no less valuable. Here, too, I must speak of its use in ophthalmia. In simple chronic conjunctivitis I myself place great reliance upon it; and in strumous ophthalmia my experience coincides with that of many others that it will often cure obstinate cases where every other medicine has failed. Dr. Angell commends it "in superficial and deep-seated ulcerations of the cornea,† especially in scrofulous subjects; in catarrhal ophthalmia, with

* See Watson's *Practice of Physic* (4th ed.), ii., 55, and *Hahn. Monthly*, Aug., 1876.

† It has been found to affect the cornea in frogs similarly to the skin,—its influence upon which will come before us immediately.

thin secretion and irritation of the edges of the lids ; and in ulceration of the tarsal edges, with thin secretion." Drs. Allen and Norton make this same thinness of secretion a prominent indication for Arsenic, adding excoriating quality of the same, burning pains, and sense of dryness. In bronchitis it is rarely indicated, save when the constitutional symptoms call for it, and there is much thin expectoration. But Dr. Black and Dr. Bayes both think it should be used oftener, especially in aged people. They are borne out here by Hahnemann himself, who in a note to S. 584 of his pathogenesis of Arsenic in the third edition of the second volume of the *Reine Arzneimittellehre*, writes—"Of a similar suffocative catarrh, becoming much worse every evening after lying down, and bringing me nigh to death, I cured myself rapidly with Arsenic, and that with a dose of marvellous minuteness. The other symptoms of my illness were obviously those of the remedy."

In inflammation of the urinary tract Arsenic is more than rivalled by other medicines, as Cantharis and its analogues. In affections of the generative organs its chief use has been in chronic menorrhagia, where it is praised by Sir Charles Locock and Mr. Hunt ; and in endo-metritis. A thin, corrosive, burning leucorrhœa indicates it in uterine affections. It will probably be found curative in noma pudendi, in cancer scroti, and where the soft chancre runs into phagedæna or sloughing.

2. The powerful irritant action of Arsenic upon the mucous membranes makes it almost certain that it must exercise a similar influence upon their external continuation, the skin. That it does so, affirmed by Hahnemann,* is witnessed to also by Hunt, Inman, Horatio Wood, and Christison ; and Ringer and Warburton Begbie concur in stating that its first effect on skin disease is to make it redder and more inflamed, worse in fact than before the treatment was begun. But upon this point we have one of Dr. Imbert-Gourbeyre's most valuable contributions. In a monograph *de l'action de l'Arsenic sur la peau* (Baillièrè, 1872) he has demonstrated from numerous facts, collected and observed, that Arsenic has the power of causing almost every form of cutaneous disorder. He gives instances of its production of pruritus, erythema, erysipelas, urticaria ; of papules, vesicles (including a true zona), pustules and furuncles ; of discolorations ; and of falling of the hair and nails. He does not mention squamæ in his list ; but here we have the testimony of Hunt and of Tilbury Fox, both of

* *Lesser Writings*, p. 337.

whom speak of pityriasis as a frequent effect of its use. Dr. Roberts gives a case of pityriasis rubra caused by it. Stillé enumerates among the effects of arsenical wall-papers—"the skin grows rough and scaly;" and says that its continued medicinal use "has in some few instances caused an eruption of urticaria, pityriasis, or psoriasis upon the skin. In one case," he writes, "of acute arsenical poisoning, and a fortnight after the patient had apparently recovered from its effects, the face, head, hands, and feet were swollen, and the whole surface of the body was of a bright red colour. After a few days the skin partially desquamated, and was tender to the touch; and this was followed by an attack of psoriasis which extended over the whole body. The hair of the head, the eyebrows and eyelashes fell off, as did also the nails." Of this last phenomenon he writes—"The continued use of Arsenic has in some cases caused the hair to fall out over the whole scalp, or in patches (*alopecia areata*);" and Naunyn, in Ziemssen's *Cyclopædia*, enumerates among the symptoms of chronic arsenical poisoning, "falling out of the hair, and even of the nails, with or without the formation of ulcers at the edges of the nails."

Thus is convicted of unconscious homœopathicity one of the most generally accepted of all the virtues of Arsenic, viz., its power over cutaneous disease. To assume, as is ordinarily done, that it acts as a "nerve-tonic" in these disorders, is a mere evasion. And here also the small dose accompanies the law of similars. Mr. Hunt gives a case in which no more than the $\frac{1}{180}$ th of a grain could be borne at a time; yet with such minute doses he cured a chronic psoriasis guttata. He recommends just enough to be given to keep the conjunctiva slightly affected throughout the course—a relic, probably, of the old mercurial practice; but Dr. Ringer finds it quite unnecessary "to induce these toxic symptoms to ensure the beneficial influence of the remedy."

At the present day the tendency among dermatologists seems rather to depreciate the unvarying prescription of Arsenic in skin disease which Mr. Hunt's success especially brought so into vogue. But it is still highly reputed for chronic pemphigus and the squamæ, and in general practice seems to be used pretty universally when the skin is affected. With us of the homœopathic school, having many other remedies for skin disease, it does not play so large a part or undergo so indiscriminate an employment. But in chronic cases of urticaria, eczema, pemphigus, lichen, prurigo, alopecia, pityriasis, psoriasis and lepra we esteem it as highly as our

brethren, and use it as the leading remedy. Where the constitution is coincidentally affected in the arsenical manner, quite high dilutions of the drug may suffice.* The innocuousness, and even necessity, of more substantial doses in most chronic dermatites corresponds with what Hahnemann says:—"in cases where, along with a local affection, the general health seems good, we must proceed from the at first small doses to larger ones."

Further evidence as to the poisonous action of Arsenic on the skin has been supplied by the recent observations of Drs. Ringer and Murrell regarding its action on frogs. Experimenting with the view of studying its paralysing action, they noticed "a curious action of arsenious acid on the skin of these batrachia." Soon (5-8 hours) after the hypodermic injection they found that they "could strip off the cuticle with the greatest readiness over every part of the body." No such phenomena appeared in frogs otherwise killed, save when Tartar emetic was used, and then "the cuticle became softened and reduced to a jelly-like condition, too soft to be stripped off, though it could be easily scraped off every part of the body."

Dr. Emily Nunn, of Boston, U.S., undertook, in the Physiological Laboratory of Cambridge, a microscopical examination of the epidermis of frogs thus poisoned. Her conclusion with regard to Arsenic is that "all the facts go to prove that the changes are the result of the Arsenic acting directly on the epidermic cells themselves," beginning with those lying deepest. It is, she says, "obviously a specific effect," and "not without interest in view of the remarkable therapeutic value of Arsenic in skin diseases." Dr. Ringer also acknowledges this connexion; and aptly points out that it is diseases of the more superficial parts of the skin which are most amenable to the influence of Arsenic. The action of Antimony was, histologically, almost identical; but was more rapid and violent, and accompanied with a marked softening of the ultimate elements of the tissue.

3. Arsenic affects the serous hardly less powerfully than the mucous membranes. The inflammations here caused by it are of a sub-acute character, with speedy and copious serous (less often purulent) effusion. The pleuræ are most frequently affected; then the pericardium; less often the peritoneum and arachnoid. The post-mortem evidence of this is to be read in every work on toxicology. And here too, as with Apis, the synovial membranes are affected similarly with

* See *Brit. Journ. of Hom.*, iv., 349.

their serous analogues, though only during the convalescence from acute arsenical poisoning.

Correspondingly, Arsenic is highly esteemed in the school of Hahnemann in inflammations of the serous membranæ, whenever very copious serous effusion is present. No remedy equals it here, especially when the pleura or pericardium is the part affected. It thus resembles Apis, and, like that medicine, is often very useful in chronic serous dropsies remaining after inflammation. Some capital cases in point are related by Dr. Yeldham in the third and fourth volumes of the *Annals* of the British Homœopathic Society. It is in some repute in the old school in the treatment of chronic articular rheumatism.

Besides these tissues, Arsenic has a potent influence upon three important organs of the body; and this is mainly of irritant nature, though not without other features. The organs I refer to are the lungs, the heart, and the kidneys.

4. As regards the lungs, Arsenic first of all congests and inflames them. This is evident from many symptoms during life, both in poisonings and provings; while autopsies frequently disclose great pulmonary engorgement and even pneumonia. But there is a dyspnœa manifest in most of these subjects which cannot always be thus accounted for; and it has long ago led homœopathists to use Arsenic largely in the curative treatment of asthma. Dr. Black writes—“There is no medicine which manifests so frequently and so closely the symptoms of asthma; and in practice it proves an admirable remedy.” Dr. Russell, who devotes two of his excellent *Clinical Lectures* to asthma, recommends it where bronchitic asthma tends to become, or has become, chronic; and furnishes several illustrative cases. But I find it very effective also in the more purely neurotic form of the malady, especially in weakly persons, and where the attacks recur periodically. This is another piece of homœopathic practice which has been appropriated by our brethren of the old school. The therapeutists of the stamp of Anstie and Ringer seem to rely much upon it: the latter praises it in the asthma of emphysema. In pneumonia Arsenic has found little employment as yet.

5. The action of Arsenic on the heart has been fully studied by the author I have so often cited, Dr. Imbert-Gourbeyre. In his treatise *de l' action de l' Arsenic sur le cœur* (Baillière, 1874) he adduces copious evidence of the elective affinity of the drug for this organ and of the profound changes it sets up. Of functional disorders he specifies palpitation and cardiac dyspnœa (to which he might have added præcordial

brethren, and use it as the leading remedy. Where the constitution is coincidentally affected in the arsenical manner, quite high dilutions of the drug may suffice.* The innocuousness, and even necessity, of more substantial doses in most chronic dermatites corresponds with what Hahnemann says:—"in cases where, along with a local affection, the general health seems good, we must proceed from the at first small doses to larger ones."

Further evidence as to the poisonous action of Arsenic on the skin has been supplied by the recent observations of Drs. Ringer and Murrell regarding its action on frogs. Experimenting with the view of studying its paralysing action, they noticed "a curious action of arsenious acid on the skin of these batrachia." Soon (5-8 hours) after the hypodermic injection they found that they "could strip off the cuticle with the greatest readiness over every part of the body." No such phenomena appeared in frogs otherwise killed, save when Tartar emetic was used, and then "the cuticle became softened and reduced to a jelly-like condition, too soft to be stripped off, though it could be easily scraped off every part of the body."

Dr. Emily Nunn, of Boston, U.S., undertook, in the Physiological Laboratory of Cambridge, a microscopical examination of the epidermis of frogs thus poisoned. Her conclusion with regard to Arsenic is that "all the facts go to prove that the changes are the result of the Arsenic acting directly on the epidermic cells themselves," beginning with those lying deepest. It is, she says, "obviously a specific effect," and "not without interest in view of the remarkable therapeutic value of Arsenic in skin diseases." Dr. Ringer also acknowledges this connexion; and aptly points out that it is diseases of the more superficial parts of the skin which are most amenable to the influence of Arsenic. The action of Antimony was, histologically, almost identical; but was more rapid and violent, and accompanied with a marked softening of the ultimate elements of the tissue.

3. Arsenic affects the serous hardly less powerfully than the mucous membranes. The inflammations here caused by it are of a sub-acute character, with speedy and copious serous (less often purulent) effusion. The pleuræ are most frequently affected; then the pericardium; less often the peritoneum and arachnoid. The post-mortem evidence of this is to be read in every work on toxicology. And here too, as with Apis, the synovial membranes are affected similarly with

* See *Brit. Journ. of Hom.*, iv., 349.

their serous analogues, though only during the convalescence from acute arsenical poisoning.

Correspondingly, Arsenic is highly esteemed in the school of Hahnemann in inflammations of the serous membranes, whenever very copious serous effusion is present. No remedy equals it here, especially when the pleura or pericardium is the part affected. It thus resembles Apis, and, like that medicine, is often very useful in chronic serous dropsies remaining after inflammation. Some capital cases in point are related by Dr. Yeldham in the third and fourth volumes of the *Annals* of the British Homœopathic Society. It is in some repute in the old school in the treatment of chronic articular rheumatism.

Besides these tissues, Arsenic has a potent influence upon three important organs of the body; and this is mainly of irritant nature, though not without other features. The organs I refer to are the lungs, the heart, and the kidneys.

4. As regards the lungs, Arsenic first of all congests and inflames them. This is evident from many symptoms during life, both in poisonings and provings; while autopsies frequently disclose great pulmonary engorgement and even pneumonia. But there is a dyspnœa manifest in most of these subjects which cannot always be thus accounted for; and it has long ago led homœopaths to use Arsenic largely in the curative treatment of asthma. Dr. Black writes—“There is no medicine which manifests so frequently and so closely the symptoms of asthma; and in practice it proves an admirable remedy.” Dr. Russell, who devotes two of his excellent *Clinical Lectures* to asthma, recommends it where bronchitic asthma tends to become, or has become, chronic; and furnishes several illustrative cases. But I find it very effective also in the more purely neurotic form of the malady, especially in weakly persons, and where the attacks recur periodically. This is another piece of homœopathic practice which has been appropriated by our brethren of the old school. The therapeutists of the stamp of Anstie and Ringer seem to rely much upon it: the latter praises it in the asthma of emphysema. In pneumonia Arsenic has found little employment as yet.

5. The action of Arsenic on the heart has been fully studied by the author I have so often cited, Dr. Imbert-Gourbeyre. In his treatise *de l' action de l' Arsenic sur le cœur* (Baillière, 1874) he adduces copious evidence of the elective affinity of the drug for this organ and of the profound changes it sets up. Of functional disorders he specifies palpitation and cardiac dyspnœa (to which he might have added præcordial

pain and anxiety, often severe); and as lesions produced in the heart he mentions endocarditis and hypertrophy. The heart sometimes also shares in the fatty-granular degeneration which occasionally results from arsenical poisoning.

This influence of Arsenic on the heart has been summed up by Trousseau and Pidoux in saying that it abolishes its contractility and often inflames its tissue. The feebleness of heart thus induced is probably an essential part of the prostration it causes, which is constantly accompanied with faintings;* and we find in practice that the pulse grows stronger under its influence. Its combination with lime (*Calcareo arsenica*) is an excellent cardiac tonic. But the power of the poison to inflame the endocardium has led us to use it freely in chronic organic diseases of the organ. In these—especially in dilatation and valvular mischief—the testimony to its value is loud and unanimous. It relieves pain, palpitation, and dyspnœa, besides having (as we shall see directly) a marked influence over the anasarca always imminent in these cases.

Such use of Arsenic, long familiar to us homœopaths, seems now finding its way into the opposite school, especially among the French. That they employ the arseniate of antimony probably makes little difference beyond reducing the dose of the more potent element in the combination. But we are indebted to our brethren for the demonstration of the power of the drug over *angina pectoris*, to which nevertheless it is quite homœopathic, as no poison causes such severe præcordial pain and anxiety. An accidental cure by Alexander, in the last century, first called attention to it; and the latest writer on the subject, Dr. Anstie, styles it "an invaluable remedy." He considers *angina pectoris* a cardiac neuralgia; and I believe that it is when it is so that Arsenic will do it so much good. But I have strong reason to think that it is occasionally a muscular rather than a neurotic affection; and here may come in other remedies, of which we have seen one in Hydrocyanic acid, and shall see another in Cuprum.

6. On the kidneys Arsenic exerts a very potent influence. In acute poisoning they share in the general irritation; so that their secretion is diminished or suppressed, and, if any urine is obtained, it is found to contain albumen. This presence of albumen is so constant a phenomenon that it has been assigned as a diagnostic mark between arsenical poison-

* "The poisonous or hurtful effects that we have to look out for, when arsenic has been prescribed, are a peculiar silvery whiteness of the tongue. . . . ; and, if the medicine be continued, *fainting* is often added" (Watson, *op. cit.*, ii., 785).

ing and antimonial. Of the more lasting renal effects of Arsenic we have full information from the experiments of Dr. Quaglio. He slowly poisoned six cats with the arsenite of potash, during periods of from one to ten months, and produced in all more or less completely developed Bright's disease. During life the urine was scanty, and contained albumen, fat-globules, renal epithelium, fibrin-casts, and blood-corpuscles; it was neutral in reaction, and the proportion of solids was below the standard. The animals died comatose, and after death their kidneys were found enlarged and hyperæmic, and the epithelial cells charged with fat and granules.

Correspondingly, while the ischuria of acute arsenical poisoning forms one element of its homœopathicity to cholera, its deeper effects have led to its use in Bright's disease. It is apparently the large white kidney—the "tubal nephritis" of Dr. Dickinson—to which it is a simile; and it is this form which seems to have been present in the cases of cure by it on record, which are numerous and brilliant.* Of the same nature is the post-scarlatinal nephritis, in which it is, perhaps, the favourite remedy in our school: it is certainly mine. It must be mentioned that in four out of the six cats experimented on by Dr. Quaglio there was found hypertrophy of the left ventricle. Dr. Buchner maintains that the renal mischief of Arsenic is always secondary to cardiac disease, and that the drug is only suitable to morbus Brightii thus arising. I cannot agree with him here, thinking both pathogenetic and clinical evidence to be against the theory. But a difficulty is created by the presence of hypertrophy of the ventricle under such circumstances, as it was supposed to belong only to granular degeneration. Dr. Dickinson now finds, however, that it may occur in tubular nephritis also, at any rate (as Baertels says) when secondary contraction has set in. The relation of Arsenic to inflammations of the serous membranes is an important element in its homœopathicity to Bright's disease, acute and chronic; and indicates its employment, if not previously, at least when these occur.

It is in this place that we must speak of the power of Arsenic over dropsy. Its tendency to cause œdematous swellings, local or general, has been noticed by many observers, and among them by Fowler, whose name is indissolubly associated with the liquor potassæ arsenitis of the Pharmacopœia. Dr. Imbert-Gourbeyre has collected their

* See *Lancet*, Jan. 18, 1862; Black, p. 17, note 1; and *Brit. Journ. of Hom.*, xii., 485; xiii., 556; xiv., 20; xvi., 219; xvii., 545, 573.

testimony in a chapter on the subject in his *l' action de l' Arsenic sur la peau*. One of the latest authors who has mentioned the arsenical anasarca is Dr. Weir Mitchell, of America.* In the cases which came under his notice he examined the urine, and generally found evidence, though slight, of renal disorder, either albuminuria or a few pale tubercasts. Stillé's description of the dropsy of Arsenic points plainly to its renal origin. "Under the influence of continued small doses," he writes, "a characteristic puffiness of the face arises, with œdema of the eyelids, which at first is most visible in the morning, but is afterwards more permanent and extensive, occupying the ankles, the limbs, and the abdomen with a dropsical effusion." It may also lead to dropsy by its depressing effect on the heart, and by the impoverishing influence which we shall see it exerting upon the blood. Whether from one or all of these causes, Arsenic is undoubtedly "hydro-pigenic;" and among homœopaths it is always esteemed the most potent "hydropifuge." Thus Bähr writes—"Arsenicum is our most important diuretic. It is suitable in all forms of dropsy, more particularly in dropsy depending upon heart disease and œdema of the lungs. After giving Arsenicum, a copious diuresis will sometimes set in with astonishing rapidity, after which the dropsical swelling speedily disappears. The result is most doubtful if we have only ascites to contend against, and inasmuch as the medicine shows its good effects in a few days already, after a few doses have been taken, it is useless to continue it for a longer period, in the vain hope of eliciting good effects from it by persisting in its use." He recommends the low triturations; but the higher dilutions have often been reported as doing great things, in cardiac dropsy especially.†

III. I come now to the neurotic influence of Arsenic, and the part played by it in the treatment of the neuroses.

It is universally recognised that Arsenic, like nitrate of silver, affects the nervous centres after its irritant influence has been more or less exhausted. The disorder induced sometimes takes the form of tremors and twitches, sometimes of epilepsy; more rarely of tetanus. But the most frequent effect is paralysis. Dr. Imbert-Gourbeyre has given us some "Etudes sur la Paralyse Arsenicale" in the *Gazette Médicale de Paris* for 1858, in which he cites thirty-one observations of its occurrence. It is nearly always paraplegic; though a case of arsenical hemiplegia is related, in which also the laryngo-

* *New York Medical Journal*, June, 1865.

† See *New York State Hom. Society's Transactions*, iv., 337.

scope detected paralysis of the vocal cord on the affected side.* The arms are involved nearly as often as the legs. Cramps and contractions in the paralysed limbs are common; but the most invariable concomitant is neuralgia. This generally coexists with loss of sensibility, at least to everything but cold, by which also the neuralgic pains are brought on or aggravated. The paralysis is most complete in the hands and feet, and spreads, if it do so, periphero-centrad. There is a sense of great restlessness in the limbs when the pains are present. The seat of the mischief seems to be the spinal cord. In a case observed by Huss the spine was found tender on pressure; and Wibmer says that in autopsies the cord is always seen to be affected, especially with congestion of the lumbar portion and cauda equina. Velpeau now announces that he has succeeded in developing an acute myelitis with it in a dog, and three undoubted cases of this inflammation in the human subject have been traced to its influence.†

Arsenic may thus occasionally find place in the treatment of myelitis and of epilepsy; but we have as yet little experience of it in these diseases. On the other hand, it is the prince of remedies in chorea and in neuralgia, to both of which the above facts show it to be homœopathic. "In simple, uncomplicated cases of chorea it is," Dr. Ringer says, "by far the best remedy;" and Dr. Warburton Begbie says that in an experience of nearly thirty years, and in a large number of cases, he has never known it to fail. Neuralgia is a still more important, because more frequent, disorder; and one cannot speak too highly of Arsenic in its treatment. In this estimate I have the concurrence of the late lamented Dr. Anstie, in his brilliant treatise on the disease. But I cannot at all concur in his view of the rationale of its action, which is that the drug has "a happy combination of powers as a blood-tonic and a special stimulant of the nervous system." The "blood-tonic" properties he ascribes to it are only seen in disease, as in malarial cachexia and the instance he cites in proof—of anæmic children suffering from chorea after rheumatism. Its influence in health is, as we shall see directly, of a very different kind. Its "special stimulation" of the nervous system is hardly shown by sensory paralysis, which he himself says is the chief chronic poisonous effect of Arsenic in this region; nor would he at least argue that such an influence is anti-pathic to nerve-pain, for he has demonstrated the consistency and frequent coincidence of anæsthesia with neuralgia. When

* *Med. Times and Gazette*, Jan. 11th, 1862.

† See *L'Art Médical*, xliiii., 48.

we consider, then, the undoubted production of neuralgic pains by Arsenic, and the excellent results obtained from it with the infinitesimal doses of homœopathy, I submit that we are shut up to the admission that its action is an instance of the operation of the law of similars.

Our experience certainly is that it far excels all other drugs in the treatment of the idiopathic disorder. The arsenical neuralgia is pure, *i.e.*, neither inflammatory, toxæmic, nor reflex. The pain is burning and agonising, accompanied with great restlessness and anguish; it is often intermittent, with tendency to periodic return; is generally made worse (even though at first relieved) by the application of cold; is worse at rest, and diminished during exercise; and usually affects (at least in the first instance) the left side. Such a neuralgia you often meet with as a consequence of malaria or influenza,—still more frequently as a symptom of pure debility. If you will read the cases published by Dr. Quin in the fourth volume, and myself in the twenty-second and thirty-first volumes of the *British Journal of Homœopathy*, you will see evidence that Arsenic exerts a magical influence over pure neuralgiæ, wherever occurring. Some of these were prosopalgia, some gastralgiæ, one sciatica; and of the first more than one were instances of the terrible “tic-douloureux,” or “epileptiform neuralgia,” usually reckoned so intractable, but which Dr. Quin’s skilful use of Arsenic entirely and permanently removed.

Here also the comparison of Arsenic with Aconite obviously suggests itself. In both there is the combination of anæsthesia with neuralgia; but at this point the resemblance ceases. The neuralgia which Aconite induces is among its acute effects: it corresponds accordingly to the idiopathic affection when of recent origin and in fairly healthy subjects. The arsenical neuralgia is always associated with paralysis, and the drug becomes a remedy most appropriately in persons advanced in life or of exhausted constitution, where degenerative change may well be supposed to exist at the nerve-roots. Experience has fully confirmed these indications for the two drugs.

Before leaving the nervous system I must speak of the mental and moral symptoms which characterise the sufferings from Arsenic. These are so constant that I cannot but refer them to a direct action upon the ideational and emotional centres. As in the motor and sensory sphere, we have the mingling of depression and irritation. As there the paralysis is accompanied with cramps, and the anæsthesia with

neuralgia, so here there is melancholy, but also restlessness, irritability, anxiety, and anguish. In some forms of melancholia and hypochondriasis we may take advantage of this action, as others have done with success.*

In the three great groups which have now passed before us—the fevers, the inflammations, and the neuroses—the part of Arsenic, as a poison and as a remedy, is mainly played. But there are other features of its action on which we must dwell, before we quit its consideration.

1. I must speak of the profound influence which Arsenic exerts upon the life of the blood. The researches of Schmidt, Sturzwage, and Harley have made it evident that it acts as a direct poison to the red corpuscles, either when formed or in the course of production. In small doses the only result of this influence of the drug is diminished metamorphosis of the food and tissues,—the excretion of carbonic acid and urea becoming notably less, and the change of the alimentary sugar into glycogen being impeded. Hence the *pseudo* “good condition” of the Styrian arsenicophagi, and of the Vienna horses, to whom the stable-keepers are accustomed to give the drug with the view of making them sleek and fat. These effects are reasonably traced to lowered functional power of the red corpuscles as oxygen-carriers, and a consequent sub-oxidation of the system,—the carbonaceous compounds, unconsumed, depositing themselves in the form of fat. A further degree of the same influence produces the “grayish cachectic appearance,” and “all kinds of anæmic troubles,” which Naunyn includes among the chronic effects of Arsenic; and, finally, the petechial effusions and hæmorrhages so often seen—the former of which have been studied by Dr. Imbert-Gourbeyre. In poisoning by arseniuretted hydrogen the red corpuscles suffer such rapid disintegration that abundant hæmoglobinuria is noted.

I may sum up this evidence in the words of Stillé. “The microscopical and chemical peculiarities of the blood under the action of Arsenic are of great importance in relation to the changes which the solids undergo, to the hæmorrhages from the nose, the digestive canal, the urinary passages, to the ecchymosis found in the lungs, pleura, pericardium, and heart, and to the occurrence of dropsy during the use of this medicine. The production of serous effusions as an ordinary effect, and of chronic anæmia as the consequence of prolonged exposure to arsenical influences, appear to furnish grounds for

* See Wurmb, §, 16; *Hom. Times*, vii., 2.

believing that, in sufficient doses, Arsenic, like Mercury, tends to disintegrate the blood-corpuscles, to diminish the proportion of fibrin, and possibly, also, to attack still more directly the vital principle upon which the normal qualities of the blood depend." Since we have been able to count the blood-corpuscles, this inference has been confirmed by actual inspection. "Drs. Cutler and Bradford, from their experiments conducted according to Malassez' method, are led to conclude that Arsenic given in health causes a progressive decrease of the number of the red and especially of the white corpuscles" (Ringer).

It is now obvious in what fashion Arsenic is a "blood-tonic." It is so upon the principle that likes are cured by likes—that it enriches the blood in disease because it impoverishes it in health. But the likeness must be complete if the medicine is to be entirely appropriate and strikingly curative. Arsenic is, as Dr. Bartholow says, "one of the most valuable agents which we possess in the treatment of chlorosis and anæmia," but his only indication for its distinctive place is that it is "especially adapted to those cases in which iron does not agree or fails of effect." We, on the other hand, should not think of giving Ferrum in those cases to which Arsenic is suitable, and which we should recognise beforehand. "Excessive prostration, considerable œdema, violent and irregular palpitations, with marked appetite for acids and brandy, and, above all, extreme anxiety"—such are Dr. Jousset's indications for it in chlorosis, in which he recognises it as one of our best remedies, especially where menorrhagia is present rather than the opposite state. "A high degree of debility, with excessive irritability, œdematous paleness, cardiac phenomena even during rest and complete gastro-ataxia" are Bähr's signs for its choice in this affection: in which, he says, "it is remarkable how soon after the administration of Arsenicum the normal appetite returns, and the sickly complexion is replaced by a brighter hue." In anæmia otherwise occurring, Arsenic is most suitable when the poverty of blood has arisen from some miasmatic influence or exhausting toxæmic disease. Such a condition is especially seen in the malarial cachexia, where in both schools, and in doses most wide apart in quantity, the drug is reckoned of sovereign efficacy. Arsenic bids fair, moreover, to be our great remedy in the malady now recognised as idiopathic, or progressive pernicious, anæmia. The fever, the œdema and the petechial effusion which characterise this form of the disease all belong to our drug. Iron has been found quite

ineffective in it; and a case has been published by an old-school physician, Dr. Bramwell, in which Arsenic proved completely curative.* More recently, our excellent colleague, Dr. C. H. Blackley, of Manchester, has communicated† to the British Homœopathic Society four cases which have come under his notice, in which a cure of this disease was effected by Arsenic, and in doses much smaller than those employed by Dr. Bramwell.

2. I would further direct your attention to the ulceration of the skin which is apt to follow upon acute, and to manifest itself in chronic, arsenical poisoning, and whose tendency is always to phagedæna and gangrene. I need not quote authorities on this point, but will use the fact as a peg on which to hang the evidence I shall bring before you of the remedial value of Arsenic in malignant ulcerations, including cancer. It has some reputation in rodent ulcer. In lupus exedens Mr. Hunt says that it is "not only our sheet-anchor but absolutely a specific," warning us that it must be persevered with for a length of time—"half a life-time if necessary."‡ Of still greater importance is its use in carcinomatous affections. Here again I may quote Mr. Hunt, as one whose experience with this medicine is second to no man's. "Arsenic is always useful and necessary in cancer. Although I have rarely found a malignant tumour dissipated by Arsenic, I have as rarely known the mineral fail to check its onward course. It most assuredly exerts, when discreetly administered, a certain amount of specific influence over this disease." I think he might have spoken still more unreservedly, had he used his Arsenic exclusively or especially for carcinomatous *ulceration*. In the glandular tumours of this disease I prefer Hydrastis, and in its fungoid and bleeding growths Phosphorus; but in epithelial cancer—as of the lip, face, and tongue—Arsenic has unquestionably proved curative, and that not seldom. Dr. Bartholow recognises its power here, though doubting it as to other forms of cancer. Even in these, however, Arsenic may do much to relieve the lancinating

* *Med. Times and Gazette*, Oct. 20, 1877.

† See *Annals*, ix., 171.

‡ "In its operation, Arsenic is the slowest by far of all medicines. It never takes disease by storm, but gradually loosens its hold. . . . Month after month, and year after year, you watch for improvement under its use, and find none, until at length you utterly despair of making any impression; and perhaps the very next week you examine the patient, and the crust has fallen off, the ulcer healed, and the disease of twenty years has gone, never to return." (*Brit. Med. Journ.*, Jan., 4, 1862.)

pains, and promote a better sanguification in the patients. Dr. Walshe prefers the iodide of Arsenic to any other remedy in this disease.

And now I must draw this long dissertation to a close. I would only ask you to note, in conclusion, the striking testimony borne by the drug to the validity of the method of Hahnemann. Because it is the greatest of poisons, it is the greatest of remedies; and its poisonous and remedial effects go hand in hand. Every morbid condition in which it has gained repute it has been seen to cause; and, by working the same method since, its therapeutic sphere has been widely extended. To ague, cutaneous disease, chorea and angina pectoris, we have added—among other diseases—typhoid and hectic conditions, cholera, cancrum oris, gastritis, chronic diarrhœa, scrofulous ophthalmia, asthma, chronic cardiac and renal disease, and serous effusions and dropsies. Truly a goodly list; and it might be yet extended. For myself I can say this, that were I reduced to two medicines only out of the whole Pharmacopœia, the two I should choose would be Aconite and Arsenic.

The action of Arsenic is so extensive, that it has points of analogy with nearly every medicine in the *Materia Medica*. Those which resemble it most closely are *Mercurius corrosivus*, *Kali bichromicum*, and *Iodine*.

Like all polychrests, Arsenic must be given in various dilutions to obtain its full efficacy. In cholera, typhoid conditions, cancer, chronic menorrhagia and cutaneous diseases we may use the first trituration of arsenious acid, or (which I prefer) the liquor potassæ arsenitis, which contains gr. j of arsenious acid in ℞cxxx. The 3rd decimal trituration is a very useful potency for chronic diarrhœa, and for chronic inflammation of those tissues to which Arsenic is irritant. The 6th dilution answers admirably for influenza, coryza, acute serous effusion, and other acute inflammations to which the drug is homœopathic. The potencies from the 6th upward have proved most serviceable in neuralgia, in chronic intermittents, and in asthma.

A word as to compounds of Arsenic. The iodide—*Arsenicum iodatum*—has been proved by Drs. Bcebe and Blakeley on their own persons, the 1st and 2nd decimal triturations being used. No special effects were obtained. Dr. Hale esteems it highly for catarrhs of any part with "peculiar and persistently irritating, corrosive character of all discharges." He reports a cure of a malignant-looking

axillary induration by it, and a similar condition of the cervix uteri, suggesting scirrhus, has more than once disappeared under its use. The arseniate of soda—*Natrum arsenicatum*—was very thoroughly proved in 1875 by the Alleghany County Society. The results obtained may be read in the *Hahnemannian Monthly* for 1876 and 1878, and in Allen's *Encyclopædia*. The effect of the drug on the mucous membrane of the fauces and posterior nares was extremely marked; and I have followed some of the provers themselves in using it, with much satisfaction, in superficial inflammatory conditions of these parts.

LECTURE XVII.

ARUM, ASAFETIDA, ASARUM, ASCLEPIAS, ASTERIAS, AURUM,
BAPTISIA.

We have to consider to-day a few medicines of small importance, along with two of higher rank in the shape of Arum and Baptisia.

The first in order is

Arum.

Under this head I include both the *Arum maculatum*—the “lords and ladies” of our popular nomenclature—and the *Arum triphyllum*, or Indian turnip, which is its American analogue. Of the former we prepare a tincture from the fresh root: of the latter the best preparation seems to be a trituration of the expressed juice of the same part with sugar of milk.

Arum maculatum was proved by Dr. Hering, and *Arum triphyllum* by Dr. Lippe. Their results, with symptoms observed in poisoning by the former species, are given in Allen's *Encyclopædia*, and their clinical applications are described by Dr. Hale in his *New Remedies*.

The one interesting point about Arum is the application which has been made of its local effects on the mouth to a corresponding condition when occurring in malignant scarlatina. The following description has been given of the former:—“After chewing a young leaf-stalk for a few seconds, a very intense, prickling, stinging pain was felt upon the tongue and mucous membrane of the lips and throat, accompanied with a flow of saliva, which seemed to relieve the pain a little—the pains were as if a hundred little needles had been run into the tongue and lips.” This was from the *Arum maculatum*, but Dr. Lippe has found some excellent results from the *Arum triphyllum* when scarlatinal and other patients

have shown great irritation of the buccal mucous membrane. "The most indicative symptoms," he says, "are the very sore feeling in the mouth, the redness of the tongue, the elevated papillæ, the cracked lips and corners of the mouth." The nose also may be sore, with or without much coryza. Dr. Guernsey speaks of raw, bloody surfaces on these parts as characteristic of *Arum*, with which there is much itching, so that children will often pick at and bore into the places, though so doing causes great pain, and makes them scream. He further indicates an acrid coryza as calling for it.

Dr. Lippe commends the drug also for clergyman's sore throat. He gives the dilutions from the sixth upwards.

I have next to speak of

Asafœtida.

The drug known by this name is the dried juice of the root of the Indian plant which yields it. From the *Asafœtida* of commerce a tincture is prepared in the usual manner for homœopathic use.

The chief proving of *Asafœtida* is that of Jörg, in which twelve persons took part. Some additional experiments are collated with his in Dr. Allen's article, which gives 585 symptoms to the drug.

Jörg's results are fairly summed up thus by Dr. Phillips. "The administration of small doses causes alliaceous eructations; the digestion is impaired; there are burning sensations in the fauces; there is pain, fulness, and oppression of the stomach; the abdomen becomes distended with flatus, which, when discharged, is of a very fœtid and disagreeable character; there is frequent inclination to evacuate the bowels, and the discharge is thin and watery. The urine is not augmented in quantity, but becomes acrid, and communicates a sense of burning. The pulse is at the same time quickened the head becomes more or less affected with flying pains, often attended with much giddiness; and various nervous and hysterical phenomena make their appearance. Like the pulse, the respiration becomes quickened, and the secretion of the bronchial membrane is promoted." Pereira adds that "the urino-genital apparatus appeared to be specifically affected, for in the males there was an increase of the venereal feelings, with irritation about the glans penis, while in the females the catamenial discharge appeared before its time, and uterine

pain was experienced." Trinks mentions a case in which (in large doses) it caused nymphomania.

Our main use of Asafœtida is as a remedy for hysterical troubles. A symptom repeatedly observed by two of the provers strikingly resembles the globus hystericus; and hysterical cough, tympanites and asthma (it constricted the chest in some) come within its range of influence. I confess that I myself rarely use it, preferring the more agreeable Moschus, whose action seems so very similar. It is only in tympanitic distension of the abdomen that I find it preferable. Dr. Ringer recommends it here, in doses, for children, of less than a drop of the tincture. Dr. Guernsey, however, thinks it quite the best remedy when hysterical symptoms manifest themselves in the œsophagus, and Dr. Hoyne confirms this experience. Quite another, and a very inexplicable action of Asafœtida, is its influence upon diseases of bone. Dr. Holcombe writes, "I have twice verified the value of this remedy in scrofulous caries of the bones. I used the 12th dilution. It is singular that a remedy, whose principal applications are to the most fugitive and sympathetic disturbances of the nervous system, should extend its curative power to the most deep-seated and chronic organic lesions." It is also highly commended in acute periostitis. I give you these facts as they stand. For myself, I have given Asafœtida very persistently in several cases of chronic caries, without being able to discern the slightest result from its use. I should say that it is from the old school that its repute here originates. Stillé quotes Neumann as speaking of its utility as "generally admitted." Dr. Hoyne cites several instances of its beneficial use in syphilitic disease. Asafœtida is also reputed of value when the milk of nursing mothers is deficient.* In all these affections, *hyper-sensitiveness* is said by Dr. Guernsey to indicate the drug.

The relations of Asafœtida as a nervine are with *Ambra*, *Moschus*, and *Valerian*. Its influence upon bone (if a fact) ranks it with the metals and metalloids *Aurum*, *Fluoric acid*, *Mercurius*, *Phosphorus*, and *Silica*.

In hysteric disorders, the dose should probably be from the 2nd downwards. In diseases of bone Asafœtida is praised in the dilutions from 12 to 30.

* *Brit. Journ. of Hom.*, ii., 417.

I am entering a region unknown to you when I proceed to speak of

Asarum Europæum,

or Asarabacca. A tincture is prepared from the entire plant.

Asarum was proved by Hahnemann and four others: the pathogenesis, containing 270 symptoms, is in the third volume of the *Materia Medica Pura*. There is a good article upon it (the last published, I am sorry to say) in the *New Materia Medica*.

That Asarum is a local irritant, of the *Elatarium* and *Veratrum* type, to the mucous membranes generally, acting as emetic, and purgative, is pretty well known; but the fact has little bearing on practice. In Hahnemann's provings we are most struck by, as general symptoms, excessive sensibility and general chilliness without thirst: in particular regions, depression of the cerebral functions with heavy headache; weak sight and twitching of the eyelids; still more striking dulness of hearing, as though a pellicle were stretched over the meatus auditorius; passing of much mucus from the bowels;* marked stitching in the lungs; a great deal of myalgia in the back and lower extremities. Asarum has hardly ever been used in disease: the above symptoms may occasionally help you to its phenomenal application. It is said to be suitable to chilly subjects; and to remove darting pains after operations on the eyes. It has a great reputation in Russia as a remedy for the effects of excessive drinking.

I can say nothing as to the analogous medicines or the dose of Asarum.

Of the plants known by the name of *Asclepias* we have information as to three, the *A. incarnata*, *A. Syriaca*, and *A. tuberosa*. The first and second seem to have some uterine influence, and the latter of these is a potent diuretic, increasing the solid constituents as well as the fluid portion of the urine. This we learn from Dr. Hale's *New Remedies*. But the same author communicates facts about the

Asclepias tuberosa

which fairly give it a place among homœopathic remedies. It is used as a tincture or trituration made from the root.

* The symptom "scanty, yellow, mucous stool, in one string," has been verified by three cases of cure by Dr. E. M. Hale (*Brit. Journ. of Hom.*, xxvi., 331).

The significant point about this plant is that it is popularly known as "pleurisy root." Such terms usually have more or less warrant from fact, and that it is so in the present case appears from a proving instituted by Dr. Thomas Nichol, of Montreal. Large doses caused only colic and purging; but from the first decimal dilution he got decided pleuritic symptoms. Thus:—"throughout the evening the pains kept increasing, making respiration painful, especially at the base of the left lung, which is dull on percussion, while the cough is dry and spasmodic." "The pain is very acute on the right side, and seems to be seated in the pleura." The remedy deserves a trial.

The next medicine I have to introduce you to is a novel one. It is made from the star-fish,

Asterias rubens,

by bruising the dried fish in a mortar and triturating with milk-sugar.

Our sole knowledge concerning Asterias is derived from the proving and clinical cases furnished by the late Dr. Petroz. They are translated from the first volume of the *Journal de la Société Gallicane* in Metcalf's *American Provings*. Seven persons took part in the experiments; but no information is given as to the size or frequency of the doses they took.

Dr. Petroz makes the following remark:—"Experimentation on the healthy gives readily, and often in profusion, symptoms indicating disturbance of function; but it never goes on to alteration of tissue, rarely even to the earliest indications thereof. We must therefore have recourse to clinical experience. Its teaching is sure, when time has confirmed it." To no medicine does this statement apply better than to Asterias rubens. The skin symptoms alone are well marked; and these have led to its employment in chronic ulceration, even when of a cancerous nature, with reported success. Its action seems limited to the left side of the body. It has also cured a case of cerebral congestion with obstinate constipation in an old gentleman: I have myself found it of great use in a similar case. Asterias had a reputation among the ancients for its efficacy in pleurisy; and Petroz cites two cases in which much benefit resulted from its use in infinitesimal doses. I have little personal experience with this remedy.

Teste classes it (with Petroz' assent) in his group headed by Sulphur, and including Bovista, *Æthusa*, and *Cicuta*.

The higher dilutions (12 to 24) were employed in all cases on record of relief or cure by Asterias.

We now come to a medicine which homœopathy has done much to rescue from unmerited neglect, and to restore to a high place in therapeutics. I speak of gold. There is so little difference between the action of the metal and its salts that I shall speak of them generally as

Aurum.

We use the pure metal in the form of a trituration of the finest gold leaf, which was that employed by Hahnemann in his provings. The trichloride—*A. muriaticum*—is also used in homœopathic practice : its solution is aqueous at first and alcoholic afterwards.

The first proving of Aurum appears in the fourth volume of the *Reine Arzneimittellehre*. It contains 137 symptoms observed by Hahnemann himself ; 198 from 7 fellow-observers ; and 3 from authors. There are also a few symptoms from *A. muriaticum* and *A. fulminans*. Those of the metal itself were obtained from one or two hundred grains of the first trituration ; so that they have uncommon value. There is a second pathogenesis in the *Chronischen Krankheiten*. It contains 82 fresh symptoms, of which 75 are Hahnemann's own. The worth of these, according to the facts we have ascertained, is more than problematical. Dr. Allen gives symptoms, both of Aurum metallicum and of Aurum muriaticum, from additional sources ; and some provings of Aurum sulphuratum, and of the chloride of gold and sodium. A valuable monograph on the drug has recently been given us by Dr. Burnett,* which contains a further proving on his own person.

Hahnemann's preface to Aurum is very interesting. He tells us that the physicians of his time so unanimously proclaimed the inertness of metallic gold, that he was at first led to use the muriate. Subsequently, however, he found that the Arabian physicians had been in the habit of using the metal itself in a fine powder ; and had praised it as remedial in those very affections for which he had found the muriate beneficial. He then prepared a first trituration of gold-leaf in the usual way, and proved it as described. From the symptoms produced he found that the drug was perfectly homœopathic to the maladies for which the Arabians had given it ; and,

* *Gold as a remedy in disease.* 1879.

guided by the same principle of similarity, he found it—in the 1st and 2nd triturations—curative in several other important affections.

He could hardly have been aware, when (in 1818) he first stated this in print, that in 1811 Chrestien had revived in Paris the use of powdered gold. In his *Observations sur un nouveau remède dans le traitement des maladies vénériennes et lymphatiques* he communicates a number of cases illustrative of its value in syphilis, scrofula, and even in uterine scirrhus; and states that the finely powdered leaf has the same effect as the oxide or the muriate. Niel and Legrand have handed on the tradition, so that a considerable body of information relative to the action of gold has accumulated, and may be read in the account of it given by Trousseau and Pidoux.

The anti-syphilitic virtues thus ascribed to gold, though only a revival of its former repute (as Dr. Burnett has shown), and though for a time very generally acknowledged, meet with little recognition in the old school at the present day. The drug is not mentioned by Wood, Ringer, or Stillé. But among homœopaths it holds a high place in many of the tertiary manifestations of the disease, especially the sarcocele, the osseous affections, and the cachexia. It does so because the provings have revealed an elective affinity on its part for the organs involved. The bones are affected with burning and boring pain, sometimes—especially in the face and feet—accompanied by redness and swelling, sometimes—as in the head—with nodes; and in one prover swelling and tenderness of the right testicle came on for some hours daily. Dr. Burnett also experienced its effect on these organs.

