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J. R. Bartlett

NEW

HOMŒOPATHIC

PHARMACOPŒIA AND POSOLOGY,

96669

OR THE

PREPARATION

OF

HOMŒOPATHIC MEDICINES

AND THE

Administration of Doses.

BY G. H. G. JAHR.

TRANSLATED, WITH ADDITIONS,

BY JAMES KITCHEN, M. D.

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FIRST PART.

OF THE PREPARATION OF HOMŒOPATHIC MEDICINES IN GENERAL.

SECOND PART.

ON THE OBTAINING AND PREPARATION OF EACH MEDICINE IN PARTICULAR.

THIRD PART.

OF THE ADMINISTRATION OF HOMŒOPATHIC MEDICINES.

TRANSLATOR'S PREFACE.

The translator of the following work deems it incumbent on him to say a few words in relation to his connection with the subject of Homœopathy, as it has met with so much opposition by the profession in all quarters of the world, and more especially so as he would not wish to be considered as being connected with any doctrine or mode of practice that is absolutely and really, what it has very generally and fashionably been called, a humbug. Before embracing the subject, he had been a practitioner of the old school for fifteen years, during which space of time he had seen considerable practice and considered himself fully qualified to know what disease was, and to appreciate the effects of remedies—in addition he may say, that he had received the best medical education both in this country and Europe, and had studied under the most celebrated professors, and attended the different hospitals in those places where he had studied: these remarks are made not by way of boast or an exhibition of superior qualifications, but merely for the purpose of allowing himself to think that he was fully qualified to appreciate the effects of homœopathic remedies on disease, and to form a correct judgment as to their sanative nature. These sanative effects he was first made aware of in his own person, and afterwards, in a short space of time, in several well marked instances among his patients, insomuch that he soon became fully convinced of the efficacy of the doses, though he must confess, at first considerably prejudiced against such a conviction —but these instances were so numerous and so palpable, that he was forced to acknowledge them as correct, and now, at the present time, after a lapse of nearly three years, his conviction is still more forcible, insomuch that in the great majority of cases to which he is called, he scarcely ever taking into consideration the numerous disappointments and failures of the remedies of the old school: because a homœopathic remedy does not succeed in a case under consideration is no reason for its condemnation, nor the condemnation of the homœopathic doctrine; were this the case (for it is a bad rule that does not work both ways,) where would be the allopathic Materia Medica and doctrine? there would be none, so numerous and so frequent are its failures: by this test homœopathy will not be the loser; the translator would refer to the facts of the doctrine; he is willing to set aside the principle of it, "similia similibus," though in the majority of instances it is undoubtedly correct; laying everything aside but the facts as revealed by practice, he would ask the opinion of opponents; there has been too much theorizing; it has been a common fault in all doctrines, and with all framers of doctrines, and one which does much injury, or, at furthest, but little good. The numerous theories of the old school need but be referred to. What have they amounted to? to nothing but to amuse and divert for the moment—something like the tub thrown out to the whale; the attention has been called off from the really solid and useful part of the science, the facts, the foundation of all good practice. So respecting homœopathy, the translator would call the attention to something solid, appreciable, and truly useful, and not to idle words, as frothy and evanescent as the morning dew, or the bubble on the surface of the sea. Here is a disease, comprising a number of symptoms, and here is a remedy, the pathogenetic effects of which are similar to these symptoms; will that remedy cure that disease, or will it not? that is all that is necessary to be asked for the present; it can frequently be said that it most assuredly will, not only in one solitary case, like a chance shot, or the panacea of a quack, but in the majority of such cases which are uncomplicated and pure. Facts cannot be denied when perfectly evident—and this is often the case in homœopathic practice; there is frequently such clear evidence that we are obliged to give in our adhesion to them, when looked on with an eye unprejudiced and willing to acknowledge the truth.