But the provings go farther than this. In the first place they show a marked melancholia as produced by Aurum, and this of a distinctly suicidal character. One of the experimenters “imagined himself not fit for this world, and longed for death: thinking of death gave him intense joy.” Then they show a strong action on the nose, which is inflamed without, and blocked up with ulcers and crusts within; with putrid smell when blowing it. Dr. Morse records an interesting case in which a syphilitic patient, being overdosed with gold by a quack, developed both sets of symptoms.* These two actions have led to the chief uses of Aurum in the homœopathic school. In suicidal melancholy Hahnemann himself repeatedly extols its virtues; and Drs. Chapman, Bayes, and Sharp speak in the same sense. Whether this affection is one primarily seated in the brain is doubtful, from the other facts

* *Hahn. Monthly*, xii., 506.

about the action of Aurum. I am myself inclined to think it a hypochondriasis having its seat either in the liver or in the testes.* Dr. Bayes states that the cases in which he has seen Aurum curative have presented indications of congestion of the head and liver, with fixed colour in the face, and a yellowish tinge. Suicidal melancholia, moreover, is not an unfrequent accompaniment of testicular disease. The nasal action of the metal has led to its successful use in chronic rhinitis, in crusts of the nostrils, and above all in scrofulous and syphilitic ozæna. Many testimonies to and illustrations of its value in this complaint are on record.

Again, one of the affections specified by Hahnemann as cured by him with gold was a mercurial caries of the nasal and palatine bones. The French experience has shown that the action of the metal is closely analogous to that of Mercury, causing—as it does—its salivation (without much if any affection of the gums) and its erethistic fever with diuresis and sweat. Thus Aurum has come to be reputed among us as a remedy for chronic hydrargyrosis; in which we have the support of Dietrich. It is an admirable medicine for those constitutions broken down by the combined influence of syphilis and Mercury which sometimes come before us for treatment. I once gave to a poor fellow thus afflicted the first trituration of gold. He came back to me in a week's time, looking quite another man, and exclaimed—"Surely you have given me the elixir of life!" Dr. Chapman has narrated a similar case in the seventh volume of the *British Journal of Homœopathy* (p. 396).

Once more. The action of Aurum on the nasal mucous membrane has naturally suggested its use in affections of that offset of it which we call the conjunctiva. Proving has not yet manifested the influence of the drug here; but there are a good many cases of chronic scrofulous ophthalmia on record in

* Dr. Burnett (p. 136) challenges this opinion of mine, which he is of course quite in his rights in doing. But he is in error when he discusses it as if it were a "theory" about the seat of hypochondriasis. It refers only to the form of this mental disorder to which Aurum is homœopathic, which I judge—from the concomitants and the general action of the drug—to be that connected with hepatic or testicular disorder rather than one purely cerebral. Dr. Burnett himself supplies an excellent instance of its efficacy in the second of the two connexions I have specified, when he recommends it for pining, low-spirited boys, and says that, in these cases, if we examine the testes, we shall "find them mere pendent shreds, just on the verge of atrophy." When under Aurum they have brightened up and become like other boys—"look again," he writes, "at the before-mentioned glands, and you will find them larger, firm, and well suspended."

which it has proved very effectual, even to restoring transparency to the opaque cornea. It seems to have a special action on this membrane, as Drs. Allen and Norton speak highly of it for interstitial keratitis, and Mr. Clifton has lately communicated a case of the syphilitic form of the disease, in which its beneficial effects were unquestionable.

In these regions of action—in affections of the bones and glands, and of the oculo-nasal mucous membrane, especially when of syphilitic, mercurial, or scrofulous origin—Aurum has made its mark among us. I may add to these that in the Leopoldstadt Hospital at Vienna it was the favourite remedy for periostitis; and cured one severe case of albuminuria, with general and local dropsy. If I am right, too, in referring its melancholia to the liver, it is but an action of the same kind when we hear of it as occasionally curative in ascites from hepatic disease—possibly cirrhosis; and in chronic icterus. But I think that the future use of Aurum will extend beyond this range. We have not yet utilised the rushes of blood to head and chest it so markedly causes, though Dierbach has recorded his experience of its value in disturbance of the pulmonary circulation after hæmorrhages.* We have not yet ascertained if it affects the female sexual system as it does the male; though the salacity and erections it causes in the latter are paralleled by the menorrhagia set up in the former. We have not determined the precise nature of the dyspnoea caused by it, or applied to practice its undoubted action upon the heart.† I think, too, that strumous and syphilitic keratitis are not the only affections of the eye it can influence. When we read of Herrmann—its most thorough prover—experiencing “excessive *tension* in the eyes,” now making sight indistinct, as if a black crape were drawn before the eyes, now causing hemiopia, in which only the lower half of objects is visible, and now diplopia—I think that we may find some work for the drug in the treatment of glaucoma. The horizontal hemiopia of the drug has led Drs. Allen and Norton to its use in detached retina, and with great advantage. Aurum seems to me one of the medicines of the future.

The only writer in the English language who gives any independent account of Aurum is Dr. Bartholow; and he, drawing partly from French and partly from homœopathic sources, has made out a list of its applications not unlike those which I have now mentioned. He finds it—in fractional doses

* See also Burnett, p. 124—126.

† Dr. Burnett relates a case of rheumatic endocarditis, in which it seemed very effective (p. 127).

of the chloride—useful in the granular and waxy forms of Bright's kidney. He cites also the experience of Martini as to its favourable action in chronic affections of the uterus and ovaries. Dr. Tritscher, in our own school, has carried out this treatment, and reports excellent results in indurations of the uterus and ovarian tumours. He gives from one to six grains of the first trituration of the chloride of gold and sodium.

The effects of Aurum take long to excite (10-15 days), and they are slow to decline.

After Mercury, the most striking analogue of Aurum is *Platina*, which is to the female sex what gold is to the male. Its points of similarity and difference with Mercury, Arsenic, Silica, and Phosphorus are well brought out by Dr. H. Goullon in a paper on the drug translated from the *Allg. Hom. Zeitung* in the twenty-second volume of the *North American Journal of Homœopathy*.

Hahnemann's published experience with Aurum was gained with the 1st and 2nd triturations; but subsequently he resorted to the 12th and at last to the 30th. His disciples (including Dr. Burnett) seem to have followed his earlier rather than his later practice in this matter.

I would speak last of the

Baptisia tinctoria.

This is the "wild indigo" of North America. We make a tincture of the bark of the root.

Short provings of *Baptisia*, made by seven persons, may be found in the fifth and seventh volumes of the *North American Journal of Homœopathy*. These, with further pathogenetic and clinical facts, are collected by Dr. Hale in the article on the drug in the second edition of his *New Remedies*, and by Dr. Allen in his *Encyclopædia*, where the drug has 367 symptoms. There are two monographs extant on the use of *Baptisia* in typhoid fever,—one, published separately, by Dr. Bayes (1872); the other, by myself, read as a paper before the British Homœopathic Congress of 1872, and printed in the *Monthly Homœopathic Review* of that year.

It is on this point that the interest of *Baptisia* is centred. I have collected, in the paper referred to, fifty-three recorded cases of continued fever, in all of which the effect of the medicine was either to induce a speedy crisis, or materially to abate and curtail the disease. In the discussion which followed its

reading at the Congress speaker after speaker rose up to confirm from his own experience this estimate of its value; and there was not a dissentient voice. Two of those who spoke were from the United States; and it was from thence that we first heard of its virtues and reputation. Among the reports examined in the paper is one of the treatment of the "colonial fever" of Melbourne; and Dr. Kitching has since given us his experience of the corresponding disorder at the Cape, where he has found Baptisia as potent as Dr. Madden found it in Victoria.* So from four continents the fame of the medicine comes borne to us; and we cannot but give it a full consideration and trial.

The first question must be as to the nature of the continued fever in which Baptisia has been found so effective. It is described in the records under several names—"typhus," "typhoid," "continued," "gastric," "bilious." Is it nevertheless in all the one essential fever we know as "typhoid" or "enteric?" or do some of the cases come within other categories?

The four distinct forms of idiopathic fever which the labours of Stewart, of Jenner, and of Henderson have defined, are so universally recognised that I need not dwell upon them. The only one which concerns us here is the so-called "febricula." This is described as a primary fever—not catarrhal or sympathetic—pretty closely resembling in symptoms the onset of the other forms, but differenced in this, that it rapidly reaches its maximum, and as rapidly subsides, within, at the most, five days. It has no local complication or specific eruption. Now it is quite possible that some of the *sporadic* cases where the disease has broken up under Baptisia have been instances of this disorder, and four out of the fifty-three cases I have collated are perhaps invalidated on this account. But no such explanation is admissible as regards the remainder of the single cases in which it displayed curative powers, as all these were of more prolonged duration; while in the epidemics reported by two of the observers, it is noted that under old school treatment the fever lasted two, three, or four weeks, and in two cases under other homœopathic remedies (Aconite and Bryonia) for twelve days. That under Baptisia it terminated not later than the fifth day is therefore no proof that it was febricula.

But is there yet another form of continued fever, resembling typhoid rather than febricula in its duration and progress, yet specifically distinct? and is it this disease in which the good

* See *Monthly Hom. Review*, xix., 207.

work of *Baptisia* has been done? This is a more difficult question. Jenner, Trousseau and Murchison seem to answer it in the negative: they think that all the varieties of fever described by the old nosologists—gastric, bilious, mucous, nervous, putrid, and so forth—fall under one or other of the four types now recognised. But the Nomenclature of our College of Physicians gives us a “common continued fever,” as distinct from either typhus, typhoid, relapsing fever, or febricula; and Dr. Aitken cites several testimonies, direct or indirect, in favour of the existence of such a species. The opinion of several of our own school who have expressed themselves on the subject is of the same tenor. Thus—Dr. Russell, in his *Clinical Lectures*, writes: “I mean by ‘gastric fever’ a non-infectious continued fever, which has no regular course; in which there is no eruption, and which is not attended with diarrhœa or intestinal affection.” Dr. Jousset also maintains the existence of a “fièvre synoque,” specifically distinct from the “fièvre éphémère” and “fièvre typhoïde” which occur in France as in this country. I have hitherto gone with the general current of doctrine in accepting the other view, and maintaining that—excluding febricula—there is but one endemic species of continued fever, and that the enteric. I must now, however, acknowledge a change of view. Watching my own practice, and examining the records of that of others, I have come to the conclusion that there is a true “common continued fever,” a veritable “synochus,” which, though it may run on from the “gastric” into the “typhoid” condition, never has the essential features or typical clinical history of typhoid fever proper.

Our decision of this question has an important bearing on the claims made for *Baptisia*. Typhoid is a disease of such frequent occurrence and such ghastly mortality: it invades such high quarters, and threatens, if it do not actually destroy, such valuable lives; it has, even when not fatal, so lengthened a process, so tedious a convalescence, such frequent *sequelæ* of even direr import than itself, that any promising addition to our power of controlling it cannot but be welcomed. But especially would this be so, if the promise held out were of more than mitigation of severity only, more than sustainment of the patient; if it were of actual abortion and breaking up of the disease. If *Baptisia* proved to be the Aconite of this fever, we should without controversy have gained a priceless remedy.

I regret that I cannot stand to the claim on behalf of it to this power which I have many times made during the last

sixteen years*. Were there no other endemic continued fever but typhoid, my conclusions from practice would be unassailable, and instances where the disease seemed to elude the abortive power of the medicine might be regarded as exceptional. But I am driven now to consider such cases as of the true enteric type, and the rest as belonging to the "common continued fever" whose existence I have been led to admit. I cannot, therefore, any longer maintain that Baptisia is capable of breaking up a genuine typhoid, and must acknowledge that those of my colleagues who have questioned its power so to do have been wiser than I.

But has it therefore no influence on the progress of this disease? Far from it: it plays a most important part in its treatment. To ascertain the precise place occupied by it—its relation to the stages of the disease and the sphere of other medicines—let us first consider the experiments made to ascertain its pathogenetic action.

These show the following symptoms:—

After taking during the day (Feb. 5th) four drops of the mother tincture, Dr. Douglass awoke in the night with a feeling as if the room were insufferably hot and close, hindering respiration. His pulse was about 90, full and soft. There was most uncomfortable burning heat of the whole surface, especially the face. The tongue was dry, and smarted and felt sore as if burnt. The heat compelled him to move to a cool part of the bed, and finally to rise and open a window, and bathe his face and hands. With these symptoms there was, he writes, a "peculiar feeling of the head, which is never felt except during the presence of fever, a sort of excitement of the brain, which is the preliminary to, or rather the beginning of delirium, which with me never fails to occur if fever continues and increases to any considerable intensity." He at length got to sleep again, but awoke the next morning with the same dry and burnt tongue.

The same symptoms recurred on the night of the 7th, after four more drops of the tincture. The oppression of breathing was still more marked, and felt quite congestive. Flushed face and dulness continued during the next day. Each night while awake he had painful intolerance of pressure as he lay, especially in the sacral region, obliging him at last to lie on his face.

On the 10th, after a dose of three drops taken in the afternoon, the same symptoms rapidly supervened. It is added that the head felt large, and the eyes were shining; the hands also felt large, and were tremulous.

* See *Brit. Journ. of Hom.*, xxi., 385.

He took no more medicine. The bowels had been constipated throughout the proving till the 12th, when they resumed their usual condition. He felt weak and tremulous, as if recovering from an illness, and was not himself again till the 15th.

The other provers had the same febrile symptoms, with hot and high-coloured urine. Dr. Rowley records vomiting and diarrhœa. Dr. Sapp, pain in the stomach, abdomen, and right hypochondrium, passing down to the right iliac region; also soreness in the region of the liver. Dr. Smith had diarrhœa, followed by constipation and hæmorrhoids; and constipation was present also in Dr. Hoyt.

Lastly, in a more ignoble prover, a cat poisoned by Dr. Burt, the small and large intestines were found congested and filled with bloody mucus.

From these symptoms two facts seem to stand forth with unmistakable clearness.

1st. Baptisia is capable of exciting true primary *pyrexia* in the human subject. This is no slight thing, for there are very few other drugs to which we can ascribe such power. And this pyrexia, in the case of Baptisia, is exceedingly like that of the early period of typhoid. The soft and full, yet quickened pulse, the headache and tendency to delirium, the soreness all over, and intolerance of pressure when lying, are marked symptoms of this stage of the disease.

2nd. We have no evidence that Baptisia affects Peyer's patches as they are affected in typhoid, nor even that it acts upon them at all as Arsenic and Iodine, and perhaps Mercury and turpentine do. But it is certain that it produces congestion and catarrh of the intestinal mucous membrane, with abdominal tenderness and diarrhœa. Now this again is the condition present during the first week of typhoid.* The Peyerian and solitary glands are, till the seventh day, involved merely in the general hyperæmia, but the latter then subsides, and they stand out alone.

We have, therefore, in Baptisia a medicine precisely homœopathic to the first stage of typhoid fever, *i.e.*, to the period antecedent to the full development of the intestinal affection. There is nothing, I think, to render it inconceivable that, administered early and persistently in this period, though it may not blight the growth of the disease, it may considerably abate its energy. There are two opportunities then afforded it for so doing. The *dothien-entérite*—as Bretonneau proposed to call the infarction of the intestinal glands—does not begin

* See Aitken's *Science and Practice of Medicine*, i., 397-8.

till about the fifth or sixth day of the fever, to which it is (as it were) secondary. Why should not its development be materially hindered? Again, on the tenth day there is a natural tendency to resolution in the local affection. "The turgescence," writes Trousseau, "of the aggregate and solitary glands of Peyer, and of the mesenteric glands, begins to decrease, and goes on gradually subsiding up to the fourteenth day, at which date the affected glands are still a little swollen, but by the end of the third week resolution is complete, excepting that the mesenteric glands do not quite regain their normal condition till a short time later." Why should not Baptisia, by abating the whole force of the malady, favour this tendency to resolution?

Of such an action as the latter, we have seen an analogous instance in the case of Tartar emetic in smallpox. It does not prevent the formation of the eruption; but it does strenuously promote its resolution in the papular or vesicular stage, so that the processes which end in pitting, and the concomitant secondary fever, are averted. There is no reason why Baptisia should not have a corresponding effect in typhoid, which is not a more specific process, having a definite clinical history, than variola. My own experience is that it has such an influence, and that typhoid when treated with it from the commencement rarely reaches any serious height or runs an unduly protracted course. Some of the cases recorded, moreover, seem to show that at no stage of the fever is it without beneficial influence, and to lead to the inference that, unless other remedies are better indicated, the patient should always have the advantage of what it can do for him. It might be alternated in the more advanced period of the disease with the Arsenicum, the Mercurius, or the Terebinthina we should deem it right to give for the intestinal affection, just as we sometimes alternate Aconite with the local specific in fully developed inflammations.

Nor has the relegation of the abortive power of Baptisia to common continued fever a merely negative significance. It is of no little consequence to have a remedy which shall break up this fever, on which typhoid symptoms are very apt to supervene if it is only treated with ordinary medicines. You have but to try it here to be satisfied of its surpassing value.

I have gone fully into this matter on account of its great practical importance. For another statement of the question, from the side of disease, I may refer you to the second edition of my *Manual of Therapeutics*, in the articles on typhoid and common continued fever. I hope that the facts

alleged may induce some of those who hear me to test the remedy in their own sphere of work, and to report the results. It need not be given in infinitesimal quantities. Drop-doses of the mother-tincture, or small portions of an infusion, were administered in most of the published cases. Such doses, moreover, will probably ensure a wider range for the medicine. The tendency in America just now is to restrict its action in continued fever to cases in which its minuter symptomatology is reproduced—as soreness in lying, a sense of being all to pieces, and so forth. Dr. Chargé adds softness of the pulse in the first stage, and fœtidity later on: Jahr gives despair of cure and certainty of death. I do not doubt that in cases so characterised its curative action may be markedly exhibited. But it will be observed that those who write thus use the higher dilutions exclusively. For more substantial doses it seems only necessary that the patient shall be within the first ten days of the fever, or at any rate shall not have passed from the “gastric” into the “typhoid” condition (I use these terms phenomenally), to ensure excellent effects from the drug.

The action of Baptisia in continued fever, like that of Ailanthus in malignant scarlatina, ought not to be allowed to stand alone, but should lead to its application to similar pyrexial states elsewhere encountered. The thirty-first volume of the *British Journal of Homœopathy* contains reports of epidemics of relapsing fever and of smallpox, by Drs. Dyce Brown and Eubulus Williams respectively. In the former malady it acted at least as well as the Bryonia we generally give; but in the latter it displayed really remarkable powers, enabling hæmorrhagic cases to recover, averting prostration, improving appetite, obviating decomposition (as shown by the absence of the usual offensive effluvia), and preventing pitting. Of 185 cases treated with ordinary homœopathic remedies, 19 died: of 72 treated with Baptisia alone, none.

Dr. Bayes, saying truly that the most marked action of the drug in fevers is to clean the tongue and enable food to be taken, recommends it in analogous gastric conditions, with much sinking at the stomach. I myself find much benefit from it in the feverish colds of aged people, which often assume a low type. I can, moreover, substantiate from experience the high commendation given to it by Dr. Mitchell, of Chicago, as a reducer of the hectic of phthisis.*

The nearest analogue to Baptisia is *Gelsemium*, which takes its place in the “remittent fever” of childhood, now

* See *United States Med. and Surg. Investigator*, vi., 251-4.

maintained by most observers to be of the enteric type. It is also allied, as an antipyretic, to *Bryonia*; and, more distantly, to *Acidum muriaticum* and *Rhus*.

Of the dose I have already spoken.

LECTURE XVIII.

BARYTA—BELLADONNA.

I have to-day first of all to speak of the preparations of Barium. Of these we have information as to four, the acetate, the carbonate, the chloride, and the iodide. Let us take first the most important, the carbonate—

Baryta carbonica.

It is of course prepared for our use by trituration.

Baryta carbonica makes its earliest appearance in the first edition of the *Chronic Diseases*, where it has 286 symptoms. In the second edition the list has increased to 794, eight others contributing to it. Many of the additional symptoms, however, were obtained from the acetate. Dr. Allen judiciously isolates those of the carbonate, and, adding some other observations, gives it a pathogenesis of 674 symptoms.

The main interest of Baryta carbonica in my eyes lies in its influence on the *tonsils*. The muriate is, as we shall see, a powerful remedy for glandular engorgements; and the carbonate shares its virtues in an eminent degree when the glands affected are the tonsillar. In chronic enlargements of these organs there is general agreement as to this property of Baryta carbonica; but it is not so well known as a remedy for acute amygdalitis—for *quinsy*. Yet it is here, in my experience, the most potent of medicines. It was from Dr. Ransford that I first got the hint of its value; and he has recently given his experience on the subject.* It was suggested to him, he says, by Dr. Stens, of Bonn; and has since been of unfailling efficacy in his hands. I can speak almost as unreservedly. It is important to distinguish the precise form of angina which calls for Baryta. It is not the inflammation of the mucous membrane, where Belladonna is so potent, or, if there be much œdema, Apis; but it is when the parenchyma of the tonsils is the seat of the mischief. It has rarely occurred to me to see

* *Brit. Journ. of Hom.*, xxxi., 737.

suppuration follow when Baryta has been administered in good time for this disorder.

It is probable (as Dr. Berridge points out) that Dr. Stens took the idea of this piece of practice from s. 279 of Hahnemann's pathogenesis, which runs thus :—" After chilliness and heat and bruised feeling in all the limbs, an inflammation of the throat, with great swelling of the palate and tonsils, which suppurate, and on account of which he cannot open the jaws, speak, or swallow ; with dark-brown urine and sleeplessness." One would like to know under what circumstances this symptom (which is said to have occurred 18 days after taking the drug) was observed.

Baryta is also considered a valuable remedy for senility, so far as this is premature and therefore morbid. It has sometimes removed, in old men (to whom it seems peculiarly adapted), the after-consequences of apoplexy. Dr. Guernsey considers it especially suitable to dwarfish subjects, of stunted growth both in mind and in body ; and thinks that its action extends to the lymphatic and salivary glands in the neck.

The medium dilutions—as the 6th and 12th—of this medicine are most in credit, but Dr. Carroll Dunham told me that he had obtained the effects of Baryta in quinsy from the 200th.

Baryta acetica was, as I have said, the form in which the metal was proved by several of Hahnemann's fellow-observers. Their symptoms—indicated by Hahnemann with a line—have been separated from the rest by Dr. Allen ; and, with those of a recent case of poisoning, are 223 in number.

The poisoning case I have referred to, which was fatal, may be read in the seventeenth volume of the *Monthly Homœopathic Review* (p. 505). It revealed an activity on the part of the salt hitherto unsuspected : the patient died in the full possession of his senses, but with absolute paralysis of all the voluntary muscles. The observer, Dr. Lagarde, proceeded to test its action upon himself. " After a lapse of three hours, discomfort and general weakness with light-headedness set in. In the upper extremities, and under the scalp and skin of the face, formication was felt. After a second period of three hours the weakness had perceptibly increased, and the left arm could no longer be moved, although sensation was intact. Dr. L. found it impossible to pull the bell or to leave the bed, and eight hours after taking the dose the upper and lower extremities were almost paralysed. The paralysis spread to the abdomen, then to the chest and neck, and lastly to the

sphincters. Coughing, spitting, and even the uttering of polysyllables, became difficult; the respirations were laboured, and the urine and fæces were evacuated involuntarily. The pulse fell to 56."

Such facts explain the repute of *Baryta carbonica* in paralytic affections, and suggest the acetate as a still more potent form of administering the metal.

Baryta muriatica, the chloride of barium, was the preparation of the drug given of old in scrofulous disease. Its physiological action is little known; but it has occasionally been given with much benefit in disease of the mesenteric and other glands in the homœopathic triturations, as you may read in Dr. Goullon's treatise on Scrofula. Dr. Hammond, of New York, employs it largely, in doses of a grain or two three times a day, in sclerosis of the brain and cord, and professes to obtain considerable amendment from it. One of our own practitioners, Dr. Flint, of Scarborough, has recently obtained with it striking remedial effects, almost amounting to a cure, in a case of abdominal aneurism, which you may read in the *Monthly Homœopathic Review* for June, 1879, and in the *Practitioner* for July of the same year. He accounts for its effect from the irritating influence on the arterial system which *Baryta* salts are found, in experiments on animals, to exert. I shall have more to say on this point when I come to the action on aneurism of iodide of potassium.

On *Baryta iodata*, the iodide of barium, you may with advantage read Dr. Hale's article in the fourth edition of his *New Remedies*. He considers it our best remedy in indurated glandular enlargements, as of the tonsils, testes, and perhaps the prostate. Dr. Liebold recommends it in strumous ophthalmia, where the cervical glands are consentaneously affected, and the patient is of stunted growth.*

We now begin the consideration of one of the most important remedies in homœopathic practice—another apt illustration, with Aconite and Arsenic, of the maxim *magis venenum, magis remedium*—the *Atropa*

Belladonna.

We prepare a tincture from the entire fresh plant in the usual manner.

* Trans. of Amer. Inst. of Hom. for 1874, p. 768.

Hahnemann early devoted attention to the pathogenetic effects of Belladonna, publishing in his *Fragmenta de viribus medicamentorum positivis* (1805) a list of 99 symptoms observed by himself, and 304 taken from records of poisoning and overdosing. In the last edition of the first volume of the *Reine Arzneimittellehre* (1830) the list has swollen to 1440, of which 390 are his own, 585 from thirteen fellow-provers, and 475 from seventy-two authors. Since that time observations of the poisonous effects of the plant have multiplied; and fresh provings of it, in small doses of the extract, have been made by the Vienna Provers' Society.* These I have myself collated with Hahnemann's pathogenesis, after revising the cited symptoms of the latter from their originals, in an arrangement of the drug for the *Hahnemann Materia Medica* (part iii.). I have included many of the observed effects of atropia, the alkaloid contained in Belladonna, to which most, if not all, of its active properties are due. Among these are some excellent provings conducted under the superintendence of Dr. E. M. Hale, and recorded in the Transactions of the Homœopathic Medical Society of the State of New York for 1868. The provers—four in number—took doses of from the hundredth to the fifth of a grain. The results of recent experimentation with atropia on animals, which has been very extensive, are well summed up by Dr. Horatio Wood; and to his article, to the chapter on Belladonna by Dr. John Harley in his *Old Vegetable Neurotics*, to the *Etude de la Belladonne* of Dr. Meuriot, and to the essay upon the drug in Hartmann's *Principal Homœopathic Remedies* (translated by Dr. Okie), I shall frequently refer in the course of my remarks. I should say that Dr. Allen gives separate pathogeneses of atropia and of Belladonna itself.

Belladonna is an excellent illustration of the fruitfulness of the Hahnemannian as compared with the ordinary method of studying medicines. The traditional plan has been to find out by a few experiments in what class or classes a drug is to be ranked—whether it is emetic, purgative, sudorific, narcotic, and so forth; and then to use it in disease when it is thought desirable to obtain such effects from it. But Hahnemann taught that every drug must be studied as a separate individual; that no general expression or classification can describe its action; and that a complete register of the effects it produces is indispensable for its use as a medicine. The result of the former course of proceeding has been to class Belladonna as a narcotic and sedative, and to use it in a few

* See *Brit. Journ. of Hom.*, vi.

forms of pain and spasm. To these, previously to the endosmose from homœopathy which has set in during the last twelve years, the employment of the drug was restricted, save for its old employment as a "resolvent," and when Trousseau gave it empirically in constipation and acute rheumatism. But the symptoms obtained from it by Hahnemann and those who have followed him display its influence on well-nigh every part of the organism; and suggest its application to a great variety of morbid phenomena.

But now in applying, as well as in studying our medicines, the method of Hahnemann is the only one largely available. What use can be made of the information obtained except upon the principle of *similia similibus*? What avails it to know that Belladonna disorders perception, ideation, and emotion in the hundred and more various ways I have exhibited in my arrangement? There is no malady in which it can be desirable to set up such disorder. But the rule, "let likes be treated by likes," at once lays hold of the whole body of morbid phenomena induced by a drug, and applies it to the treatment of disease. Because Belladonna has this vast range of poisonous action, therefore and just so far has it power to cure. It thus sprang rapidly, in the hands of Hahnemann and his disciples, into the first rank of polychrests. The observations of Hartmann well exhibit its estimation and employment in the homœopathic school. His catalogue of disorders in which it has been found beneficial includes the great majority of fevers, inflammations, congestions and neuroses. It is probably more frequently prescribed in homœopathic practice for acute disease than any other medicine save Aconite.

Let us first consider the traditional knowledge and use of the drug, and see how far it can be recommended as worthy of imitation.

1. It had long been noted, as Percira says, that Belladonna relieved external pains rather than internal. Physiological experimentation has now explained this, by showing that the extremities of the sensory nerves are affected by it before their trunks, which indeed require large doses to influence them. Thus cutaneous anæsthesia is most readily induced by the local application of the drug; but it occasionally appears after its ingestion. It was a prominent symptom in Dr. Hale's provers; and the amaurosis which we shall see caused so often by Belladonna is of a piece with it.

Belladonna is thus a strictly local anæsthetic, acting as such even when introduced into the general circulation. The only

truly analogous morbid state, as a whole, to that induced by it is the absence of sensibility which sometimes exists in mental disorder. But the antipathic action of the drug may here find a legitimate sphere of usefulness, and it may be employed—locally applied in ointment, liniment, and plaster—as an anodyne for external pains. Perhaps we homœopaths do not avail ourselves sufficiently of such palliative aids, which, with proper precautions, are as harmless as they are comforting.

2. Belladonna affects the motor just as it does the sensory nerves, *i.e.*, paralysing their extremities first, and then (if in sufficient quantity) their trunks. Its action on the motor centres is, as we shall see hereafter, somewhat different. But this power of causing peripheral paralysis is turned to useful account when the drug is employed locally as an antispasmodic, as (for instance) in rigidity of the os uteri during labour. Such a use of it is probably seen in its control over the nocturnal enuresis of children. The bladder is one of the few organs which it paralyses when taken internally; and to a lesser degree of the same influence must generally, I think, be referred its power in this malady, which implies excess of irritability rather than want of power. The main proof of this position is that large doses are required—ten or twenty drops of the tincture; and homœopathic records are significantly silent on the practice.* I have never seen any benefit from the doses we ordinarily use; and in this case we need not fear the production of physiological effects from the internal administration of the drug in substance, as children below puberty are singularly insusceptible to its disturbing influence.

3. Almost the same remarks may be made as to the action of Belladonna on the sympathetic nerve-fibres, only that here (with a not uncommon antagonism) it excites instead of depressing. But here also it affects primarily the extremities of the nerves; and its influence is only certainly manifest when it is locally applied,—the dilatation of the pupil being the sole witness to it after internal administration. In this sphere, too, we avail ourselves of the physiological action of the drug, using it locally as a mydriatic. I shall return to this subject, when I come to its action on the eye.

4. There is yet another power of Belladonna which may

* Dr. Claude records two cases of cure by it in the homœopathic attenuations; but he admits that he has generally been disappointed with it (*L'Art Médical*, xlviii., 345).

often be usefully employed, but which as yet is difficult of explanation; I mean the arrest of secretion it causes, notably in the salivary glands and the skin. That this action is exerted through the nerves is pretty certain, both from the rapidity with which it is induced, and from the antagonism displayed in regard to it by such pure neurotics as pilocarpin, muscaria, and physostigma. But it can hardly be brought about by vaso-motor excitation, as the dried surfaces are congested rather than anæmic; nor will the depression of the chorda tympani which is proved to exist account for its action on the sudoriparous glands, which have not (as far as we know) any such excitor nerves as have the salivary. But, however caused, the arrest of secretion which Belladonna brings about may not unfrequently be induced with benefit to our patients. We have probably better ways of checking the sweats of phthisis or other such fluxes, which require the internal administration of the drug. But its local application in hidrosis of the hands or feet, in salivation, and—above all—to check the secretion of milk in sudden weaning or threatened mastitis, is a practice often fraught with advantage.

I have willingly dwelt on these actions of Belladonna, as in them we are on common ground with our brethren of the old school, and in our frank acceptance of such practices lies one of the hopes of a better understanding in the future. The local and functional influence of the drug herein displayed can be better utilised in the way of antipathic palliation than in that of homœopathic cure. But it would be a great error to suppose that in such physiological effects and their application on the antipathic principle we have the whole sphere of the drug. When we look a little farther, we see behind these phenomena of the periphery central disturbances of a very different kind. While the retina is insensible to actual objects, visual hallucinations throng about the subject of Belladonna's influence. While the dilated pupil would indicate that the brain was suffering from anæmia or effusion, its actual condition is that of active congestion and often furious excitement. These phenomena—as also the dry throat, the scarlet skin, and the conjunctival and vesical irritation which so often appear—point to properties of another kind. Now, although writers on *Materia Medica* treat of Belladonna as a pure narcotic, a toxicologist like Christison does not hesitate to class it among the narcotico-acrids, adducing several instances in which inflammatory irritation—as of the throat and bladder—has resulted from its ingestion. We have only to suppose that it exerts this influence upon the cerebro-spinal centres

also—that it irritates nervous tissue besides disordering nervous function; and the whole problem is solved. The symptoms of tissue-irritation are seen at the centre, those of functional excitation or depression at the periphery of the nervous system; and hence the double set of phenomena manifested.

Let us now consider, in this light, the disturbances set up by Belladonna in the brain and cord; and the therapeutic applications to which they have led under the guidance of the law of similars. We may divide our matter according as the phenomena are those of sensibility, of motility, of the cerebral functions proper, or of the brain as a material organ.

1. The sensory disturbance caused by our drug varies according as the centre or the periphery is most affected. In the latter case we have the anæsthesia which has already come before us; in the former we have such a condition as this, reported by Hahnemann, and confirmed by Harley—"great irritability and impressionableness of all the senses; he tastes and smells everything more acutely; the sense of taste, of sight, and of hearing is keener, and the mind is more easily moved and the thoughts more active." Such hyperæsthesia is always found to be an indication for Belladonna in homœopathic practice. To this point the statements of Pereira are singularly though unconsciously pertinent. "In the first degree of its operation," he writes, "Belladonna diminishes sensibility and irritability. This effect (called by some sedative) is scarcely obvious in the healthy organism, but is well seen in morbid states, when these properties are preternaturally increased."

2. The central motor disorder caused by Belladonna is quite analogous to its sensory disturbance, but is of more varied character. Now we see twitchings, jerkings, and jactitations like those of chorea, to which in one case of poisoning they were compared by the reporter.* Now the symptoms are tetaniform; the animals experimented upon, says Dr. Fraser, appear as if suffering from strychnia.† Still more frequently, in severe cases of poisoning, clonic convulsions of epileptic type appear.‡ Again, there may simply be great restlessness and bodily inquietude.§

All this is of a piece with the hyperæsthesia we have seen in the sensory sphere, and, like that, indicates the homœopathic

* See *Hahn. Mat. Med.*, part iii., s. 22.

† *Ibid.* s. 28, 29.

‡ *Ibid.*, s. 36-43.

§ *Ibid.*, s. 44-47.

use of the medicine. In chorea and tetanus we have scant records of its employment. Dr. Hoyne relates an instance of its favourable action in the latter disorder (I, 39); and Dr. Croucher has lately communicated a case in which a Belladonna plaster along the spine seems to have been the curative agent*. But in eclampsia, infantile and puerperal, it is largely and successfully used among us; and in epilepsy itself has no mean reputation. It probably acts here by modifying the irritability of the medulla oblongata, to which Schroeder van der Kolk has taught us to look as the centre of the epileptic convulsion. By the same action it influences hydrophobia, whose phenomena seem to depend on inflammatory irritation of the medulla and its issuing nerves; and thus also it occasionally benefits laryngismus, whooping-cough, and asthma. If it is to do good in affections like these, the patients must (as a rule) be young and impressionable subjects, of sanguine-nervous temperament; and, in epilepsy, the malady should be of recent origin. The use of the remedy on a large scale in this last disease—as by Greding,† Grandi,‡ and Michéa§—where all sorts of cases are taken together, has not yielded any great percentage of cures. But Trousseau, after thirty years' experience, declared the Belladonna treatment of epilepsy the least inefficacious he had known; and speaks of having obtained a certain number of solid cures. Dr. Echeverria finds it beneficial in epileptic vertigo. As to hydrophobia the question is still more doubtful. But it is impossible to read the mass of evidence collected by Bayle|| without concluding that Belladonna must sometimes have cured, and has often prevented, this dire disease, to which it is confessedly homœopathic in the first degree. Youatt had no small confidence in it as a prophylactic in dogs themselves.¶

So far the motor disturbance of Belladonna has been obviously connected with its irritant influence on the nervous centres. But now a glance at its pathogenesis will show a good many symptoms of loss of power over the extremities; and this not from exhaustion only, but occurring comparatively early in the poisoning. Sometimes, from atropia especially, the limbs are heavy and helpless: the condition is compared by one observer to the first stage of the progressive paralysis of the insane. More commonly, with Belladonna

* *Brit. Journ. of Hom.*, xxxiii, 266.

† *Adv. Med. Pract.*, ed. Ludwig, vol. i.

‡ *Gaz. Méd. de Paris*, 1854, p. 757.

§ *Gaz. des Hôpitaux*, 1861, p. 563-578.

|| *Bibl. de Thérap.*, ii., 502.

¶ See Watson's *Lectures*, 4th ed., i., 629.

itself, there is a loss of co-ordination, resembling that of locomotor ataxy. I have pointed out in another place* that the poison causes nearly all the apparently incongruous symptoms which characterise this singular disease. In the eye it produces the injected conjunctiva; the dilated, sometimes varying pupils; the ptosis; and the diplopia and amaurosis so often observed in ataxy. It develops incontinence of urine and tactile anæsthesia; and (according to Brown-Séquard) depression of reflex excitability. Since, moreover, the pathological basis of the phenomena of this disease is in the first instance of inflammatory nature, it would be the truest homœopathy to give Belladonna as a remedy in its early stages. I have had one well-characterised though incipient case, in which a complete cure has been effected by the 1st decimal dilution of the drug. And such an application of the remedy should not stand alone. It has been ascertained that a morbid process similar to that of locomotor ataxy, but occurring in other tracts of the cord—a slow inflammation going on to induration or softening—lies at the root of many other diseases. This has been well shown by Dr. Jousset in respect of the muscular tremblings of *sclérose en plaques*, of spinal paralysis, of general paralysis of the insane, of the glosso-laryngeal paralysis of Duchenne, of infantile palsy, and of progressive muscular atrophy.† I should myself be inclined to extend it also to such affections as neuralgia, glaucoma, and exophthalmic goitre, in all of which we shall find our Belladonna in repute. It is of course in the incipience of these maladies—in their stage of excitement—that the remedy is indicated. Trousseau and Pidoux speak of Bretonneau as having obtained in several cases of paraplegia a cure as unexpected as inexplicable by the use of the drug.

3. We come now to the action of Belladonna in the mental and moral sphere, which is one of the most potent it exerts. Perception, ideation, and emotion are equally affected; and in a manner similar to that which we have seen in the regions of sensibility and movement. The drug excites and at the same time perverts their function,—blunting their reaction to real impressions while quickening in them a feverish automatic activity, spurring them on in a rapid and disordered course until they fail for exhaustion. Hallucinations (Stillé says that the spectral illusions of Belladonna are all of a bright gleaming character), delirium (often compared to delirium tremens), insane talking and acting, melancholy and rage are

* *On the Various Forms of Paralysis*, 1869.

† Translated from *L'Art Médical in Brit. Journ. of Hom.*, xxxiii., 577.

the features of this part of the pathogenesis of Belladonna; and are present in the same degree and variety in that of no other drug save its congeners, Hyoscyamus and Stramonium.

Correspondingly, Belladonna occupies in homœopathic practice the first rank among the remedies for cerebral disturbance. It is best indicated in the sthenic and congestive delirium of the fevers and exanthemata; in mania-a-potu; in *furor transitorius*; and in acute maniacal delirium, the *délire aigue* of the French. A case of this last kind, related by Dr. Maudsley, resulted from transfer of erysipelas from the leg to the brain; and to this disease we shall hereafter see Belladonna strikingly homœopathic and curative. It should also be serviceable in acute melancholia; and in the alternation of epilepsy with insanity. Hitherto, indeed, homœopathy has had little opportunity of proving its powers in the treatment of mental disease. But now that the New York State Asylum has been erected for carrying out our method in the care of the insane, we shall soon learn what we can do in this direction, and how to do it. Dr. Butler tells me that Belladonna has been one of the medicines most largely and beneficially used there; and Dr. Talcott, the present superintendent, speaks warmly of it in acute mania.* In the ordinary practice, Belladonna was of old time often employed with success in mania and mental disorder generally. Trousseau and Pidoux justify this use of the drug, naïvely remarking that "experience has proved that a multitude of maladies are cured by therapeutic agents which seem to act in the same manner as the cause of the disease they oppose."

4. Throughout these pictures of sensory, motor, and mental disorder we continually have more or less evidence of the co-existence of active determination of blood. The disturbance set up is indeed, as I have argued, *inflammatory* in essence. Still more marked is this feature when we come to the symptoms of the head itself. The vertigo, intoxication and headache so constantly occurring in the provers are all hyperæmic in character; and in poisonings we have phenomena of acute cerebral congestion, going on sometimes nearly to phrenitis, more frequently to apoplexy. For the evidence of this I must refer you to my arrangement of the drug in the *Hahnemann Materia Medica*: I must here pass at once to its therapeutical applications.

The vertigo of Belladonna is, as I have said, hyperæmic; it is worse on movement and relieved in the open air. In Dr. Harley's experiments its development seemed to coincide

* *Homœopathic Times*, vii., 1.

with the rise of the pulse. Such congestive vertigo, when occurring in subjects not too advanced in life, yields readily to the drug. Of its headache I have been able to collect no less than seventy-eight instances, including almost every variety of the affection. Its most frequent seat is the forehead and the temples. Belladonna is, from these effects, and from clinical experience, our chief remedy in headache. It is suited both to the nervous or neuralgic form, and to the congestive. Heavy, drooping eyelids, and blindness or flashes of light before the eyes, point to it; also flushed face, hot head, and sense of burning in the eyeballs. Secondary vomiting does not contra-indicate it; but in true gastric headache it is of no use. The Belladonna headache is always aggravated by light, noise, and movement, and also by lying down; it is easiest in a quiet sitting posture. Its essential characters, indeed, are hyperæmia and hyperæsthesia.

It is but a step farther to say that in arterial congestion of the brain, from almost any cause, Belladonna is an invaluable remedy. The only instance in which it is outrivalled is the cerebral hyperæmia of sun-stroke, where Glonoin takes its place; though not necessarily to its exclusion. Nor does it cease to be of avail when the congestion runs on to inflammation. I must agree with Bähr that its action does not reach to meningitis, if the meninges he has in view are the dura mater and arachnoid. Over the inflammatory results of injury to the skull it has thus little power. But in ordinary phrenitis or encephalitis, such as we meet with in the course of reaction from concussion, and as the result of mental excitement, intemperance, and such-like causes, Belladonna is (with or without Aconite) the main remedy; that is, if the patient is in the first stage of the disorder, and not in that of effusion or collapse. It is no less valuable in apoplexy, as long as cerebral hyperæmia is present, whether before or after extravasation has occurred. Here, too, it is useful to check the tendency to secondary inflammation.

Before leaving the sphere of the nervous system, I must speak of the action of Belladonna in neuralgia. Its causation of this phenomenon is doubtful,—only one symptom of the kind being on record, in the fourth of Dr. Hale's proverbs.* But Dr. Anstie has argued (mainly on the ground of the numerous complications so often present in severe cases—as spasms, paralyses, inflammations, disorders of nutrition, secretion, and sensation) that true neuralgia is always of central origin. The particular seat of it he thinks the posterior root

* See *Hahn. Mat. Med.*, part iii, s. 438.

of the spinal nerve in which the pain is felt. In reviewing Dr. Anstie's admirable treatise in the *British Journal of Homœopathy** I have suggested that it is rather to the grey nucleus we should look than to the issuing fibres. I have also pointed out that the analogy of locomotor ataxy, whose pains Dr. Anstie characterises as truly neuralgic, indicates that the central mischief is primarily at least of an inflammatory nature. If these things are so, we have no difficulty in understanding how Belladonna cures neuralgia homœopathically, though it has not time enough to set it up. The neuralgia which indicates it is of comparatively recent origin, and occurs in young or middle-aged persons. It is associated with marked symptoms of hyperæmia, and differs from that of Aconite—which otherwise it so closely resembles—in having hyperæsthesia present. It is usually situate in the trigeminus (especially the right one),—the drug having little influence over sciatica or other neuralgiæ occurring below the head and neck. This is also the experience of Trousseau.

Dr. Bayes says that a characteristic symptom here is accession or aggravation of the paroxysm at about 5 P.M.; while Dr. Guernsey notes of the pains that they come and go with great celerity, and are made worse by the least jar. Dr. Dunham considers the remedy not less indicated when the pains, though suddenly disappearing, gradually increase to their acme.

I have now concluded what I have to say of the action of Belladonna upon the nervous centres. We have seen it everywhere inducing excited but perverted functional activity, increased manifestation of energy with diminution of real power and effectiveness. Such are the hyperæsthesia in the sensory sphere, the jactitation in the motor, and the delirium in the ideational, which it confessedly develops. The phenomena precisely correspond with the more active production of cells of a low order—the “increased attraction” of nutrient fluid with “diminished selection”—displayed by the non-nervous tissues when inflamed. I have accordingly suggested† that they imply inflammatory irritation of the nervous substance on the part of the drug, and have supported my view by pointing to the active hyperæmia which is always more or less manifestly present. This doctrine has indeed long been tacitly accepted in the school of Hahnemann, as shown by the universal recognition of the homœopathicity of

* xxx., 367.

† I first did so—as a result of a study of the drug carried out with Dr. Madden—in the *Brit. Journ. of Hom.* for 1862 (vol. xx).

Belladonna to cerebral inflammation: I have only put it into the language of modern pathology. We are glad to receive for it the support of Dr. Harley. At the end of his analysis of the effects of the drug he concludes that "the whole of the phenomena may be attributed to excessive stimulation of the nerve-centre, attended by increased oxidation;" and that "hyperoxidation of nerve-tissue" is the essential action of the poison. This is but the same thing in other words.

But observe the difference in practical results. Dr. Harley's conclusions lead him to no therapeutic application of the drug; while ours, by the way indicated by the rule *similia similibus*, have made it the prime remedy for all disorders of the nervous centres in which hyperæmia is associated with hyperæsthesia or pain, disordered co-ordination or clonic convulsion, hallucination, excitement, or delirium. It is in such conditions a remedy most highly prized by all who practise homœopathically; and by none more so than those among them who most habitually employ infinitesimal doses. The remedy thus reflects confirmation and honour on the method that created it, and adds another and no insignificant leaf to Hahnemann's laurel crown.

LECTURE XIX.

BELLADONNA (*continued*).

At our last meeting we made a full study of the action of Belladonna in the sphere of the nervous system, where we meet with its most prominent effects and frequent uses. But we have yet to see it operating as a potent agent in several other regions. I shall speak of it to-day as it affects the circulation and temperature, the mucous membranes and skin, the eyes, the urinary organs, and the uterus; concluding with some miscellaneous applications which it has received.

I. Belladonna, in not too excessive doses, increases the action of the heart both in force and frequency. The latter phenomenon seems due to paresis of the inhibitory fibres of the vagi,—the drug acting (as we have seen it do elsewhere) on the extremities of the nerves in the heart.* But were this its only property, there would be no increase of the force of the circulation; and for this we must invoke the stimulant action on the sympathetic which we have already seen it displaying, and which—if exerted—would make the heart's beats stronger as well as more rapid. Thus also we account for the fact that the arteries are contracted under its influence, and the blood-pressure increased. Such arterial contraction was long ago ascertained to follow its application to the frog's web by Mr. Wharton Jones,† and the same thing has been observed as a consequence of its internal administration by Hughes Bennett‡ and by Harley. Many years ago, before I knew anything of homœopathy, I made an attempt to account for its whole action on the body by means of this influence;§ and, though the generalisation was unwarranted, the fact remains established. Dr. Handfield Jones, it is true||—and also Dr. Dyce Brown¶—has assumed an opposite action on its part, on account of the hyperæmia manifested in

* A full account of the experimentation by which this action of atropia is ascertained is given by Dr. Lauder Brunton, in his *Experimental Investigation of the action of Medicines*, part i., p. 60.

† *Brit. and For. Med. Review*, xiv., 603.

‡ *Researches into the Antagonism of Medicines*, 1875, p. 41.

§ See *London Med. Review* for 1860.

|| *Functional Nervous Disorders*, sub voce.

¶ *Monthly Hom. Review*, xv., 353.

the head and on other surfaces by the subjects of its influence. But it must be remembered that there are two ways in which the circulation in any part may be increased,—the one by relaxation of its blood-vessels, the other by irritation of its tissue. Opium, Amyl nitrite, and Glonoin, which primarily dilate the arteries, may well be conceived to act in the first of these two ways : Belladonna, which contracts them, can only congest a part by irritating its substance, and so compelling a larger afflux of blood. In this way—as we have seen in the nervous system, and as we shall see in many other parts—I account for the hyperæmia manifested under the influence of our present drug.—Belladonna of course conforms to the law of other stimuli, and in excessive quantities exhausts the susceptibility of, and so paralyzes, the organs it naturally excites. But such actions are, as I apprehend, beyond the sphere of true pharmacodynamics, as available for therapeutic purposes.

The above phenomena, which I have expressed as obtained by modern experimentation, have many prototypes in the symptoms of poisoning and proving collected by Hahnemann. Moreover, the febrile condition so repeatedly recorded by the latter as resulting from the drug has now been demonstrated to be a true *pyrexia*. “The similarity,” writes Dr. Harley, “of the general phenomena which attend the operation of Belladonna and those which accompany pneumonia, enteritis, the development of pus in any of the tissues and organs of the body, &c., arrests attention ;” and again—“an infinitesimal quantity of atropia—a mere atom—as soon as it enters the blood, originates an action which is closely allied to, if it be not identical with, that which induces the circulatory and nervous phenomena accompanying meningitis, enteric, or typhus fever.” Other experimenters also have found a considerable elevation of temperature—from 1 to 4 degrees centigrade—under the action of atropia. The fever induced differs considerably from that of Aconite and Arsenic. The chill is slight, and sweating is rare after the heat : the heat itself is very decided, the surface feeling burning, but there is no great thirst, nor is there either the prostration of Arsenic, or the restless, uneasy, anxious condition especially characteristic of Aconite.

We of the homœopathic school have long ago drawn from such facts the inference that Belladonna has an important place in the treatment of the primary fevers ; and that where pyrexia accompanies inflammation of parts which it specifically irritates (as the brain or throat) it suffices to control both the general and the local phenomena. It is interesting to find Dr. Harley coming to the same conclusion. “It appears,”

he writes, "that the stimulant action of Belladonna is converted in great measure in febrile diseases into a tonic and sedative influence." He gives it largely in the continued fever to which he likens its action; and in the pyrexia symptomatic of inflammations explains its *modus operandi* thus — "two similar effects, the one arising from a local irritation and the other from the presence of Belladonna, like spreading circles on a smooth sheet of water, interfere with and neutralise each other." He believes that "it has not yet attained to its legitimate place as a therapeutic agent," and anticipates that "its sphere of usefulness will be acknowledged before long to be co-extensive with acute disease itself." If he would look into homœopathic literature he would find that Belladonna had attained this its "legitimate place" among those whom he stigmatises as "blindly led by an unscientific dogma" at least fifty years ago; and that the analogy by which he explains its action is a household word among them.

The kind of fever to which Belladonna is specifically applicable is that in which the excessive oxidation in which the febrile process may be conceived to exist falls chiefly on the nervous centres. The type to which it conforms is that which our forefathers described as "typhus nervosus." The most familiar example of the kind is the "brain fever" of over-excitement; but a similar condition is often presented by the toxæmic fevers. It is where there is too much blood-poisoning for Aconite to act, but not enough to require Arsenic, and where the disorder of the vegetative life for which Baptisia is indicated is less prominent than that of the nervous centres, that Belladonna finds its sphere. It is thus very frequently our main antipyretic in the earlier stages of continued fever, especially when presenting the form which used to be called "cerebral typhus." Turgor of the face, often with shining eyes, is characteristic for it here. It also supplants Aconite in puerperal fever, and in the more profoundly penetrating exanthemata. In the initial fever of variola it has received high commendation in both schools.* With scarlatina its name is inseparably connected, from the virtues claimed for it by Hahnemann as a (temporary) prophylactic against the disease. His account of how he arrived at this estimate of it is very interesting: you may read it at p. 466 of Dr. Dudgeon's translation of his *Lesser Writings*. Much controversy has raged on this subject, and very different results have been obtained by different experimenters.† I think (as does Dr. Stillé, no favourable judge) that the conclusion must be in

* See *London Med. Record*, Feb. 15, 1879.

favour of its pretensions ; and that we do well in administering it—according to the custom of most homœopathists—when ever scarlatina breaks out in a household. The analogy of the prophylaxis of ague by quinine makes strongly in its favour.

It was the homœopathicity of Belladonna to scarlatina which led Hahnemann to it ; and, though some rash controversialists have questioned the fact, it is generally admitted. Not merely has the cutaneous irritation of the drug (which sometimes ends in desquamation) been compared by many observers to the scarlatinal eruption, but we have also in the disorder the fever, the angina faucium, and the delirium also induced by the drug. It thus naturally plays an important part in our practice in the curative as well as the prophylactic treatment of scarlatina. Hahnemann lays much stress on its being the “smooth” scarlatina in which Belladonna is so potent to prevent and cure : disappointment, he says, has commonly proceeded from confounding this with the *rothe Friesel*, which is a different malady. It is the smooth scarlatina which we ordinarily see in this country.

II. Together with its pyrexia, Belladonna congests the mucous and cutaneous surfaces throughout the body. “The mucous membranes,” writes Dr. Meuriot, “ten minutes after the injection of atropia, are red, injected, and dry.” This seems to be the rationale of the well-known dry mouth of the drug. It is not the mere result of diminished saliva, nor of occluded arteries : “the blood-vessels of the part,” says Dr. Harley, “are congested, and the blood is arrested.” After a time, the dryness is relieved by a secretion of mucus, foul and viscid ; and therewith the pulse falls. In fever, as the same author states, atropia will moisten the dry tongue, moderating the circulation at the same time.

This condition of mucous membrane is probably induced by the drug throughout the body : it explains many of the symptoms it causes, and warrants the use of the medicine in similar dry catarrhs wherever occurring. At some points, however, the action runs on to actual phlegmonous inflammation. Besides the conjunctiva (of which I shall speak hereafter), this condition is best seen in the throat, which is one of the cardinal centres of the action of Belladonna. Dryness, dysphagia, constriction, soreness, painful deglutition, swelling and burning, are the sensations experienced here by the subjects of its influence ; and the physical signs of inflammation are often evident. Correspondingly, for acute sore throat Belladonna is as complete a specific as medicine can present. It is specially indicated where there are much heat and pain

on swallowing, bright redness of the affected parts, flushed face, and headache. When the parenchyma of the tonsils is involved—when we have true quinsy—I confess I prefer *Baryta carbonica*. But Hahnemann himself extols *Belladonna* here; and cites a case* where quinsy supervened during the treatment of jaundice by *Belladonna*—whether *post* or *propter* can hardly be decided. Elsewhere the signs of its tonsillar influence are not very prominent.

III. The skin is affected with *Belladonna* much as are the mucous membranes; it becomes dry, red, and hot. Sometimes, especially in the face,† the action goes on to inflammation; and we have the condition which makes it as similar as it is potent in the treatment of erysipelas. Every one who has adopted this bit of homœopathy from us—from Liston of old down to Ringer to-day—speaks highly in its praise. Here, as in the throat, it is the smooth, tense, bright-red surface which calls for it; when much œdema exists, *Apis* is considered preferable, and when many vesicles form, *Rhus*—though Dr. Yeldham would have us rely upon *Belladonna* in every variety of the disease. Boils and carbuncles, which bear so close a relation to erysipelas, may generally be helped—the former often blighted—by our medicine.

IV. I come now to a very important and interesting sphere of the action of *Belladonna*,—I mean the eye. The points which here arise for physiological discussion would well-nigh occupy a lecture of themselves: I must sternly confine myself to a statement of the facts and to practical conclusions.

Belladonna displays in the visual apparatus nearly all the actions of which we have seen it possessed. It anæsthetises the retina; it depresses the motor oculi, and excites the sympathetic fibres which animate the iris; it frets the visual centres to hallucinations, and inflames the conjunctiva. Let us consider,—first its inflammatory effects; secondarily, its influence upon the pupil; thirdly, the disorder of vision produced by it.

1. That *Belladonna* inflames the eye is very obvious. The injection of the ocular membranes present during its action is not merely symptomatic of cerebral hyperæmia, but is a direct tissue irritation, which has often gone on to conjunctivitis. Evidence of a similar condition in the sclerotica, iris, and even retina, is not wanting in the pathogenesis of the drug; and the same may be said of the lachrymal sac and canals.‡

* S. 507.—See *Brit. Journ. of Hom.*, xxxi., 476.

† *Hahn. Mat. Med.*, part iii., s. 424-7.

‡ *Ibid.*, s. 449, 458, 472-3, 502, 508-9, 532-4, 538-44.

Belladonna is, accordingly, a prime remedy in homœopathic practice for inflammatory affections of the eyes. It is indicated in the severer forms of catarrhal ophthalmia, and in strumous ophthalmia when of inflammatory type; also (say Drs. Allen and Norton) in the acute exacerbations of chronic disease, as granular ophthalmia. Sense of burning and dryness in the eyes is characteristic of it here. I have seen it act admirably in two cases of iritis of traumatic origin. Its use as a mydriatic in iritis generally is well known and universally adopted: I am not sure but that part of the good it does is due to its specific operation. Dr. Anstie thinks that he has seen incipient glaucoma checked by the subcutaneous injection of a minute dose of atropia in the neighbourhood of the eye, whilst not uncommonly, in chronic glaucoma, its employment has been known to cause an inflammatory attack. The fact that this peculiar affection is often a trigeminal neurosis, of cerebral origin, and liable to complicate neuralgia of that nerve, would also suggest the possible usefulness of Belladonna in it, as we have seen in the case of Aconite. Our remedy is suitable to retinal hyperæmia,—especially (Drs. Allen and Norton say) if a red conjunctival line is very marked along the line of fissure of the lids; and even to retinitis when acute and recent. A good cure with it of the latter affection is recorded by a son of the Hartmann whose monograph on the drug I have mentioned,* and another by Dr. Norton. It has also cured optic neuritis.

2. The dilatation of the pupil so readily and uniformly caused by Belladonna has long been a subject of great interest. I have always been one of those who have maintained that the phenomenon is due to excitation of the radiating fibres of the iris through the sympathetic.† Dr. Harley has reinforced our side,—advancing against the opposite hypothesis of mere paralysis of the third nerve the very different effects of Conium (which undoubtedly causes such paralysis) and Belladonna on the eye. Dr. H. Wood, after reviewing all recent experimentation, concludes that here (as also in the heart and intestines) both kinds of influence are at work—the cerebro-spinal fibres being depressed and the sympathetic excited. But the most important fact he brings forward is that the whole action is a local one, even when the drug reaches the eye through the general circulation. For thus is explained that to which I have often called attention,—that the dilated pupil of Belladonna is quite unconnected with its cerebral

* *Brit. Journ. of Hom.*, xxxi., 182.

† See *Ibid.*, xxii., 435.

effects, which indeed, when occurring idiopathically, are associated with contraction rather than expansion of the iridal aperture. Dilated pupils, therefore, are at least no necessary homœopathic indication for the use of Belladonna in cerebral disorders; and often tell of a condition of exhaustion or effusion to which the drug is quite unsuitable. Mere phenomenal homœopathy would demand their presence to make up the totality of symptoms; but here, as in so many places, physiology enables us to correct the impressions of our senses, and to obtain *similia* which shall be real and not apparent only. On the other hand, when Graves recommended the administration of Belladonna in the head affections of fever, when the pupils were contracted, although he thought himself acting upon the old principle of antipathy, his remedy was really homœopathic to the morbid condition present.

I do not of course deny that a dilated pupil may be one of a group of symptoms to which Belladonna is homœopathic and curative. It is a part of the general influence of the drug on the sympathetic (and perhaps musculo-motor) nervous system, though not of that which it ordinarily exerts upon the brain-substance. Thus Dr. Harley, when speaking of its action in fever as just the opposite of that which it exerts in health, says—"it may happen, if we give a dose of atropia to a patient with a pulse of 120 or higher, a dry and hard tongue, and pupils measuring the $\frac{1}{8}$ ", that after ten, twenty, or thirty minutes, when the action of the belladonna is fully developed, the pulse will be decreased, the tongue be moist, and the pupils contracted." So von Graefe has sometimes observed ephemeral mydriasis as a premonitory symptom of insanity, especially of ambitious monomania.

3. The impairment of vision caused by Belladonna is of two kinds. That which is produced by its local application is *far-sightedness*. It is hardly correct to call it either hypermetropia (as Dr. Harley does) or presbyopia (as it is generally styled); for both these names connote substantive alterations in the refracting media of the eye, while all that atropia produces is loss of power of accommodation for near objects. That it effects this by paralysing the ciliary muscle, through the nerves from the third which supply it, seems abundantly proved; and I must abandon the view which, in agreement with Dr. Harley, I formerly held as to the part played by the iris in the process.

No therapeutic inference, upon the homœopathic principle, is deducible from this action of the drug. But Pereira is mistaken in supposing that the impaired vision of Belladonna is

“chiefly or entirely presbyopia.” It has been noted when no mydriasis has been present, and therefore presumably no paralysis of the accommodation.* I must, therefore, explain some at least of the blindness so often noted from its ingestion by a direct anæsthetic influence exerted by it upon the retina, analogous to that which it displays at other points of nerve-termination. Whether its occasional curative power in “amaurosis” is due to such an action I cannot say. Symptoms of hyperæmia, with photopsies and chromopsies (as red sparks, flames, bright spots, lights, &c.), or chromatic appearances of bright objects, have generally been present in such cases; and suggest, as they do in the pathogenesis of the drug (where they frequently appear), congestion of the retina.

V. I have now to speak of the action of Belladonna on the urinary organs. Passing out with the renal secretion, it excites the circulation of the kidneys on its way; causing either diuresis, or—if the dose be large—congestion and stasis, with diminution or even temporary suppression of urine. It seems to be the primary or Malpighian circulation of the kidneys which is influenced by Belladonna: there is no reason to suppose that it has any direct action on the secreting cells of the convoluted tubes. Belladonna, therefore, does not accompany the scarlatinal poison the whole length of its course. When tubal nephritis has been set up, it cannot neutralise the mischief; though it may (like Terebinthina) do good by unloading the Malpighian capillaries, and so setting free a copious flow of urine to flush the ducts. But if renal hyperæmia, whether from scarlatina or from cold, go no farther than to produce defective secretion, hæmaturia, or even albuminuria, Belladonna may be all that is required. Dr. Harley thinks highly of it in the last-named condition; and himself points out that the quantity of albumen is liable to be increased “unless the dose is a very small one.” That is, he admits its action to be homœopathic.

Descending from the kidneys to the bladder, we find the latter powerfully affected by Belladonna. The condition most frequently set up is well illustrated in a case seen by Sir William Jenner, where a Belladonna plaster had been placed on a somewhat abraded surface of the body. Two hours after the first appearance of the symptoms, “the patient was affected with an extreme desire to micturate, though he could pass only a few drops of perfectly colourless urine. From this time till he lost consciousness, his desire to pass urine was constant:

* See *Hahn. Mat. Med.*, part iii., s. 545-6.

† *Ibid.*, s. 553-4.

whenever he could retire, he did so, but succeeded in expelling from the bladder, with considerable effort, only a few drops of colourless fluid." I cannot agree with Dr. Harley that this frequent and urgent micturition is "the result of repeated calls to empty a distended and weakened bladder." It seems to me a true strangury, by which phrase it is described by Christison as occurring, with even bloody micturition, at the close of poisoning cases.* No spasm, indeed, is present, and the absence of pain forbids the supposition of inflammation; but I think that *irritation* to no slight extent is set up. Böcker states that the vesical mucus in the urine is increased by Belladonna. Correspondingly, for simple irritation of the bladder, short of actual inflammation, I know of no medicine so valuable as Belladonna.

Of course in thus venturing to differ from Dr. Harley as to the ordinary action of Belladonna on the bladder, I have no thought of denying that in large doses it may paralyse this organ, both in its detrusor and in its sphincter fibres. I have already ascribed to such an action its power of breaking the habit of nocturnal incontinence of urine in children.

6. I would finally speak of the action of Belladonna on the uterus. Of this, from the physiological side, we have very little evidence. Nearly all the symptoms (which are but twenty out of a pathogenesis of 2680) given by Allen as belonging to the female sexual organs are from Houat or Greding,—either, though for different reasons, an impure source. The residue enable us to affirm two things only. The first is, that the drug is capable of producing a sensation of pressing and urging towards the sexual organs, as if everything would fall out there.† The second is, that it tends to promote and increase the menstrual flow. It is also said, in a quotation which I am unable to verify,‡ to have caused, in one case, "badly-smelling metrorrhagia." It is, however, in high esteem as a therapeutic agent in uterine congestions and inflammations. Hartmann writes—"that Belladonna exercises a decided influence upon the uterus is proved by the essential aid it affords

* See s. 2635 in Allen's Supplement.

† From the arrangement of the sexual symptoms in Hahnemann's pathogenesis, it would seem that this symptom had been observed by Stapf on his own person; and also by Hahnemann on a woman, under dubious circumstances, indicated by its being bracketed. Dr. Allen gives the latter under the head of "abdomen," and includes the former in his symptoms of the female sexual organs.

‡ Dr. Allen gives this symptom twice, ascribing it in the second case to Gross, as contained in Hahnemann's pathogenesis. I can find no such observation from him there.

in that terrible disease, uterine cancer, and in not merely the palliation, but the cure it effects in relaxation of the uterus, or even the prolapsus which results from that disease. In all of these affections, the sensitive urging and pressing downward, as if all the deeper-seated viscera would protrude at the genitals, exists, with which there is generally united a sensitive pain in the sacrum, all of which symptoms characteristically indicate Belladonna." He also recommends it for uterine congestion, "manifested particularly by a violent burning, stinging, fulness, tension and urging, deep in the abdomen and the sexual organs generally, with which there is often conjoined a dragging, lancinating sensation around the loins, and heat in the region; also sensitive pressure and constrictive pain in the small of the back, which causes the patient to walk slowly and carefully." Dr. Matheson* speaks in the warmest terms of the value of the drug in congestive and inflammatory conditions of the uterus. He gives the lowest decimal attenuations; but Drs. Leadam and Guernsey, who use the higher, seem no less appreciative of it. The former speaks warmly of its power to relax rigidity of the os uteri during labour; and the latter mentions hot discharges as indicating it in both menstrual and lochial derangements.

Dr. Dunham, in his *Lectures* (I, 262), has some valuable remarks on this subject. "No remedy," he says, "is more frequently and successfully employed for affections of the genital organs of women." He, with Hartmann, praises it in prolapsus, when this is (as it were) active, rather than the passive relaxed condition indicating Sepia and Stannum. The bearing down is worse when the patient sits bent over, and when she walks, but better when she sits erect or stands. I should call it a kind of tenesmus of the cervix. He describes a form of dysmenorrhœa connected with ovarian congestion, in which he has found its repetition just before each menstrual epoch for several months completely curative. He has also removed with it offensive odour of both catamenia and lochia, being led to it by the symptoms of Hahnemann's pathogenesis which I have mentioned.

In the observations I have now made, the main action of Belladonna, both as poison and as remedy, has been brought before you. There are yet a few other applications of it, however, which must be noted before I leave it.

1. The first is its use in exophthalmic goitre. Dr. Kidd

* *On Some of the Diseases of Women* (1876), p. 40.

long ago put on record a case cured by it,* and it has since become a favourite remedy in the hands of many homœopathists, as you may see from a discussion on the subject at the British Homœopathic Society, reported in the thirty-third volume of the *British Journal*. Dr. Jousset is one of those who esteems it here. Its employment is now gaining ground in the old school, as Dr. Ringer tells us—candidly admitting at the same time that the practice was initiated among homœopathists.

2. Belladonna does not play such an important part in aural as it does in ocular disorders ; but its applicability to inflammation of the middle ear, especially when brain symptoms coincide, is obvious. Hartmann writes—“Although I am convinced, from repeated experience, that Pulsatilla is almost specific in otitis interna et externa, still cases do occur in which it is not sufficient, but must give way to Belladonna. This occurs where the internal inflammation is more vividly developed than the external, or where the consensual cerebral symptoms are prominent phenomena.” This expresses the general experience of homœopathists.

3. We should hardly have known that Belladonna had any action on the teeth and gums, had it not been for Hahnemann's provings. They, however, show it to be eminently suitable to inflammation of the dental pulp. Whenever the burning, throbbing and swelling indicative of this condition are present in toothache, Belladonna should be given, especially when the pain is worse at night.† It will often, especially if aided by Aconite, arrest an incipient gumboil. In this category, too, I must speak of its great value in the dentition troubles of children. It is when there is both the febrile condition of Aconite and the nervous erethism of Chamomilla, with marked cerebral excitement and tendency to convulsions, that Belladonna exceeds either medicine as a remedy. The higher dilutions generally answer best.

4. Belladonna plays but little part in the treatment of disorders of the digestive organs, though it affects the whole alimentary mucous membrane somewhat as it does the mouth and throat. It has been recommended in peritonitis, in inflammatory ileus, and in colic when a spot is as if griped with the nails, or when the transverse colon is felt through the abdominal walls distended like a pad. A corresponding action on the respiratory mucous membrane makes it very useful in dry, irritating laryngeal coughs, worse in the evening

* *Brit. Journ. of Hom.*, xxv., 187.

† See cases by Mr. Harmar Smith, *Brit. Journ. of Hom.*, xxv., 624.

and early night; also in incipient laryngeal and bronchial catarrhs, where congestive symptoms are marked. Dr. Dunham's comparison between it and its cognate remedies here should by all means be read (*loc. cit.*, p. 267).

5. Lastly, there seems little doubt of the influence of Belladonna upon the lymphatic and mammary glands. It will often subdue the beginnings of inflammation in the former,—best, Dr. Jousset says, when given in the mother tincture. In mastitis it is much praised when the mischief has got beyond the point at which Bryonia checks it. "The breasts feel heavy, and appear hard and red, the redness often running in radii; flushed face and injected eyeballs; full, bounding pulse; drowsiness; throbbing headache; sensitiveness to noise and light,"—these are Dr. Guernsey's indications for it.

I have yet to say a few words about the celebrated alkaloid of Belladonna,

Atropia. Being unable to discover the least difference in kind between the poisonous effects of the drug and its product, I have spoken of the two interchangeably. Dr. Allen, however, has given a separate pathogenesis of atropia, containing upwards of 500 symptoms. I too think that therapeutically we should keep them distinct. In all that I have said hitherto about treatment, I have been speaking of the administration of Belladonna. Whether atropia should ever be used in its stead has been inquired into by the late Dr. Caspar, of Vienna.* He treated more than a hundred cases,—at first by giving atropia after Belladonna, though apparently well indicated, had failed, and afterwards, as his knowledge grew, by prescribing it in the first instance, following it up, if ineffectual, by Belladonna. His main conclusion is that, as a therapeutical agent, atropia occupies the purely neurotic sphere of Belladonna, having no place in its tissue-irritations and vascular excitements. He has cured with it idiopathic and post-febrile headaches of long standing, hallucinations, epilepsy (in three instances), irritable throat and larynx, whooping-cough in the convulsive stage, and asthma. He thinks that it has little or no action below the diaphragm. But Dr. Kafka, after a proving of the sixtieth of a grain of the *sulphate* of atropia upon himself, was led by the symptoms induced to give it in chronic affections of the stomach attended with much pain and vomiting, and with very satisfactory results.† Dr. Bähr recommends it to relieve the pain of gastric

* See *North Am. Journ. of Hom.*, vi., 457.

† *Brit. Journ. of Hom.*, xv., 238.

ulcer ; and in a case recently reported from America it seems to have effected a complete cure.*

The second trituration has generally been that employed.

* *Amer. Journ. of Hom. Mat. Med.*, Nov., 1872. .

LECTURE XX.

BERBERIS, BISMUTH, BORAX, BOVISTA, BROMINE AND THE BROMIDES.

I shall begin this lecture with a sketch of the action of the barberry,

Berberis vulgaris.

We make a tincture from the small branches of the root, or the bark of the larger roots.

An excellent proving of Berberis, made upon five persons, mainly with infusions of the root, was published by Dr. Hesse in the first volume of the *Journal für Arzneimittellehre*. Its symptomatology is reproduced by Dr. Allen, who gives 1262 symptoms to the drug. A study of this pathogenesis, by Dr. Edward Blake, may be read in the thirty-third volume of the *British Journal of Homœopathy*.

From some remarks of Dr. Hering's in the sixth volume of the *American Homœopathic Review* (p. 48), we learn that the symptoms of Berberis have led to its successful use in several affections of the biliary and urinary tracts. Mr. Clifton has commended it to relieve pain in the passing of gall-stones, and in hepatic congestion;* while Dr. S. E. Newton, following up a previous experience of Dr. Lippe's, praises it in the sufferings attendant on the passage of urinary gravel.† These actions are in perfect accordance with its pathogenesis, which shows a marked influence on the two tracts now specified, with alteration in their secretions. I am inclined to think that the hepatic is the primary action; and that the urinary symptoms are due to a change in the renal secretion secondary thereto, setting up irritation of the mucous membrane along which it passes. But, however this may be, whenever you meet with pain, soreness, and burning in the biliary or urinary tracts (especially when, in the latter case, there is much pain in the

* *Monthly Hom. Review*, xii., 405.

† *Brit. Journ. of Hom.*, xxxiii., 362.

hips), with tendency to gall-stone and gravel, you will do well to think of Berberis.

Some attention has of late been directed to an alkaloid found in Berberis, and present also in Hydrastis, Podophyllum, and Calumba, which is called berberin. Experiments on animals prove it a very mild poison, such symptoms as it does produce being those of gastro-intestinal irritation. "Given to fowls," writes Dr. Phillips, "in pills amounting to a quantum of four to eight grains with each day's food, the drug produced progressive loss of appetite, to the extent of causing marked inanition." These effects may throw some light upon the "stomachic" virtues ascribed to Calumba; but they do not hint at the special virtues of Berberis. Berberin has also been credited with anti-periodic properties, but recent trials have resulted negatively.*

Berberis may be compared with *Nux vomica* and with *Capsicum*.

The dilutions from six to eighteen were used in the cases Dr. Hering reports; but the later experience I have mentioned was gained with more substantial doses—Mr. Clifton getting no good effects until he resorted to the mother-tincture. Dr. Blake's experience, and (I may add) my own, is to the same effect.

My next medicine will be the familiar

Bismuthum.

Hahnemann called his preparation an oxide, and under this name its symptoms appear in Allen's *Encyclopædia*. But I think that if you read his directions for making it you will agree with me that the resulting salt is identical with that which chemists now style the subnitrate, and which is the bismuth of ordinary practice. This is the conclusion also of the British Homœopathic Pharmacopœia, which directs the officinal subnitrate to be used, and prepared of course by trituration.

The primary proving of Bismuth is in the sixth volume of the *Reine Arzneimittellehre*, where eleven symptoms are given by Hahnemann, and ninety-seven by three others. Some additional experiments with full doses are recorded by Wibmer, and given in symptom-form by Allen under the head of Bismuthum subnitricum.

* See *Brit. Journ. of Hom.*, xxxi., 190. *Practitioner*, xi., 333.

Bismuth has long been known as a remedy for gastric pain and vomiting. Hahnemann thinks that the symptoms obtained from it show it to be homœopathic enough to such conditions; and Pereira speaks to the same effect when he says that "in large doses it disorders the digestive organs, causing pain, vomiting and purging." But recent experience with it in chronic diarrhœa, such as that of phthisis and of unhealthy children, has elicited the fact that it may be given in enormous doses with nothing but benefit. The conclusion has hence been reached that the irritant effects ascribed to it of old were due to the Arsenic so often present in it, or to the development of an irritant nitrate; and that in its pure state it has no more active properties than chalk, and produces its good effects by a local "sedative and desiccant" action on the alimentary canal.

If this were so, Bismuth would lie outside the sphere of homœopathy. But Drs. Chapman* and Bayes have each put on record several cases in which, from the first to the third trituration, it proved curative in gastralgia, and my own experience is of the same tenor; while Dr. Jousset finds it quite effective, in similar forms, in the diarrhœa for which it is in repute. Prepared by our processes, therefore, Bismuth is not without dynamic action; and Dr. Horatio Wood shows that it is not so insoluble as is commonly supposed. It would probably repay a more thorough proving, directed to ascertain the precise form of gastralgia to which it corresponds. It seems indicated when there is sympathetic "stomach-cough," which is worse when the stomach is empty.

Bismuth seems also to exert a marked action on the heart, though this again may have been due to Arsenic. "Violent beating of the heart" appears in Hahnemann's pathogenesis;† a contracted pulse is several times noted by the provers; and in the post-mortem examination of the only case of poisoning on record the inner surface of both the ventricles was found very red. Arsenic can produce such effects, as we have seen; and we must not hastily use Bismuth in cardiac affections on the strength of these observations.

Teste states that he has used the drug with brilliant results in phlegmasia alba dolens.

Bismuth resembles, besides *Arsenic*, *Argentum*, *Hydrocyanic acid*, and perhaps *Zinc*.

Hahnemann recommended the 2nd trituration to be used for medicinal purposes; and in about that strength the drug has

* *Brit. Journ. of Hom.*, vii., 504.

† Dr. Allen (S. 61) has accidentally omitted the "violent" (*starker*.)

generally been given in homœopathic practice. Dr. Yeldham, however, states that he has been compelled to give up all attenuations, and resort to five-grain doses of the pure substance, with which he has "met with almost unfailing success in that form of gastralgia to which females in particular are liable."*

I have again a well-known drug to bring before you in the sodic biborate,

Borax.

It is prepared for homœopathic use by trituration, or solution after 1².

Hahnemann gave in the second edition of the *Chronic Diseases* a pathogenesis of Borax, containing 460 symptoms; nearly all of which are contributed by Dr. Schreter, and are stated to have been observed by him on several persons. These were evidently patients, and some of them infants, to whom he was probably giving the medicine for thrush. Dr. Allen adds reports from two other experimenters; but their results are so meagre as only to afford twenty-one additional symptoms.

Borax is best known as a local remedy for thrush. Whatever the rationale of its action, we cannot but continue to employ a medication so simple and so effectual. Yet it is of interest to inquire whether there is anything specific in the practice, and anything which illustrates the homœopathic method. At first sight Hahnemann's pathogenesis would seem to show that Borax can produce thrush. "Aphthæ in the mouth," "an aphtha inside the cheek, which bleeds when eating," "an aphtha on the tongue"—these symptoms from Schreter should be proof positive of homœopathicity. But when we examine them closer, we find that they occurred from four to five weeks after the administration of the drug. Better evidence than this must therefore be given, ere we can affirm the thrush-producing power of Borax. At the same time there can be no doubt that small doses—say grains of the first trituration, given internally, will cure the disease nearly if not quite as rapidly as when local application is employed;—a fact which speaks strongly in favour of the dynamic action of the medicine.

However this may be, the local use of Borax in aphthous and also in pruriginous affections is of undoubted value. To

* *Brit. Journ. of Hom.*, xxviii., 745, 757.

these its employment is at the present day well-nigh entirely restricted. But in old times it was, as Pereira says, "regarded as an agent exercising a specific influence over the uterus; promoting menstruation, alleviating the pain which sometimes attends this process, facilitating parturition, diminishing the pain of accouchement, and favouring the expulsion of the placenta and lochia." This use of the drug has been continued in the homœopathic school. Schreter speaks of ready conception having been observed in five women under its use; and mentions one case where a woman who had been sterile fourteen years on account of an acrid leucorrhœa, after other remedies at last took Borax, whereupon she became pregnant, and the leucorrhœa improved. Dr. Middleton, of Philadelphia, reports a similar experience in several cases of dysmenorrhœa with sterility. He gave a grain of the crude salt night and morning.* Dr. E. M. Hale has put on record a case of membranous dysmenorrhœa radically cured by it.† This piece of practice, however, is not of homœopathic origin; for the physician who first recorded the successful use of the remedy was Dr. Henry Bennet.

Dr. Guernsey lays much stress on "fear of downward motion" as an indication for Borax. An adult, he says, dreads going down stairs, or the downward movement of the rocking-chairs so much used in his country; a child seems ever in dread of falling, and if the nurse attempts to lower it from her arms while asleep, it will cry out and throw its hands up as from fear. This feeling is part of a general nervous sensitiveness, especially to noise; but is peculiar to the present drug.

Dr. Hale gave five-grain doses of the pure substance; and neither for the uterus nor for the mouth does Borax seem to need much dilution.

My next medicine is probably known to you by its poisonous effects only. It is the "puff-ball," *Lycoperdon*

Bovista.

It is prepared by trituration.

Bovista was proved by Nenning and two others; 640

* See *Hahn. Monthly*, xi., 523.

† *Brit. Journ. of Hom.*, xxix., 746. There is another in the tenth volume of the Transactions of the N. Y. State Hom. Society (p. 279), where the first attenuation was employed; and two in the *New England Medical Gazette* for December, 1879.

symptoms from this source appear in Hartlaub and Trinks' *Arsneimittlehre*. It was little used in practice until attention was called to it by Petroz in the fourth volume of the *Journal de la Société Gallicane*. The additional observations he communicates are combined with those of Hartlaub and Trinks by Allen.

The puff-ball has been found by Dr. Benjamin Richardson to be capable of producing anæsthesia in animals exposed to the fumes of its combustion. This anæsthesia is of the nature of asphyxia, like that of nitrous oxide; it is not of the chloroform character. Petroz, finding a similar condition set up from simple olfaction of the mother-tincture, was led to administer it in a serious case of asphyxia. He does not relate the circumstances, but says that the remedy was given with great success. His experimenters, and those who took part in the German proving, experienced great pain and heaviness in the head. Their symptoms should be carefully studied in Dr. Allen's arrangement, and may lead to valuable results. Teste (who has a good article on the drug) says that it is especially indicated by a sensation as if the head were swelling up to a great size. He mentions in another place the cure of a chronic leucorrhœa by Bovista, chosen mainly because of the co-existence of this symptom; and Dr. Walter Wesselhœft has recorded a very interesting one of protracted metrorrhagia, in which, after the failure of all measures, medicinal and mechanical, improvement set in immediately after the administration of this remedy, to which he was led by the co-existence of "severe neuralgic pains in the eyes and temples, accompanied by a sense of enlargement and fulness of the whole head."* Dr. Guernsey recommends it in leucorrhœa like the white of an egg.

But the chief use of Bovista is in the cutaneous sphere. The skin appears in the proving as much affected with itching pimples; and Dr. Guernsey speaks of "tettery" persons as special subjects of its beneficial use. It is said to be indicated when the irritation is brought on by washing. Drs. Frédault and Guerin-Ménéville commend it in the eczema of the back of the hands known as bakers' and grocers' itch.

Bovista is classed by Teste with *Sulphur*, *Asterias*, and *Cicuta*.

The medium dilutions have been those hitherto used; but Dr. Wesselhœft gave the 3^r trituration.

I now come to the *pièce de résistance* of this lecture, in the

* *N. Engl. Med. Gazette*, xi., 461.

shape of a discussion of the action of Bromine and its compounds. And, first, of

Bromium

itself. An aqueous solution (alcoholic from the 3^x upwards) is directed by the Pharmacopœia. But, as bromic acid soon forms in such a preparation, it is recommended to keep the Bromine pure, and dilute it with distilled water when required for use.

In the second volume of the *Neues Archiv* Dr. Hering published a pathogenesis of Bromine. The symptoms supplied by himself and his fellow-provers were mainly obtained from the 30th dilution; but some are taken from observers who used material doses. The experiments of Höring, Butzke, and Heiendringer—which are of this character—are given by Frank (i, 386), and should be consulted; as also should be an Harveian prize essay on the subject by Dr. Glover, published in the fifty-eighth volume of the *Edinburgh Medical and Surgical Journal*. The symptoms from these and other sources, as collected by Dr. Allen, amount to 821 in all. Some additional memoirs on Bromine are mentioned by Dr. Ozanam in the *brochure* to which I shall refer, and may be consulted by those desiring further knowledge of the drug.

The results of all these investigations are but scanty. Bromine is unquestionably a powerful irritant; more so (Dr. Glover says) when diluted than when pure. Hence it inflames every mucous membrane with which it comes in contact. Being very volatile, moreover, its exhalations ascend from the stomach after it is swallowed; so that the coryza and salivation it provokes may not be more than local effects. Nevertheless, as, even when injected into the veins, it sets up inflammation of the lungs and air-passages, we may fairly credit it with a specific influence on the respiratory organs; and these have been the main sphere of its homœopathic use. The rigors and prostration which accompanied its coryza in one of Glover's dogs suggest it in influenza. Since in Höring it caused difficult and painful inspiration, violent stitches in the lungs, and cough in attempting to draw a long breath, it ought to find a place in the treatment of pneumonia; in which indeed, and in phthisis, Dr. Hering praises it. Dr. Kafka, also, esteems it highly in croupous pneumonia, when Iodine (his chief remedy) fails. I often find it useful in

dry laryngo-tracheal coughs, with hoarseness, and pain and burning behind the sternum. But its chief credit has been gained in the treatment of membranous croup, of which there are numerous instances on record in which it effected a cure.* As it usually came in to reinforce the ordinary remedies, the cases in which it was employed were severe and advanced; so that its potency is the more established. One of our latest reports comes from Dr. Meyhoffer, who in a very able way discusses the precise place of Bromine in the therapeutics of this disease. He points to the prostration manifest in its poisonous effects (which was also, I may say, noted by Höring in his experiments on the human subject with moderate doses); and decides that it is in extension of diphtheria to the air-passages that it is indicated, while Iodine—whose primary constitutional action is excitant—is better suited to what is distinguished as true croup. He does not, however, admit an essential but only a phenomenal, difference between the two diseases; and the whole tendency of medical opinion is now in this direction.

Dr. Ozanam, of Paris, assuming this doctrine (which has always been held by French pathologists), has published several interesting observations on the use of Bromine in croup and diphtheria, which are summed up in a short treatise on the subject dated 1869.† He has ascertained that an aqueous solution of Bromine, of the strength of one part in a thousand, disintegrates a false membrane in an hour. He then points to the elective action of the drug on the air-passages, and also (as he thinks) on the throat; and to its property, when inhaled by animals, of determining the formation of false membranes on these parts. He finally advances its power—equal to that of Chlorine—of destroying contagious germs; and concludes that on every ground it ought to be a prime remedy for diphtheritic affections. He himself has found it to be so. His first success was obtained in 1849, and since then he has treated some 150 cases, with the loss of only five, all of which were croupous. He gives every hour one or two drops (in *eau sucrée* for children) of a freshly prepared aqueous dilution of 3^x strength, and adds inhalations of a weak solution. Of late he has found a combination of Bromine and Kali bromatum—*bromure de potassium bromé*—

* *North Amer. Journ. of Hom.*, x., 296. *Philad. Journ. of Hom.*, i., 529; ii., 74, 565. *Brit. Journ. of Hom.*, xxiv., 625.

† *Mémoire sur les dissolvants et les désagrégants des produits pseudo-membraneux, et sur l'emploi du Brome dans les affections pseudo-membraneuses* (Baillière).

still more efficient, both chemically and clinically. Other authors are cited by him as confirming his results; and I should have mentioned that Dr. Meyhoffer speaks of having treated twenty cases successfully with Bromine alone, where diphtheritic exudation in the throat or larynx was accompanied by great prostration. M. Teste communicated to the Paris Congress of 1878* a very favourable experience with this medication, which he reckons "the most precious acquisition that the art of healing has made for a hundred years past." He also uses the *eau bromée*, but in a one per cent. solution, giving from one to three drops for a dose, every hour in anginous diphtheria, every quarter of an hour in croupous. He forbids the use of milk, which his observations lead him to consider destructive of the action of the Bromine.

Dr. Oehme,† summing up the evidence as to the anti-diphtheritic virtues of Bromine, concludes that it is mainly from its chemical action that it proves useful; and M. Teste agrees with him here. Himself in general an advocate of the use of attenuated medicines, he finds that the present drug cannot be so given with advantage. He thinks that it acts by its great affinity for hydrogen, much as Chlorine does; and relates some curious observations as to the change which *eau bromée* undergoes when exposed to the exhalations from diphtheritic patients.

However it may be as regards diphtheria, the specific action of Bromine on croup is unquestionable. In addition to the reports of its value I have already mentioned, I may mention that Dr. Kafka has contributed to the *Allgemeine homöopathische Zeitung* for 1875 a severe case of membranous croup in which inhalations of Bromine (1st and 2nd decimal on cotton wool) had a most beneficial effect. Dr. Guernsey's indication for it in croup and laryngeal diphtheria is "rattling of mucus in the windpipe when coughing."

Besides its use in croup, Bromine has retained among homœopaths the place it has lost in the old school as a reducer of enlarged lymphatic glands. Dr. Goullon, in his excellent treatise on scrofula, gives several instances of cure of strumous glands by means of it. Dr. Guernsey recommends it in idiopathic physometra.

Some curious sensations in the extremities are related by Trousseau and Pidoux to have been caused by Bromine when administered by Andral and Fournet to a number of sufferers from arthritis. But as these phenomena are quite unique, and

* See its Transactions, p. 72.

† *Therapeutics of Diphtheritis*, sub voce.

were accompanied by great diminution of their pains, I think they must have depended on the morbid state of the patients, and cannot be used as homœopathic indications.

The chief analogue of Bromine is *Iodine*, as compared with which, however, it has a very limited sphere.

In croup, Bromine has been usually given in about the 3rd decimal dilution, in strumous glands in the 3rd centesimal.

Having spoken of Bromine itself, it becomes necessary to enquire into its action when in combination with an alkali. This at once gives it other features and a new range of action. Let us speak of the bromide of potassium.

Kali bromatum.—The history of this substance is a curious one. It was first used as an analogue of the iodide of the same metal, and introduced into the Pharmacopœia on the strength of the virtues ascribed to it by Dr. Robert Williams in chronic enlargements of the spleen. Its repute here soon waned, and it ceased to be officinal. In 1857 the late Sir Charles Locock called attention to its power of checking epileptic fits dependent upon irritations of the female sexual organs. It was soon found that epilepsies from other causes were amenable to its influence; and it rapidly acquired—at least in this country, in France, and in America—an estimation as an anti-epileptic far excelling all other remedies now in use, and capable of doing more for the disease than had ever been done or hoped for hitherto. “It has changed,” Dr. Anstie quotes an eminent authority as saying, “the whole prognostic significance of epileptic attacks.”

“Like that of all other drugs,” writes Sir Thomas Watson, “its special virtue was discovered empirically, and could never have been reasoned out.” But, attention being once directed to it, experimentation as to its physiological effects followed. Conducted in the usual gross way, and on the lower animals only, this seemed to prove *Kali bromatum* a pure sedative to nervous tissue, and it was used accordingly in every kind of irritation of brain, cord, and nerves. Disappointment naturally followed, and the employment of the drug is now, by good judges, restricted to true convulsions recurring paroxysmally, excluding all habitual spasms. As Dr. Ringer says:—“although convulsions may be excited by many causes, it is probable that the conditions of the nervous centres producing the attack are in every instance identical; and it appears to be these conditions which the bromide controls.” At the same time, more careful reading of the physiological effects showed that it was the reflex function of the nervous centres—the

“true spinal cord” of Marshall Hall—to which the bromide so readily acted as a sedative: sensation and voluntary motion were only affected by toxic quantities.

As checking convulsions, then, by deadening reflex excitability, bromide of potassium has taken its place in general therapeutics; and we of the school of Hahnemann have had to consider what to do with it. Our power over convulsive affections—especially over epilepsy—is not so great as to make us independent of further aid; and the mere fact that we have here to do with an antipathic action would not keep us from Kali bromatum any more than from Amyl nitrite. But palliation of paroxysms, as with the latter, is a very different thing from their suspension by the continued use of the drug. Here the vices of antipathic medication become manifest. It is allowed that epilepsy is seldom or never cured by the bromide, so that the patient remains free from it after ceasing to take the drug: it is only kept in check while he remains under its influence. For this purpose, moreover, it is necessary to take large and frequent doses, so that the blood be kept constantly charged with it, and the nervous system never free from the sedation it causes. Even then it is confessed that it oftentimes loses its power through habituation of the tissue to its action,* and has to be suspended for a time, at the risk of the paroxysms returning, so as to start afresh on its work.

Before committing our patients to such a course of treatment, it is necessary to enquire whether no harm results to the organism at large from this constant saturation with a medicinal agent—whether, in fact, the remedy is not worse than the disease. The phenomena of “bromism” are now well known. I will cite Dr. Bazire’s description of them as they appear in the nervous centres.†

“When given in large doses, such as thirty and forty grains two or three times a day, it produces very striking symptoms in about ten or fifteen days. The patient at first complains of a dull headache, becomes listless and apathetic, with an expressionless gaze and a lustreless eye. His intellect is clouded, his mind confused, and he is unable to concentrate his thoughts. There is slowness of perception, and questions have to be asked several times before their meaning is understood and an answer can be obtained. If, when these symptoms have begun to show themselves, the medicine be continued, hebetude follows, with inability to think, and a kind of stupor resembling that of the first stage of typhoid fever, together with drowsiness, somnolence,

* The last writer on the subject, Kunze, says—“The bromides only retard the attack of epilepsy for at most half a year; after which it comes on with renewed energy.” (See *Practitioner*, xxii., 222.)

† See his translation of Trousseau’s *Clinical Lectures*, vol. i.

and constant dropping off to sleep. The pupils are dilated, and contract very sluggishly under the influence of a strong light; the sensibility of the conjunctiva is so deadened that a finger may be passed with impunity on the surface of the eyeball without producing winking. Hearing loses its usual acuteness, and it is only by speaking in a very loud voice that the patient can be aroused from his stupor.

"The sense of taste is probably impaired like those of hearing and of sight. The tongue is moist and red at first, but after a few days it has a tendency to drying and browning. There is anæsthesia of the velum palati, the uvula and upper portion of the pharynx, so that these parts may be tickled without producing nausea or involuntary movements of deglutition. Swallowing itself, however, is unimpaired, and strangely enough the appetite remains very good; the patient takes his food well, and dozes off immediately after. Digestion seems to be easy, and the bowels, although sluggish in their action, are not very confined. There is intense thirst, and a craving for cold drinks. The anæsthesia is not confined to the mucous membranes only, for the sensibility of the skin is diminished also, so that pinching and pricking are scarcely noticed by the patient. From the beginning, the sexual aptitude fails; erections become rare and imperfect, and cease entirely after a few days.

"Simultaneously with the impairment of sensibility, disorders of motility manifest themselves. Thus the patient is averse to taking exercise, sits and lounges about; by degrees, his gait becomes altered, he rolls and staggers like a drunken man, his limbs shake and bend under him. After a time, he is obliged to keep to his bed, and when he uses his hands, as in the act of carrying anything to his mouth, they are seen to tremble, as if he were suffering from delirium tremens. The respiration is calm and tranquil, with occasional sighing. The circulation is considerably slackened; the pulse at the wrist is weak and slow; the heart's beat lacking in energy, and its sounds distant and feeble; in fact, in its effect on the heart, bromide of potassium seems to resemble digitalis. If the drug be withheld, these symptoms gradually diminish and pass off of themselves, but they leave behind them for some time afterwards great feebleness, both physical and mental. The anæsthesia of the fauces seems to be the last phenomenon to disappear."

To these effects, sufficiently undesirable, must be added the well-known acne of the drug, whose pustules sometimes become boils, and end in large ulcers with conical scabs like rupia. I may also cite Dr. Clarke's* description of the symptoms of a toxic dose, which, as he says, "are only an increase or an exaggeration of those of a therapeutic one. "The fœtid breath becomes nauseous; œdema supervenes on congestion of the uvula and fauces; the whispering voice sinks into aphonia; sexual weakness degenerates into impotence; muscular weakness becomes complete paralysis; reflex, general, and special sensibility disappears; the ears do not hear, nor the eyes see, nor the tongue taste; the expression of hebetude becomes first that of imbecility, and then that of

* *Abstract of the Physiological and Therapeutical Action of Bromide of Potassium*, by Drs. E. H. Clarke and R. Amory. Boston, 1872.

idiocy; hallucinations of sight and sound, with or without mania, precede general cerebral indifference, apathy, and paralysis; the respiration, without the stertor of opium or alcohol, is easy but slow; the temperature of the body is lowered. As the bromism becomes more profound, the patient lies quietly on his bed, unable to move, or feel, or swallow, or speak, with dilated and uncontractile pupils, and scarcely any change of the colour of the skin or face; the extremities grow gradually colder and colder; the action of the heart becomes feebler and slower, till it ceases altogether."

I confess that my own decision is against the bromidal treatment of epileptic and other convulsions, save when from their frequency they are threatening life or reason, and when careful homœopathic medication has failed. I think, moreover, that herein I am expressing the mind of most practitioners of our school. It is quite possible, indeed, that some true specific influence of an anti-epileptic kind may be exerted by Bromine itself. This is suggested by the efficacy ascribed by Dr. Hammond to the bromide of zinc, in quite small doses, and by others to the bromide of arsenic in quantities smaller still. I am speaking, however, of the usual practice with the bromide of potassium. But we may here be positively as well as negatively consistent with our principles, and find in the phenomena of bromism indications for the use of the drug according to the law of similars. This has already been done for us in several instances.

1. The acne of Kali bromatum was first noticed by Höring, of whose experiments with Bromine I have already spoken. It became in his case—as not unfrequently—a crop of boils. It is common, but not constant—Dr. Clarke observing it in two thirds of the cases treated by him with continuous doses; and it is not, as Dr. Russell Reynolds says, determined by the quantity of bromide that is taken. He has seen it follow a few five-grain doses, and it has been absent in many cases where thirty grains have been taken, three times daily, for periods of six or even of twelve months. It sometimes results in suppuration: sometimes the pustules die away without going through this process. Its favourite seats are the face, scalp, and back.

Here is a suitable starting-point for homœopathic medication; and Dr. Drysdale states that he has more than once cured such an acne with two- or three-grain doses of Kali bromatum. But he had been anticipated in his statement by a practitioner of the old school, Dr. Cholmeley. He states that he has seen an obstinate, long-continued acne disappear

entirely while bromide of potassium was being taken for a nervous disorder.*

2. Kali bromatum has an unquestionable soporific effect, and is in large use as a hypnotic, though opinions seem much divided as to its certainty. It concerns us little in this capacity; but we read with much interest the description of the kind of sopor induced given by M. Laborde from observations made on himself. "It is," he says,† "a state of heavy somnolence; it is often suddenly interrupted, although there are, properly speaking, no dreams, or no dreams that take a definite shape; it is rather a nightmare, and an indefinite one. Waking is accomplished with great difficulty." The indications for the drug in certain morbid conditions of sleep are obvious; and we have the encouragement of Dr. Ringer, who finds it very useful in the night-screaming and somnambulism of children, and the nightmare of adults. We may remember, too, the connection between too profound sleep and nocturnal enuresis.

3. According to physiological experimenters, bromide of potassium acts strongly on the vaso-motor nerves, constricting (at least at first) the arterioles. They maintain that it is in virtue of this power that it proves sedative to the nervous centres generally. Dr. Russell Reynolds, however, takes just the opposite view, considering that it acts upon the vaso-motor system as a "sedative," *i.e.*, that it reduces such morbid activity as would lead to the spasmodic narrowing of vessels, and the consequent induction of irregularity in the supply of blood. The principle *similia similibus* explains the apparent contradiction. He commends it accordingly in disturbances of this system elsewhere than in the head, and finds ten- or even five-grain doses sufficient for their removal.

4. We shall probably find a place for Kali bromatum in some functional paralytic conditions, as tabes dorsalis from sexual excess, idiopathic aphasia, and simple dementia. Two local paralyses are mentioned as having been cured by it—dysphagia of liquids in infants by Dr. Ringer (I have had the same experience once myself), and incontinence of urine by Dr. Warburton Begbie.‡ The latter has been caused by the drug.

There are a good many other points of interest about bromide of potassium; but I cannot do more than indicate them. There is the question of the source of its efficacy, whether

* *Med. Times and Gazette*, Dec. 11th, 1869.

† See *Practitioner*, xii., 9.

‡ *Ibid*, xii., 98.

this be from its bromine, as maintained by Dr. Richardson, or from its potassium, as suggested by Professor Binz, or whether (as Dr. R. Reynolds thinks) it is a *tertium quid* distinct from either. Then there is its action on the sexual organs, whose activity it seems—in large doses—to diminish even to abolition: this being due, according to some observers, to a local action on the extremities of the excitor nerves, according to others, to its depressing influence on the spinal cord. Dr. Anstie thought much of it in insomnia, and even neuralgia, from sexual worry; and it seems effective in nymphomania. This, of course, belongs to its antipathic action; for I do not think we can make capital out of the single observation of Laborde in which sexual excitement seemed to follow upon its use. But it is here, perhaps, that I must mention the action of the drug on ovarian cysts. A case of this kind is recorded in the *Edinburgh Medical Journal* for 1868, in which, after a single tapping, the continuous use of the bromide, in doses of five, ten, and fifteen grains, effected a complete cure. In the twenty-seventh volume of the *British Journal of Homoeopathy* Dr. Black records an equally satisfactory case, where grain doses sufficed for the cure; and in the twenty-eighth volume you may read one of my own.* There is much encouragement here for future trials. Other applications of the drug may result in time from a consideration of the 444 pathogenetic effects of Kali bromatum recorded by Dr. Allen under that heading.

Of the other alkaline bromides, I may mention that that of ammonium has been proved by Dr. Cushing, of Lynn, and you will find his pathogenesis in Allen's first volume. Its chief effect on him seems to have been the production of much white, sticky mucus about the upper part of the digestive and respiratory tracts. Dr. Hale praises it in the treatment of chronic catarrh of the posterior nares. This writer has some remarks on the dynamic action of other bromides, which you will do well to read. The field is too little worked for me to adventure upon it at present.

* In my case the cyst seems to have ruptured into the peritoneum. Dr. Helmuth, in his *System of Surgery* (3rd ed. p. 106), relates a curious case of cysto-sarcoma of the breast, of many years standing, in which, under the influence of two-grain doses of the bromide, three times daily, the larger cysts broke and discharged, and a number of the smaller ones disappeared.

LECTURE XXI.

BRYONIA.

I shall devote this lecture to a medicine which, more than any one which has yet come before us, therapeutics owe entirely to Hahnemann. I speak of

Bryonia.

A tincture of the root of the *Bryonia alba* is the ordinary homœopathic preparation; but the British Homœopathic Pharmacopœia allows the indigenous species—the *Bryonia dioica*—to be substituted. Mr. Turner tells me that now and then the *tamus communis* is brought to chemists by mistake for the bryony root, and might be incautiously used by them.

Bryonia was early proved by Hahnemann: the pathogenesis occurs in the second volume of the *Reine Arzneimittellehre*. It consists (in the latest edition) of 781 symptoms, two thirds of which are contributed by the master himself, and the rest by six fellow-provers. It was also one of the medicines selected for re-proving by the Austrian Society. Their results are published in the third volume of the *Oesterreichische Zeitschrift*. Eighteen persons took part in the proving, two of whom were females; and nearly all employed increasing doses of the mother-tincture. The symptoms obtained are amalgamated with Hahnemann's by Dr. Allen, forming a total of nearly two thousand; and the experiments on animals which were made have been translated for the *British Journal of Homœopathy* (vol. xxv). There are two interesting studies of *Bryonia* which I may commend to your notice,—the one by Dr. Hirschel, in that part of his *Pharmacodynamics* which has been translated by Dr. Hayle; the other by Dr. Dunham, in his *Lectures* (I. 89). It forms also one of the first series of "principal homœopathic remedies" on which Hartmann has made his *Practical Observations*.

I have said that therapeutics owe *Bryonia* to Hahnemann. Before his time it was known only as a drastic emetic and

purgative, and very little used in practice. He proved it for the volume of *Materia Medica* which he brought out in 1816; and remarks there that "the symptoms it excites in the healthy correspond to many affections of daily occurrence," and that hence "its healing power must be of wide range." He had already found it very useful in the fever which ravaged Germany while the seat of war in 1813, as I shall tell you hereafter; and he relates in the preface to this volume of the *Reine Arzneimittellehre* a case of gastralgia with water-brash cured by it in twenty-four hours, after the patient had been laid by for three weeks. He gave here a single dose of a drop of the pure juice, and at this time recommends the drug to be somewhat thus administered in maladies of some standing when the patient is fairly robust, but to be given in the 18th dilution in acute disease with much constitutional excitement. In a solution of about this strength he had employed it in the fever of which I have spoken. He compares it to *Rhus* (whose proving also first appeared at this time), giving as its distinguishing features its mental symptoms (of which immediately), and the aggravation of its pains by movement—those of *Rhus* being worse at rest. This last characteristic has proved of inestimable value in determining the selection of *Bryonia*. He further suggests its probable usefulness in certain abdominal spasms in the female sex, and (later) in some kinds of constipation and of menorrhagia.

In consequence of all this, *Bryonia* soon came to be largely used in homœopathic practice, and took that place among the polychrests of our *Pharmacopœia* which it has ever since retained. Of its high estimation and wide sphere of usefulness you cannot form a better idea than by reading Hartmann's *Observations*; and I shall have to enlarge upon rather than detract from his recommendations of the drug.

As *Bryonia* will be a new medicine to most of my hearers, I must detail its pathogenetic effects with some minuteness.

Bryonia is a pure irritant. It has no neurotic or hæmatic power; but sets up inflammation,—locally, wherever it is applied, specifically, in the serous membranes and the chief viscera they contain, some of the mucous membranes, and the muscles.

I. No poison (not even *Aconite* or *Arsenic*) affects the *serous membranes* so certainly and powerfully as *Bryonia*. If you will read the autopsies of the animals poisoned at Vienna, this fact will abundantly appear. In the first the pleuræ were injected and full of serum, and the peritoneum and arachnoid injected; in the second, third, and fifth the arachnoid only

was reddened ; but in the sixth the pleuræ were as in the first, and the pericardial vessels were injected. Correspondingly, the provers have the characteristic pleuritic pains with fever ; and although the symptoms of the head, heart, and abdomen are undecided, they at least do not forbid the supposition of an affection of their respective serous membranes. Moreover, those close allies of the serous sacs—the synovial membranes, which are more easily affected by drug action, give plain indication of suffering from Bryonia. The joints swell and become tender, especially those of the fingers.

Since all the parenchymatous organs influenced by Bryonia are enclosed in serous membrane, I used to try to account for their symptoms by the primary action of the drug on the investing tissue. I cannot, however, ask you to accept this doctrine now. I must describe the effects on the viscera as they exist, and leave their relation to the disorder of their envelopes for further investigation.

1. It is curious, nevertheless, that as of all the serous membranes the pleuræ are those most readily influenced by Bryonia, so of all the viscera the *lungs* are those which suffer most from its action. The short, quick, and oppressed breathing, heat and pain in the chest, cough and bloody expectoration, and fever, experienced by the provers, find their interpretation in the phenomena presented by the poisoned animals. In these, with similar symptoms during life, the lungs were always of deeper colour and diminished crepitation, while in two the lower lobes were hepaticized.

2. Next to the lungs, the *brain* is the organ which shows most signs of being affected by Bryonia. There is no perversion of the sensorial functions, as with Belladonna ; and the determination of blood does not pass beyond the stage of congestion. But up to this point it is very well marked ; and the provers get a hot and red face, with headache (generally frontal), sense of weight and fulness, and vertigo. Epistaxis also is frequent.

3. Of the two chief viscera enfolded by the peritoneum, the *liver* is much more affected by Bryonia than the kidneys. It causes tensive and burning pain in the hepatic region, which is sometimes also sensitive to pressure. In one prover, the skin over the whole body became yellowish. In the animals the liver was always found gorged, and sometimes friable.—In two animals the kidneys also were found congested ; but I think the scanty, hot, and high-coloured urine so often passed by the Austrian provers a symptom of general fever rather than of renal implication.

II. I now come to the action of Bryonia on the *mucous membranes*. It is interesting to observe (in connection with its relation to the rheumatic poison) how much less powerfully it influences these than it does the serous and synovial membranes. It is an acrid, and hence large doses cannot but irritate the alimentary canal as they go down. Accordingly, we have in the provers sore throat, vomiting, and diarrhœa with colic and flatulence; and in the animals an aphthous mouth, and ulcers in the stomach and intestines. But the essential phenomena of Bryony in the gastro-intestinal sphere do not seem to depend upon irritation of the mucous membrane. They are,—water-brash (with this there is the characteristic contractive pain at the lower end of the œsophagus), bitter risings and vomitings, pressure on the stomach, feeling of load as if a stone were there, and constipation. These await their physiological expression; but they have received, as we shall see, their full therapeutic application.

The respiratory mucous membrane is unquestionably affected by Bryonia, though I doubt whether the irritation extends lower than the first division of the bronchi. The symptoms of the provers (pain, cough, &c.), whenever localised, are referred to the trachea and its bifurcation; and these parts only were found injected in the poisoned animals. The pneumonia set up by Bryony was never associated with bronchitis, in this strikingly different from that of Tartar emetic and Phosphorus. If Bryonia causes any nasal catarrh, it is dry; and the cough also has little expectoration, and is continuous, irritating, and violent, often causing retching and pains in the walls of the chest. Of late, our knowledge of the action of Bryony on the air tubes has received a novel extension from an experiment of M. Curie's.* By administering to a rabbit gradually increasing doses of Bryonia during eight months till he came to 250 drops of the mother-tincture daily, he developed in the animal a firm pseudo-membranous tube, extending from the larynx to the third ramifications of the bronchiæ. While this fact is of great interest, I do not think it proves that the action of Bryonia on the air-passages is either profound or extensive. Pseudo-membranous formation on their surface is a pathological fact *per se*; and has no necessary relation to the amount of affection of the subjacent mucous membrane.

Upon the urinary mucous membrane I should have said that Bryony had little or no action, but that several of the provers experienced considerable vesical tenesmus, with a

* See *Brit. Journ. of Hom.*, xix., 455.

feeling after micturition as though all the urine had not been expelled.

III. In one of the animals poisoned with Bryony at Vienna, where a very minute autopsy was made by a practised pathologist, it is noted that the substance of the heart and the muscles of the neck were intensely red. Putting this together with the soreness and pain on motion experienced by the provers in so many parts of the body, even to the production of pleurodynia and lumbago, I venture to set down our drug as a specific irritant of muscular fibre. As we have no other medicine with such an action, we must not lose even the hint of it supplied by these facts.

Under these headings I have given you the main pathogenetic effects of Bryonia. I have only to add that in the female provers the menstruation was premature and excessive; and that in all febrile symptoms were frequent.

Let us now enquire what have been the clinical results of these very extensive provings.

To Bryonia, as to all the great Hahnemannian medicines, a special constitution and disposition has been assigned as that to which it is most suitable. It is said to act best in persons of firm and fleshy fibre, of dark hair and complexion, of "bilious" tendency and choleric temperament, and where much irritability and irascibility are present. You must not lay too much stress on such indications; nevertheless, they sometimes guide us to the true remedy. Still more characteristic are its pains, which are always of a shooting or tearing kind.

I shall begin by characterising the relation of Bryonia to fever. It is especially suitable to two great types, the rheumatic and the typhous.

I. After Aconite, Bryonia is incomparably the best remedy for *acute rheumatism*. In its whole pathogenetic action it reminds one of the rheumatic poison. Its feeble affinity for skin and mucous membrane, and its powerful influence over serous and synovial membrane and muscular fibre, with its fever and sour sweats, point unmistakeably to this disease. Accordingly, most of us employ it throughout rheumatic fever, generally in alternation with Aconite, unless the symptoms call urgently for some other medicine. But we need a series of comparative experiments which shall demonstrate what part the Aconite and what the Bryonia takes in controlling the disease. Bryonia appears equally suitable for articular and for muscular rheumatism: it is least fitted for affection of the fibrous tissues proper. It continues, of course, to be a

homœopathic remedy when any of the serous membranes are inflamed in the course of rheumatic fever; though it may yield in importance to some other medicines. It is a capital remedy (at any rate after Aconite) for rheumatism attacking particular muscles, as those of the loins or neck, or the diaphragm; particularly when brought on by cold draughts. In chronic rheumatism it is specially indicated when the pain is increased by motion, *i.e.*, when the affection is sub-inflammatory in character.

II. The great campaign of 1813 in Germany, which ended at Leipsic, left—after the war had rolled away over the Rhine—a woeful legacy behind it in the shape of an epidemic fever. Of this malady Hahnemann gives a graphic account in a paper which you will find in Dr. Dudgeon's translation of his Lesser Writings (p. 712). Bryonia was the remedy he most frequently employed, being indicated by shooting pain, worst on movement,—Rhus and Hyocyamus also being given according to the symptoms; and he treated 183 cases without a single death. Bryonia has hence acquired among homœopaths a large reputation in the treatment of the essential fevers. The head symptoms and the bilious disturbance of the drug frequently find their antitypes here; and Hahnemann's pathogenesis adds the dry mouth and tongue, and the nocturnal delirium. One of his symptoms, indeed, if a pure pathogenetic effect of the drug, would make it perfectly homœopathic to low fever:—"She sleeps the whole day, with dry, great heat, without eating or drinking, with twitching in the face; she has six involuntary passages, the stools being brown and smelling badly." Hartmann characterises the fever of Bryonia as one that often suggests Aconite, but wrongly; in the old nomenclature, it is a synochus, not a synocha. The patient, he adds, is often cold externally, though hot within. Dr. Dunham attempts a detailed picture of the Bryonia fever. "The headache," he writes, "is a splitting pain through the temples, and at the same time, and more severely, in the occiput. Oppression at the pit of the stomach, and tenderness there; vomiting of food, mucus, and bile, stitches in the hypochondria, and soreness and tension in the hypochondriac region, along with dry cough and decided constipation, without any desire for evacuation of the bowels, are present. Together with these local symptoms, there are frequent short chills, alternating or mixed up with heat of the body; a pulse small and frequent, but somewhat hard. Add to the above, a slimy and bitter taste, aversion to food, pains in the back and limbs, much aggravated by touch and motion, together

with dulness of the sensorium and aversion to noises and to mental exertion, and we have a picture of the form of fever for which, whether remittent or intermittent, Bryonia is appropriate." You will find its symptomatic indications in typhoid very minutely detailed by Dr. Wolf in the eighth volume of the *British Journal of Homœopathy*.

Nosologically, Bryonia is especially suitable for *relapsing fever*. Dr. Kidd, who saw so much of this malady in Ireland in 1847, considers Bryony the best medicine for it;* and Dr. Russell thinks that the fever treated by Hahnemann was of this nature. Its place in typhus and typhoid is more difficult to determine. There seems a general concurrence among the older homœopathists as to its power of modifying favourably the erethism of the first stage of "typhus abdominalis," our enteric fever; and Trinks even claims for it the capability of aborting the disease.† He commends it also for the rheumatic pains and the bronchitis which occasionally complicate the course of fever. It has long been the favourite remedy in this country for "common continued fever"—the "gastric fever" of popular nomenclature; but in my own hands Baptisia has quite dethroned it here.

III. I will now speak of the power of Bryonia in affections of the serous membranes and of the viscera which they enclose.

Dr. Trinks, than whom we have had no better practical physician among us, thus characterises the place of Bryonia in serous inflammations.‡

"From no small number of cases which I have carefully marked down, the fact comes out that Bryonia is the sovereign remedy in all inflammations of the serous membranes which have advanced to the stage of serous effusion. This action of Bryonia extends all over the serous membranes which cover the thorax and abdomen, and the organs situated in these cavities, and which are so often attacked by inflammation.

"As long as the local inflammatory condition had not reached this stage, the fever being still of a sharp, well-pronounced synochal character, the Bryonia was of no use, but at this time Aconite and Belladonna were the specific medicines which arrested the inflammation before it had been developed to the stage just specified. But when on the other hand the inflammation had advanced to the stage of serous exudation, then in all cases Bryonia showed itself a medicine of quick and certain operation, which not only removed the still-existing local inflammation, but also with the least possible delay effected the absorption of the serous effusion which had already taken place.

"I find in my journal many cases of inflammation of the pleura, as

* *Annals*, iv., 181.

† *Brit. Journ. of Hom.*, xxix., 303.

‡ *Ibid.*, viii., 482.

they occur very frequently in Dresden in the beginning and end of winter, during the prevalence of strong east and north-east winds, in persons disposed to tubercular phthisis; then two cases of inflammation of the pericardium with serous exudation; and two very noteworthy cases of inflammation of the peritoneum, with very copious effusion of serum into the abdominal cavity."

These doctrines of Trinks' about the place of Bryonia in inflammations of serous membranes have been confirmed by all subsequent observers. Aconite should be given at first, and continued (with aid from Sulphur) should the exudation be plastic; but if serous effusion occur, its place must be taken by Bryonia. It is especially in *pleurisy* that this treatment has become accepted. You will find some good cases illustrative of it by the late Dr. Beilby, of Glasgow, in the tenth volume of the *British Journal of Homœopathy*. For *pericarditis* you should read Dr. Russell's *Clinical Lectures*. I myself greatly prefer in this disease Aconite or Colchicum. In *peritonitis* from exposure to cold I have seen Bryonia act exceedingly well after Aconite: there are two capital cases in Trinks' paper. It is recommended also for the puerperal form of this disease. *Arachnitis* is the only form of serous inflammation in which Bryonia has not proved curative; but since this malady, as occurring (where we most frequently meet with it) in children, is generally tubercular, the failure of any given medicine to cure it reflects no discredit on the remedy. In non-tubercular cases in these subjects it would probably repay the confidence which is generally placed in it; and in the acute meningitis of adults it is of unquestioned value.

Of the viscera enveloped by the serous membranes I shall only speak here of the brain, as the lungs and liver will come in under the head of the respiratory and digestive organs respectively. I will just say, however, that Bryonia is frequently indicated in inflammations of parenchymatous organs on which it has no direct action, when it is their serous envelope which is affected. Such maladies are the diaphragmitis, the lienitis and the ovaritis for which Hartmann commends it. Returning to the brain,—Bryonia is of great value in simple non-inflammatory *congestion* of this organ. Cases are on record in which such a condition arising from suppressed menstruation, from exposure to intense cold, and from sea-sickness with long-lasting constipation, was promptly dissipated by the medicine. It is also frequently useful in congestive headaches, with feeling of bursting or splitting, which are seated in the forehead, relieved by pressure, and much

increased by stooping, which causes a sensation as if the brain would fall out. If—as it often is—giddiness is present, the patient feels as though he would pitch forwards. Another kind of headache for which Bryonia is useful is a form of hemicrania: the pain is generally on the right side, and is accompanied by retching and bilious vomiting.

Before leaving the serous membranes, I must refer to their synovial analogues; only to say, however, that Bryonia has proved as useful in idiopathic synovitis—when caused by cold or injury—as when the affection is the local manifestation of rheumatism.

IV. I have now to speak of the power of Bryonia over affections of the digestive organs. A form of *gastralgia* for which it is suitable is again most excellently described by Trinks. “The pressure on the stomach, a much more frequent affection in the female than in the male, generally caused by irregularity in diet, eating indigestible food, bread not enough baked, coffee, brandy, or bad beer, finds for the most part its radical cure in Bryonia. It comes on when the stomach is empty as well as when it is full, but more frequently immediately after it has been emptied of its contents: the patients complain of a pressure at the pit of the stomach, *as if they felt a heavy annoying stone there*; it lasts from two to four hours, sometimes longer, and goes off with much eructation. In worse cases, the so-called water-brash is an accompaniment, or there is a great deal of acidity generated, which shows itself by sour risings, heartburn, and vomiting of a very sour and acrid mucus. In the severer degrees of this pain of stomach, the epigastrium becomes extremely sensitive to external touch and pressure, and the patient cannot bear the clothes to be firmly put on.” Teste notes of the Bryony dyspepsia, that beer disagrees or gives no satisfaction to thirst, and that water is absolutely required as a *dissolvent*. As with *Nux vomica* and *Lycopodium*, gastric disorder requiring Bryony is generally accompanied by *constipation*; but whether for this malady occurring independently it is ever better than the other more important medicines we have, I cannot say. Hahnemann ranks it with *Nux vomica* and *Opium*. Dr. Dunham considers that Bryonia is specially adapted to torpor of the bowels, as distinguished from the ineffectual urging of *Nux vomica*; and Dr. Guernsey indicates dryness of the *fæces*, as if burnt, as calling for it.* Dr. Bayes recommends it in the constipation of children, where the *fæces* are so large and hard as to cause pain in passing. The

* See cases in *Hoyle*, i., 80, and *Amer. Homœopathist*, ii., 43.

diarrhoea of Bryonia also must not be forgotten as a possible indication for its therapeutic use. I have heard of its doing much in America for cholera infantum. Causation of diarrhoea by dry, hot weather is always regarded as indicating it.

In affections of the liver, Bryonia frequently comes into play, often in association with Mercurius. It hardly reaches to true hepatitis; but in congestive states of the organ, with pain in the right shoulder, giddiness, and slight yellowness of the skin and eyes, it is very useful. It is pre-eminently a gastro-hepatic medicine, and constantly finds place when the digestion is impaired in consequence of the imperfect action of the liver.

V. We come now to the action of Bryonia in affections of the respiratory organs, which from its pathogenesis should be rather extensive. It is the best medicine—after Aconite—for what is known as a “cold on the chest,” *i.e.*, where a nasal catarrh has run down the air-passages, as far as the first or even second division of the bronchi. Heat, soreness, and pain behind the sternum, and an irritative shaking cough with scanty expectoration, make up the Bryony picture. Or, in Trinks’s words, there is “dry, more or less severe cough, often rising to the point of retching, which is excited and maintained by a constant ‘tickle’ in the lower part of the trachea or under the breast-bone, which is more severe by day than by night, and forces up only a very small quantity of clear, sometimes blood-streaked, expectoration; gives rise to pain of being shaken in the abdomen, or in the chest and head, and makes the patients often complain of an extremely annoying pressure under the sternum, which confines the breathing. These states occur frequently in elderly persons with stuffing of the nose, running from the eyes, and derangement of the stomach, at the beginning and end of winter. For this condition Bryonia effects all that can be expected from a medicine, and that very speedily.” Another of our veterans, Dr. Schrön, has some valuable remarks on the action of Bryony in the respiratory sphere.* Among other things, he says, “In chronic cough, which becomes very violent at the least excitation of the lungs, as speaking, which is worst morning and evening, and which is accompanied by very little expectoration, as we observe in individuals whose lungs have suffered from previous inflammation and frequent attacks of hæmoptysis, I have seen Bryonia administered with the best effects. I had such a case in which the patient coughed for whole nights together. Bryonia ζ , given for some length of

* *Brit. Journ. of Hom.*, xvi., 439.

time, not only produced perfect night-rest, but favoured the process of nourishment in such a manner, that the patient, who was formerly quite emaciated, picked up flesh, and her appetite improved." Dr. Dunham notes of the Bryonia cough that the patient often presses on the sternum to support the chest during the exertions he makes.

But besides conditions such as these, Bryonia has obtained reputation in the treatment of the three great affections of the respiratory organs, croup, bronchitis, and pneumonia.

1. For *croup* Bryonia had been recommended by M. Teste (in alternation with Ipecacuanha) long before M. Curie ascertained its power of developing false membranes. He speaks very confidently of the certainty of this treatment. M. Curie himself relies upon Bryonia in the treatment of croup and laryngo-tracheal diphtheria. We have as yet no differential diagnosis between it and Iodine, Bromine and Kali bichromicum as anti-croupous remedies.

2. In most of our text-books and domestic treatises, Bryonia occupies the first place among the remedies for acute *bronchitis*. I myself am quite unable to see its homœopathicity to this disease, when the smaller bronchiæ are involved; and I have never been able to trace any good effect from it in practice. I said so much in a paper which I read on bronchitis before the British Homœopathic Society; and found that my colleagues generally had met with the same disappointment in the use of the drug.* Bryonia, therefore, must no longer stand at the head of the medicines curative of this disease. Dr. Jousset, indeed, praises it in capillary bronchitis; but he always gives Ipecacuanha in alternation with it, and I should be inclined to ascribe most of the benefit observed to the latter drug.

3. It is otherwise with *pneumonia*. From what has been said, indeed, Bryonia can obviously do no good in the broncho-pneumonia so common in children and aged persons, where a catarrh begins in the bronchial mucous membrane, and probably affects the air-cells rather in the way of œdema and collapse than of actual inflammation. But to primary "croupous" pneumonia Bryonia is perfectly homœopathic, even more so than the Phosphorus which in this country (at least) usually plays the chief part in the treatment of the disease. Its power of developing a false membrane in the air-tubes, which makes nothing in its favour in bronchitis, is all-important here, where we have to deal—not with catarrh of a mucous membrane (which is absent in the air-cells proper)—

* See *Annals*, v., 193.

but with fibrinous exudation. To convince yourself of its power you have only to read Tessier's cases treated in the Hôpital S. Marguerite, in which Bryonia was the chief remedy employed.* Dr. Jousset continues to express unbounded confidence in it, giving it (like his master) in the higher attenuations (12-24). I am myself in the habit of administering it in the first decimal dilution; and think I can claim for it, thus given, the power ascribed by Kafka to Iodine and Bromine, but refused by Jousset to any medicine, of aborting the disease. Pleural complication would of course confirm the indications for it in any given case; and in pleuro-pneumonia proper—if you ever encounter such an affection in the human subject—you will find it specific. It has been found curative of the epidemic pleuro-pneumonia of animals.

There are yet a few residuary phenomena to be noted in the action of Bryonia.

a. The first is the power which it exerts over the *mammary glands*. Whenever, from the first coming in of the milk, from catching cold while nursing, or from abrupt weaning, the breast becomes swollen, tender, knotty, and painful, Bryonia will almost certainly resolve the inflammation and prevent the formation of abscess. Dr. Dunham advises it in milk fever.

b. Secondly, Bryonia is of such high popular repute in the scleroderma of horned cattle—*Haningkrankheit*—that it has acquired the name of *Haningwurzel*. Dr. Mayrhofer proved it on three oxen, and in each the primitive symptoms of the disorder were developed—the skin becoming dry, creaky, and adherent, and the hair bristly and knotty. It is thus suitable in scleroderma neonatorum. It is occasionally praised by homœopathists in dropsical conditions—as, for instance, in the œdema of the legs which comes on in some pregnant women without the intervention of renal mischief. It would probably be suitable to the condition lately described as “skin-dropsy,” where anasarca occurs independently of disease of the heart or kidneys, and is supposed to depend upon insufficient performance of their functions on the part of the sudoriparous glands.—It is also possible that these effects of the drug indicate a specific action as exerted by it on the subcutaneous cellular tissue, and that it may prove useful where inflammation and induration occur herein. Jahr considers it the most effective medicine we have for absorbing or promoting the rapid maturation of carbuncle.

c. Bryonia has not much influence on the eye (at any rate

* *Récherches cliniques sur le traitement de la Pneumonie, &c.*, 1850.

it is not much used in its diseases), though it would seem suitable enough to rheumatic ophthalmia. Drs. Allen and Norton say:—"It is rarely, if ever, indicated in diseases affecting the external tissues of the eye, its great sphere of usefulness being in diseases of the uveal tract." They commend it in iritis, choroiditis (especially the so-called "serous" form), and ciliary neuralgia, where the pains are of its shooting character, and have its aggravation from motion. They add amelioration from pressure as a characteristic condition for it here. Dr. Vilas commends it in scleritis and episcleritis.

4. Several of Dr. Guernsey's indications for the drug I have already mentioned. I may add—dry, parched lips and mouth; thirst for large draughts of water; nausea and faintness on sitting up; vomiting of food soon after taking it. It is commended by some in vicarious menstruation, and is particularly good, Dr. Guernsey says, when this takes the form of epistaxis.

I mentioned at the outset of these remarks the kind of patient for whom Bryonia is suitable. I conclude by saying that it is well indicated for morbid states brought on by that very anger to which he is prone, and also to those resulting from the dry east winds of our climate. This last point gives it another feature of differentiation from *Rhus*, which rather meets the consequences of damp.

From its extensive range Bryonia cannot but have many analogues. In its relation to rheumatism, it compares with *Aconite*, *Rhus*, and *Colchicum*; in fever it acts like *Baptisia* and *Eupatorium*. It affects the serous membranes like *Aconite*, *Arsenic*, and *Mercurius corrosivus*; the synovial membranes like *Pulsatilla*; the alimentary canal like *Nux vomica* and *Lycopodium*; the liver like *Mercurius* and *Chelidonium*; the air-passages like *Nux* and *Senega*; the lungs like *Phosphorus*, *Chelidonium*, and *Tartar emetic*.

The dose of Bryonia, like that of all the polychrests, varies widely. As a rule it may be said that the lowest potencies act best in rheumatism and dyspepsia, and the medium and higher in respiratory affections. But even to this rule there are exceptions; and in its other applications it is equally in favour with those who use the high and with those who prefer the low dilutions. That is, I believe, its action is qualitative rather than quantitative.

LECTURE XXII.

CACTUS—CALCAREA.

Our first medicine to-day comes to us—as a medicine—from Italy.

There are, I do not doubt, many excellent homœopathists in that country ; but hitherto they have contributed little to our literature or to our *Materia Medica*. Dr. Rubini, of Naples, has come forward to redeem the credit of his countrymen in this matter, and has given us a new and valuable medicine in the night-blooming cereus,

Cactus grandiflorus.

A tincture is prepared from the young and tender branches and the flowers.

Dr. Rubini, after observation of the physiological and therapeutical effects of the Cactus for ten or twelve years, published a pamphlet containing the results of his experience. It was translated by Dr. Dudgeon for the *British Journal of Homœopathy*, in whose twenty-second volume it may be found. It contains numerous symptoms observed on the healthy (subjects and doses not specified), and as many cured in the sick. Some later provings, from four sources, are incorporated with Dr. Rubini's results in Allen's *Encyclopædia* ; and Dr. Hale, in the article on the drug in the second edition of his *New Remedies*, has collected all the clinical experience with it which had appeared in print up to that time (1867).

From Dr. Rubini's proving it would appear that Cactus has a very powerful action upon the heart and arteries, closely resembling that of Aconite. General rigor, followed by much heat and sweat, even recurring daily at the same hour, and symptoms—as pain and hæmorrhage—of acute congestion in the head and chest, attest its action on the arterial system ; while the heart gives evidence in pain,

palpitation, oppressed breathing, and constriction about the chest, of being unusually affected. The pulsation in the scrobiculus cordis so characteristic of cardiac disorder is markedly produced by Cactus. It causes also painful pressure on the vertex; acid risings from the stomach, with sense of weight there; severe twisting colic, with heat (external and internal) of the abdomen; bilious diarrhœa, with pain before the stools; inflammatory strangury, followed by copious urine loaded with lithates; and painful menstruation. There is great prostration; and the mental condition is one of profound melancholy.

From such a pathogenesis as this brilliant results might be anticipated. Dr. Rubini assigns to it a wide range of curative power. "The characteristic feature of the Cactus consists in this, that while it develops its action specially in the heart and its blood-vessels, dissipating their congestions, and removing their irritations, it does not weaken the nervous system like Aconite;" so he writes in the preface to his proving. I must differ from him about Aconite weakening the nervous system. It need never do so, if the dose be not too large. But if Cactus acts in this manner, it may be a formidable rival to Aconite, as it would obviously be used in the same class of cases. It is said to have cured with striking rapidity acute otitis, acute and even chronic bronchitis, pleurisy, pneumonia, hæmoptysis, hæmatemesis, gastro-enteritis, hepatitis, hæmaturia, and a quotidian ague. These experiences have yet to be confirmed. For my own part, when I meet with these acute fevers, congestions, and hæmorrhages, I seem quite content with my tried and valued Aconite, and am loth to experiment with any other medicine. It is otherwise in affections of the heart, where Cactus appears to exert a power beyond that of Aconite, and to fill a place hitherto vacant. It seems beneficial in all over-actions of this organ, from nervous palpitation to acute carditis. In the distress arising from hypertrophy; in the severe sufferings incident to valvular disease* (perhaps also in angina pectoris); and in chronic palpitation, it generally gives rapid and lasting relief. The feeling as if the heart were grasped and compressed as with an iron hand (probably spasm) is very characteristic of Cactus in these cases, and is well-marked in its pathogenesis. It would probably be beneficial, at least to relieve pain, in internal aneurisms.

* See an excellently narrated case by Dr. O'Brien in the tenth volume of the *Monthly Hom. Review*.—Dr. Meyhoffer's experience with Cactus in cardiac affections, as related in his contribution to the *Transactions of the Paris Congress of 1878*, is also worth consulting.

Dr. Lippe states that he has frequently cured with *Cactus* the pressive headache in the vertex so often met with as a result of menorrhagia. I myself place much reliance on it in the similar headache of the menopause. Dr. Guernsey says that the constrictive sensation—as of an iron hoop—caused by *Cactus* in many parts of the body is an unerring indication for it in practice. This statement has been confirmed by many observers. Among them is Dr. Wallace McGeorge, whose communication on the subject may be read in the eleventh volume of the *Hahnemannian Monthly* (p. 507). He relates an instance of vaginismus in which, led by this characteristic, he prescribed *Cactus* with success. Dr. Farrington mentions another of rheumatism of the diaphragm, where the same constrictive sensation was prominent, and where the remedy proved equally potent.

The great analogue of *Cactus* is obviously *Aconite*. Its influence on the heart resembles that of *Naja*.

Dr. Rubini recommends the mother-tincture in acute inflammations and organic diseases of the heart. In its nervous affections he states that the higher dilutions act well

The remainder of my lecture to-day will be occupied with the subject of the action within the organism of the preparations of lime—

Calcarea.

Hahnemann has proved two of these—the *acetate* and the *carbonate*; and some later work has been done with *C. caustica*, *fluorata*, *iodata*, *phosphorica*, and *sulphurica*, and some knowledge attained of the virtues of *C. arsenica* and *muratica*. I shall speak of each of these separately, in its distinctive characters. But, first of all, there is a good deal to be said upon lime as such, without reference to the peculiarities of its several salts.

Lime differs from all the substances which have hitherto come before us as medicines, in that it is a normal constituent of the animal body. It enters, as you know, into the composition not only of the bones and teeth, but into that also of muscle, nerve, and nearly every other solid and fluid portion of the organism. It may hence be thought doubtful, at the first blush, if such a substance can have pathogenetic properties beyond those belonging to any local influence it may exert. When absorbed into the blood, it must surely be taken up by the tissues which it goes to constitute, and

welcomed instead of resented by them. It would seem, moreover, to act in disease as a food rather than as a medicine; so that its remedial use belongs to dietetics, and finds no place in a course of *Materia Medica*.

I have no doubt that there is some measure of truth in such arguments, especially on their therapeutic side. That, in cases of deficiency of lime as of iron, these elements can be given as food and so appropriated by the hungry tissues, I have no doubt; and the practice which results from the conviction is daily supported by success. But this does not warrant the inference that such substances can have no operation as poisons and no use as medicines. Consider what must happen if they are administered in excess—if more is introduced than the tissues require for their health and integrity. Elimination will doubtless dispose of some of the superfluity. But the affinity of the substance for certain parts of the organism will still be attracting it thither; and, while its *quality* determines its destination, its *quantity* will prevent its acting as a food and being wholly assimilated. You cannot make perfect health more healthy; and if you continue to ply a part with its natural stimuli and aliment beyond the point of perfect health, you necessarily produce disease.

Now it has been fully ascertained, and is well set forth by Dr. von Grauvogl in his *Text-Book of Homœopathy*, that the kind of disease produced is just that which ordinarily results from deficiency of the substance in question. Thus the habitual drinkers of chalybeate waters become anæmic. On the other side, it is a fact—and upon the principle *similia similibus* should be so—that these elements of the tissues, when given as medicines, promote the assimilation from the food and blood of the very material of which they consist. We shall see, when we come to Ferrum, that in this way anæmia may be cured by doses of iron far too small to have any nutritive value. Substances of this kind are called by von Grauvogl “nutrition-remedies,” as distinguished from the “function-remedies,” which are alien from the composition of the body.

A Dr. Schussler has lately caused some sensation by proposing to treat all diseases with such medicines as form part of the organism, and so to limit our *Materia Medica* to a dozen constituents. This proposition, indeed—commended to us strangely enough by Dr. Constantine Hering—we cannot for a moment entertain; but the importance of the remedies in question is undoubted.

The question then arises—is lime one of them? To answer it we must go, as with iron, to places where it is habitually introduced in excess as a constituent of the food or drink of the inhabitants. What do we find there? In the first instance, *bronchocele*. An overwhelming mass of evidence has now been collected in favour of the opinion that “the endemic prevalence of goitre is connected with the use of water impregnated with calcareous salts.” I quote Sir Thomas Watson, who himself endorses this view. But what does bronchocele mean? Is it a mere local, perhaps mechanical, effect of the circulation of particles of lime through the gland? Nay; for if we look a little farther—at the children of goitrous parents, at those whose thyroids are enlarging under unfavourable hygienic circumstances, we get a more general condition; we have *cretinism*. Cretinism essentially consists in defective growth; imperfect ossification of the skull, with hydrocephalus and imbecility; and enlargement of the mesenteric glands. Here we have the ultimate pernicious effects of the introduction of lime in excess into the system; and they are obviously the same as those which follow its deficiency. Dr. Beneke has well pointed out the importance of phosphate of lime to cell-growth, as illustrated by agriculture;* and no cells can need it more than those which are concerned in ossification. It only requires to be established that lime dynamically cures what dynamically it causes; and this, I think, is fully substantiated by experience. It is apparent from the high repute which—as we shall see—the carbonate enjoys in homœopathic practice, when given for those very conditions in doses of the utmost minuteness. “Where we find,” says Dr. Guernsey, “a large head, large features, pale skin with a chalky look, and (in infants) open fontanelles, we should think of *Calcarea carbonica*.” It is hardly less apparent in the excellent results which Dr. Ringer reports from grain doses of the phosphate, of which he admits that only a small proportion can be dissolved in the gastric juices, and enter the blood.

I hold it established, therefore, that we have in lime a medicine as well as a food; and that in the former capacity it acts, like all its congeners, according to the principle *similia similibus*. I pass, now, to consider the ascertained usefulness of its several salts.

Calcarea acetica was proved, in a saturated solution of oyster-shells in vinegar, by Hahnemann and four others: their

* See *Brit. Journ of Hom.*, xvii.

results, making 270 symptoms, appear in the fifth volume of the *Reine Arzneimittellehre*. We count his solution our first decimal potency, and make subsequent attenuations with alcohol.

The pathogenesis of *C. acetica* deserves more study than it has received, as it supplies almost our only certain knowledge of the finer actions of lime. The salt has been mainly used in the bowel affections, acute and chronic, of children to whose general diathesis lime is suitable. Dr. Clotar Müller says that it was the remedy in one of the only two cases of migraine he ever succeeded in radically curing. The symptoms indicating it were a feeling of great coldness in the head and much gastric acidity.

It is usually given in the lowest attenuations.

Calcarea arsenica, the arsenite of lime, has not been proved, but appears to possess the virtues of its constituent elements. Dr. C. Hering commended it many years ago in epilepsy,* and Dr. H. Nankivell has praised it in *tabes mesenterica* and chronic pneumonic phthisis, with hæmoptysis,† while Dr. Hilbers esteems it highly in dyspnœa from a feeble heart. I can confirm the last-named indication.

Calcarea carbonica is the salt of lime which has found chief use in homœopathic therapeutics. The form in which we employ it is not chalk or marble, but the soft white substance which is found between the external and internal hard layers of the oyster-shell. This is triturated in the usual way. Its pathogenesis appears in the first edition of the *Chronic Diseases*, where 1090 symptoms are ascribed to it—all (as we know) observed on patients taking it in the attenuations from the 3rd to the 12th. In the second edition the list is increased to 1631. Two hundred and seventy of the additional symptoms are those of the acetate, which Hahnemann has thought well to incorporate, marking them by a line—a sign of distinction which Dr. Hempel's translation too often omits. The remainder are from Hahnemann himself and from fresh fellow-observers, all of course experimenting with globules of the 30th. Dr. Allen's arrangement of the drug contains some additional symptoms obtained from an alcoholic solution of the precipitated carbonate by Dr. Koch on himself and four others.

Hahnemann, in choosing this animalised form of carbon-

* *Brit. Journ. of Hom.*, vii., 564.

† *Monthly Hom. Review*, xvii., 631.

ate of lime for homœopathic purposes, was in harmony with all tradition. From early times similar natural products have been employed in medicine, such as "crabs' eyes," crabs' claws, coral, egg-shells, and powdered human cranium; and have acquired no small reputation. Modern therapeutists, supposing themselves wiser, have substituted a more purely mineral form of the salt, but with the result of losing all but its chemical and mechanical qualities. A practitioner of the old school, who knows chalk only as a means of neutralising acid in the stomach, or of plastering over the intestinal surface to check diarrhœa, naturally ridicules us for counting it a polychrest remedy. But he forgets that our *Calcarea carbonica* is something more than his "creta preparata," and that it inherits an ancient and widespread renown. Stillé follows Richter in thinking that an error has been made in substituting mineral for animal preparations of lime, and says that the latter are certainly better borne by the stomach. Our fullest information on this subject, however, is given us by Dr. Imbert Gourbeyre, in his "History of Calcareous Preparations," which has been translated from *L'Art Médical* in the thirty-fourth volume of the *British Journal of Homœopathy*.

Of the symptoms of Hahnemann's pathogenesis I have nothing to say. But, taking the phenomena of cretinism as our best proving of lime, we have in the virtues of *Calcarea* (so called among us *par excellence*) their truly homœopathic application. It is in the large class of diseases due to derangement of the secondary assimilation that it finds its curative place. The three great forms of assimilative derangement are rachitis, scrofula, and tuberculosis; and in all of these *Calcarea* is a principal remedy.

1. First, of *rachitis*. "If a child cuts its teeth late, if it does not walk so early as other children, if the fontanelles are late in closing, the probability is that it is the subject of rickets:" so writes the late Dr. Hillier, in his excellent *Clinical Treatise on Diseases of Children*. Well, then, when rachitis thus manifests itself, you will find *Calcarea* an invaluable aid in its treatment. But when the diathesis is more pronounced, when its phenomena reach beyond those of deficient supply of lime-salts, you will have to look farther for your medicinal remedies. I shall have more to say upon this subject when I come to Silica, which I believe to be the most potent of anti-rachitics. Let me notice here, however, that head sweats in the evening are noted by Hahnemann as an especial indication for *Calcarea*, and have lately been mentioned by Jenner as pathognomonic of rickets.

2. Regarding *Calcarea in scrofula*, I will begin by citing our latest writer on the disease, Dr. H. Goullon, of Weimar. "Water," he says, "that contains the salts of lime in excess is accused by some of producing scrofula. Thus it is said that the inhabitants of Rheims owe the large number of persons affected by scrofula among their population to this circumstance. If this be so, does there exist a greater triumph for Hahnemann's principle? Certainly the Hahnemannian school, if it were without the salts of lime, would not wish to treat scrofula. *Calcarea carbonica* performs wonders in scrofulous ophthalmia; like Sulphur, it removes scrofulous pot-bellies, if I may be allowed to use this expression; like Phosphorus, it cures scrofulous diarrhœa." Dr. Goullon then cites cases of *tabes mesenterica*; of strumous ophthalmia and otorrhœa; and of disease of the joints and vertebræ in such subjects, where *Calcarea* has proved curative. Dr. Goubeyre shews that scrofula was one of the chief maladies in whose treatment the animalised forms of carbonate of lime gained their ancient repute. My own experience with it is especially in the treatment of mesenteric disease, in which—if not too far advanced—it is an invaluable remedy. You will remember the enlarged abdomen of cretinism. This brings us also to bronchocele, of which Goullon writes: "The swelling of the thyroid gland is so intimately connected with scrofula that its former name—*struma*—has been applied to the diathesis." He gives three cases of the disease cured by *Calcarea*. They were all simple hypertrophies; but the power of the drug over cystic growths—of which we shall speak presently—would encourage its use in the cystic form also of goitre. Dr. Goubeyre relates the favourable experience of a French practitioner (Chlyssiol) in this disease with powdered egg-shells, and a case of his own, in which a large but soft goitre of many years standing disappeared in seven months under Hahnemann's *Calcarea carbonica* in the fourth trituration.

3. I cannot speak with any certainty of the action of *Calcarea in tuberculosis*. At the British Homœopathic Congress of 1873, Drs. Gibbs Blake and Wynne Thomas brought forward some evidence of its power over chronic maladies associated with high temperature, some of these being certainly and others presumably of a tuberculous nature.* But I have most confidence in it here as a preventive. There is a peculiar form of dyspepsia which often precedes the development of tuberculosis. Indicated more or less precisely by Drs. Tweedy Todd, Clark, Bennett, and Ancell, it has been most fully characterised

* *Monthly Hom. Review*, xvii., 683.

by Mr. Jonathan Hutchinson. Its special feature consists in acid eructations after food: "everything the patient takes 'rises acid,' as he expresses it, but more particularly everything containing fat, oil, or sugar." There is a special dislike to fat present.* Now in this acid dyspepsia Calcarea proves itself an excellent remedy. I know not whether the fact that two of Hahnemann's provers of the acetate had constant sour eructations has any bearing on the point, since they were taking vinegar; but of the value of the carbonate, in the minutest doses, there is not the least question. I have myself cured with it a most obstinate case, in which the fount of acid seemed inexhaustible, and even gouty symptoms were set up in a patient the most unlikely to be attacked with such a malady.

In all derangements of nutrition, whether rachitic or not, when occurring (as they generally do) in children, Calcarea is indicated where the profuse perspiration of the head which I have mentioned is present.

The powers of our drug seem moreover to extend to the new products which result from disorders of growth. It has repeatedly been reported as causing the disappearance of warts, polypi, and even benignant tumours of the encysted kind.† In this connexion it must not be forgotten as a possible aid against cancer. In the *Lancet* for 1868 Dr. Peter Hood published two cases in which the daily administration of small quantities of powdered oyster-shell effected a cure of this dire disease. Mr. Spencer Wells, who authenticated his observations, suggested that the rationale of the cure was that the lime caused ossification of the blood-vessels of the diseased part, and so starved it out. The process is one not easy of conception; and a specific curative power is at least as tenable a theory.

This is the great sphere of the action of Calcarea. But it has other uses, which seem independent of its power over assimilation. One of these is of a very curious kind; and, if I had not repeatedly seen it (and also felt it) myself, and had it vouched for by excellent observers like Drs. Dudgeon, Drury, and Bayes, could hardly have credited it. It is its power, when given in repeated doses of the 30th dilution, of relieving the pain attending the passage of biliary (Dr. Bayes says also of renal) calculi. It has for me quite superseded the

* Aitken *Science and Practice of Medicine*, 5th ed., ii., 206; to whom I am indebted for these facts.

† See Goullon on Scrofula, art. *Calcarea*, and *Brit. Journ. of Hom.*, xxvi., 31.

need of chloroform and even of the hot bath. Hahnemann, moreover, insists much on the relation of Calcarea to the menstrual function. "It is indispensable and curative," he says, "when the catamenia appear a few days before the period, especially when the flow of blood is considerable. But if the catamenia appear at the regular period or a little later, Calcarea is hardly ever useful, even if the catamenia should be rather profuse." In these cases, says Dr. Guernsey (who has a great *penchant* for out-of-the-way symptoms), the patients often complain of a sensation as if cold, damp stockings were on their feet: whenever they do, we may think of Calcarea. Again, the medicine has a considerable reputation in epilepsy* (Dr. Gourbeyre mentions the high ancient repute of powdered human cranium in this malady) and in migraine,† when these affections appear in the natural subjects of its influence, *i.e.* (as I might have said from the first) in unhealthy women and children, of leuco-phlegmatic temperament, and with tendency to corpulence. In these subjects it will remove many anomalous symptoms and local troubles, as headache with sense of coldness, toothache (especially that of pregnancy) caused by the slightest cold, leucorrhœa, deficiency of milk while nursing; and so forth. The sensitiveness to cold mentioned in connexion with the toothache of Calcarea is noted by Dr. Guernsey as characteristic of the general morbid condition calling for it; "every current of cool air," he says, "seems to go through and through the patient." Vertigo on ascending, I may add, is another of his "keynotes" for it.

Jahr says that, after failing in acute hydrocephalus with the ordinary remedies, he took to treating the disease with Calcarea 30, and with very different results. I have mentioned in my *Therapeutics* a favourable result obtained by myself in this way. Still more decisive is its action in chronic hydrocephalus, where its power as a nutrition remedy comes into play. Perhaps *C. phosphorica*, as recommended by von Grauvogl, may be still more effectual here.

I have quoted Dr. Goullon's commendation of it in strumous ophthalmia. It is highly esteemed in the homœopathic treatment of this malady, especially when the cornea is involved. Hitherto, we have supposed it to act here by modifying the constitutional diathesis. Dr. Mc Dowell, of Baltimore, however, has recently described‡ what he calls "oyster-shucker's

* *Brit. Journ. of Hom.*, xxii., 246, 258.

† See *Ibid.*, xxi., 282.

‡ See *N. York Medical Record*, xvi., 83.

corneitis." He is "disposed to attribute the disease to a specific toxic element contained in the slime and dirt which coats the oyster-shell;" but I think we may fairly prefer to trace it to emanations from the shell itself.

The analogues of *Calcarea carbonica* are *Baryta*, *Iodium*, *Phosphorus*, and *Silica*.

The higher dilutions, from the 12th to the 30th, are those which appear to be most in favour, and which I myself use; but the 3rd is undoubtedly efficacious. *Calcarea* seems seldom or never employed by the exclusive adherents of mother tinctures and crude drugs.

Calcarea caustica.—Lime in this form, in which we have it in the ordinary lime-water, can have but slight pathogenetic properties, as we give the latter freely, even to children, as an antacid. But provings made with it by Koch, Keil, and Liedbeck on thirteen persons give it in Dr. Allen's *Encyclopædia* a list of 342 symptoms. These seem but trivial; and I have no knowledge of their having received any application to practice. Dr. Wyld speaks highly of it as a resolvent application to boils and carbuncles.

Calcarea fluorata has been proved on three persons, in the 15th dilution, by Dr. J. B. Bell. It is one of Schussler's "tissue remedies," introduced into the series because of its presence in bone and the enamel of teeth. It seems several times to have removed exostoses in the human subject, and is recommended for the spavin of horses.

Calcarea iodata, the iodide of lime, has been proved by Dr. W. S. Blakely and another in the crude substance and the lower triturations; 47 symptoms of it are given by Allen. These, too, are of no very definite character; though, as with *C. caustica*, the head is the part most affected. Dr. Meyhoffer thinks the iodide the best form of lime in the chronic bronchitis of scrofulous children, when in a thin subject (in the last point distinguished from the carbonate) the cervical glands are much swollen, the cough rather dry, and there is ground for suspicion of enlargement of the bronchial glands. It is soluble in water, and with this the lower attenuations are made; but Dr. Sherman says that in this form it is readily decomposed, and that triturations are preferable.

Calcarea phosphorica.—Dr. Hering has justly taken me to

task for having said, in the first edition of my Manual, that this salt of lime had never been proved. He refers me to some provings of the 1st and 2nd triturations made under his superintendence, which I ought to have known of, as they were in Jahr's *New Manual*. He speaks also of yet more extensive provings still unpublished. Dr. Allen gives all that are now extant. It has not been largely used in homœopathic practice. Dr. von Grauvogl relies much upon it in chronic hydrocephalus, both to cure the already existing disease, and—by giving it to the mother during pregnancy—to avert the tendency to its recurrence in future children. Dr. Cooper* speaks highly of it for chronically-enlarged tonsils in strumous subjects; and Dr. Verdi, of Washington, has much confidence in it in phthisis.† Dr. Guernsey gives as a great indication for it that every cold causes rheumatic pain in the joints and in various parts of the body. It, too, is one of Schussler's twelve remedies, and is given by him to promote the nutrition of the tissues into whose composition it enters, especially the blood corpuscles and the bones. Dr. Hering long ago used it on the same principle to favour the union of fractures and the closing of open fontanelles, and also to aid in dentition. But the main use of phosphate of lime is as a food in the same class of cases in which we use the carbonate as a remedy, and perhaps in others. Dr. Dusart, of Paris, is a well-known advocate of its use in this way, and his syrup of the lacto-phosphate is a convenient form for its administration to children. Dr. Ringer gives us the latest estimate of its efficiency. He recommends it in most forms of mal-nutrition and defective cell-growth; in anæmia from growing fast, rapid child-bearing, prolonged suckling, or excessive menstruation; in chronic discharges; in rachitis; and for the bad effects of town life, including brain-fag. He gives one or two grains of the salt three times a day. The homœopathic uses have been made with the lower triturations.

Calcarea muriatica (the chloride of calcium) has not been proved. I find it extremely useful in the moist porrigo capitis of children, giving it in the first attenuation. Some use it in solution as an abortive local application for boils; it is said to ease the pain also.‡ It has lately been recommended in the old school as an anti-scurfulous medicine.§

* *Monthly Hom. Review*, xi.

† *Brit. Journ. of Hom.*, xxix., 749.

‡ *Ibid.*, xix., 498.

§ *Lancet*, Aug. 28, 1877.

Calcarea sulphurica, the sulphate of lime, has been proved (in the higher attenuations), as you will see from Allen ; but here too we owe any knowledge we possess of the drug to Dr. Schussler. He says that it is present in connective tissue, and acts chiefly on this part, being thus valuable in suppurations. "It acts," he says, "with more intensity in most cases where Hepar sulphuris, the sulphide of lime, has heretofore been given." Quaglio and Kock support this statement ; and "it is willingly confirmed," says Dr. Hering, "by the one who introduced the old Hepar in suppurations."

LECTURE XXIII.

CALENDULA, CAMPHOR, CANNABIS SATIVA AND INDICA,
CANTHARIS.

I begin to-day with the common garden marigold—

Calendula.

This plant owes its place in the *Materia Medica* of Homœopathy to its power as a *vulnerary*. Dr. Allen gives a pathogenesis of it obtained by two provers, but the symptoms are few and insignificant, and it is rarely given internally. One of our German practitioners, however, Dr. Thorer, becoming acquainted with the virtues ascribed to the marigold by the common people, endeavoured to ascertain by experiment its exact place in the treatment of injuries. You will find his paper translated in the fifth volume of the *British Journal of Homœopathy*. His cases show that Calendula has a most beneficial influence over wounds, especially incised wounds, promoting union by first intention, or, where that is impossible, favourable cicatrisation with the least possible amount of suppuration. From that time to this Calendula has always been used in homœopathic practice to promote the healing process in wounds, ulcers, burns, and other breaches of surface. You may read instructive comments on its virtues by Dr. Yeldham in several papers in the *British Journal* and the *Annals*. It was used on a large scale by our American colleagues in the treatment of the injuries arising in the course of their civil war; and it obtained (as you may see, for instance, from Dr. Franklin's book on surgery) their warmest commendations. No suppuration seems able to live in its presence.

Of course there is nothing homœopathic about Calendula,—its working, that is, is no instance (so far as we know) of the operation of the law of similars. Nevertheless, it is homœopaths only—at least in England and America—who give their patients the benefit of this precious vulnerary. You will find it

invaluable in surgical, and also in gynecological, practice. Dr. Ludlam, our foremost authority in the latter sphere, has just made some remarks on its value herein, advising its use in all solutions of continuity of the sexual passages, and even commending its internal use in chronic endo-cervicitis and scrofulous ulceration, with much purulent leucorrhœa.

I have now to speak to you of

Camphor,

of which we make an alcoholic solution. The proportion of drug to vehicle in this mother-tincture has ranged in homœopathic pharmacy from one eighth to one twelfth. The British Homœopathic Pharmacopœia makes it one tenth. The preparation sold as "Rubini's Camphor" is a saturated solution, as used by that physician in the treatment of cholera. Some alarming accidents have lately occurred from persons employing this tincture with the freedom to which they have been accustomed in the use of the ordinary preparation, which can do no harm. There has been a very absurd and unfair attempt to make capital out of these occurrences as against homœopathy.* A few minutes thought and inquiry would have shown that the only blame rested with the carelessness which ignored an obvious and reasonable difference of strength in the two solutions.

A proving of Camphor appears in the fourth volume of the *Reine Arzneimittelehre*. It contains 105 symptoms from Hahnemann himself, and 240 "observations of others," of which 93 are from twenty-one authors, and the rest from four fellow-provers. Camphor was also one of the medicines proved by Professor Jorg: his results, obtained upon himself and ten of his pupils, are given in Frank's *Magazin* (iv. 482), and related by Hempel, who adds some further pathogenetic records. Dr. Allen, combining these materials, gives 916 symptoms to the drug.

The action of Camphor on the organism has been a matter of dispute from early times. The old physicians were divided into two camps on the question whether it is a "hot" or a "cold" remedy. Hahnemann recognises the variable character of the facts before him, and suggests their explanation. "The action," he says, "of this substance on the healthy body is extremely problematic and difficult of definition, for this reason, that the primary action of Camphor alternates so

* See Transactions of Clinical Society of London, vii., 28.

suddenly, and is so easily confounded, with the reaction of the vital principle." He explains farther on that he agrees with those who consider chill and depression to be the first effects of Camphor, and refer the symptoms of stimulation so often observed to a secondary reaction. He is supported herein by the weighty authority of Trousseau and Pidoux. After a full survey of the evidence, they conclude that the essential action of Camphor is "refrigerant and sedative," and describe its full poisonous effects as those of collapse with chill. Stillé (who has an exhaustive article upon the drug) takes the same view *as regards large doses*—from thirty to sixty grains. But he thinks, on the other hand, that all the evidence goes to show that "the direct and primary action of small or medicinal doses—from one to fifteen grains—of Camphor is to stimulate and excite the nervous and vascular systems, and through them the whole organism." If he is right—and I myself think that the facts bear him out—Camphor conforms to the view of drug-action maintained by Dr. Sharp. It has an opposite action on the healthy body in large and small doses respectively; and its effects in cold and depressed conditions of the system are due to the direct stimulant influence of the moderate quantities in which it is administered. I have already explained to you why I am unable to accept this law as true of medicinal action in general; and I think that the exceptional character of the dosage of Camphor shows that, where it does apply, it leads to a mode of practice peculiar to its operation, and different from that which obtains in homœopathic treatment generally.

It was not many years before Hahnemann had an opportunity of giving his views about Camphor a practical application, and thereby of making a most important contribution to therapeutics. In 1831 Asiatic cholera for the first time invaded Europe. The few physicians then practising homœopathically sought diligently for its *similimum*, that they might be ready to encounter it. Several medicines were suggested; but when Hahnemann spoke out from his retreat at Coethen, he pronounced the one great remedy to be Camphor. He described the well-known features of the first stage of the invasion,—the sinking of strength, the coldness, the anxietas; all these occurring before the vomiting, purging, and cramps have set in. Here, Hahnemann said, Camphor is a potent and certain remedy. It should be given freely—by the mouth, by inhalation, by friction, by clyster; and persevered with till the patient recovers. Nor, though the second stage has supervened ere the treatment has

begun, should Camphor be neglected. But here, unless improvement set in within a couple of hours, it is of no use to persist, and recourse must be had to other remedies, of which he specifies Cuprum and Veratrum.*

Hahnemann had the gratification of hearing of the great success which attended all who followed this advice of his, and of numerous instances in which the family use of Camphor had checked the earliest symptoms of the prevailing scourge. In the epidemic of 1849, British physicians had an opportunity of testing the value of the remedy: and Dr. Drysdale in Liverpool † and Dr. Russell in Edinburgh vied in their praises of it. The latter, who has written a book on the disease, ‡ says: "It is our firm belief that Camphor is an almost infallible remedy for cholera, if given from the very outset." In 1854, the same testimony was given to its value in England; and from Italy still more striking evidence was adduced as to what it can do. Dr. Rubini, of Naples—he who has given us *Cactus grandiflorus*—states that during this epidemic he treated, together with his colleagues, 592 cases with Camphor alone without a single death. He gave it in the spirit of Hahnemann's instructions—*ad libitum* doses of a saturated tincture, and relied upon it to the exclusion of all other medicines in every stage of the disease. You will find a full account of his observations in the tenth volume of the *Monthly Homœopathic Review*. Much exception has been taken to his statement of results, as exaggerated; but I think without just cause. Dr. Rubini is a physician of undoubted experience and judgment, not to speak of trustworthiness; and his published affirmations have never been contradicted. He does not mean to say that all his cases were in collapse: on the contrary, of a set of 200 treated in one institution, it is expressly mentioned that collapse occurred in fifteen only. What our colleague wishes us to understand is, that in an epidemic of Asiatic cholera in which 377 cases came under his own treatment, and 215 more under that of his fellow-practitioners, they gave nothing but Camphor, and lost no patient. There must have been the usual proportion of severe cases among these; so that the results are most gratifying. We have hitherto been jubilant about reducing the ordinary 50 per cent. mortality from cholera to one half; but 26 per cent. of deaths is a melancholy rate after all. We are bound

* His paper may be read in Dudgeon's *Lesser Writings* of Hahnemann, p. 845.

† *Brit. Journ. of Hom.*, viii., 149.

‡ *On Epidemic Cholera*, p. 211.

to look in directions which promise something better still; and Dr. Rubini's extension of Hahnemann's Camphor-treatment deserves our most respectful attention. Mr. Proctor, indeed, reports less favourably of it in the Liverpool epidemic of 1866;* but further experimentation is required. In the same epidemic Dr. Rubini treated 123 cases, and again his mortality was nil.†

It is natural to inquire whether the report of the anti-choleraic virtues of Camphor has spread beyond homœopathic regions, and whether any trial has been made of it. This might well be, as in its case there are no posological prejudices to be overcome. I am only acquainted, however, with one miserable instance of its use in the last epidemic, where it was given to a few patients at the London Hospital. The physician did not deign to follow our method of administration, viz., dropping it on sugar, but gave it suspended in water. He thus nauseated his patients, and burnt their throats; and consequently, instead of exhibiting it in a better form, thought fit to abandon its use altogether. Both Ringer and Wood, however, now recommend it; and the latter states that it forms the chief ingredient in the popular cholera-mixtures sold in America.

A similar action to the foregoing, though on a humbler level, is the power which Camphor has of checking an incipient "cold." Hahnemann, in the preface to his proving, commends it in the influenza then first known as an epidemic; and Dr. Ringer has lately extolled its virtues in the chronic paroxysmal coryza from which some people suffer. In all these nasal defluxions Camphor should be taken by olfaction as well as internally. It is also of much repute in summer diarrhœa. I think that Dr. Phillips well characterises the condition which calls for it here as one of exhaustion with irritability of the intestinal nerves resulting from high summer heat; but Dr. Ringer finds it useful also in diarrhœa resulting from cold.

A few words must be said on the symptoms of re-action which sometimes occur after Camphor poisoning, where the primary effects have been sedative. They are those of fever, with much confusion and oppression of the brain, and even disorder of its functions. The fever, as in a case recorded by Dr. Hempel, may take on a typhoid form and be of some duration. I cannot say whether these facts have any relation

* See *Brit. Journ. of Hom.*, xxv., 92.

† See his *Statistica dei colerici curati colla sola Canfora in Napoli negli anni* 1854, 1855, 1865. 3rd edizione, ampliata. Napoli, 1866.

to the antifebrile and antiseptic powers ascribed to Camphor by the physicians of the last century, or to its occasional successful employment in mania. It was chiefly administered in fever when an ataxic condition was present, and phenomena of this kind are frequent in the Camphor re-action. But I do think they are closely connected with another use made of it in homœopathic practice, viz., to recover the patient from the state into which he is thrown by the retrocession of measles or scarlatina. There is here the same cerebral disturbance and oppression; and the patient, though hot within, is cold without. He has that characteristic of Camphor noted by Dr. Guernsey, that, though cold to the touch, he will not remain covered. I know the value of cold affusion in these terrible cases; but it is at least *jucundius*, if not also *tutius*, to effect what we want by the administration of Camphor.

The only marked local action of Camphor is on the genito-urinary organs, which is all the more interesting, as it cannot be detected as passing off by the urine. That it causes strangury is undoubted, and is admitted both by Pereira and by Ringer. The former is naturally astonished at a power of diminishing irritation of the urinary organs being assigned to Camphor. But that it has this power, whether the strangury is idiopathic or the effect of Cantharides or other drugs, is the testimony of all the old physicians. I have myself twice seen patients in this agonising condition translated, as it were, from hell to heaven in less than an hour by repeated small doses of the drug. This action, therefore, is not antipathic, as supposed by Stillé. As with Cantharis, the urinary irritation of Camphor sometimes extends to the genitals, causing priapism and such-like phenomena. But the ordinary and permanent effect upon these organs (probably through the nervous system) is of a depressing character. "Camphora per nares castrat odore maris" is quoted in all books on *Materia Medica*; and Hahnemann cites an observation from Loss, in which impotence thus produced lasted a considerable time. I do not know whether much homœopathic use has been made of this action of Camphor. Stillé mentions several striking instances of its value as an antipathic palliative. Dr. Hirsch has recommended it for irritable weakness of the sexual organs, with nocturnal emissions. Dr. Norton mentions a similar case.*

Besides these uses in disease, Camphor is reputed by Hahnemann an antidote to most vegetable and to some animal and mineral poisons. Against the majority of these it probably

* In an article on the drug in *Brit. Journ. of Hom.*, ix., 407.

has no true antidotal power, and it would hardly neutralise their effects in poisonous quantities. But for the more delicate disturbances produced by minute doses Camphor may be a capital remedy, by substituting a more potent impression than theirs upon the nervous centres. This is probably what he meant.

Dr. Holcombe* thus sums up the action of Camphor: "It is antidotal to almost all the drastic vegetable poisons—relieves strangury—procures reaction from cold, congested conditions—is the great anti-choleraic—and quiets nervous irritability sometimes better than Coffea, Ignatia, or Hyoscyamus. This is its whole clinical value—and a great one it is—in a nut-shell."

I must not leave Camphor without referring to Dr. Harley's communication regarding it in the ninth volume of the *Practitioner*. He finds that in medicinal doses—from five to thirty grains—its effects are but slight, being chiefly those of sedation of the motor and ideational centres of the cerebrum, with much giddiness. These results are somewhat different from those of other observers, and can only be provisionally accepted at present. An epileptic fit has twice been observed as a result of an overdose of our concentrated solution.

In its influence over the circulation Camphor resembles *Aconite*, *Arsenic*, and *Veratrum album*. Its power of causing strangury is like that of *Cantharis* and *Terebinthina*, less like that of *Belladonna*.

The drug does not seem to bear attenuation. The primary solution is that always in use.

I will now give you some account of the medicinal virtues of *hemp*. Unlike the ordinary practice, we use not the *Cannabis Indica* only, but that also which grows in colder climates. Let me speak of the latter first—

Cannabis sativa.

Our tincture is prepared from the flowering tops and upper leaflets.

A proving of hemp, by Hahnemann and eight others, appears in the first volume of the *Reine Arzneimittellehre*. It contains 330 symptoms, 47 of which, however, are from authors. The severity of some of these is puzzling, when we consider how mild a poison the plant is. But the mystery is explained when we examine the originals of the two principal groups—those of Morgagni and of Ramazzini. The former consists of

* *United States Medical and Surgical Journal*, vol i.

cases of disease recorded in various parts of his *De sedibus et causis morborum*, and mentioned as occurring in hemp-dressers; but rarely traced or traceable to their occupation. The latter are symptoms occurring in workers in hemp and linseed—the connexion, as well as the nature of the phenomena, showing that they are mere local effects of the dust. These, therefore, must be eliminated from the pathogenesis of the drug. But in their place we have five more recent provings to put, all instituted with substantial doses, which are duly incorporated with Hahnemann's by Dr. Allen. There is an interesting study of the drug by the late Dr. Norton in the ninth volume of the *British Journal of Homœopathy*.

It would appear, from Hahnemann's preface to his proving, that Cannabis was in common use at his day as a remedy for acute gonorrhœa. It was supposed to act as a "demulcent;" but he is well warranted in saying that its curative powers depend upon the faculty it possesses of producing a similar morbid condition in the urinary organs. Its pathogenesis shews excessive irritation of the mucous membrane of the bladder and urethra, and of the prepuce. The latter is dark red, hot, and inflamed; there is much burning in the urethra, painful and difficult micturition, chordee, and mucous discharge. It has been customary to add the observation of Morgagni, in which the urine was so full of mucus and pus that the catheter became clogged, and failed in its office. This, however, is not to the point, as the case was one of paraplegia from spinal disease, and the state of the bladder (noted eight days before death) was only that incident to such affections. But there is amply sufficient evidence besides this to prove the homœopathicity of Cannabis to urinary inflammations; and it continues to be in the school of Hahnemann the favourite remedy for gonorrhœa after the most urgent symptoms have been subdued by Aconite and (if necessary) Cantharis. Even when the inflammation is not so acute, I think we do well to commence the treatment with a more vascular medicine, which in such a case had best be Gelsemium.

A good deal of use has been made of Cannabis in affections of the eyes, owing to the symptoms in Hahnemann's pathogenesis—"the cornea becomes opaque; pellicle before the eyes" and "cataract." For the first he himself vouches; and though one would have liked to know under what circumstances it occurred, we cannot but accept it, and it is certain that the medicine has some effect in removing corneal opacities left behind after strumous ophthalmia. The symp-

tom "cataract" is referred to Neuhold. This author is recording effects of the effluvia of hemp before drying, so that his symptoms are valid enough. Nor is there any doubt that his "suffusiones oculorum," which Hahnemann renders cataract, *may* mean this. Celsus* uses the phrase in this sense; and we cannot but remember Milton's

"So thick a drop serene hath quenched their orbs,
Or *dim suffusion* veiled;"

though it is possible that by suffusion he means opacity of the cornea as distinguished from the "gutta serena" of cataract. At the same time, when we find the phrase occurring in a list of the observed effects of hemp without special mention or warrant, it becomes very unlikely that the author meant to hazard in this manner so startling an assertion as that the herb can cause cataract. We must wait for further information on this head.

Hahnemann's pathogenesis credits Cannabis with a power of causing inflammation of the lungs, with delirium and vomiting of green bile. Some recommendations and applications of it in pneumonia have followed, but I think without warrant. The observations in question are cited from Morgagni; and he is evidently speaking of the irritating effect of inhaling the hemp-dust on the workers in it.

In the fourth volume of the *British Journal of Homœopathy* Dr. Quin has recorded an excellent case of hemicrania cured by Cannabis. It was primarily coincident with the catamena, which were far too copious. I think I have seen the medicine useful in menstrual headache.

The action of Cannabis on the urinary tract assimilates it to *Apis*, *Cantharis*, *Copaiba*, and *Terebinthina*; that on the eyes to *Euphrasia*.

There is a general agreement that for gonorrhœa the mother-tincture of Cannabis is required, in frequent doses of from one to ten drops; though Dr. Helmuth says that a tolerably large experience leads him to prefer the 12th. In the other affections mentioned the medium dilutions have been efficacious.

And now of the

Cannabis Indica.

The peculiar properties of this variety of hemp exist in a resin which is developed in it by climatic influences. This,

* Seventh book, vii., 13, 14.

when presented separately, is the substance known as haschisch, bhang, gunjah, and churrus. A tincture is prepared from it for ordinary practice by dissolving one part in twenty of rectified spirit. One part of this tincture, therefore, to four of alcohol will make our first centesimal dilution.

Some provings of the Indian hemp, made upon seven persons with the tincture and lower attenuations, were published by the American Provers' Union in 1839. Since then scores of persons have tested its curious effects upon themselves; and the experiences of haschisch-eating have been put on record,—by one writer with a descriptive power and gorgeousness of diction hardly inferior to that of the "English Opium-eater." Of the results thus obtained Dr. Allen has made an exhaustive collection; and 918 symptoms of the drug, including the mental phenomena described at full length, stand in his *Encyclopædia*.

To possess yourselves of the characters of the haschisch intoxication, it is necessary that you should study it thus in detail. No outline can adequately present it. It is a condition of intense *exaltation*, in which all perceptions and conceptions, all sensations and emotions, are exaggerated to the utmost degree. Distances seem infinite and time endless; pleasure is paradise itself, and any painful thought or feeling plunges at once into the depths of misery. Hallucinations of the senses are common; and the least suggestion will set going a train of vivid mental illusions. All the time a dual consciousness is present: the experimenter feels ever and anon that he is distinct from the subject of the haschisch dream, and can think rationally. The bodily sensations accompanying these phenomena are not many. Headache, sense of dryness of the mouth and throat, and anæsthesia of the surface, are not uncommon. The headache is very commonly a sensation as of the brain boiling over, and lifting the cranial arch like the lid of a tea-kettle. The anæsthesia may be preceded by sensations over the body like those produced by slight electric sparks. In the motor sphere there is experienced at times the peculiar condition known as cataleptic. Dr. O'Shaughnessy thus describes the effect of the resin on a native of India:—"At 8 p.m. we found him insensible, but breathing with perfect regularity, his pulse and skin natural, and the pupils freely contractile at the approach of light. Happening by chance to lift up the patient's right arm, the professional reader will judge of my astonishment, when I found that it remained in the posture in which I had placed it. It required

but a very brief examination of the limbs to find that the patient had by the influence of this narcotic been thrown into that most strange and most extraordinary of all nervous conditions,—into that state which so few have seen, and the existence of which so many still discredit,—the genuine *catalepsy* of the nosologist.”

Such application of *Cannabis Indica* to practice as has been made has been in perfect homœopathic *rapport* with these effects. Dr. Handfield Jones naively describes it as “physiologically a nervous stimulant, and therapeutically a nervous sedative.” Dr. Ringer and others recommend it in headache, the former esteeming it the most useful medicine we possess for diminishing the frequency of the paroxysms of migraine. It seems, he says, to act on the nervous centre whence they spring. It is probable, however, that this effect is obtained by inducing the physiological action of the drug, as croton-chloral—which is a pure anæsthetic—produces similar results. It should be remembered if we ever come across a case of *catalepsy*. I myself had a patient in whom attacks, probably hysterical at bottom, assumed a *cataleptiform* character, and here *Cannabis Indica* proved rapidly curative. The exaltation of ideas it causes reminds one of the first stage of the general paralysis of the insane. It could not control the meningeal inflammation said to be always present in these patients; but it might benefit the excited nervous centres while other remedies were striking at that essential element of the malady. Its power of causing general anæsthesia adds another to the few remedies we have for this condition when occurring idiopathically. Dr. Gray reports its successful use in dissipating spectral illusions, without terror, occurring in the course of fevers, &c. Indian hemp is found to be almost entirely without effect in graminivorous animals. If *Teste* be right, this indicates it as specially suitable in sthenic constitutions and disorders.

The effects of *Cannabis Indica* on the brain may be advantageously compared with those of *Agaricus*, *Belladonna*, *Camphor*, *Crocus*, *Hyoscyamus*, *Opium*, and *Stramonium*. In its power of causing *catalepsy* its only rival is the chloride of tin.

In the case mentioned I gave the second dilution.

I have last to speak of the Spanish fly,

Cantharis,

of which we make a tincture by percolation.

There is a short pathogenesis of this substance in Hahnemann's *Fragmenta de viribus medicamentorum positivis*, consisting of 30 symptoms observed by himself, and 75 from nineteen authors. He did not, however, take the medicine up again; and its full proving appears in the first volume of Hartlaub and Trinks' *Arzneimittellehre*. It contains 952 symptoms, many of which are citations from records of poisoning and overdosing, and the rest obtained by five provers. Dr. Allen adds experiments made by Giacomini on his pupils, and observations from many other sources, making a total of 1651. Some very complete studies of the action of the Spanish fly on animals have lately been made by Dr. Cantieri, of Milan, and published in the Italian journal *Lo Sperimentale* (xxxiv, 9, 10). I take the account of these from the abstracts which have appeared in English periodicals.

The primary interest of Cantharis arises from its local use as an epispastic. The theory of the "counter-irritation" thus practised has been much discussed of late; and Drs. Anstie* and James Ross† have revived the doctrine of Fletcher‡ on the subject, and (as I think) have demonstrated afresh its soundness. We have but to go here as elsewhere to pathogenetics, and there we shall find the explanation and guidance of our therapeutics. It appears, accordingly, that "blisters applied to the thorax and abdomen of dogs and rabbits will produce redness and absolute inflammation of the pleura and peritoneum, in patches distinctly corresponding to the vesicated surface of the skin."|| Hence blisters when used (as they principally are) for chronic inflammations are homœopathic agents, though acting by local absorption instead of by elective affinity. We have not yet the same experimental proof in the case of neuralgia, for which blisters are now being so freely employed. But I have shown in other places§ that Dr. Anstie's whole theory and practice on this point is homœopathic in everything but name, and implies that here also an irritant is being sent to an already irritated part, and needs to be diluted (by distance) to obviate aggravation.

But, although we thus claim for homœopathy whatever benefit blisters may effect in the majority of cases in which they are applied, we do not as a rule employ them. We have

* *Practitioner*, iv., 156.

† *On Counter-Irritation* (Churchill).

‡ *Elements of General Pathology* (1842), p. 484; see also Dr. Drysdale's exposition of Fletcher's doctrine in *Brit. Journ. of Hom.*, xxvii., 494.

|| Inman, *New Theory and Practice of Medicine*, p. 322.

§ See *Brit. Journ. of Hom.*, xxviii., 326; xxx., 373.

medicines which, given internally, seek out under the guidance of elective affinity the part that may be inflamed or the nerve that is aching, and there more pleasantly and at least as effectually extinguish the fire. So far as this holds good, blisters are put out of court. But it is a question whether there are not gaps as yet unfilled by specific medication, where judicious counter-irritation might supply what is missing. Should we desire to test this question the excellent account of the value of blistering given by Dr. Ringer will help us. At present we use Cantharis externally, not to produce blisters, but to disperse them. In burns and scalds causing vesication, in vesicular erysipelas, and in herpes zoster we have conditions of the surface more or less resembling the local effects of Cantharis; and in all these affections the external application of the diluted tincture has been attended with great advantage. In burns and scalds I have often seen the best effects from it. I once had a case in which both legs had been severely burned by Phosphorus. Carron oil had already been applied to one before I arrived, and I did not think it well to interfere with the dressings: the other, however, I treated with rags dipped in a lotion made with Cantharides. The difference between the subsequent history of the two limbs was most instructive. That to which the Spanish fly had been applied got well with little trouble in a week: the other suppurated, and it was two months before it had regained its integrity.

When introduced into the system, Cantharis acts as an irritant poison, developing in all parts which it reaches either by local contact or by elective affinity the same "pellicular phlegmasia" (as Trousseau and Pidoux call it) which it causes on the skin. The inflammation it sets up in the tract from the mouth to the stomach seems purely local, but the intestines are somewhat irritated even when it is introduced directly into the blood. Under these circumstances it quickens (while weakening) the pulse, and raises the temperature, thus producing a true (though only symptomatic) febrile condition; and it inflames, besides the genito-urinary organs, the serous membranes throughout the body—peritoneum, pleura, pericardium, and the cerebral and spinal arachnoid. The first-named, however,—the genito-urinary organs—are the chief seat of its action. The slightest effects are increased quantity of urine and still more increased frequency of urination, with heat in passing it in the case of men, in women smarting. In higher degrees of its action it inflames the whole mucous tract from the kidneys to the urethra, causing pain in the loins; scanty, high-coloured, bloody, and

generally albuminous urine, often loaded with tube-casts and sometimes with epithelial cells; and burning pain and tenderness in the hypogastrium, with severe strangury.* The characteristic pellicle is sometimes found in the bladder, and has been voided (say Trousseau and Pidoux) into the chamber-pot. With all this there is fever and great restlessness. The genital organs are similarly and considerably affected. With the slighter degrees of urinary irritation there is moderate erotic excitement; but in poisoning by the drug this sometimes becomes painfully excessive, and is accompanied by priapism, inflammation (even to gangrenè) of the external parts, and of the uterus, sometimes causing abortion.

The nervous symptoms of Cantharis usually come on some days at least after the ingestion of the poison. They consist in delirium—which, with the local throat-symptoms, closely resembles hydrophobia, convulsions, and ultimately coma. They are possibly to some extent due to the meningeal irritation which Cantharis can set up: Dr. Cantieri also found softening of the nervous centres, especially in the cerebellum and the lumbar cord. But they are chiefly, I think, secondary to the renal mischief, *i.e.*, they are uræmic.

It would seem that under favouring circumstances Cantharis can specifically irritate the skin. Pereira mentions a case in which the application of a blister to the pectoral region caused the development of ecthymatous pustules not only there, but all over the body. Occasional pimples, vesicles, and pustules are mentioned in Dr. Allen's pathogenesis as occurring in the provers, but the "psoriasis" and "eczema" which appear there are hardly to be depended upon.

Correspondingly with these physiological effects, the main homœopathic use of Cantharis is in inflammations of the urinary organs. This is no novelty as regards their chronic forms, for Groenvelt and Bartholin advocated the practice more than a century ago. The former was sent to Newgate for the offence† at the instance of the London College of Physicians; but the practice has since had many upholders. To use the drug, however, in acute cystitis and nephritis, and in inflammatory strangury, was only possible upon the determinate method and with the small doses of homœopathy. In such affections we count it the chief remedy. Its renal symptoms show that it acts on the secreting tubes rather than, as turpentine, on the Malpighian bodies. It is hence inferior to that medicine in simple congestive suppression of

* See *Brit. Journ. of Hom.*, xvii., 548.

† *Ibid.*, x., 557.

urine or hæmaturia; but when desquamation predominates over congestion, as in the acute Bright's disease of post-scarlatinal dropsy, Cantharis takes the highest place.* "There can be no doubt," says Dr. Dickinson, "that the renal disorder produced by Cantharides is of the nature of tubal nephritis." Its secondary head-symptoms are very significant here. Dr. Ringer strongly recommends it in this malady in minim doses of the tincture, after the first symptoms have passed off; and says that the discrepancy respecting the effect of Cantharides arises probably from the difference of the dose administered by different observers. He also recommends it in the same quantities in diurnal enuresis in women—the condition for which Dr. Cooper has established the use of Ferrum. Pereira mentions a case of a boy of fourteen who had been subject to incontinence of urine from infancy. By means of gradually increasing doses of the tincture of Cantharides he was entirely relieved of the incontinence by day, but the nocturnal discharge continued. It would seem likely that some at least of the influence exerted by Cantharis on the *functional* power of the bladder comes from the spinal cord. Dr. Samuel Jones, in an exhaustive lecture on the drug reported to the *American Observer* for 1879, puts in juxtaposition cases in which paraplegia with cystoplegia were caused by it, and in which its administration temporarily restored power to a bladder paralysed in a corresponding connexion. The influence of Cantharis probably stops short of the lower end of the urethra; and it is not thought much of in gonorrhœa, save where the inflammation extends so high as to cause irritability of the bladder. But in those cases of spermatorrhœa described by Lallemand, which depend on the spread of gonorrhœal irritation through the ejaculatory ducts along the spermatic passages, Cantharis is one of the most homœopathic medicines; and Dr. Kidd speaks well of its efficacy in their treatment.†

As to the other parts irritated by Cantharis, we must note the great success obtained by Cazenave and others in the treatment of cutaneous squamæ and vesiculæ by small doses (℥ iij—v) of the tincture.‡ We must also take into account Dr. Jousset's estimate of the drug as the chief remedy for pleurisy. As soon as effusion has taken place, he says in his excellent *Éléments de Médecine Pratique*, we must resort to Cantharis, in the third dilution, every two or three hours; if necessary (though he says he has rarely found it so) descend-

* See *Annals*, viii., 550, for two illustrative cases, † *Ibid*, v., 131.

‡ Trousseau and Pidoux; see also *Brit. Journ. of Hom.*, iii., 417.

ing to the second, the first, or even the mother tincture. In his hands it appears quite to take the place of Bryonia and Apis; but he mentions one case in which the last-named succeeded after it had failed. The original idea of using the Spanish fly in this disease was Giacomini's, and was an inference of his from the value of blisters therein, which he (rightly) conceived to act by the absorption of the Cantharis they contained.

Lastly, we must consider Bretonneau's comparison between the effects of Cantharis in animals and diphtheria. He describes the concrete exudation lining the mucous membranes, and the coldness and adynamia; to which Dr. Black, commenting on the point,* aptly adds the albuminuria of the two affections. This physician naturally suggests the trial of the drug as a remedy for the disease. I have rarely used it myself, and I believe that it has disappointed expectations. Dr. Ludlam, however, in his *Clinical Lectures on Diphtheria*, speaks highly of it for the prostration which often continues after the acuteness of the mischief has subsided; and Dr. Lawrence Newton communicates a similar experience.† The symptoms of Giacomini's provers establish its complete homœopathicity to this condition.

Dr. Guernsey says that it is often indicated (by the consensual urinary symptoms) in ovaritis. Dr. Jones lays much stress on external coldness, even with shuddering, coinciding with inward burning, as indicating it; and recommends it (in the tincture) for chronic ulcers of the legs.

In its action on the urinary organs Cantharis finds its nearest parallel in *Terebinthina*; but *Arsenic*, *Mercurius corrosivus*, *Scilla*, *Sabina*, *Kali bichromicum*, *Apis*, *Camphor*, *Cannabis sativa* and *Copaiba* coincide with it at some points of the tract.

The dilutions from the third decimal upwards have been those commonly used internally. For external application the lotion should not be stronger than one part of the tincture to forty of water.

* *Brit. Journ. of Hom.*, xvii.

† *Monthly Hom. Review*, xiv., 411.

LECTURE XXIV.

CAPSICUM, CARBON SULPHURATUM, CARBO ANIMALIS AND
VEGETABILIS, CAULOPHYLLUM, CAUSTICUM, CEDRON.

My first medicine to-day is the Cayenne pepper,

Capsicum.

It is prepared by pulverising the ripe capsules of the *Capsicum annum*, together with the seed, and from these making a tincture by percolation.

The pathogenesis of *Capsicum* is in the sixth volume of the *Reine Arzneimittellehre*, and contains 275 symptoms from Hahnemann, 65 from four fellow-workers, and four from authors. Dr. Allen has added a few later observations.

Capsicum produces its well-known burning in the mouth, throat, gullet, stomach, and intestines, along which it passes, and in the urinary passages by which it is eliminated. The condition set up is one of incipient inflammation, and is identical with that produced by the rubefacient action of the drug on the skin. Local application, moreover, is not always necessary to induce the latter effect. Dr. Allen's pathogenesis contains symptoms produced by repeated teaspoonfuls of a solution of *Capsicum* taken for a slight cold; and among these are a papulo-vesicular eruption all over the body, with much itching and burning.

The common employment of *Capsicum* as a gargle in sore throat is undoubtedly an instance of homœopathic action. It used to be limited to relaxed conditions of the mucous membrane; but Drs. Ringer and Phillips concur to extend it to the early stage of acute inflammation. The latter recommends it in "throat-coughs," in which I have myself seen it of great service. Dr. Bayes says that an indication for it in coughs is when each paroxysm causes pain in the ear. Its usefulness in atonic dyspepsia, especially that of drunkards, is

well established ; but belongs to it rather as a condiment.* It has been found of service in nervous irritability of the parts it inflames, as hiccough, and tenesmus of the bladder and rectum ; even in dysentery where the last symptom is prominent. A sense of burning is of course another indication for it. It should be useful in some irritations of the urinary tract : Dr. Phillips speaks of having cured a chronic case of renal congestion with it. I am not aware of its having been used in cutaneous affections, save as a local application to chilblains.

Hahnemann, in his preface, refers to Bergius' recommendation of the drug in intermittent fever. His own symptoms present a very fair picture of the paroxysm of this disease. He notes especially the chill, saying that he has seen it gradually increasing for eleven hours after taking the medicine, and then declining for twelve hours more. Capsicum has always occupied a high place in the homœopathic treatment of ague : it is found especially useful when the sweat coincides with the heat, instead of following it.

It seems probable that Capsicum is capable of a more profound action than the sketch now given would suggest. Dr. Houghton tells us that Dr. Allen directed his attention to one of Hahnemann's symptoms—"a swelling on the bone behind the ear, painful to the touch"—as suggesting its use in aural inflammations, and that he has found it of the utmost service in both chronic otorrhœa and acute median otitis, when the mastoid cells are much involved. I have myself lately had a case of the latter kind, in which I fully expected to have to make a deep incision ; but complete recovery, with good hearing power, has ensued upon the steady employment of Capsicum. Again, Dr. O. R. Wright communicates a case, in which, during pleuro-pneumonia, all the signs of abscess of the lung supervened,—the cough becoming explosive, and the air expelled therewith being intolerably fœtid, tainting the atmosphere of the room. Hahnemann's symptom, "the cough expels an offensive breath from the lung," led to the administration of Capsicum in a high dilution, and under this remedy rapid and complete recovery ensued.† Our French brethren praise it in hæmorrhoids, for which cayenne pepper is well known as a popular prophylactic.

* Dr. Ringer writes:—"I can endorse Dr. Lyon's strong recommendation of capsicum in dipsomania. Ten-minim doses of the tincture obviate the morning vomiting, remove the sinking at the pit of the stomach, the intense craving for stimulants, and promote appetite and digestion. It should be taken shortly before meals, or whenever depression and craving for alcohol arises."

† See *N. York State Hom. Soc.'s Transactions*, x., 123.

As an irritant of skin and mucous membrane Capsicum most resembles *Argentum nitricum*, *Croton*, and *Euphorbium*.

Hahnemann recommends the 9th dilution, but nearer approaches to the crude drug have generally given complete satisfaction.

I have now to speak of the substance known since its discovery as *Liquor Lampadii* and *Alcohol Sulphuris*, under which latter name it stands in our *Pharmacopœia*. It is a bisulphide of carbon, CS_2 . Pereira calls it *Carbonei bisulphuretum*, and it appears in Hering's *Materia Medica* as *Carburetum sulphuris*. I shall myself follow the analogy of similar compounds in styling it (much as Dr. Allen does)

Carbon sulphuratum.

Proving of this substance have been made by Knaf in the old school, and by Pernerl and Koch in the homœopathic ranks—altogether on thirteen persons. Its use in the manufacture of vulcanized india-rubber has led to many observations of the effects of inhaling its vapour. These have been collected by Delpech in the *Union Médicale* for 1855.* The materials thus specified, with others of like kind, have been worked up by Dr. Hering into one of the monographs of his volume of *Materia Medica*, and by Dr. Allen, who gives 750 symptoms to the drug.

Carbonic sulphide is a stimulant anæsthetic like ether, and can be given for this purpose by inhalation. It has too many inconveniences, however, to allow of its use in practice. If long inhaled it causes local irritation, besides headache and giddiness; and the workers in it become impotent. The effect which most arrests my attention is the occurrence of long-lasting ringing in the ears, with or without deafness. This was experienced by one of those who took it internally; but it is especially prominent in a record of the effects of inhaling the vapour given by Mr. T. Wilson in the seventeenth volume of the *British Journal of Homœopathy*. Neither Hering nor Allen has used this observation. It has led, however, to the only homœopathic application of the drug of which I am aware, Mr. Wilson stating that he has cured a case of tinnitus aurium of some standing with it in the first dilution. It is a medicine which ought to have a wider application.

* See an account of his observations by Dr. Jousset, in *Brit. Journ. of Hom.*, xv.

I should have mentioned that our preparation is a solution in alcohol, in which the drug is freely soluble.

I have now to speak of charcoal, animal and vegetable, which we will designate generically as

Carbo.

By all the writers on *Materia Medica* charcoal is regarded as utterly inert, and Hahnemann is laughed at by Pereira for filling thirty-five pages with the symptoms produced by the millionth of a grain. The learned writer has omitted to notice that this millionth of a grain was obtained by trituration, and that it is to this process that Hahnemann ascribes the development of such extensive powers in a substance inert in its crude state. This is a question of fact, and cannot be decided *à priori*. The same answer is to be made to Dr. Faivre, who, in *l' Art Médical* for 1869, relates some experiments with finely pulverized charcoal with negative results.* The division of the particles caused by his process is not to be compared to that of the Hahnemannian trituration. A more serious objection is raised by the results of the recent re-proving of *Carbo vegetabilis* by the American Institute.† The first, second and third centesimal triturations of this substance were tested upon nearly fifty healthy subjects, without producing any effect whatever. Nine other persons did report symptoms, which, arranged in schema form, number 327; but six of these had previously observed their health without taking any medicine at all, and under these circumstances had noted sensations and phenomena amounting to half as many again as those subsequently elicited by them. These results in no way disprove the medicinal value of the drug, especially when given (as it usually is) in the attenuations above the third; but they render any pathogenetic effects ascribed to it (in the triturations) extremely dubious.

We will take first in order

Carbo animalis.—Hahnemann directs this to be prepared from ox-leather. Noack and Trinks recommend in preference meat—beef, veal, or mutton—as the substance to be carbonized. It probably matters little. The potencies are, of course, prepared by trituration.

A pathogenesis of *Carbo animalis*, made with the third

* *Brit. Journ. of Hom.*, xxviii., 232.

† See its Transactions for 1877, p. 181.

trituration, appears in the sixth volume of the *Reine Arzneimittellehre*. It consists of 188 symptoms from Hahnemann himself and a Russian physician named Adam, with three from *Rust's Magazin*. Hartlaub and Trinks subsequently proved the drug, presumably in the same form; and gave their results in the shape of 254 symptoms in the third volume of their *Arzneimittellehre*. The final pathogenesis in the second edition of the *Chronic Diseases* incorporates these two series of symptoms. The remaining 283 of its 728 are from Wahle.

That animal charcoal, even in its crude state, is inert, can hardly be affirmed in the face of the observations cited by Hahnemann from *Rust's Magazin*, to which Dr. Hempel, in his article on the drug, adds some more of like tenor. Daily doses of from four to twenty-four grains have not only disordered the stomach and bowels, but have caused the breaking out of copper-coloured eruptions on the face, of acne, and of boils; and have developed painful swellings and indurations of the parotid and mammary glands. In these very glandular enlargements, especially when of a scirrhus nature, *Carbo animalis* has a repute of old which the homœopathic school has sustained,* extending it also to syphilitic glandular engorgements, as bubo.† It is also considered by some as having a dynamic controlling influence—distinct from its chemical action—over low states of the system characterised by putrescence of the fluids and secretions. Noack and Trinks, who praise it here, ascribe to it a deeper and more penetrating action than has its vegetable brother. Dr. Drury commends it, in a high dilution, against offensive lochia; and Dr. Allen emphasises “offensive night-sweat” as a symptom repeatedly verified.

Great lassitude, especially felt in the thighs, during and after the menstrual period, appears to be Dr. Guernsey's chief general indication for the remedy.

The action of *Carbo animalis* on the glands is somewhat like that of *Conium* and *Hydrastis*.

With the exception mentioned, the lower attenuations have generally been used.

Carbo vegetabilis is generally made from poplar, beech, or birch wood; and raised to the third potency by trituration.

Vegetable charcoal was proved, Hahnemann tells us, with doses of some grains of the third trituration. In the sixth

* See *Brit. Journ of Hom.*, xxxvi., 368.

† See *Ibid*, i., 300.

volume of his *Reine Arzneimittellehre* he gives 720 symptoms so obtained by himself and three others, which, on the grounds just stated, must be held of dubious validity. A later pathogenesis in the second edition of the *Chronic Diseases* extends the list to 1189; and, as no additional fellow provers are mentioned, the new symptoms must be understood as observed upon patients in the usual way. The symptoms obtained by Dr. Wesselhœft are given by Allen in his supplement.

Since the power of charcoal to check fermentation and to absorb gases has been known, it has been largely used in dyspepsia attended with acidity and flatulence. Dr. Madden, moreover, from experiments upon his own person, has been led to the conclusion that, swallowed in substance, finely-powdered charcoal acts as a mechanical detergent of the mucous membrane, dislodging any superfluous mucus it may have formed, and so aiding digestion.* All these are extramedicinal effects of the drug, of which we may and do avail ourselves in common with our brethren of the old school. But, over and above them, we have dynamic uses of *Carbo vegetabilis* which make it an important remedy. One of these singularly coincides with its chemical action,—I mean its power over flatulence, whether existing alone, or associated with acidity and heart-burn. It is my own favourite remedy for this condition; and I have seen the most distressing oppression and dyspnœa, recurring after every meal, removed by its use.† Dr. Guernsey's indication, "the patient wants to be fanned," belongs to this condition. I think it most suitable for cases where the gas distends the stomach more than the intestines, and where the tendency is rather to diarrhœa than to constipation—in this last feature contrasted with *Lycopodium*. Then there is an adynamia for which *Carbo vegetabilis* is specific. It is non-febrile, therein contrasted with that of Arsenic, and is attended by evidences (such as blueness and coldness) of defective circulation and imperfect oxidation of the blood. When such a condition exists in affections of the aged, and in advanced stages of typhus after the temperature has fallen, *Carbo* is an effectual rallier. But I cannot agree with those who see a *Carbo* adynamia in the collapse of cholera, and recommend it to be given therein.

* *Brit. Journ. of Hom.*, xxvii., 64.

† Dr. Cooper prefers the *C. animalis* in flatulent dyspepsia; and says that, given at night, it acts almost like an opiate in promoting sleep, by removing the gastric condition which prevents it (*Brit. Journ.*, xxxvi., 227).

There is, moreover, a good deal of evidence as to the power of *Carbo vegetabilis* over affections of the respiratory organs. Wurmb and Caspar esteemed it highly at the Leopoldstadt Hospital in chronic hoarseness (to which it is markedly homœopathic) and in emphysema. Bähr thinks it to be depended upon in chronic neglected bronchitis, with emphysema, and in the suppurative stage of pneumonia. Dr. Bayes says that in chronic bronchitis of aged people, with profuse expectoration or profuse accumulation of mucus, with imperfect power of expectoration, blue nails, and cold extremities, *Carbo vegetabilis* from 6th to 30th is most useful. In all these affections of the respiratory organs a sense of weakness and fatigue in the parts is very characteristic for *Carbo*.

Dr. Thayer, of Boston, speaks highly of it in epistaxis, and Teste in soreness, itching, and burning of the female genitals with sexual excitement—both of which affections are recorded by Hahnemann (in the R. A. M. L.) as effects of the drug, and are in the list given by him of curative indications for it.

Lycopodium, *Veratrum album* and *Carbolic acid* are the medicines which may be most advantageously compared with *Carbo vegetabilis*. *Carbolic acid* has in the gastric sphere the same singular coincidence of chemical and dynamic action.

The sixth attenuation is that which I have almost always used, though I have found the third trituration act capitally in the dyspepsia of old people.

I have now to give an account of another of the many indigenous medicines with which our American brethren have of late years enriched the *Materia Medica*, the

Caulophyllum

thalictroides, popularly called "blue cohosh" or "squaw root." The former name hints at its similarity to *Actæa racemosa* (black cohosh); the latter points to its main sphere of action.

We prepare a tincture from the root. *Caulophyllin* is also much used.

There is a proving of *Caulophyllin* by the indefatigable Dr. Burt in the second edition of Dr. Hale's *New Remedies*, together with all that is known regarding the drug. I do not find anything fresh about it in the fourth edition.

The "squaw root," as may be supposed, acts chiefly on the uterus. No woman having proved it, I am unable to state what are its physiological effects upon the organ. Dr. Hale

thinks that it is primarily excitant; and that it is homœopathic to dysmenorrhœa, uterine cramps, spurious labour-pains, abortion, and after-pains. It seems especially suitable to affections of the motor nerves sympathetic with uterine irritation (*Actæa* includes also reflex hyperæsthesiæ). It has been found useful in chorea, in spasms from suppression of the menses, and in uterine paraplegia. Cases are also on record in which it has strengthened labour-pains, where ergot could not be given on account of the rigidity of the os uteri; and in which flooding after abortion and long-continuing lochia after parturition have been checked by its use. In "false pains;" to avert threatened abortion; and to prevent premature labour, *Caulophyllum* is much recommended: also in spasmodic dysmenorrhœa and after-pains, and as a preparatory medicine for women who have difficult labours.* It will probably continue to be given indiscriminately as a uterine remedy, until a proving on a woman or the accumulation of clinical experience enables its precise place to be fixed. I have myself had little experience with it. The proving of Dr. Burt reveals a marked power on the part of *Caulophyllum* of causing acute rheumatoid affections of the small joints, especially those of the fingers. Putting this and its uterine action together, it becomes probable that *Caulophyllum* will rank with *Actæa*, *Pulsatilla*, and *Sabina*, as a remedy for that peculiar form of chronic rheumatism described by Dr. Fuller as secondary to uterine disorder. It has made some brilliant cures of inflammatory rheumatism of the hands and fingers, and is said by Dr. Ludlam to be more effectual in females than in males thus affected.

I have already pointed out the close relations of *Caulophyllum* with *Actæa racemosa*, *Pulsatilla*, and *Sabina*. It has some points of analogy also with *Secale*.

The *Caulophyllin*, in the triturations from the first to the sixth decimal, has been most frequently used.

I have next to speak of

Causticum,

and, before I go any farther, must endeavour to satisfy your natural curiosity as to what the medicine so named may be.

* "Dr. Helmuth informs me," writes Dr. Hale, "that he has used the *Caulophyllin* successfully for the removal of those discolorations of the skin of the face common in women with menstrual irregularities or uterine disease."

Its history is as follows:—In the *Fragmenta de viribus* Hahnemann published thirty symptoms as obtained by him from a substance he called “Acris tinctura.” He stated that it was an alcoholic solution of the principle to which quick-lime and the alkalis owed their causticity. He obtained it by digesting caustic potash in alcohol, and then saturating with vinegar to neutralise the potash. As he found (from its effects) a medicinal agent still present in the solution, he, strangely enough, considered this to be the caustic principle of the alkali. In the second volume of the second edition of the *Reine Arzneimittellehre* (1824) we find a more extensive pathogenesis of this preparation, now named “Aetzstoff-Tinctur—Tinctura acris sine kali.” 106 symptoms have been observed from it by Hahnemann, and 201 from seven fellows; and in a very long preface the chemical reality of the principle of causticity is defended. In the third edition (1833) the drug does not appear, for the reason that in the meanwhile Hahnemann had seen reason to class it among his antipsorics. Its pathogenesis had accordingly been transferred to the *Chronic Diseases*, in the first edition of which (1830) it appears with 1014 symptoms, including those which he had already published. It is now called simply “Aetzstoff” or “Causticum,” and is directed to be prepared by adding to quick-lime a solution of some previously fused bisulphate of potash, and distilling. The product, he says, is hydrated causticum. In the second edition of the *Chronic Diseases* are incorporated some hundreds of symptoms communicated by Nenning to Hartlaub and Trinks, making a total of 1505.

What, then, is the real chemical nature of this preparation of Hahnemann’s? Dr. Black has had it analysed, with the result of finding it to be a weak solution of caustic potash of varying strength. He recommends that the dilutions shall in future be prepared from the liquor potassæ of the British Pharmacopœia. Twenty parts of this with eighty of distilled water constitute, according to him, the first centesimal dilution of what we might now more correctly style Kali causticum. You will decide for yourselves whether to adopt Dr. Black’s suggestion, and will then look carefully to see if you get the same effects from his preparation as are ascribed to Hahnemann’s. In the meantime, the British Homœopathic Pharmacopœia does wisely, I think, in adhering to the latter. It directs the attenuations to be made with rectified spirit.

Dr. Allen seems to agree with Dr. Black, for he incorporates with Hahnemann’s symptoms “some effects of caustic potash.”

The main sphere of the therapeutic action of Causticum has consisted in paralytic affections and laryngo-tracheal catarrhs. It was in facial paralysis that it first acquired reputation; and¹ as this affection, when local, readily admits of spontaneous recovery, it is not easy to prove that any medicine has cured it. But when so careful an observer as Bähr expresses no doubt of the anti-paralytic virtues of the drug, we may wisely avail ourselves of them; and now with the more confidence that we have reason to believe that it is potash we are using. For it has been well ascertained of late years that potash has a poisonous action quite distinct from that of any alkali, and that this is especially seen in the way it paralyses the spinal cord and the heart.

What are the special paralytic conditions in which Causticum will prove efficacious has not been determined. I can speak with most certainty of it in local paretic states, whenever occurring. As regards the larynx we have the weighty testimony of Dr. Meyhoffer. "The absence," he writes, "of harmonious co-operation of the vocal cords is one of the most permanent and persevering symptoms of deficient innervation in laryngeal catarrh; persons recovering from this affection cannot exert the vocal organ to the full compass of the voice, nor use it in all its modulations, for at least two or three weeks after every trace of capillary turgescence has subsided; and any overstrained exercise of the vocal apparatus, or oratorical display, at this period tends to perpetuate the defect. This kind of diminished vitality is naturally of great consequence to singers and public speakers: fortunately, a specific remedy is at hand in what Hahnemann introduced into medical practice as *Hydrated Causticum* (Kali causticum), which often in a single dose removes this functional weakness of the glottis, as well as that resulting from over-exertion."* Of the same character is that which Dr. Guernsey notes of the cough of Causticum, that the expectoration only comes up far enough to be swallowed: there is no power to spit it out. In the bladder we have a similar condition. It is especially shown in that, when the patient coughs, there is involuntary emission of urine during the paroxysm. This is a well-known indication for Causticum. But it has also been useful when such paresis of the sphincter exists without cough, as in the enuresis of children and old persons; and I have found it curative in a similar condition of the anus. In the eleventh

* *Chronic Diseases of the Organs of Respiration*, i., 56. See also a case of aphonia, with facial paralysis, by Dr. Kafka in *L'Art Médical* for June, 1875.

volume of the *New England Medical Gazette* (p. 491) a case is reported in which it had a decisive curative effect in post-diphtheritic paralysis of the fauces; and Drs. Allen and Norton speak of it as the remedy *par excellence* for paralytic affections of the ocular muscles, especially if caused by exposure to cold.

Independently, moreover, of associated paretic symptoms (which may be absent), Causticum is a medicine of undoubted power in laryngo-tracheal catarrh. Dr. Black's experience is decisive here. He relates* cases of long-lasting catarrhal aphonia, and of violent and fatiguing cough, in which its administration effected speedy cure. It is especially indicated in coughs by the co-existence of a sore sensation in a streak down the trachea.

There is another property of the salts of potash which seems to have found its homœopathic application by means of Causticum. This is the increase of the urinary solids, first noticed by Golding Bird with the acetate, and since confirmed by Dr. Austin Flint with the nitrate, and by Rabuteau with the chloride. The late Mr. Freeman has put on record some cases where convalescence from typhoid fever was retarded by the passing of large quantities of urine loaded with lithic acid and lithates.† The excessive tissue waste revealed by this symptom was checked by Causticum, and the recovery went rapidly on. In a similar case occurring in my own practice, where after parturition this state of the urine was associated with debility, low spirits, anorexia, copious sour perspirations, and persistent aching of the mammæ, speedy change for the better ensued upon the administration of this remedy. It should be thought of for that rare form of disease, azoturia.

For possible further application of Causticum I may refer you to Hahnemann's list of morbid conditions in which it has been useful; to a paper read upon it before the British Homœopathic Society by Mr. Nankivell, with the discussion following;‡ to a study of it by Dr. Lohrbacher, now (1879) in course of translation in the *North American Journal of Homœopathy*; and to Teste's article on the medicine, in which he lauds it in the treatment of smallpox. Some of the traditional uses of caustic potash and the liquor potassæ are, moreover, highly suggestive, especially Mr. Brandish's results from his alkaline solution in scrofula. He, indeed, gave the potash

* *Brit. Journ. of Hom.*, xxiv., 470.

† *Monthly Hom. Review*, x., 288.

‡ *Annals*, ii.

in large doses ; but Sundelin's experience, which was equally favourable, was obtained by a preparation containing a drachm of the alkali to an ounce of water, of which he gave two drops twice a day, gradually increasing the dose. He "regarded the usefulness of potash as most striking in scrofula affecting persons of a soft but full muscular system, and a torpid phlegmatic temperament." Drs. Allen and Norton find frequent employment for it in scrofulous inflammations of the eyes. They also ascribe to it some power over cataract. "Several cases" they say "have been arrested in their progress, and the sight even improved, where, before its administration, they were rapidly going on to complete blindness." Dr. Bayes says that he has always found good results from Causticum in constipation, when the evacuation is very solid, is expelled with great difficulty and straining, and presents a shining appearance, as if greased.

Gelsemium corresponds best to the paralytic symptoms of Causticum ; *Bromine* and *Spongia* to its laryngeal action.

Dr. Black's success was obtained with the first and second decimal dilutions, and the anti-paralytic virtues of the drug have generally been elicited from the potencies just above these. In the higher attenuations, however, Causticum has played a prominent part in the treatment of chronic disease, as you may see from such a book as Jahr's *Forty Years' Practice*. It is especially esteemed in old rheumatisms, and is even praised by some in rheumatoid arthritis.

For my last subject to-day I have a drug which we know as

Cedron.

It is the fruit of a South American tree of doubtful species ; but identifiable through its extensive native use. Dr. Hale thinks there is no doubt of its being the Simaruba Cedron. A trituration of the seeds is the best preparation, according to Dr. Casanova ; but the British Homœopathic Pharmacopœia directs a tincture to be prepared from the whole fruit.

Cedron has been proved by M. Teste on three persons in the sixth dilution, and by Dr. Casanova on fourteen in the crude substance and first three decimal triturations. The full report of the former's experiments may be read in his *Matière Médicale* : the results of the latter are given by him, with much clinical observation, in a series of papers published in

the fifth and sixth volumes of the *Monthly Homœopathic Review*. Dr. Allen adds symptoms from eight American provers, all using the crude drug or mother tincture.

It appears that in Panama Cedron is considered a specific for the bites of the venomous serpents of the country, and for its endemic intermittents. Teste's three provers each experienced a daily paroxysm closely simulating ague. The chills came on towards evening; there was little or no sweat, but much cerebral congestion. Several of Dr. Casanova's provers had similar attacks, but there was no lack of perspiration with them. Teste reports brilliant results from Cedron in the intermittents of Martinique and Wallachia. A vial of the sixth attenuation, given by him without label to a friend visiting the island I have mentioned, attained quite a reputation as a secret remedy. Dr. Casanova's experiments, pathogenetic and clinical, point in the same direction. He considers Cedron a true anti-periodic, like Quinine and Arsenic; and gives it in neuralgia and other disorders, as well as in ague, when appearing in regularly recurring paroxysms. The periodical ("almost clock-like," says Dr. Jones) recurrence of the symptoms in his provers led him to this practice. It checks, he reports, the tendency to miscarriage, when this repeats itself at the same epoch. He thinks it infallible in the endemic intermittents of damp, warm, and low marshy climates.

I am myself accustomed to use Cedron with success in obscure cases of recurring chills and fever, such as those we meet with in persons returned from tropical countries. I have generally used the second dilution. Dr. Casanova says that residents in hot climates are much more susceptible to its action, pathogenetic and curative, than others differently situated. Drs. Allen and Norton, guided by the severe shooting pain over the left eye experienced by one of the provers, have been led to use the drug to relieve the supra-orbital pains found in iritis, choroiditis, and other deep inflammations of the eye; and have been frequently successful with it.

I should mention that the epithet I have cited as Dr. Jones' is from a study of Cedron by him in the seventh volume of the *American Observer*.

LECTURE XXV.

CHAMOMILLA, CHELIDONIUM, CHIMAPHILA, CHLORAL,
CHLORUM, CICUTA, CINA AND SANTONINE.

I begin to-day with a humble and familiar plant, which, nevertheless, almost ranks with the polychrests of homœopathy,

Chamomilla.

By this we mean the common *Matricaria Chamomilla*, not the *Anthemis nobilis*. At least, so Hahnemann meant; but, if Stillé is right, the common wild camomile of England and America is the *Anthemis nobilis*, while in Germany it is the *Matricaria Chamomilla*. There is probably no essential difference between them.

Chamomilla early attracted Hahnemann's attention. A pathogenesis of it appeared in the *Fragmenta de viribus*, containing 272 symptoms observed by himself, and three from authors. In the second edition of the third volume of the *Reine Arzneimittellehre*, there are 189 additional symptoms of his own, and 30 observed by Stapf in a girl of nineteen, after drinking some large cupfuls of camomile tea. We have two later provings of the drug, one by Dr. Hoppe of Basel, on himself and two others, related in the thirteenth, fourteenth and fifteenth volumes of the *Vierteljahrschrift*; the other by the Vienna Provers' Union.* Dr. Allen, incorporating the results thus obtained with a few others, gives us a pathogenesis of 1,446 symptoms. For the therapeutic action of Chamomilla, we have again the benefit of Hartmann's *Practical Observations* (first series).

Chamomilla, at times largely used by physicians, had in Hahnemann's day become practically a domestic remedy only. It was chiefly used in pains and difficulties of the uterus, from which action, it is said, its name *Matricaria* (from

* *Brit. Journ. of Hom.*, vi., 267, 270.

matria) is derived. His proving, and the applications which have been made of it to practice, have given the drug a much wider range of action. I fully agree with one of the Vienna provers (Dr. Schneller) that Chamomilla affects the nervous system primarily. Its pathogenetic effects are faint and obscure; but its curative power is well defined. It is when the sensory and excito-motor nerves are morbidly impressionable that Chamomilla is so valuable a medicine. Thus Hahnemann says—"Chamomilla seems, in the smallest doses, greatly to moderate excessive sensibility to pain and too great disturbance of the mind induced by much suffering, whence also it meets many of the troubles of coffee-drinkers and those who have been dosed with narcotic palliatives. It is on the other hand less beneficial to those who remain patient and composed during their sufferings,—an observation which I consider of the utmost importance." It has even cured rheumatism and neuralgia of the limbs where this great "nervousness" was present. Of its pains generally Hahnemann says—"It is their peculiarity that they are worse at night, when they often drive one to the border of distraction, not unfrequently accompanied with unquenchable thirst, and heat and redness of the cheeks; also with hot sweat on the head and scalp. The pains of Chamomilla generally seem utterly intolerable." And again—"The paralytic sensation produced by Chamomilla in any part is always accompanied by drawing or tearing pain, and drawing and tearing pains rarely occur without the paralytic or numb sensation in the part." Dr. Dunham adds that the pains are made worse by warmth. "There must always be intolerance of pain, aggravation at night, and aggravation by warmth. This applies to the toothache, earache, facial and cervical neuralgia, and to the abdominal colic, and distinguishes it from the symptoms of Colocynth, which are diminished by warmth." The impressionability of the excito-motor nerves which Chamomilla so powerfully modifies shows itself in such clonic spasms as are apt to occur in women and young children. In the former, it effectually relieves the "false pains" and the cramps and painful twitches of the legs, which harass the later months of pregnancy; it is good also for spasmodic dysmenorrhœa, for after-pains, and for metrorrhagia (whether in threatened miscarriage or otherwise) when there are forcing pains and the blood is dark and clotted. The presence in such patients of a "spiteful, sudden, uncivil irascibility," of which they are sometimes conscious, but say they cannot help it, is—according to Dr. Guernsey and others—a great indication for the

remedy. In children it plays a most important part during the process of dentition. It probably has some specific influence on the pulp of the teeth itself in the gums, for it often gives great relief in ordinary inflammatory and rheumatic face-ache. Hahnemann gives* the following description of the symptoms which call for it:—"It is of service in those toothaches that occur in fits, most violently at night, with redness of the cheek, which during the fit seem to be quite unbearable, that do not affect any one tooth in particular, that in their slightest degree consist of formicating pecking pains, when more severe cause a tearing pain, and in their greatest severity occasion a shooting pain extending often into the ear, that most frequently come on soon after eating and drinking, are somewhat relieved by the application of a finger that has been dipped in water, but are much increased by drinking cold things, and that generally leave a swelling of the cheek." But when in dentition the nervous system becomes irritated, then for restlessness, fretfulness, and spasms there is no medicine like Chamomilla. Dr. Guernsey's indication for it in teething infants, that the child refuses to be soothed save when carried about, has often been verified. Hartmann recommends it for the sympathetic cough occurring at this time. Even the diarrhœa of teething will sometimes yield to it; and when other remedies (as Mercurius) are strongly indicated, Chamomilla in alternation—by quieting the reflex irritation—will help them.

This application of Chamomilla to disturbance of the vegetative organs, when induced by nervous causes, finds another instance in its use in the effects of anger and active vexation, when showing themselves in "bilious fever" and jaundice, which was well known among the older homœopaths. Hahnemann himself wrote:—"The (sometimes dangerous) disorder, resembling an acute bilious fever, which is often brought on by violent angry vexation, with heat of the face, insatiable thirst, bilious taste, tendency to vomit, anxietas, restlessness, &c., has so much homœopathic similarity to the symptoms of Chamomilla that it can hardly fail to remove the whole sickness speedily and specifically: one drop of the juice diluted as before mentioned"—that is, to the twelfth degree—"cures as by magic." The occurrence of jaundice from such causes is well known, and always suggests Chamomilla. Dr. Hempel, however, maintains in his lectures that "the primary action of Chamomilla seems to be upon the functions of the biliary apparatus;" and some recent obser-

* *Lesser Writings*, p. 641.

vations of Dr. Sharp's favour its direct hepatic influence. He found that, on a healthy person, the effect of the first dilution, in drop doses, was to produce motions like those of a baby: that is, as he thinks, to increase the secretion of bile. On the other hand, five and ten drop doses of the mother tincture made the motions scanty and dark in colour. He further relates one case of jaundice, and two of diabetes of hepatic origin, in which the action of Chamomilla was everything that could be desired. Another suggestion of its power of influencing the secretion of bile is supplied in a case of over-dosing observed by Dr. Burnett, in which the symptoms were diarrhœa of *white, putty-like stools*, white-coated tongue, and intense vertex headache, with a sensation of pressure from within the cranium.* This was from the *Anthemis nobilis*. Chamomilla, with *Nux vomica*, is Dr. Jousset's principal remedy for what he calls "ictère essentiel."

I can confirm from my own experience Hartmann's recommendation of the remedy in flatulent colic, where the flatus seems to collect in several spots in the abdomen, as if incarcerated.

The analogues of Chamomilla as a nervine are *Agaricus*, *Belladonna*, *Coffea*, *Hyoscyamus*, *Ignatia*, and *Stramonium*.

The facts about the dose of Chamomilla are very curious. I have hitherto been in the habit of stating as the general experience of homœopathic practitioners—as it was certainly my own—that the remedy begins at about the sixth potency to manifest its great curative powers, and may often be given with advantage as high as the 18th. I had in my mind recorded expressions of opinion on the part of Drs. Madden,† Bayes,‡ Hempel,§ and Holcombe||—to say nothing of Hahnemann's own recommendation of the 12th as the best attenuation. Dr. Black¶ has since cited some testimonies on the other side; but these, when examined, show that it is not the lower dilutions of the drug that give satisfaction, but the infusion, the mother tincture, or at the highest the first decimal. The only writer quoted by Dr. Black as using the 3rd decimal and centesimal is Dr. Clotar Müller, and he says that "the curative results were but seldom indubitable." The conclusion seems

* *Monthly Hom. Review*, xxi., 408.

† *Brit. Journ. of Hom.*, xxiii., 530.

‡ *Applied Homœopathy*, sub voce *Chamomilla*.

§ *Mat. Med.*, sub voce.

|| *United States Med. and Surg. Journ.*, i., sub voce.

¶ *Brit. Journ. of Hom.*, xxix., 795.

to be that Chamomilla is one of those drugs whose crude and infinitesimal actions are about identical; but that there is an intermediate stage where dilution simply weakens. This is my reading of the facts; but the question is a difficult one at the best. It is, moreover, of Chamomilla as a nervine that the attenuations have found such favour. Dr. Sharp seems justified in saying that as an hepatic remedy the first dilution is preferable; and in its colic I have found the mother tincture most effectual.

I have now to bring before you a drug whose exhaustive proving of late years should give it a prominent place among our remedies. I refer to the greater celandine,

Chelidonium majus.

The tincture is prepared from the fresh plant in the usual manner.

The proving to which I refer is by Dr. Buchmann of Alvensleben. It appears in the seventieth volume of the *Allgemeine Homöopathische Zeitung*, and is translated in the twenty-third and two following volumes of the *British Journal of Homæopathy*. Hahnemann had previously given a short pathogenesis of the plant in the fourth volume of the *Reine Arzneimittellehre*, consisting of 28 symptoms from himself, 122 from eight fellow-observers, and 6 from authors. Teste also had contributed some provings on four persons with the sixth dilution, and the Vienna Provers' Union had experimented with the drug. All the results of the foregoing, and some symptoms from other sources, are incorporated by Dr. Buchmann with his own—making 1456 in all*—in the "schema" of the drug with which he concludes his record. I should have said that his experimenters were eighteen in number; and that nearly all took full doses of the mother tincture.†

Our knowledge of Chelidonium, which has been gradually building, is perfected by what Dr. Buchmann has now so ably done. Led by the doctrine of signatures, the Middle Age physicians supposed that the bitter yellow juice of this plant,

* Dr. Allen, though drawing from no other sources, gives (I suppose from difference of arrangement) 2428 symptoms to the drug.

† The fairness and impartiality of Dr. Phillips' book may be estimated by his statement that "exact experiments are altogether lacking as to the physiological action of the juice of Chelidonium." Yet he is acquainted with Dr. Buchmann's work, as he cites him as a therapeutic authority on the drug.

so nearly resembling bile, must be beneficial in disorders of the liver. The disciples of Rademacher have shown that here at least the signature has proved a true guide, by adducing numerous cases of jaundice, gall-stones, and acute and chronic hepatitis cured by the drug. Then comes Dr. Buchmann's proving to show that this remedial power obeys the law of similars. The action on the liver is very strongly marked in his proving. Pain, both acute and dull, and tenderness of the organ; pain in the right shoulder; stools either soft and bright yellow, or whitish and costive; and deeply tinged urine, appeared in nearly every prover. In three the skin became yellow or dark; and in one regular jaundice was set up. Correspondingly, Chelidonium bids fair to take high rank in our school as an hepatic medicine. You will find a number of cases illustrative of its value at the end of the proving. Further experience, however, is required to enable us to define its exact place here in relation to other hepatic remedies, as Mercurius, Bryonia, Phosphorus, and Podophyllum. Dr. Guernsey says that a pain at the lower angle of the right scapula, running into the chest, is characteristic of it. It has become my own stock-remedy for simple jaundice.

Next, the experiments instituted by Teste led him to credit Chelidonium with a specific affinity for the *respiratory organs*. The two disorders to which he thought its symptoms specially pointed were pertussis and pneumonia. Subsequent experience has confirmed his predictions of its value. In *whooping cough* it has been found to act specially well after Corallium, as indeed he recommends. And it really seems a most valuable accession to our remedies for *pneumonia*. It is especially useful where the right lung is affected, and the liver involved. Teste thinks it better than Bryonia in those cases where the patient is of blond complexion and placid temperament. Dr. Ludlam praises it in the catarrhal pneumonia of young children, where there is an excess of the pulmonary secretion, with inability to raise or dislodge it. All this you will find confirmed and made clear by Dr. Buchmann's experiments and observations. He shows that in animals poisoned by the drug the lungs are found generally engorged, sometimes hepatised. He develops in several of his provers all the symptoms of an incipient pneumonia. And he contributes from his own practice cases of the disease, in which the beneficial action of the drug was most manifest. He corroborates also its value in whooping-cough, and points to the spasmodic cough induced by it as showing its homœopathicity.

Lastly, the new proving of *Chelidonium* reveals a hitherto unknown influence exerted by it on the *kidneys*. Besides the general symptoms of renal irritation, an examination of the urine in one case showed the presence of tube-casts, of increased uric acid, and diminished chloride of sodium. The mischief in this case was so considerable that œdematous swellings of the extremities occurred. We have as yet had little or no experience with *Chelidonium* as a renal remedy.

Besides the facts embraced under the above headings, I would note in the proving the severe pains in the knee-joints, and the itching hæmorrhoids, developed in one prover (both occasionally symptoms of hepatic disorder); the dark redness so often appearing on the cheeks, hinting embarrassment of the pulmonary circulation; the chills and fever; the inflamed scrotum and eyelids; the itching of the skin, generally in patches; and the periodical toothache. Dr. Buchmann also points out a group of symptoms which show an action on the diaphragm. He esteems it very highly in all external neuralgiæ, and gives a good case of prosopalgia cured by it. In the twentieth volume of the *British Journal of Homœopathy* you will find some cases of supra-orbital neuralgia cured by *Chelidonium*, in which also its curious affinity for the right side of the body appears; and in the twenty-eighth volume there is a case of my own, in which a migraine of this kind, evidently hepatic in origin, was removed by it. You will also do well to consult Mr. Clifton's graphic description of the form of dyspepsia calling for it in the seventeenth volume of the *Monthly Homœopathic Review*. I have only to add, that cases are appended to Dr. Buchmann's proving which hint at other fields of action for *Chelidonium* as yet unexplored. You must not suppose, from Hahnemann's 66th symptom, that gonorrhœa is one of these. It occurred in the case he cites only as a re-appearance after suppression, while *Chelidonium* was being taken for the swelled testicle which had resulted.

Bryonia and *Phosphorus* are the analogues of *Chelidonium*.

The dose for adults seems to range from the first to the sixth decimal; from the sixth to the twelfth for infants.

I must now briefly mention one of the American indigenous remedies, the "Pipsissiwa," winter-green, prince's pine, or

Chimaphila.

A tincture is prepared from the fresh leaves, bruised.

Chimaphila has not been proved: all our information concerning it is derived from Dr. Hale's article in his *New Remedies*.

There is one and one only point of interest about this plant. It appears (besides being an active diuretic) to have a specific influence upon the urinary passages, like that of the *Pareira brava* and the *Buchu*, which ordinary practice knows well, but which we have hardly hitherto used. Dr. Hale has found it a valuable medicine in cases of dysuria with mucous sediment in the urine; and has cured gleet with it. Dr. Holland relates a good case of chronic cystitis in which it proved curative after many medicines had failed.*

Besides *Pareira* and *Buchu*, *Chimaphila* may be compared with *Cannabis sativa*, *Cantharis*, *Copaiba*, *Eupatorium purpureum*, and *Uva ursi*.

From one to five drops of the mother-tincture appear to be the most suitable dose.

I have now to say something about the hydrate of

Chloral.

Into the use of this drug (obtained, as you know, by the action of chlorine upon alcohol) as a hypnotic I do not propose to enter. You can learn it from the ordinary text-books; and you must use your judgment as to its adoption. Chloral is unquestionably the least harmful agent of the kind we can employ, when we must employ them.

But our concern with the drug is to know whether we can utilise any of its physiological action homœopathically. Its influence on the system appears to be that of a pure nervous depressant. It acts very much as *Opium* does, only that it affects the cerebrum so quickly, that the so-called primary excitement of the latter, which I suppose to depend upon vaso-motor paralysis, is slightly and rarely visible. Every now and then, however, it does occur; and the flushing of the surface is characterised by being accompanied with more or less eruption, most frequently urticarious or erythematous, but sometimes like that of measles or scarlatina, and always associated with great itching. The conjunctivæ, also, are not merely suffused, but hot, stiff, swelled, and tender (especially on the lids), and there is sometimes lachrymation. Dr. Allen gives a number of such phenomena in his pathogenesis of Chloral, which contains 281 symptoms from various sources.

* *Brit. Journ. of Hom.*, xxxii., 84.

Dr. Dyce Brown also has, in the fifteenth volume of the *Monthly Homœopathic Review*, related in detail many observations displaying its physiological effects; and, in the thirty-second volume of the *British Journal of Homœopathy*, has shown us how to turn them to good account, by giving a series of cases of conjunctivitis, urticaria and pruritus in which, in grain doses or less, it proved very efficacious in his hands. In the former place he also calls attention to its disturbing and depressing influence upon the heart, showing this to be exerted through the nervous supply of the organ, and to indicate the drug when from nervous causes its action is disordered. The same thing may be said of its effects on the respiration.

Several corroborations of Dr. Brown's experience with Chloral in conjunctivitis and urticaria have been put on record. Among them I may mention that of Dr. Hale, who says that in two cases of conjunctivitis in his practice its effect was simply magical, and of Dr. Burnett, who communicates a case of nettlerash of four months' standing rapidly cured by it.* It is my own favourite medicine for chronic cases of this affection.

The drug has never been used above the first decimal attenuation.

And now for a few words about chlorine itself, which chemistry at the present day calls

Chlorum.

Dr. Allen gives a pathogenesis of this gas, embracing the effects of its inhalation. The only one of these, however, which appears noteworthy is that twice observed by Dr. Carroll Dunham, viz: that while inspiration was easy enough, at most accompanied by a crowing noise, expiration became impossible, and asphyxic symptoms appeared. Now this, as you are probably aware, is the condition present in the spasmodic form of the disorder known as "laryngismus stridulus." I say, the spasmodic form; for it not uncommonly comes before us as a consequence of pressure on the recurrent nerves by enlarged bronchial glands, and here the glottis is paralysed, and inspiration—always wheezing—sometimes becomes excessively difficult. Dr. Dunham at once perceived

* *Monthly Hom. Review*, xxi., 341. See also two cases by Mr. Clifton in *Ibid.*, p. 526.

its applicability to the first-named variety of the disease; and both he and Dr. Searle have mentioned cases in which its administration, in a weak aqueous solution, effected a cure.*

Like its congeners, Iodine and Bromine, the combination of Chlorine with an alkali develops new features in its action. We know something of it as conjoined with lime and with soda.

Calcareæ chloratæ—as I suppose we must call the old “chlorinated lime,” the “calx chloratæ” of present nomenclature—is known to us only by Dr. Neidhard’s strong recommendation of it in diphtheria.† He gives it in the form of the “liquor calcis chloratæ,” a drop or less for a dose.

Natrum chloratum must be our title for Labarraque’s solution—the “liquor sodæ chloratæ” of the British Pharmacopœia. It seems to be a complex preparation, containing the hypochlorite of soda with its carbonate and chlorate, and also hypochlorous acid. It has, however, been proved and used as a unity; and this is all that we require to secure the “single remedy” of homœopathy. It has long been used in ordinary practice as a disinfectant; but Dr. Cooper, employing it on one occasion for this purpose in a case of leucorrhœa, was struck by the remarkable improvement in the patient’s general uterine condition which ensued, and was led to test its internal administration. He found it, thus given, a most valuable remedy for congested and atonic states of the uterus and its ligaments, with their accompanying pains about the chest and hepatic disorders. Further experience has led him to regard it as a potent medicine in chronic catarrhal troubles of children, as in those of the middle ear; and to have a general bracing influence upon the “flabby, debilitated, hydrogenic constitutions” to which he considers it best suited. You will find his original papers on the subject in the thirtieth and thirty-first volumes of the *British Journal of Homœopathy*; and in the thirty-fifth volume he has given a complete list of its observed effects, pathogenetic‡ and curative.

In uterine affections, Dr. Cooper gives the liquor sodæ chloratæ with little dilution. For children he finds it act better in the (lower) attenuations.

* See *Hom. the Science of Therapeutics*, p. 493-501; Trans. of N. Y. State Hom. Med. Society, ix., 256, 262.

† *Diphtheria, its nature and homœopathic treatment*, 1867.

‡ Dr. Allen gives these in his supplement (vol. x.) under the heading of *Natrum hypochlorosum*.

Of the three very similarly acting Umbelliferæ, we have already discussed the *Æthusa cynapium*. The *Cēnanthe crocata* is at present hardly used in our practice; but we have some knowledge of the third, the long-leaved water hemlock, or

Cicuta virosa.

The tincture is made from the root.

Cicuta was proved by Hahnemann: the pathogenesis is in the sixth volume of the *Materia Medica Pura*. It contains 36 symptoms of his own, 168 from three fellow-provers, and 37 from authors—most of which were observed in eight children poisoned by the plant, as related by Wepfer in his treatise *De Cicutâ*. The poisonous effects of the plant are fully described by Hempel in his article.

From these cases of poisoning it appears that *Cicuta* causes tetanus as manifestly as does *Strychnia*. But it has this difference, that it affects the brain no less than the spinal cord. The cerebral symptoms are various; but in their intensest form they approximate to those of epilepsy, which indeed in poisoning by *Cēnanthe crocata* is exactly simulated. The proving adds little to the knowledge of *Cicuta* we thus derive from toxicology, save that it shows its power of causing local tonic spasms, as of the neck and jaw, and of developing pustular inflammation on the face and hands.

Cicuta has not been much used in homœopathic practice,—chiefly in epilepsy and pustular eruptions. Of the latter Hahnemann says—"I have cured chronic confluent impetigoes of the face, with burning pains, by means of one or two doses of a small portion of a drop of the juice, letting three or four weeks intervene ere I followed up the first (when necessary) with the second." Dr. Conrad Wesselhœft has recorded several cases showing its curative effects in eczema of the chin in the male subject.* Teste calls attention to its double action on the nervous system and the skin; and suggests it as a remedy for cerebral and other nervous affections resulting from repercussion of eruptions. It is good for hiccough and belching when of a spasmodic character: I have myself cured an obstinate and long-lasting affection of this kind with it, and it has relieved such symptoms when occurring in cholera.

Dr. Lilienthal has a paper on *Cicuta* in the *Hahnemannian*

* *N. Eng. Med. Gazette*, x., 505.

Monthly for 1875, in which he directs attention to the great hyperæmia of brain and cord found in animals poisoned by it, which die with convulsions, followed by paralysis. No wonder, he says, that so many of our practitioners consider *Cicuta* nearly a specific in (epidemic) meningitis cerebro-spinalis. He is referring especially to the results obtained by Dr. Baker, of Batavia, who reports sixty cases treated by this remedy without a single death.*

The analogues of *Cicuta* are *Aconite*, *Hydrocyanic acid*, and *Strychnia*.

It seems to have acted well in all dilutions.

I have last to speak of a medicine we call

Cina.

This is the "worm-seed" of commerce and domestic practice; and is said to consist of the unexpanded flower-heads of one or two eastern varieties of *Artemisia*. From it the now well-known Santonine is obtained. We triturate the latter, and make a tincture of the former.

The proving of *Cina* is in the first volume of the *Reine Arzneimittellehre*. It contains 290 symptoms from Hahnemann and five others, and 11 from three authors.

Cina has derived its reputation and its popular names from its activity as a vermifuge. That it does, especially in the form of Santonine, kill and expel the round-worm and occasionally the thread-worm, there can be no doubt. Hahnemann refers to this use of it; and very justly, as it was given in doses of from ten to sixty grains, warns against its danger. He adds, moreover, that worms in healthy children cause little inconvenience; while in the unhealthy they are a symptom of the morbid condition, and will continually recur after expulsion until this is remedied. He says nothing about the dynamic use of *Cina* in helminthiasis. But his experiments and citations revealed the curious fact, that *Cina* produces on the healthy body nearly, if not quite, all those symptoms whose presence leads us to suspect the existence of worms. There are the dilated pupils, with dimness of the sight and twitching of the eyelids, the ravenous appetite, the pinchings in the abdomen, the itching at the nose and anus, the frequent micturition, the spasmodic cough with vomiting, the restless sleep, the fever, and the twitchings in various parts of the body.

* N. Y. State Hom. Society's Transactions, x., 60.

General convulsions also have frequently resulted from the large doses of Cina or Santonine given as a vermifuge. Homœopathic practitioners thus came to give this drug in minute doses to children suffering from worm-affectations. They calculated that, on the principle *similia similibus*, it might at least relieve the symptoms caused by the presence of the parasites, though they themselves remained *in situ*. It fully answered their expectations; and a curious result followed. By some inexplicable influence these infinitesimal quantities of Cina not only relieved worm-symptoms, but promoted the death and expulsion of the worms themselves. This occurred so often, that at length it became the recognised homœopathic practice to dispense with vermifuges, and to rely upon dynamic remedies alone. The pathology of the day was altogether favourable to this course, as it regarded worms as a morbid product of the organism.

The results of such practice have been partly beneficent, partly disastrous. It has saved thousands of children from nauseating and poisonous worm-medicines, which for them were quite needless, as Cina and similar remedies in minute doses did all that was required. But, on the other hand, by making treatment by the latter only a sort of orthodoxy in homœopathy, it has left hundreds of others unrelieved, when a few grains of Santonine, or an injection of salt or quassia, would have delivered them from their tormentors. With the demonstration, now fully made, that worms are in all cases introduced from without and act as foreign bodies, the reasonableness of destroying them directly, where possible, necessarily follows. This has been seen by most homœopaths; and our later Domestic Guides have ceased to display the helpless inanity into which Hering's falls on the subject.

Our wisdom, therefore, in the treatment of helminthiasis is first of all to give the patient the possible benefit of the dynamic action of medicines,—that is, unless any other be distinctly indicated, of Cina. It seems beneficial in all varieties of the malady, as Dr. Bayes says that he has repeatedly killed tapeworm with it, as well as the lumbrici and ascarides for which it is generally given; and it acts *omni dosi*, from the twelfth dilution of Cina of this writer to the twentieth of a grain of Santonine recommended by Dr. Dyce Brown. What the former will sometimes do is illustrated by an excellent case of Dr. Hamilton's in the thirteenth volume of the *British Journal of Homœopathy*, where chorea depended on the presence of ascarides, and was cured by their expulsion by this

means. But, unless such measures speedily succeed, then—if the symptoms are at all urgent—we are bound to resort to the usual parasiticides, among which Santonine, especially against the round worm, holds a prominent place.

This is the most important sphere of the action of Cina. But Hahnemann, saying that it has more valuable properties than those which make it a vermifuge, indicates it in whooping-cough (in which Dr. Jousset esteems it the principal remedy), and in certain intermittents accompanied by vomiting and canine hunger. Teste commends it in the flatulent colic, without diarrhoea, of older children; and Dr. Bayes in the gastralgia of empty stomachs. Dr. Martin Deschere, who has recently given us a study of the drug,* justly says, that where symptoms like those of helminthiasis present themselves, Cina will cure, whether worms are present or not. Dr. Chepmell has pointed out that such a condition often occurs in lingering remittent fevers in children, and says that here Cina is quite specific.

Of the dose of Cina I have already spoken; and I am unable to mention any true analogue to it.

I must now dwell somewhat upon

Santonine, whose properties, though involved in those of Cina, are much more marked when it is administered separately. One of these is enuresis. As Dr. Ringer writes—“Santonine, if given frequently, is very apt to occasion a great difficulty in holding the water, and thus it is not uncommon for children, if they take much of this medicine, to wet the bed, and to be obliged to pass the water very frequently, or even to be unable to hold it during the day.” He characteristically adds: “this remedy is sometimes able to stay the nocturnal incontinence of urine of children.” I had suggested that it did so when, as often happens, worms were the cause of it; but in his later editions Dr. Ringer says that this is no necessary element in the cases.

A more important and interesting action of Santonine is that which it exerts upon the eyes. The xanthopsia caused by it has long been noticed, and has of late years been fully studied by Dr. Edmund Rose.† He finds the derangement of vision produced by it to be, in the first degree, “colour-blindness;” in the second degree, “colour-confusion,” which he considers to be the condition known as Daltonism; and, in full intoxication, hallucinations. His inquiry into the causa-

* *North Amer. Journ. of Hom.*, xxvi., 115.

† See *Brit. Journ. of Hom.*, xxvii., 214.

tion of these phenomena leads him entirely to reject the theory—of which there is no proof—that the xanthopsia is due to a staining of the media of the eye. He sets it down rather, connecting it with the other phenomena, as a result of congestion of the retina, which the ophthalmoscope demonstrates to be present. The colour-confusion and hallucinations he traces to a corresponding influence on the optic nerves and the visual centres respectively. The latter he connects with the hallucinations of other senses, the (evidently cerebral) vomiting, and the spasms of the cranial nerves, as showing that the drug acts directly on the brain.

Such investigations seemed at first sight to have rather a scientific than a practical interest. But Dr. Dyce Brown, whom we always find quick at seeing the therapeutic inferences to be drawn from physiological observations, has done this good work for Santonine. In conjunction with an oculist friend, Dr. Ogston, he put the drug to the test as a remedy for several of the deeper-seated affections of the eye. The results, which were published in the *British and Foreign Medico-Chirurgical Review* for 1871, are very striking.* Of the forty-two cases treated thirty-one were cured or improved; and these included choroiditis, retinitis, atrophy of the optic disc, pure amblyopia, and retinal anæsthesia. The ultimate influence of Santonine on the brain was manifest, for cerebral amblyopia and paralysis of the motor oculi were greatly benefited, and concomitant headaches removed. In one case, moreover, of undoubted double cataract vision was greatly improved after some months' use of the Santonine; and with reference to this Dr. Brown tells us that in some experiments of Dr. Ogston's "it several times happened, especially when young kittens were employed, that within a few minutes after the animal was killed, a dense cataract developed itself in the lenses of both eyes. Within half an hour these parts became quite opaque, the opacity remaining very marked after the removal of the lens from the eye." "It seldom," he says, "occurred to any extent in the eyes of adult animals, nor has it ever been observed to occur during life." Nevertheless, unless cataracts are of spontaneous origin in recently defunct kittens, the tendency of Santonine to produce them is undoubted; and that is enough for homœopathy.

I am not aware whether any further testing of the power of Santonine in eye disease has been carried out. But Dr. H. Wood reminds us that in 1862 MM. Guérin and Martin had recommended it in amaurosis, especially in that following

* See also *Brit. Journ. of Hom.*, xxix., 445.

acute choroiditis and iritis.* *Apropos* of this, it is worth mentioning that Stillé cites a case in which a child of six months took five grains of it, instead of three which had been ordered. It became amaurotic, and did not recover its sight for two months. I myself rely on it with much confidence in that hyperæsthetic and hyperæmic condition of the organs which comes on from continuous fine work, as in seamstresses.

The action of Santonine on the eyes is comparable with that of *Atropia* and of *Digitalis*.

In Dr. Ogston's cases a grain of the drug was given every night. But Dr. Brown's first patient, whose improvement in sight while taking Santonine for worms first drew his attention to the subject, had doses of the twentieth of a grain only. It must be remembered that two grains have proved fatal to a child.

* I had referred to the record of their experience in the second edition of this Manual.

LECTURE XXVI.

CINCHONA.

We will address ourselves to-day to the consideration of the famous Peruvian bark and its no less famous alkaloid, quinine. I have had some doubts as to the designation I should use for the bark itself. Cinchona is the scientific name of the botanical genus, and perpetuates the memory of its introducer into Europe: by this term it has always been known in England. But if you look into the continental medical Latin of the last two centuries you will find it called, if not "cortex Peruvianus," then "china-china." This is said to represent its native appellation, "china" meaning bark, and the reduplication implying that it is bark of barks. By this name it has passed into the nomenclature of other countries: it is still "china-china" in Italy, it is "quinquina" in France, and "china" or "chinarinde" in Germany. Under this last title it stands in the *Materia Medica Pura*; and as China it is known in the school of Hahnemann throughout the world. I cannot refrain from using the familiar term when speaking of the special homœopathic uses of the drug; though for historical and general purposes I shall best—lecturing as I do in England and for Englishmen—call it

Cinchona.

The homœopathic tincture is directed to be prepared from the yellow bark, which was that mainly used in the provings. It is richer in quinine than the other varieties.

Hahnemann has bestowed great attention on Cinchona. Its first pathogenesis appears in the *Fragmenta de viribus*, where it is credited with 122 symptoms of his own, and 99 from authors. In the last edition of the third volume of the *Reine Arneimittellehre* Hahnemann's own symptoms have increased to 427, and he has pressed no less than 21 provers into his service, obtaining from them 575 symptoms. There

are also given 141 observations from authors, 35 in number. You may well be surprised at hearing that so many ill-effects have been ascribed by medical writers to a substance of by no means virulent nature; and an examination of the originals justifies the hesitation to accept them. A good many are the obvious mechanical effects of the large quantities of powdered bark in those days introduced into the stomach; and are often so represented by their reporters, and stated to have disappeared after an emetic. These are quite inadmissible as pathogenetic effects of the drug; and I think that the mass of those that remain are no less so, for another reason. The opponents of the use of bark in intermittents, and also those who maintained that it should not be given without the previous use of evacuants, alleged many instances of harm resulting from its administration. To all these phenomena (including asthma, jaundice, and dropsy), whether aggravations of the paroxysms, their transformation into other shapes, or results of their suppression, Hahnemann has freely helped himself to completé the Cinchona-pathogenesis. Influenced by his then theory of homœopathic curc, he considered all these to be symptoms of the Cinchona-disease, by the induction of which in a mild form even cases suitable for it were cured. The objection to such a doctrine is that no Cinchona-disease of the kind has ever been induced upon other than aguish subjects. So that the phenomena are at the utmost effects of the compound influence of the drug and the disease; and are more probably due to the latter alone, the bark acting only as a disturbing influence of no specific kind. I would therefore recommend you to expunge from the pathogenesis of Cinchona all the symptoms which Hahnemann has cited from authors, save the few I shall mention. For the study of the symptoms of his fellow-provers I can recommend you a paper by Dr. Langheinz, "On the relation of Peruvian bark to Intermittent Fever," which is translated from the *Vierteljahrschrift* in the twenty-fourth volume of the *British Journal of Homœopathy*. He arranges some of them according to the time of their occurrence after the ingestion of the drug, and so reconstructs a fair picture of the effects as they followed one upon another. He also relates the proving of Cinchona by seven of Jörg's pupils, and some other experiments with it.

Hahnemann found Cinchona in use for two great purposes,—as a tonic, and as a remedy for intermittent fevers. He proved it to discover on what principle it so acted. That it caused a febrile paroxysm was the Newton's apple which

led him to formulate *similia similibus* as the law of specific therapeutics. Of this I will presently speak at length. But he also found that it produced in the healthy a peculiar kind of debility; and that its "tonic" properties in disease, when analysed, were demonstrably applicable to weakness of this very sort. When used with precision, under the guidance of the homœopathic rule, he stated that Cinchona would do all its strengthening work in infinitesimal doses, as high even as the twelfth dilution. The special kind of debility for which it is suitable he indicates as that which results from exhausting discharges or other loss of fluids. There is here emptiness of the blood-vessels and much loss of energy, but therewith considerable erethism of the nervous and even of the circulatory system. In this condition, where the weakness is itself the disease, Cinchona is curative, because homœopathic to it. Hahnemann reprobates in a forcible manner the pernicious practice, prevalent in his day, of giving bark for every kind of weakness, and where the disease which caused the weakness was still present. He acutely pointed out that the best results which were obtained from it were seen in the convalescence from acute disease, and were just correlative to the super-added debility caused by the depleting treatment then pursued. For all this you should read the preface to his proving, which is a master-piece of observation and reasoning.

This thought of Hahnemann's was as original as it was brilliant and fruitful. It was a pure induction from his provings. The only attempt made at precisionising the tonic properties of bark in former times was the doctrine that it acted best in a relaxed state of the solids. Here its large proportion of tannin may have come into play. But Hahnemann's doctrine was far more definite, and at once fixed its genuine and certain range of action. It will not cure anæmic debility like Ferrum, or nervous debility like Phosphoric acid. But in that occasioned by loss of blood; by diarrhœa, diuresis, or excessive sweating; by over-lactation; and by too great and rapid expenditure of semen, it is a most effectual remedy. Nor does it fail us when a discharge is a morbid one *ab initio*, as in excessive suppuration. "In all these cases," says Hahnemann, "the other symptoms of the patient generally correspond to those of China." In one particular especially they do so, viz., in their tendency to pass into a *hectic* condition. We have here the succession of chill, heat, and sweat which we shall see to be characteristic of the drug, and which gives it its place in the treatment of ague. It cannot be too

strongly impressed on the mind that China is the great antihectic. It is to this febrile condition what Aconite is to the synochal and Arsenic to the typhoid form. But whether with hectic or without, remember that weakness from drain on the system is the sphere of the tonic action of Cinchona; and within it you will find it manifesting some of the most beautiful curative powers known to the art of medicine. They are seen alike in the most acute and the most chronic forms of debility so induced. Thus, in the prostration, even to syncope, which follows upon puerperal hæmorrhages, Dr. Guernsey relies upon it with undoubting confidence; and that in the minute doses he habitually employs. (Failure of vision and ringing in the ears are of course indications of this condition; but I hardly think that Dr. Guernsey is warranted in pointing to the well-known tinnitus of quinine as proving the homœopathicity of China to the last-named symptom. It is generally, in quinic intoxication, associated with symptoms of cerebral hyperæmia; whereas here we have present a precisely reverse state of things.) The virtues of the remedy extend, moreover, to other effects of the same cause—to headaches and various pains and neuroses, to hydræmia, and even to dropsy.

For want of such a defining thought, bark and its alkaloid, hitherto indiscriminately used as tonics, seem now falling out of favour. All recent physiological experimentation, moreover, has gone against the notion that the drug exerts any primarily roborant action on the system. Quinine was found by Briquet (as we shall see) to lessen the force of the heart's action and diminish the arterial pressure, and also to impoverish the blood. The latter action has been studied more fully by Binz, with the result of proving quinine to be the most potent of protoplasm-poisons, so that even in minute doses it kills the white corpuscles. While such facts indispose the practitioners of traditional medicine to use Cinchona as a tonic, they support its credit in the school of Hahnemann. They show also, as Dr. Drysdale has pointed out,* how just was Hahnemann's discernment of the precise kind of debility to which bark is homœopathic. To check the formation of the blood by killing its white corpuscles is to produce a similar effect on the system to that occasioned by actual loss of the vital fluid.

We enter upon a larger and more difficult question when we come to the action of Cinchona as a remedy for intermittents. Is it anti-periodic, whatever be the origin of the

* *Brit. Journ. of Hom.*, xxvii., 283.

malady so recurring; or is it anti-malarial, whatever be the form assumed by the disorders so caused? What is the measure and extent of its efficacy, and what the dose and time of its administration? Lastly, what is the rationale of its action? These are some of the points presenting themselves for discussion.

And, first, as to the facts. There can be no doubt of the specific power of bark over ague. It was the one bright spot in the medicine of Hahnemann's day, which led him to believe that if he could find the rule of its action he would have the clue to a better therapeutics. It is still cited—as by Dr. Latham—as the cardinal instance of the “cure” as distinguished from the “treatment” of disease.* And it has been shown that “the disappearance of ague, as a cause of mortality in this country, exactly coincides with the introduction of Cinchona bark into general use;” so that while between the years 1653 and 1660 there died in England of ague 10,466 persons, in the corresponding septenary period from 1733 to 1740 the deaths from this cause were only 31.†

And now, how is this curative power of Cinchona and its alkaloids to be characterised? If it is anti-periodic, it will manifest itself more or less in all affections of periodic recurrence: if it is anti-malarial, it will hold good to some extent in all results (at any rate, all recent results) of malarial poisoning. The action will spread laterally along whichever plane it occupies in ague itself. Well; the testimony to the general anti-periodic virtues of Cinchona is somewhat conflicting. Hahnemann says that “almost all typical diseases may be suppressed by powerful doses of China;” and, though in his *Materia Medica* he condemns the practice as pernicious, it appears from some papers included in Dr. Dudgeon's collection of his *Lesser Writings* to have been formerly his own, and fairly successful. Pereira speaks of it as “beneficial” and “serviceable” in many cases where “a paroxysm (of pain, spasm, inflammation, hæmorrhage, or fever) returns at stated intervals;” but he does not use such qualified language of its power over ague. Trousseau and Pidoux will not allow that it is an anti-periodic. If periodicity, they say, belongs to an affection which has not malaria for its cause, bark often fails to influence it. Of our latest writers, Horatio Wood states that quinine has no less power over non-malarial than over malarial periodic affections, so far as checking their recurrence

* *British Medical Journal*, Aug. 17, 1861.

† Russell, *Clinical Lectures*, p. 355.

is concerned; but that the benefit is often temporary only. Ringer speaks less distinctly on the subject. He commends it in periodic, but also in non-periodic neuralgia; and writes—“Quinia appears to be useful in some, but quite useless in other cases of intermittent hæmaturia.” Phillips is decided on the other side. “It is a stereotyped remark in medical works,” he writes, “that the more exactly a nervous (or indeed any other) disease conforms to a regular type of periodic exacerbations, the more surely will quinine prove useful. As a general proposition this is untrue. It is only when the neuralgia is due to actual malaria that the rule holds; and in the case of recurrent inflammation, or of hectic, there must be either malaria or else septic poisoning at work, or else we shall find this maxim fail us.” It is evident from his whole work that our late colleague speaks from a survey of others’ experience, and not merely from the brief space of his own in this field; otherwise his statements of fact could not be allowed much weight. He makes a good point, however, when he points to the inefficacy of quinine in migraine, however strictly periodic its recurrence.

On the other hand, the testimony to its efficacy in malarial poisoning, whatever form it may assume, is loud and uniform. To begin with, it is an almost certain prophylactic.* Its use renders possible the penetration into certain regions which would otherwise be deadly to the traveller. Then it is no less effectual whatever be the type of the malarial fever, whether intermittent, remittent, or continued. Dr. Maclean shows that by far the best treatment for the incessant vomiting and distressing pain in the head which occur in bad remittents is to give quinine freely. Again, when malaria manifests itself in quite different ways, as in dysentery on the one side, in neuralgia or even epilepsy on the other, quinine is the one and most effective remedy.

I think, then, we may conclude that Cinchona cures ague by its specific antidotal influence against the malarial poison. But what kind of antidote is it? Does it act after the manner of a chemical neutraliser? or does it set up in the parts affected an action incompatible with that of the poison, and is this action of a similar or an opposite kind? The former alternative has of late been widely advocated. Since the researches of Binz and others have shown how potent a poison quinine is to all protoplasm, the hypothesis has been framed that malaria consists of an abundance of low organisms, and that bark antidotes it by destroying these. I think that

* See Stillé, *op. cit.*, i., 514; Ringer, 7th ed., p. 559.

several considerations concur to render such a theory untenable. One is that the dose of quinine which suffices to cure an intermittent is often far too small to affect the vitality of the supposed microzymes. I will not bring forward homœopathic experience, but will content myself with referring to the treatment of ague by subcutaneous injection of the drug. It is found that by this method doses of two grains each, repeated every fourteen or twenty days, are generally sufficient to check the paroxysms and prevent relapse: the maximum quantity required in the worst cases was from six to ten grains, and the maximum frequency of injection every day or two.* Still better results have been obtained; but I give these as easily credible. On the other side, Dr. Buchanan Baxter has ascertained† that the vitality of microzymes is suspended only, not annihilated, by quinine in such proportions as the animal body can bear in its blood. But the crucial test is afforded here, as previously, by the extension of the plane of action. Quinine is not the only protoplasm poison. Strychnia and mercuric chloride have the same property in less degree; yet they have little or no power over intermittents. So also bark is not the only febrifuge; but the other substances which resemble it in this power exercise no common destroying agency over infusoria. Some have it, as Dr. Baxter has ascertained with regard to beberine and picric acid, and as is now generally recognised in respect of willow-bark and its derivatives; but no one would think of ascribing it to black pepper, chamomile, and cobweb, whose repute against intermittents is nevertheless considerable.

I cannot therefore assent to the hypothesis that bark cures ague by destroying in the blood the microzymes which cause it. My conclusion accordingly must be that it antidotes malaria by setting up, in the parts that are or would be affected by it, an action incompatible with its own. In this I am supported by the high authority of Bretonneau, of Trousseau and Pidoux, and of the elder Wood. "I know," the latter writes, "no better explanation of the anti-periodic property than that which supposes it to depend upon the powerful influence exercised by the remedy upon the nervous centres, through which probably the paroxysms are produced. Every consideration in connection with the peculiarities of regular intermittent diseases leads to the conclusion, that the paroxysms are produced by an influence acting through the cerebral centres, without which the result would not take place. Now,

* *Lond. Med. Record*, ii., 333.

† *Practitioner*, xi., 342.

if these centres can be preoccupied by a strong impression from some other source, they may be rendered insensible to the morbid influence, and the paroxysm, therefore, set aside. Quinia is characterised by its disposition to act energetically upon certain nervous centres, which are probably the same as those through which the cause of the disease operates. Quinia, therefore, interrupts the succession of the paroxysms; and, as they are sustained, probably, in part at least, either by habit, or by some chain of morbid action passing insensibly from one paroxysm to the succeeding, the interruption is either permanent, or continues until the original cause may reassume, in some mysterious way, its original activity, and produce a relapse in the now unguarded system."

We are thus prepared for the question whether bark is homœopathic to ague, whether this prerogative instance of specific therapeutics conforms to the principle *similia similibus*. This question is sometimes put thus—Can the drug cause, has it ever caused, an intermittent fever? But even though we had to answer in the negative, the homœopathicity of the remedy would not be disproved. It is rare that drugs can excite concrete diseases; and it is quite unnecessary for the practical carrying out of the rule "let likes be treated by likes" that they should do so. For this, and for the demonstration of similarity in a remedy, it is sufficient that it is seen working in the same direction as the disease;—that it affects the same parts, and—so far as its action goes—in a similar manner.

Now of such homœopathicity of bark to ague we have abundant evidence. I will not dwell on mere assertions, though several of these might be cited from out of the ranks of the old school to corroborate that of Hahnemann.* But from the elaborate discussion of the question carried on by Dr. Langheinz, and also by Dr. Rogers in his tractate entitled *The Present State of Therapeutics*, I will cull two or three actual observations bearing on the point.

The first is a case of tertian fever in a child, which was treated by grain doses of quinine every two hours during the interval. After the third dose there appeared a rigor, followed by heat and sweat; the whole attack lasting forty-five minutes. The same thing happened after each succeeding dose; and one of the attacks was witnessed by the reporting physician, who describes it. It was a typical ague on a small scale, with thirst during the heat. The tertian paroxysm recurred once

* See the testimonies of Auber and Goedorf in Langheinz' article, and of Weitenweber and Götz in *Monthly Hom. Review.*, x., 760.

at the expected time, but in less force; and then came no more. The bark fever also, after growing slighter and slighter, disappeared; and the patient became and continued well. But it may be said that this was not a pure experiment, as the patient was already suffering from ague; and if I were endeavouring to prove that Cinchona can cause intermittent fever in the healthy, the objection would be valid. When, however, my object rather is to ascertain the direction in which it acts, the *modus operandi* of its curative working, then such an observation is most illuminative. It shows the drug at every dose exciting a miniature paroxysm of the disease, until the susceptibility of the system for both bark and malaria was exhausted. It suggests that a similar process, though without such outward manifestations, is going on in all cases where a single full dose is administered—as recommended by Briquet and most therapeutists—some score or more of hours before the expected paroxysm. It tells the same story as that which we shall hereafter meet with when we speak of Thuja; when we shall see this medicine, given continuously to a sufferer from warts, excite two crops of new ones, whose dying away is followed in a short time by the disappearance of the old enemies.

But we have further testimony. In Dr. Langheinz' paper you may read a case in which a patient convalescing from typhoid, and taking half-grain doses of quinine, had what the reporter calls "a well marked fit of ague" after each dose. The medicine was omitted for ten days; but on its being prescribed again, in the form of decoction of bark, the same phenomena followed. Three other cases are cited by this writer in which quinine given to patients affected with other diseases caused in them a single or (as in one of them) a double paroxysm of fever, *i.e.*, of the typical sequence of chill, heat, and sweat. If you will have experiments on the healthy, you will find some there from Wittman, in which the same phenomenon appeared; or I may refer you to Hahnemann's provings of Cinchona and Noack's (of which I shall presently speak) of quinine, in which it was of no unfrequent occurrence. If you wish for such experiments on a larger scale, I may refer you to the report—cited by the same writer—of the health of the workmen in the quinine manufactory at Frankfort-on-Maine. From this it appears that most of those who are much exposed to the dust of the bark sooner or later get an attack of fever, consisting of one violent paroxysm of chill and heat; after which they seem to become insusceptible.

I will sum up in the words of Trousseau and Pidoux.

“Daily observation, says M. Bretonneau, proves that Cinchona given in a strong dose determines, in a great number of subjects, a very marked febrile movement. The characters of this fever, and the epoch at which it manifests itself, vary in different individuals. Most frequently tinnitus aurium, deafness, and a sort of intoxication precede the invasion of this fever; a light rigor then is added, a dry heat accompanied by headache succeeds the first symptoms, subsides gradually, and ends in moisture. Far from yielding to new and stronger doses of the drug, the fever caused by the absorption of the active principle of Cinchona does not fail to be exasperated.” I am sorry to say that these authors do violence to history and truth by claiming this discovery for Bretonneau, instead of acknowledging it as Hahnemann’s.

Now it is no answer to such facts as these to point to the exceptional nature of their occurrence,—to bring forward the number of patients, workmen, and even experimenters in whom Cinchona and quinine have produced no such symptoms. You will remember how Dr. Drysdale has shown that there are two classes of drug effects, which he names absolute and contingent; the one resulting in almost every subject of the drug’s influence, as the mydriasis of Belladonna, the other requiring for its development a special susceptibility on the part of the prover, and, like disease itself, not to be produced at will. It is symptoms of this contingent order which most closely resemble the phenomena of idiopathic disease, and avail best for the working out of the rule *similia similibus*. Of such kind is the fever of bark. I think that the evidence I have adduced is quite sufficient to show that the aguish paroxysm may be and has been induced by the drug; and this is enough to outweigh hundreds of instances in which it has failed so to act. It is enough, moreover—since there are no opposite facts on record which suggest that it is antipathic—to justify the conclusion that it is homœopathic to the disease it cures;* in further support of which we have the fact noted by several observers, that the first paroxysm occurring after quinine is begun is apt to be more violent than its predecessors. This invariably occurs when a full dose is given immediately before a paroxysm.

This question is of so much importance to the argument for and against homœopathy as a therapeutic method, that I have gone into it at greater length than I should otherwise

*The absence of subsequent periodical recurrence of the fever induced by bark is of no importance to the question. The deficiency can be supplied in treatment by the repetition of the dose.

have been justified in doing. But its determination has also a practical bearing on the use of the remedy. If it cures ague by destroying microzymes, it must be given in large and frequently repeated doses, so as to saturate the blood up to their perishing point. If it acts by giving the nervous system a substitutive shock, as Dr. Wood seems to suggest, it is best administered in single full doses to cinchonism shortly before each expected paroxysm. But if "substitutive" here, as elsewhere, means "homœopathic,"* then no such violent measures are required; and we need only proportion our doses to the severity of the disease, giving them with moderate frequency during the interval. And again, if Cinchona cures in virtue of its homœopathicity, it will cure most effectually when most homœopathic, and less so as the type of the fever departs from that which it causes; till at length we shall come into a region where it will not cure at all, even though it may, if given in sufficiently large doses, suppress the paroxysms.

Now these corollaries just express the experience of homœopaths in the treatment of intermittent fever. Hahnemann says, in his preface to Cinchona, that, when all the symptoms correspond, a single small dose of bark given directly after the attack, previous to the elements of a new paroxysm having accumulated in the system, will cure the ague then and there. He does not here specify what these corresponding symptoms must be. But from some of his notes to the proving we may gather them to be—thirst just before and after the hot stage; commencement of the paroxysm with some accessory symptoms, as palpitation, anxiety, nausea, great thirst, canine hunger, pressing pain in the hypogastrium, or headache; distension of the external veins; and rush of blood to the head. Dr. Bayes, who saw much of ague in Cambridge, cured the majority of his cases with the third and higher dilutions. He states that "in intermittent fever the symptoms which most strongly indicate China are where the chills, the hot stage, and the perspirations are generally evenly and well marked, and there is a distinct intermission of comparative health. There is a loud rumbling in the head, sense of constriction from ear to ear over the vertex, great sensibility to currents of air, sinking at the epigastrium, a feeling of emptiness without hunger, or of hunger easily appeased, contractive pain under the lower left ribs, sometimes a sense of fluttering, mental depression with irritability." Dr. Chargé emphasises the absence of thirst during the actual chill and heat, saying that its presence in either is a positive

* See p. 221.

counter-indication for the drug; he also notes the abundance, though slow development, of the sweat (which occurs mostly at night), and the frequency of gastro-hepatic disturbance during the intervals. I am speaking here, of course, of China itself; the minute indications for quinine as a distinctive remedy I shall specify hereafter.

I have entered into these *minutiæ* because it is by attending to them that the most brilliant cures are made, and with the smallest and least frequent doses. But I am bound to say that I think the good to be done by attempting such precise practice is far outweighed by the disadvantages it entails. In the pursuit of the exact *similimum* through an interminable list of not always trustworthy symptoms time is lost and disappointment incurred. Bark is passed by because the correspondence is not exact; whereas it is sufficiently close to enable it to cure quite satisfactorily, even if the doses must be a little larger and the repetitions rather more frequent than would otherwise be necessary. The result is that Dr. Rogers is able to make a point against homœopathy, that its treatment of ague is, by the statements and confessions of its own adherents, not so successful as that of the old school; and this simply through its neglect of quinine. It ought not to be possible to substantiate such a charge, as I must confess Dr. Rogers to have done; and I must again advocate, as I have often done before, the treatment of all recent and simple agues with quinine alone. When these display the regular series of chill, heat, and sweat, unmarked by any special phenomena, the remedy is pretty well infallible. The objection that it merely "suppresses the paroxysms," and does not really cure the disease, has no weight here; for in such recent cases the paroxysm is the disease, and in its repeated recurrence lies all secondary evil which may occur. Nor can any harm be done, even in case of failure, while moderate dosage is practised; and here, as quinine cures rapidly if at all, little time need be lost before resorting to other means.

I am glad to be supported in this position by one of the veteran homœopaths of the United States (now just lost to us), Dr. Jeanes. In a paper recently read before the Philadelphia Medical Society on "Intermittent Fever,"* he maintained that the power of Cinchona and its alkaloid to check the progress of ague is a great boon to humanity, and one of which we should not hesitate to avail ourselves, even though we have to use massive doses for the purpose. On the other side I fully concur in all that has been said, by Dr. Hirsch†

* See *Brit. Journ. of Hom.*, xxxii., 723. † *Ibid.*, xxv., 406.

and others, on the evil of forcing a suspension of the paroxysms by needlessly large doses—using, as Dr. Drysdale puts it, a surplus of physiological action, instead of suffering the whole of this to be absorbed into the therapeutic operation. Such practice is especially to be reprobated in cases of long standing, where cachexia is established. Here the more minute and specialised homœopathic treatment has time to be carried out, and repays the trouble; and in this bark is rarely indicated for chronic intermittents.

I have now said enough upon the two great actions of Cinchona, its tonic and its febrifuge properties. But, over and above all this, Cinchona does good service to us in several ways, most of which Hahnemann himself has pointed out. It appears from the pathogenetic symptoms, he says, that it will cure only a small number of diseases. He first specifies the kind of ague in which it is febrifuge and of weakness where it is tonic, as we have already seen. And then he goes on—

1. "The primary effect of China is to open the bowels; hence it will cure certain kinds of diarrhœa, provided the other symptoms correspond."

This is a curious effect of a substance containing so much tannin, yet it occurred repeatedly, both in Hahnemann's and in Jörg's experiments, and has been observed also in the workers in bark at the Paris manufactories. I have repeatedly verified it in practice, both in acute and chronic diarrhœa. The latter must be of a passive and painless character to call for it; when enteritic or ulcerative it requires Arsenic and remedies of that kind. But in acute *summer* diarrhœa—not that of autumn, which is more profuse and bilious—severe griping pain is nearly always present; and the first effect of the China is to relieve this, after which the flux itself ceases. China is also one of the remedies for lienteria,—diarrhœa with undigested food having been noted from it by both Hahnemann and Herrmann.

2. "The too ready and frequent morbid excitement of the sexual organs, resulting in an involuntary emission of semen, and caused even by slight abdominal irritations, is permanently relieved by China."

Sexual excitement was noticed by several of Jörg's provers and by Hahnemann himself: Dr. Phillips says that all the alkaloids of Cinchona will cause it. The condition Hahnemann describes is just that left behind by a too frequent repetition of such excitement, especially of an abnormal kind.

3. "Pain which is excited by merely moving the affected parts, and which gradually rises to the most fearful height, has frequently been cured by a single drop of the twelfth dilution of China, even when the attack had returned frequently." In another place he notes of the pains of China, that they are "increased by motion, and especially by touching the affected parts; and also characterised by this, that the pain, though it may have disappeared for the moment, may be excited again by simply touching the parts, when it frequently becomes horrid and intolerable."

Neuralgic and rheumatic pains, having these features, may be controlled by China; they are said to be of drawing, tearing, or even jerking character.

Hahnemann indicates China also in certain forms of jaundice, in humid gangrene of the outer parts, and in suppuration of the lungs. And lastly he lays down that "bark will scarcely ever be useful except where the nightly rest of the patient is disturbed similarly to the disturbance which characterises China;" of which disturbance he says: "China is characterised by restless night-sleep, with dreams causing anxiety and starting; when waking from these dreams one finds it difficult to come to one's senses, or the anxiety continues." It is the best remedy when such disorder of sleep is readily brought on by drinking *tea*. It is, indeed, to the general effects of excess in this beverage what *Nux vomica* is to the corresponding evils of much coffee-drinking.

I have cited these remarks of Hahnemann's at length, as he has evidently studied China very closely. Its pathogenesis abounds with references from one symptom to another, which only appear elsewhere under *Ignatia* and *Pulsatilla*. There is little to add to his enumeration of the curative powers of the drug. I may mention its value, however, in that relaxed state of the ligaments of the joints which makes them (especially the ankles) ache after any exertion. I may say, moreover, that it seems to excite the ovario-uterine functions so as to convert the existing catamenia into a hæmorrhage—the blood coming away in black lumps. It is thus homœopathic to a form of menorrhagia itself, as well as to the debility which it occasions. Dr. Guernsey considers it to be a "keynote" for the drug when the symptoms are aggravated every other day. He also lays much stress on distension of the abdomen as characteristic of it: "the abdomen feels full and tight, as if stuffed—eructations afford no relief." A similar feeling is experienced elsewhere, even in the limbs, so that the garters, as well as the clothes about the waist, must

CINCHONA.

be loosened. Dr. Thayer, of Boston—an old and experienced practitioner—esteems China very highly in gall-stones. Since 1854, he says (writing in 1874), he has “not failed in a single instance to cure, permanently and radically, every patient with gall-stone colic who has taken the remedy” in his manner; and he has treated many from all parts of the United States. He gives the 6th dilution, at increasing intervals, till only one dose a month is taken. Sometimes, he says, the first effect seems to be an increase in the frequency of the attacks, till (as he supposes) the gall-bladder is emptied; but then they subside and cease.*

As an anti-malarious agent, Cinchona compares with *Arsenic* and *Cedron*; as a tonic, with *Ferrum*.

For dose, Hahnemann recommends the 12th dilution. I confess, however, that save for nervous conditions I have never found it necessary to go above the 1st; and for the hectic of suppuration the mother-tincture seems to act best.

* See *Brit. Journ. of Hom.*, xxxiii., 345.

LECTURE XXVII.

CINCHONA ALKALOIDS, CISTUS, CLEMATIS, COCA, COCCULUS,
COCCUS CACTI, COFFEA.

In connexion with Cinchona it is necessary to speak of two at least of its alkaloids. The first is the well-known quinia, which homœopathic nomenclature follows that of Germany in calling

Chininum, but which is better known by its popular name of quinine. It is, as you know, commonly used in the form of a sulphate, of which triturations or an alcoholic solution may be made.

Quinine has, since its discovery in 1820, gradually taken the place of the powdered bark as a remedy for ague. It has, moreover, manifested such decided physiological properties of its own, that it has been thought worthy of a special proving, which it has received at the hands of Dr. Alphonse Noack, of Lyons. Five persons took part in it; and its record is contained in the second volume of the *Journal für Arzneimittellehre*.* Dr. Allen gives its results, together with those of numerous other experimenters (among whom I may especially mention our colleague, Dr. J. C. Morgan, of Philadelphia), making a total symptom-list of 1076. Much information, moreover, as to the physiological action of quinine is contained in M. Briquet's *Traité thérapeutique du Quinquina et ses préparations* (1853); and Binz's recent publication, *Ueber das Chinin und seine Wirkung* (1877), gives the latest researches on its action. I may also refer you to a useful collection of facts relative to its pathogenetic effects made by Dr. Ch. de Moor, and appearing month by month, since its commencement, in *L'Homœopathie Militante*.

So far as the pathogenetic properties of quinine have relation to its use in intermittent fever, they have already come before us. But experiment reveals other actions exerted by it, which have to be considered and utilised; while its extensive use as a medicine makes it necessary that we should form a precise apprehension of what can be wisely and well done with it.

* See also vol. i. of the *Révue de la Mat. Méd. Spécifique*.

1. Let us first consider the group of phenomena entitled "cinchonism," and readily induced by full doses of quinine. Their seat is the head, with the eyes and ears. There is deafness, with tinnitus—the latter preceding and being more considerable than the former, and taking the form of buzzing, singing, roaring, or hissing; there is disturbed visual function, even to blindness; and in the brain itself we have headache, with fulness, weight, and tension, vertigo, and sometimes epistaxis. When the headache is localised, the forehead and temples are its seat. Accompanying these phenomena are evident signs of congestion, as flushing of the face and redness of the eyes and ears. One of Noack's provers describes his headache as intense towards evening, when the arteries of the head began to beat with violence, as if the skull was about to burst. His face was burning; there were noises in the ears and sparks before the eyes. Dr. Hammond has lately examined precisely into this matter. In a man who had taken ten grains the retina and tympanum were found sharing in the hyperæmia of the outward parts; and in a cinchonised rabbit the same condition was seen in the brain, when a hole was made in the cranium.* In animals, and even in the human subject, meningitis may follow, with delirium and convulsions; and with or without this complication collapse and coma succeed the stage of excitement when the dose has been large.

Such effects as these are in the ordinary mode of treatment simply an unpleasant, but to some extent necessary, evidence that the system is thoroughly affected by the drug. For homœopathy they are direct therapeutic indications. They should give us a valuable medicine for some forms of headache, and for congestive disorders of sight and hearing. We have yet to learn what is the pathological (or even the full symptomatic) condition of those eyes and ears, which are reported as having been rendered permanently amaurotic or deaf by the drug. In chronic congestive headaches it is a favourite remedy in my own hands.

2. Next, the survey of Noack's provings—in which full doses were taken—shows several pretty uniform effects of the drug. One of these was tenderness and pain in the vertebræ, especially in the dorsal region; another was the pain and tension at

* It is fair to say that opposite results were obtained by Vicol and Mossop, who after five and ten grain doses found the disk and retina very anæmic. Here, however, no disturbance of vision was present, and the phenomena may have depended upon depressed general circulation.

the stomach which Trousseau and Pidoux also note. The most constant phenomenon was a highly lateritious state of the urine, which, on cooling, deposited numerous orange coloured crystals consisting of urate and purpurate of ammonia, with phosphates.

It is not easy to give these effects of the drug any physiological expression. But they must be borne in mind as indications for it in ague or other disorders to which it is found adapted. The state of the urine mentioned led me once to give it with striking success, though no stronger than the 3rd dilution, in a case of daily occurring supra-orbital neuralgia, as I have related in the twenty-sixth volume of the *British Journal of Homœopathy*.

3. M. Briquet, besides investigating fully the phenomena of cinchonism, ascertained by exact experiment the influence of quinine on the circulation. He found that while small and rare doses seemed to increase the force and frequency of the heart's action, the more intense and sustained effect of the drug was enfeeblement of the circulation, with diminished arterial pressure and lowered temperature. In this he has been supported by subsequent observers. He concluded that quinine could not have any of the tonic properties of Cinchona, but should rather be used as a "hyposthenisant" in febrile and inflammatory states. His conclusions have been carried out by his native *confrères*, especially in the treatment of acute rheumatism. That there is something specific about it here may be inferred from the fact that Dr. Jousset reports it very efficacious in the small doses of the school of Hahnemann; and that Sydenham is rightly cited by Hahnemann as stating that the continued use of bark sets up a sort of "scorbutic rheumatism," shifting in situation, and alternating with internal pains. It was in such rheumatic conditions that Cinchona in substance was so esteemed by the older physicians, and Stillé thinks that it is more effective than its alkaloid.

4. The ideas of those who use quinine as a tonic, supposing such to be its primary influence on the system, have sustained a still graver shock from the experiments of Binz, to which I have already referred. Briquet had found that quinine, while it increases the fibrin, diminishes the number of the red corpuscles of the blood. Binz has further ascertained that in virtue of its power as a protoplasm-poison it paralyses and kills the white corpuscles, so that they never become red: it also lessens the ozonising property of the blood. As a tonic, therefore, it is under a cloud; but, on the other hand, German

and English practitioners are now following suit with the French, and, taught by Cohnheim the important part played by the white corpuscles in inflammation, are giving quinine in large doses to restrain their activity. Cinchonism, however, is not found a desirable addition to the patient's sufferings; so as alcohol is found to hinder its development, it is given simultaneously. Thus the unhappy subject of inflammatory fever, to whom Aconite and cold water would be the greatest of boons, is now to be dosed with quinine and brandy. I frankly say that for myself in such a case I should prefer the lancet. I am not objecting to using quinine in such disorders as pyæmia and leucocythæmia; and in the former of these it seems to have proved strikingly efficacious. The quantity given need not be very considerable, as Binz finds that one part in four thousand, or even less, will effect the purpose.

5. Another indiscriminate and, I think, unwarranted use of quinine seems to be receiving its death-blow; I mean its prescription for every kind of neuralgia. Dr. Anstie coincides with foreign observers in rejecting it in all but malarious neuralgia, making a doubtful exception in the case of the supra-orbital form when otherwise caused. It was this nerve which was affected in the case of my own which I have cited: it is probable that more extensive provings would show that the drug has an elective affinity for it. It appeared, indeed, to have such affinity in Dr. Morgan's proving, who, though experiencing some amount of neuralgiform pain everywhere, felt it far more frequently and acutely in the supra-orbital region. Dr. Ringer thinks that, therapeutically, this nerve is the special seat of the influence of quinine.

6. The power of quinine to arrest the paroxysms of pernicious malarial fever, otherwise almost certainly fatal, has been turned to good account by our French homœopathic colleagues in a similar condition which occasionally complicates any form of acute disease. It has best been studied by Dr. Frédault, under the name of "ataxy," in *L'Art Médical* for 1876-7. He describes it thus:—"There may present itself not so much a serious condition, permanent and established, as in simple *gravity*; not so much a serious condition approaching to *malignity* by an increasing tendency to aggravation even till death; but one characterised by disorders in its progress, and especially by relapses and amendments, remissions, and then again aggravations,—the phenomena having features which remind one of the *perniciousness* of marsh fevers, not indeed having their regularity and defined characters, yet resembling them though at a distance, and denoting a special gravity."

When this condition—whose three signs are gravity with incoordination of symptoms, temporary seizures resembling those of pernicious ague, and threatenings of a fatal issue—supervenes in the progress of any acute disorder, he thinks that it is best met by the administration of a *gramme* of quinine, either at once, or *in dosi refractâ*. He relates several cases illustrative of his remarks; and points to attacks of coldness of the extremities, especially of the hands and the nose, as very significant of this condition. Drs. Jousset and Cretin fully agree with him; and the occasional administration of quinine in this way seems to play no unfrequent part in the practice of our Parisian *confrères*. I am a little jealous lest it should be adopted too frequently, to the neglect of more purely homœopathic treatment; but I cannot doubt that it is a valuable piece of practice, and one which may at times render us serviceable aid. I have seen such phenomena occurring in acute disease, and know well their peril.

The only other alkaloid of bark which I shall mention is cinchonia—

Cinchoninum.—This has received a good deal of experimentation on the human subject in the old school, so that Dr. Allen can give a pathogenesis of 288 symptoms taken from fourteen observers. The most significant point is that noted by Bouchardat, that it is less liable than quinia to produce tinnitus and visual disorders, but that in smaller doses and more frequently it occasions a peculiar and pretty severe tense pain in the forehead. In doses of twelve or fifteen grains, he says, it is much more apt than quinia to cause præcordial pain, and faintness even to syncope.

I pass now to some medicines of lesser note, beginning by giving you a short account of the rock-rose, or

Cistus Canadensis.

The tincture is prepared from the whole plant.

The Cistus has been proved, mainly in the tincture and 1st dilution, under the superintendence of Dr. Hering. His pathogenesis, with the medical history of the plant, is given entire by Dr. Hale in the second edition of his *New Remedies*.

It was the great popular reputation of the rock-rose in *scrofula* which led to its being proved. The symptoms (which we have only in schema-form) shadow forth, faintly indeed, the manifestations of the diathesis in the eyes, ears, nose, and

lymphatic glands; and in such affections (especially in glandular enlargements) it has been used successfully by homœopathic physicians. Dr. Bradshaw has cured white swelling of the knee-joint with it,* in which, and in the corresponding disease of the hip, it is in considerable old school repute. I am myself most impressed with its effects upon the *throat*. The sense of dryness there is more marked in the pathogenesis of Cistus than in that of any other medicine I know,—except perhaps Belladonna. The following symptom, too, looks very like *shingles*. “Below the right shoulder-blade, extending round to the front of the body, was a very much inflamed spot about the size of the palm of the hand, painfully sore to the touch; soon after pimples began to appear on this spot in a large group; they caused violent burning. Later, a pain went from this belt-like spot to the left hip, and into the groin; the pain was like rheumatism, motion increased it.”

Cistus is said to require a magnesian soil; and Dr. Hering suggests that it may be related to that mineral as (for similar reasons) Belladonna is to lime and Pulsatilla to iron.

The 1st dilution has been used successfully in scrofula,

If the next name on my list were as valuable a medicine as its sister is a beautiful flower, it would be precious indeed.

Clematis

is prepared from the leaves and stems of the *Clematis erecta*.

A pathogenesis of Clematis, obtained by seven persons with substantial doses, was published by Stapf in his *Archiv* (vol. vii). Hahnemann subsequently included the drug among those of the second edition of his *Chronic Diseases*, but only added to Stapf's symptoms six from Stoerck, of which more anon. It was next taken up by the Austrian Society, where twenty-one persons proved it, nearly all using the mother tincture. The symptoms from all these sources, with a few others, are given by Dr. Allen, whose total amounts to 821.

I shall best bring the results of this extensive experimentation before you by connecting them with the therapeutic uses of the drug. Hahnemann says in his preface that “it will be found curative in a number of affections which have their origin in the abuse of Mercury and are complicated with

* *Monthly Hom. Review*, xiii., 38.

proars, in foul eruptions of the head and general surface, in several urinary troubles, in stricture of the urethra, and various kinds of very troublesome inflammation of the eyes." He goes on to state that Stapf has found it helpful in orchitis and indurated swellings of the testes following mismanaged gonorrhœa; and then refers to Stoerck's previous experiences with the drug.

This well-known physician published, in 1769, a tract entitled *Libellus, quo demonstratur, herbam veteribus dictam Flammulam Jovis posse tutò et magna cum utilitate exhiberi ægrotantibus*. His cases are given in the fourth volume of Frank's *Magazin*; and include ulcers and excrescences, secondary syphilis, "scabies humida," arthritis, and headache. The drug appears to act much like Dulcamara and Sarsaparilla in such affections, setting up diuresis and diaphoresis, increasing the circulation on the surface, and favouring the return of suppressed discharges; so changing chronic morbid conditions for the better. Full doses of course are required for such actions.

As regards orchitis, Dr. Desterne has criticised unfavourably the published experience with Clematis;* but such a case as that recorded by Dr. Ransford in the twenty-fifth volume of the *British Journal of Homœopathy* appears exempt from his objections, and bears out the credit of the remedy. There seems no doubt of its pathogenetic action upon these organs: the swelling and painful sensitiveness noted by Stapf's provers being reproduced in several of those of the Austrian Society. Its efficacy in urethral stricture is equally warranted by its effects in the healthy, and has received several testimonies in its favour besides that of Hahnemann. Hirsch† praises it in the spasmodic form, and Franklin‡ in the inflammatory variety. I have myself seen it act with rapid curative power in symptoms of commencing stricture supervening upon chronic gleet. It is only, of course, in such conditions that internal medication can be expected to do anything: you would not look for help from it in organic strictures of long standing. As to eruptions, the provers experienced several, of vesicular and even pustular kind; and Hempel gives one case and Hirsch another of eczema impetiginodes cured by it. Hahnemann's last recommendation speaks of several kinds of inflammation of the eyes as curable by it. Much burning and redness were developed in the provers; in one the pupils were contracted;

* See Hempel, *sub voce*.

† *Brit. Journ. of Hom.*, xxv., 612.

‡ *Science and Art of Surgery*, i., 428.

lymphatic glands; and in such affections (especially in glandular enlargements) it has been used successfully by homœopathic physicians. Dr. Bradshaw has cured white swelling of the knee-joint with it,* in which, and in the corresponding disease of the hip, it is in considerable old school repute. I am myself most impressed with its effects upon the *throat*. The sense of dryness there is more marked in the pathogenesis of Cistus than in that of any other medicine I know,—except perhaps Belladonna. The following symptom, too, looks very like *shingles*. “Below the right shoulder-blade, extending round to the front of the body, was a very much inflamed spot about the size of the palm of the hand, painfully sore to the touch; soon after pimples began to appear on this spot in a large group; they caused violent burning. Later, a pain went from this belt-like spot to the left hip, and into the groin; the pain was like rheumatism, motion increased it.”

Cistus is said to require a magnesian soil; and Dr. Hering suggests that it may be related to that mineral as (for similar reasons) Belladonna is to lime and Pulsatilla to iron.

The 1st dilution has been used successfully in scrofula,

If the next name on my list were as valuable a medicine as its sister is a beautiful flower, it would be precious indeed.

Clematis

is prepared from the leaves and stems of the *Clematis erecta*.

A pathogenesis of Clematis, obtained by seven persons with substantial doses, was published by Stapf in his *Archiv* (vol. vii). Hahnemann subsequently included the drug among those of the second edition of his *Chronic Diseases*, but only added to Stapf's symptoms six from Stoerck, of which more anon. It was next taken up by the Austrian Society, where twenty-one persons proved it, nearly all using the mother tincture. The symptoms from all these sources, with a few others, are given by Dr. Allen, whose total amounts to 821.

I shall best bring the results of this extensive experimentation before you by connecting them with the therapeutic uses of the drug. Hahnemann says in his preface that “it will be found curative in a number of affections which have their origin in the abuse of Mercury and are complicated with

* *Monthly Hom. Review*, xiii., 38.

prosa, in foul eruptions of the head and general surface, in several urinary troubles, in stricture of the urethra, and various kinds of very troublesome inflammation of the eyes." He goes on to state that Stapf has found it helpful in orchitis and indurated swellings of the testes following mismanaged gonorrhœa; and then refers to Stoerck's previous experiences with the drug.

This well-known physician published, in 1769, a tract entitled *Libellus, quo demonstratur, herbam veteribus dictam Flammulam Jovis posse tutó et magna cum utilitate exhiberi ægrotantibus*. His cases are given in the fourth volume of Frank's *Magazin*; and include ulcers and excrescences, secondary syphilis, "scabies humida," arthritis, and headache. The drug appears to act much like Dulcamara and Sarsaparilla in such affections, setting up diuresis and diaphoresis, increasing the circulation on the surface, and favouring the return of suppressed discharges; so changing chronic morbid conditions for the better. Full doses of course are required for such actions.

As regards orchitis, Dr. Desterne has criticised unfavourably the published experience with Clematis;* but such a case as that recorded by Dr. Ransford in the twenty-fifth volume of the *British Journal of Homœopathy* appears exempt from his objections, and bears out the credit of the remedy. There seems no doubt of its pathogenetic action upon these organs: the swelling and painful sensitiveness noted by Stapf's provers being reproduced in several of those of the Austrian Society. Its efficacy in urethral stricture is equally warranted by its effects in the healthy, and has received several testimonies in its favour besides that of Hahnemann. Hirsch† praises it in the spasmodic form, and Franklin‡ in the inflammatory variety. I have myself seen it act with rapid curative power in symptoms of commencing stricture supervening upon chronic gleet. It is only, of course, in such conditions that internal medication can be expected to do anything: you would not look for help from it in organic strictures of long standing. As to eruptions, the provers experienced several, of vesicular and even pustular kind; and Hempel gives one case and Hirsch another of eczema impetiginodes cured by it. Hahnemann's last recommendation speaks of several kinds of inflammation of the eyes as curable by it. Much burning and redness were developed in the provers; in one the pupils were contracted;

* See Hempel, *sub voce*.

† *Brit. Journ. of Hom.*, xxv., 612.

‡ *Science and Art of Surgery*, i., 428.

and in three the vision was indistinct, as if objects were seen through a gauze or fog. Hirsch recommends Clematis in "chronic inflammatory states of the borders of the eyelids, with soreness and swelling of the meibomian glands, such as we find in young scrofulous subjects." But the affection of the eyes in which Clematis has done yeoman's service is iritis. Drs. Allen and Norton do not seem to speak from personal experience of it here, but they mention the high praise it has received from many, among whom was my own teacher, Dr. Madden. They consider it indicated where great sensitiveness to cold is present, as is Mercury, to which they reckon it an analogue in point of its action in iritis. I myself have every confidence in it in both the rheumatic and the syphilitic forms of this disease.

All this evidence makes it probable that we have not yet sounded to the depths the virtues of Clematis, or assigned it its definite sphere of action. I know of no medicine presenting much analogy with it; nor has its use been extensive enough to enable us to fix its most suitable dose.

I have now to bring before you the Peruvian shrub known as the Erythroxyton

Coca.

The leaves are the officinal portion; a tincture may be made from them when fresh, or triturations when dried.

Coca has been proved by twenty-four persons in all (mostly homœopathists), besides the observations made by travellers of its effects on the natives. A full collection of all this information has been made by Dr. C. Hering, and published by him in his *Materia Medica*.

Coca is one of those substances of which we shall soon encounter a cardinal instance in coffee—substances which "cheer, but not inebriate," stimulating the nervous centres without engorging their substance and disordering their functions like alcohol, opium, and haschisch. It has been used from time immemorial by the natives of South America as we use tea and tobacco. Taken in excess, it causes mental excitement, palpitation, sleeplessness or vivid dreaming, sparks or flames before the eyes, and ringing in the ears, with increased susceptibility of the senses. It has in a marked degree the property belonging to this class of substances ("aliments d'épargne") of diminishing tissue-waste; so that, while under

its influence, there is little need of food, the bowels are costive, and the urine is deficient in solid matter. By acting thus, and by diminishing the sense of fatigue, it proves invaluable to the travellers in its native regions, who chew the leaves as they go on. It has a further virtue, common to it with Arsenic, of obviating the distress experienced in climbing heights, and breathing

“ the difficult air of the keen mountain-top.”

This power of the plant is witnessed to by all observers.

Coca has found little use as yet in practice. Dr. Hering recommends its employment in troubles coming on with a low state of the barometer; and the analogy of Arsenic would suggest its trial in asthma. Dr. Clotar Müller,* who was one of the first to prove and discuss Coca, says that he has found it useful to palliate over-action in cardiac disease. It may occasionally replace Coffea in insomnia from nervous excitement.

And now, of

Cocculus Indicus.

This is unknown as a medicine save in homœopathic practice, where it is employed in the form of a tincture prepared from the seeds.

Cocculus was proved by Hahnemann among his earliest medicines; a pathogenesis of it appears in the *Fragmenta de viribus*, containing 156 symptoms from himself, and 6 from three authors. In the third edition of the first volume of the *Reine Arzneimittellehre* the number has swelled to 557, of which more than half are Hahnemann's, the remainder being contributed by eight fellow-observers.

Hahnemann says in his preface that Cocculus had never been employed as a remedial agent previous to the provings instituted by him with it on the healthy. He commends it in some lentescent nervous fevers; in abdominal and other spasms, with depression of spirits, especially in women; and in not a few paralytic affections and moral disturbances. The experience of his disciples has verified especially the second of these recommendations, and has established it as a true anti-paralytic; while it has, with the aid of physiological experimentation, both defined and extended its sphere of action.

* See *Brit. Journ. of Hom.*, xv.

Cocculus is well-known as a poison for fishes, and as an agent used for the adulteration of beer. In both cases the intoxication it produces is manifest rather in the motor than in the ideational centres; and to the same effect is the testimony of those who have experienced its effects in their own persons. Hahnemann has related in *Hufeland's Journal* a case of poisoning by it, which may be read in English in Dr. Dudgeon's collection of his *Lesser Writings* (p. 377). Coldness; paralytic stiffness of the limbs, with drawing pains in their bones and in the back; and sullen irritability, with anxiety, were the prominent symptoms. The patient said that his brain felt as if constricted by a ligature. He wished to sleep, but a frightful sensation, as of a hideous dream, came over him directly he closed his eyes, and made him start up again. He had great repugnance to food and drink. This last is a frequent symptom of Cocculus, and is very characteristic of it.* The experiments which have lately been made on animals with the alkaloid contained in Cocculus, picrotoxine, show that convulsions, both tonic and clonic, are a special characteristic of its action. The latter present many of those singular features which have been observed as results of injury to the crura cerebri, as semi-circular and backward movements, and rolling over on the axis of the body. With these there is great slowness of pulse and respiration, indicating disturbance at the origin of the vagi.

Cocculus thus appears to influence the motor nervous tract throughout the cranio-spinal axis. To such action is referable, I think, the whole range of its curative influence. It is of great service in certain kinds of vomiting. These, when analysed, appear to be of cerebral rather than gastric origin. They are such as occur in sea-sickness, and in some persons from riding in a carriage or any similar motion; they have another instance in the vomiting of migraine and of cerebral tumours. In the latter Cocculus yields to Apomorphia, but in the former it has no rival. Such sickness is usually accompanied with vertigo; and for this trouble, when thus associated or appearing independently, Cocculus is a principal remedy. You will recollect the constant association of vertigo with those movements of gyration of which I have spoken as caused by Cocculus: it is, Dr. Ferrier says, their subjective side. The abdominal spasms in which it is, as Hahnemann alleges, so frequently serviceable are not mere colic; they appear always to spring from the nervous centres either directly or by reflex irritation. They are generally accom-

* See Meyhoffer, *op. cit.*, i., 111.

panied by flatulence, which is not the product of fermentation, but seemingly generated by the intestinal walls. It is most troublesome at night, so that it wakes the patient, or prevents his sleeping. Such flatulent spasms are most frequently seen in the female sex, and especially when its characteristic functions are being performed, as during menstruation and pregnancy. "Menstrual colic" is an example, and here Cocculus is renowned: Dr. Edward Blake esteems it also our best remedy for pure dysmenorrhœa. It is also useful in other nervous affections occurring at these times, as in menstrual headache. The following case of Dr. Black's shows what it can do here, and illustrates also the nausea and vertigo characteristic of the drug:

"Miss H—, æt. 35, of a full plethoric habit, has suffered from her present headaches for now fifteen years; they came on shortly after the catamenia appeared, and have ever since regularly occurred at that period. Violent headache—described as a dull pain affecting the whole head; the patient has a difficulty in describing it minutely; is unable to lie for a moment on the back of the head; is forced to lie on the side; unable to bear the least light; any noise excites nausea and vomiting. During the headache she feels as if suffering from sea-sickness, and, on sitting up, the objects around seem to move up and down. The headache lasts from thirty-six to forty-eight hours, and comes on the third or fourth day of the catamenial period. The catamenia are abundant, but unattended by local pain. General health good.

"March 16th.—Cocc. 18, m. et n.

"April 4th.—The headache has occurred at the usual time but not so severe as usual, for she was able to move about, and was not confined to bed, as she always was before. A dose of the 6th dilution was given from every half-hour to every six hours during the third and fourth days of her period with great advantage. Cont. Cocc.

"20th.—Rept. Cocc. 18, as on March 16th.

"May 1st.—Has had a very slight headache at the usual period, which was again much relieved by frequently repeated doses of Cocc. 18; she was now ordered Bell. 6, alternately with Cocc. 18, m. et n. This was the last prescription; for one headache occurring after that she took the Cocc. Since October, 1844, to July, 1846, she has continued free from those headaches.

"Remarks.—The principal indication in this case for the selection of Cocculus was the marked tendency to nausea resembling sea-sickness, as if the stomach heaved up and down. So great was this idiosyncrasy that she told me that travelling in a carriage made her feel ill, and that sickness has often been brought on by looking at a vessel pitching up."

The use of Cocculus in convulsive and paralytic affections is yet in its infancy. It is said to have removed hemiplegia following apoplexy; and Trinks has recorded an excellent case of post-diphtheritic paralysis in which it was the curative

agent.* It might prove useful (perhaps in the form of picROTOXINE) in some of the rarer forms of chorea, in which peculiar and definite involuntary movements—like those it produces—constitute the disorder. Dr. Phillips' recommendation of it in hysterical paralysis seems well in accordance with its general action; and from its pathogenesis it should be useful in paralytic weakness of the cervical muscles.

A French physician, M. Felix Planat, has just published a treatise entitled *Récherches physiologiques et thérapeutiques sur la picROTOXINE*. He states that he has, by the administration of this alkaloid, brought on convulsions, with foam at the mouth, in a rabbit, a kitten, and other animals of lower organization; and that, giving it persistently in epilepsy (in the form of a strong tincture of *Cocculus*), on the principle *similia similibus curantur*, he has obtained several undoubted cures. The French Academy has awarded this writer a prize upon the Barbier foundation.† I have recently had a case of epilepsy, in which repeated drawing of the head to the right side with temporary unconsciousness occurred. *Cocculus* has completely removed this feature of the case, though the actual fits have not been influenced by it.

The only medicine with which I can compare *Cocculus* is *Chamomilla*, and this solely in regard of its abdominal symptoms.

The medium dilutions (as in Dr. Black's case) have been those mainly used, Hahnemann himself recommending the twelfth. But Dr. Phillips says he has got excellent results in cerebral vomiting, flatulent distension and spasms, and menstrual colic—for none of which uses, however, does he credit the school in which he learnt them—with doses of one to three drops of a strong tincture.

We have next to consider the place and action of cochineal,

Coccus cacti.

This must not be confounded, as is sometimes done, with the *Coccinella septempunctata*, the lady-bird. The dried insect, powdered, is treated with alcohol for a tincture, or (better) triturated with milk-sugar.

Cochineal has been proved by the members of the Austrian Society in their wonted exhaustive manner. The experiments

* See *Brit. Journ. of Hom.*, xix., 312.

† *London Medical Record*, May 26, 1875.

—in which twenty-eight persons took part—are related in detail in the fourth volume of the *Österreichische Zeitschrift*; and the schema of the symptoms may be found translated in Metcalf's *Homœopathic Proving*s, and by Dr. Allen, who adds symptoms from two other provers. Hempel's article, also, should be consulted.

The Austrian proving makes it evident that the virtues popularly ascribed to cochineal in whooping-cough spring from its homœopathic relation to the disease. Few of the provers escaped a cough; and with Dr. Wurmb it was "so violent that it caused vomiting, and the expectoration of a great quantity of thick, viscous, and albuminous mucus." I am not aware, however, that the medicine has been much used by homœopathists against this disease, save in France, where Dr. Guérin-Méneville says that it is in daily employment. Jousset considers frequent micturition of pale clear urine, with tenesmus, an indication for it here. I myself gave it once, in the 1st decimal trituration, in a case where a father whose house was full of whooping-cough contracted just such a cough as that Dr. Wurmb describes. The curative effect was very marked. Again, this proving amply accounts for the reputation of cochineal in the school of Rademacher as a "kidney remedy." The urinary symptoms are numerous, and of a high grade of intensity. Nephritic colic and vesical and urethral tenesmus are plainly pictured therein; and you may read in Hempel cases where affections of this kind and also acute renal dropsies have been cured by cochineal. I have little doubt but that the study of this beautiful proving will lead to a more extensive use of the medicine, especially in sore throat with great dryness (like Belladonna and Lachesis, which last was taken by one of the provers to relieve the symptom, and with immediate effect), in inflammation of the labia (like Apis), and in laryngeal irritation and hoarseness.

Cochineal has hitherto proved curative chiefly in tolerably material doses; but, as the proving was mainly made with the dilutions, we ought to get more out of these than we hitherto have done. In whooping-cough, Jousset gives it from the 6th to the 30th.

We now come to one of those substances which stand on the boundary line between food and medicine,

Coffea.

We use the raw, not the roasted bean, preparing it either as a

tincture or by trituration. Hahnemann's caution in this respect is justified by the discovery that methylamine is developed in coffee by roasting.

A full proving of Coffea—by five persons, one of whom was Hahnemann—is recorded by Stapf in his *Beiträge*; and contains 246 symptoms.

Stapf well characterises the primary effect of coffee as “a pathological excitation of all the organic functions. When coffee acts moderately upon the healthy organism” (he says) “the irritability of the organs of sense is morbidly increased, the visual power becomes more acute, the hearing more sensitive, the taste is finer, the sensorium is more vivid (hence increased susceptibility to pain), the mobility of the muscles is increased, the sexual desire is more excited, even the nervous activity of the digestive and secretive organs is increased; hence a morbid sensation of excessive hunger, increased desire and facility for alvine evacuations and for the emissions of urine. To what an extent the nervous and animal activity of the organism is increased by coffee appears from the sleeplessness which it excites in various shades and degrees, from the peculiar pathological excitation of the mind and soul, and from the febrile warmth which it causes to a considerable extent.” This primary effect of coffee is made use of in many ways, as you well know,—to arrest the paroxysm of ague and of asthma, to relieve headache, and to antidote the depressing effects of vegetable poisons, such as Opium. But it also points to several conditions in which the drug may become homœopathically curative, as when pain is felt excessively (in labour, for instance), in nervous excitement, and especially in sleeplessness. For this last it has a high repute in the school of Hahnemann; and my own experience with it makes me surprised to find Dr. Ker saying that he has never known it to do any good.* Possibly he used it in too low dilution. I find it particularly useful when the patient cannot get to sleep because of ideas perpetually forcing themselves upon his mind. Dr. Bayes says that the insomnia cured by Coffea is that which is owing to excessive agitation of mind or body.

There are two forms of neuralgia in which Coffea has often proved beneficial. One of these is toothache. We are indebted to Dr. E. M. Hale for establishing as the characteristic for it here (besides restlessness and great complaining) that the pain is entirely relieved for a time by holding cold water

* *Monthly Hom. Review*, xviii., 744.

in the mouth, returning as this grows warm.* He has lately communicated a case in which strong coffee drunk to keep off sleep produced a toothache having this very feature.† The other *Coffea* neuralgia is a variety of migraine, which the excessive use of the beverage is so apt to occasion. Hahnemann, who wrote an essay on the injurious effects of this practice, so common in Germany in his time, thus describes the migraine it causes :—" It comes on in the morning shortly after waking, and increases little by little. The pain becomes intolerable, and sometimes burning; the integuments of the head are very sensitive, and hurt when touched ever so slightly. Body and mind seem excessively sensitive. The patients look exhausted; they retire to lonely and dark places, and close their eyes in order to avoid the light of day; they remain seated in an arm-chair, or stretched upon a bed. The least noise or motion excites the pain. They avoid talking or being talked to, or hearing others talk. The body is colder than usual, although no chills are experienced; the hands and feet especially are very cold. They loathe all food and drink, on account of a continual sickness at the stomach. If the attack is very violent, a vomiting of mucus takes place, which, however, does not diminish the headache. There are no alvine discharges. The pain scarcely ever ceases before evening. The attacks come on irregularly, and without premonitory symptoms."

I have given this description, because of late the alkaloid of *Coffea*—caffeine—has come into use, generally by hypodermic injection, as a remedy for migraine. This caffeine contains the toxic principles of coffee in a very concentrated form. In doses of from two to ten grains, it causes (according to Lehmann) violent excitement of the vascular and nervous systems—palpitations of the heart, extraordinary frequency, irregularity, and often intermission of the pulse, oppression of the chest, pains in the head, confusion of the senses, singing in the ears, scintillations before the eyes, sleeplessness, erections, and delirium. These phenomena seem to be the result of direct excitation of the heart and nervous centres, which latter (in animals) goes on to tetanus. The cardiac condition induced by it is described by Dr. Phillips as one of irritability, in which the slightest excitement is sufficient to bring on violent palpitations.

This keener action of the alkaloid should be utilised in practice according to the law of similars. That it can be we

* *Brit. Journ. of Hom.*, xxiii., 492.

† *Ibid.*, xxxii., 546.

have the testimony of Dr. Anstie. His experience led him to hope that caffeine might prove a very valuable remedy, both in neuralgia and in alcoholic insomnia. And when a correspondent asked how an agent mainly employed for rousing the nervous system (as in opium-poisoning) can be effectively used as a calmer of pain and nervous irritation, his reply was just that which ours would have been—that “the dosage is wholly different in the two cases.” Dr. Meyhoffer has made much use of the cardiac action of the drug. “Coffea,” he says,* “is to the nerves of the heart what Cactus is to its muscle.” In nervous palpitation, with abundant secretion of urine, he gives the 3rd or 6th dilution with rapid effect. In asystolia he finds caffeine, in doses of one or two centigrammes, to exert a most beneficial effect, very like that of *Digitalis*, but more completely ameliorative when sleeplessness is part of the patient’s distress.

I have only to add that Dr. Bayes describes the hemicrania in which *Coffea* is useful as a kind of clavus; and mentions a case in which spasmodic stricture of the rectum was remarkably controlled by the medicine.

Coffea admits of close and profitable comparison with *Chamomilla* and *Ignatia*, and (less so) with *Coca*.

The attenuations from the third upwards have generally been used. Dr. Bayes finds the twelfth most effectual; and with this my own experience coincides.

* *Comptes rendus du Congrès International d'homœopathie*, 1878, p. 69.

LECTURE XXVIII.

COLCHICUM, COLLINSONIA, COLOCYNTH, CONIUM, COPAIBA.

Our first medicine to-day is the meadow-saffron,

Colchicum.

We prepare the tincture from the fresh common bulb, by expressing the juice, and treating the residue with alcohol.

Colchicum has twice been proved in the school of Hahnemann, first by Stapf (*Archiv*, vol. vi.), and later by Reil (*Vierteljahrschrift*, vol. viii).* The two pathogeneses, with numerous observations from other sources, are combined by Dr. Allen, giving a collection of nearly 1,200 symptoms.

In poisoning by Colchicum, the gastro-enteric symptoms are very prominent. These are of specific nature, as they appear with hardly less severity when the poison is directly introduced into the circulation. They have two forms, or perhaps stages. In the first, there are constant and profuse serous evacuations, with collapse, blueness and coldness, hoarse voice, and cramps—the whole forming a vivid picture of Asiatic cholera. In the second the symptoms are those of gastro-enteritis, with especial dysenteric phenomena—the passing of shreddy mucus from the bowel being a constant feature. In both forms muscular weakness is very marked; and there is often deathly nausea.

Next to the stomach and intestines, Colchicum acts most powerfully on the kidneys. It is supposed to be diuretic; but I apprehend that the notion has arisen from observation of its action in disease. In a short proving of it which I made twenty years ago upon my own person the quantity of urine was very notably decreased; and Stoerck found the same thing.† Suppression often occurs in cases of poisoning, and is probably due to intense congestion of the Malpighian bodies, which lesion has been caused by the poison in dogs.

* See *Brit. Journ. of Hom.*, xix.

† *Libellus de Rad. Colch. Autumn*, 1759.

A more important question concerns its influence upon the elimination of the urinary solids. Some statements have been made to the effect that it increases the proportion of these, and especially of the urea and uric acid. Dr. Garrod* has analysed these statements, and made some careful experiments himself, with the conclusion that "there is no evidence that Colchicum produces any of its effects upon the system by causing the kidneys to eliminate an increased quantity of uric acid; in fact, when the drug is continued for any lengthened time, it appears to exert a contrary effect." He also says—"We cannot assert that Colchicum has any influence upon the excretion of urea, or the other solid ingredients of the urine."

A case of poisoning by Colchicum is reported in the *London Medical Gazette* for 1838-9 in which the symptoms assumed another character. There was intense gnawing, dragging pain in all the joints of the extremities, beginning in the hands and feet with numbness and pricking, with profuse acid sweating, and stiffness and pain in the occiput and nape of the neck. Such rheumatoid phenomena occurred in Stoerck's experiment on himself, and are very marked in Dr. Reil's proving. Here, however, they seemed seated in the muscles rather than the joints; and Teste's statement was borne out, that the neck is especially influenced by the drug. Several provers had decided pleurodynia.

There are three other statements to be made about the physiological action of Colchicum. The first is, that cows which eat it become affected with distressing and sometimes fatal tympanitic distension. The second, that it appears directly to slow the heart's action. The third, that in one case of poisoning by it the pleuræ were found inflamed.

We pass now to therapeutics. The gastro-enteric action of Colchicum has hardly yet been utilised in homœopathic practice. Its botanical congener, *Veratrum album*, has pre-occupied any place it might have found in the treatment of cholera. I should suggest its substitution, however, in some cases, should great nausea be present, and should the cramps attack especially the soles of the feet. Stillé mentions its being recommended for cholera (to which he recognizes its homœopathicity) by a Mr. Cotter, who states that he used it successfully in eight cases. I once effected a rapid cure of an obstinate acute diarrhœa with Colchicum, guided to this medicine by the deathly nausea and prostration which were present. It ought to find an occasional place in the treatment of dysen-

* *Nature and Treatment of Gout*, 2nd ed., 1863.

tery and sub-acute proctitis, with much passing of mucus; and might be useful in relieving tympanites, as indeed in veterinary practice it has proved to be. Borborygmi are very marked in its diarrhoea; and the symptom, "He has appetite for forty different things, but as soon as he sees them, or, still more, smells them, he shudders from nausea, and cannot eat anything," has been frequently verified clinically.

But the main interest of Colchicum lies in its relation to gout and rheumatism. Its power of relieving the gouty paroxysm was renowned of old; and, since its revival in later times, has become firmly established and universally recognised. It is confessedly, moreover, of a "specific" nature. It is not an indirect result of evacuations caused by the drug, for it occurs just as surely when these are absent. It is not an ordinary "anodyne" effect, for Colchicum has no such property. Nor does the medicine act as an "antiphlogistic," for it subdues the pain before the heat and swelling begin to subside, and some time before the temperature falls; it, is moreover, inoperative in other than gouty inflammations. The term "specific" is accordingly used to denote its action; and pathogenesis shows that here, as elsewhere, "specific" means homœopathic. The anti-arthritis power of Colchicum would hardly, indeed, have been arrived at by the rule *similia similibus*; but, being empirically discovered, no other formula seems so well to express the relation of its curative to its physiological effects. So far as it influences healthy joints it is to cause inflammation and pain in them, and not any condition opposite to that which obtains in the gouty state.

If this be the rationale of its influence, Colchicum acts directly upon the affected joints in acute gout, and may have no power over the morbid diathesis. Pereira writes—"That Colchicum alleviates a paroxysm of gout I have before mentioned; but that alleviation is palliative, not curative. It has no tendency to prevent a speedy recurrence of the attack; nay, according to Sir Charles Scudamore, it renders the disposition to the disease much stronger in the system." Ringer says that a full dose may remove the pain in an hour, but Wood adds that by such practice the mischief is often transferred to the internal organs. It was supposed at one time that it might be of permanent benefit by increasing the elimination of uric acid by the kidneys; but Dr. Garrod's investigations seem to have barred this claim. It must thus be concluded that, in the ordinary dosage, Colchicum acts locally only upon gout; and, like quinine with ague, may by excess of action suppress it injuriously. It is a question whether

homœopathy can make a better use of it. There must be something in the physiological action of the drug which makes it so effective specially against *gouty* pain and inflammation—something qualitative, as Drysdale expresses it,* in its relation to the disease. Whether the suggestion of Dr. Garrod's results is worth anything—whether Colchicum diminishes the renal elimination of uric acid, and is thus homœopathic and curative to gout at its possible fountain-head, remains to be investigated. However this may be, it is certain that in the various gouty neuralgiæ and inflammations Colchicum is more effective than any other medicine. Herein we agree with the late Sir H. Holland, who says that whether the gouty inflammation develops itself in the foot, the bronchi, the eyes, or the head, the specific virtues of the remedy are equally apparent. Several of these affections—especially the pleurodynia, the angina, and the ophthalmia—are figured pretty plainly in its pathogenesis; and quite small doses are often sufficient to cure them. Dr. Dunham lays stress on the tendency of Colchicum to make the returns of gout more asthenic; and, connecting this with the muscular weakness it causes, thinks it most perfectly homœopathic when gout presents the asthenic form in coming before us for treatment. The old-school writers of course present this as a counter-indication for the drug.

It makes for the purely local action of Colchicum in gout, that rheumatism—so similar to it in its arthritis, but so unlike it essentially—should be also under the control of the medicine. But it further strengthens the doctrine of qualitative relation, that rheumatic joints are not nearly so much influenced by it as gouty, and are most helped when the inflammation is, as there, purely synovial. It is, as its provings indicate, in muscular rheumatism—especially torticollis—that it shows itself most effectual. But in two published cases—one of Dr. Kidd's and one of Dr. Laurie's†—it displayed such remarkable power of controlling rheumatic pericarditis, that it ought to be more frequently used in the treatment of this affection. We have seen that it has inflamed the pleuræ. Teste says that the rheumatic pains to which it corresponds are generally *tearing*. In warm weather they are principally felt at the surface of the body; as the air grows cooler they seem to penetrate the deeper tissues and the bones. Dr. Dunham says that they are worse at night.

A statement of the last-named author's I must cite without comment, for what it is worth. "I would draw attention,"

* *Brit. Journ. of Hom.*, xxvi., 313. † *Ibid.*, v., 314, and xiii., 198.

he writes, "to the fact that, in many cases of poisoning by *Colchicum*, cataracts have formed before death in the eyes of the sufferers. Professor Hoppe reports that with it he greatly benefited, though he failed to cure, three cases of soft cataract."

This is all I have to say about the therapeutic power of *Colchicum*. But I know of few drugs which seem to promise more extensive applications in the future.

Actæa racemosa, *Arnica*, *Bryonia* and *Veratrum album* seem to be its closest analogues.

The question of dose is a large one. Five drops of the mother-tincture every few hours seem to give speedy relief, without baneful consequences, in ordinary gout; but Dr. Dunham says that in the atonic forms to which he thinks it specially suitable, the 15th dilution is quite strong enough. There seems nothing gained by diluting the drug for its other applications.

Another valuable contribution to our *Materia Medica* from the indigenous plants of the American continent is the

Collinsonia Canadensis.

The tincture should be prepared from the root.

In the second edition of Dr. Hale's *New Remedies* may be found a short proving of *Collinsonia*, together with all that is known about the drug.

From this proving, and from the considerable clinical experience now accumulated, we are able to define pretty clearly the sphere of action of *Collinsonia*. It affects the whole gastro-intestinal canal, but especially the *rectum*. The presence of flatulence, spasm, and colic in the parts above confirms the indications for the remedy drawn from the condition of the rectum itself; but these last alone are decisive. From Dr. Burt's proving it appears that *Collinsonia* in small doses causes constipation, with straining and dull pain in the anus after stool. Here is shadowed forth the most important action of the drug. It is in *constipation* and *hæmorrhoids* from congestive inertia of the lower bowel that *Collinsonia* proves such a precious remedy. We frequently meet with such a condition in the middle and latter months of pregnancy; and here I have the greatest confidence in the drug. But it is also a most effective remedy for piles in general, when connected with constipation, and may be resorted to with advantage

whenever *Æsculus* fails. Nor, though acting primarily on the rectum, does it confine its curative influence to that one only of the pelvic viscera. In many uterine affections connected with constipation it is of great value. Cases are collected by Dr. Hale in which dysmenorrhœa, pruritus, and even prolapsus uteri have under such circumstances yielded to its use. One of the cases of pruritus was a woman in the eighth month of pregnancy; so that *Collinsonia* should be remembered when we meet with that distressing form of the affection. In larger doses, it irritates the rectum so much as to set up diarrhœa, soon running on into dysentery: there are severe colicky pains in the hypogastric region before and after the stools, and much tenesmus. It has not been used to any extent in complaints of this kind; but in proctitis and rectal dysentery it should rival *Aloes*.

The rectum is thus the main field of action of *Collinsonia*; but you will see from Dr. Hale's article that it is gaining considerable reputation as a cardiac remedy. Time will show its real place and value here, whether it is merely in the sympathetic cardiac disturbance of hæmorrhoidal subjects that it is effective, or whether it acts more directly on the organ.

Dr. Ludlam has lately borne a testimony to the virtues of *Collinsonia*, which, from the high estimate we all entertain of his judgment, is worth citing here. "We have often," he says, "used this remedy in hospital and private practice. It seems specially adapted to women, and to those women who have hæmorrhoids either during, or as a sequel to, pregnancy and parturition, or in complication with obstinate constipation or chronic inflammation with slight displacement of the womb. For the first of these cases, where the trouble dates from gestation or from labour, or from both, and the condition has become chronic, there is no remedy to compare with it for efficacy. We have cured a dozen cases of this kind that have been sent to us by physicians from as many states, with the *collinsonia* in the 3rd dilution. And the college class can bear witness to its remarkable efficacy in many such cases in our clinic at the Hahnemann Hospital. When the hæmorrhoids are associated with constipation, and with a mild form of retroflexion or retroversion, and especially with prolapse of the uterus, it will often relieve the whole difficulty."

I have already hinted that *Aloes* is a close analogue of *Collinsonia*. So also are *Æsculus* and *Podophyllum*, and—more remotely—*Hydrastis*, *Nux vomica*, and *Sulphur*.

I have nearly always used the 2nd dilution; but others seem to have done as well with the 3rd, and others with

more material doses. Herein also *Collinsonia* resembles *Æsculus*.

I now go on to speak of

Colocynth,

a drug which is a crucial instance of the fruitful results attainable by the Hahnemannian process of "proving" on the healthy body. Here is a substance which traditional medicine knows simply as a purgative. The modern experimentation on animals has done nothing for it: as a purgative and nothing else it still stands in the works of Ringer, Wood, and even Phillips. But a few physicians in Vienna agreed to test its effects on their own bodies; and lo! a range of action is revealed which at once puts it in a high place among specific remedies.

The dry pulp of the fruit is either triturated, or treated with alcohol to make a tincture.

There is a pathogenesis of Colocynth in the sixth volume of the *Reine Arzneimittellehre*. It contains 26 symptoms from Hahnemann himself, 195 from six fellow-observers, and 29 from authors. In the *Chronic Diseases* a second pathogenesis appears, but has only swollen to 283 symptoms in all, the additional ones being mainly Hahnemann's, *i.e.*, observed on patients. But our knowledge of the drug has been immensely increased, and, indeed, pretty well perfected, by an exhaustive proving conducted with it by the Austrian Society. Dr. Watzke's account of the experiments—in which seventeen persons, including two women, took part—is translated from the first volume of the *Österreichische Zeitschrift* in Metcalf's *Homœopathic Provings*. It contains also an analysis of Hahnemann's pathogenesis, and a complete account of all that is known of the drug, both as poison and as medicine. This monograph is indispensable for the study of Colocynth; and so also is a commentary upon it by Dr. Pope, which you will find in the twelfth volume of the *Monthly Homœopathic Review*.

Traditional medicine, as I have said, knows Colocynth only as a purgative. It is aware, however, that this action is specific, and not merely local, being induced by its external application as well as by its introduction into the stomach. It seems most probable that thus, at least, it purges the lower bowel only, as the rectum is the only part of the alimentary