Again, the unity of the homœopathic practice, and as an inference, the truth of it is no where more beautifully exhibited than in a case of well defined disease, when the symptoms are prominent and evident, say a case of scarlatina in a previously healthy subject, that is, uncomplicated with any chronic affection; let a dozen, or a hundred, if you will, homœopathic physicians be called to such a case, and after a full view of it and study of its symptoms, they will all invariably prescribe the same remedy. This *must* follow as a matter of course; they are guided by correct and unerring principles, a never-failing rule to go by. On the other hand, what would be the course were a dozen allopathic practitioners called to visit such a case; it is almost unnecessary to proclaim it; we need but look through the annals of medicine to be told of the unfortunate results of difference of opinion in respect to such cases. A says the patient must be bled. B says, no! if you bleed your patient, you kill him. C relies altogether on vomits, D on calomel; E on a little sweet spirits of nitre and warm water gargles; F on pepper gargles; G on cold affusions; H on tepid affusions; K on rum and water; and so on to the end of the chapter. If that is a good doctrine and good practice, where there is such diversity of opinion, and that, too, according to the idea of the practitioner, God help us! It is high time that better principles should be inculcated, and a more positive and assured practice, even did not better success attend it. The same remarks may be applied to the treatment of other diseases allopathically: only to mention erysipelas, what assurance has the patient when he is ordered to be bled, or leeched, or scarified, that he ought not to be stuffed with bark and wine, and other stimulants. Away with such uncertain practice; let us be more consistent, more based on solid principles, more regulated by correct rules, and not left to the uncertain whims and follies of prejudiced practitioners. Indeed, reform is greatly needed, when we see such confusion, and such unsettled ideas daily and hourly in the sick chamber, and death smiling at the doubts of the long-faced doctors. No wonder, then, that Moliere and Le Sage should cast ridicule on the noblest profession on earth, when such are its certainties; and no wonder, either, that the Chevalier Gatti once made use of the following apologue to the Grand Duke of Tuscany, after renouncing a practice of thirty years, and saying that he was weary of guessing: "Nature is fighting with the disease; a blind man, (that is the allopathic physician,) armed with a club, comes to settle the difference. He first tries to make peace; when he cannot accomplish this, he lifts his club and strikes at random; if he strike the disease, he kills the disease; if he strike nature, he kills nature." A true but melancholy picture of allopathic practice in numerous instances. There could be no better illustration of what is called the depleting plan; it kills its thousands every year, from the infant in the cradle to the old man tottering to his last fall, and plucks the blooming rose from many a beauty's cheek. Should the unfortunate patient have sufficient stamina, he may survive; but even then, with a broken and shattered constitution, destined to feel the effects of such a depletion as long as life remains, and to be an invalid to his last day. This is no exaggerated picture; and if this be correct practice, alas! poor human nature. But it is not so; such never could have been the intention of the Creator of man; it is man's own false work, and nothing worth, and should at once be corrected. Here homœopathy at least is deserving of a trial, to attempt to obtain better success. All are bound, as philanthropists, so to act, especially when full and ample assurance is given by others worthy of belief that success will follow. That any one should prejudge a case because he cannot understand it, or because it is contrary to all that he has been taught or knows on the subject, shows rather a pitiful condition of the human mind, and exhibits rather too great a deference to our masters, under whose guidance we have been led. Every one should examine and judge for himself in all matters of fact; when once convinced, opposition should cease. To a certain point it is commendable, but beyond that point, and in the face of undoubted facts, it becomes mere empty verbiage or downright falsehood; for there are some whose ignorance connects them with the former, and others whose baseness allies them with the last. With such, homœopathists would have nothing to do; they would appeal to the honourable part of the profession, and they hope, and have every reason to believe that their appeal will not be in vain. Every year brings evidence of its increase, and adherents to the doctrine are constantly declaring themselves; it counts among its ranks many of the most prominent members of European society; and even in this country it is not made up of quacks and scoundrels, as some of our learned and very principled professors would have their hearers to believe. These accusations amount to nothing, exhibiting only the bitterness and meanness of the minds whence they emanate, and are only worthy of a passing remark.

Exceedingly erroneous ideas prevail among physicians, who have acquired a mere smattering of the doctrine, in relation to homœopathy. Some of them announce to their patients that they are as much homœopaths as those who style themselves so, because they frequently give small doses of medicine; as if homœopathy consisted alone in the administration of small doses. To expose such ignorance, it is only necessary to mention that drachm doses of the mother tincture have occasionally been exhibited. It shows that they do not understand nor comprehend the grand principle of the administration of remedies, 'similia similibus.' The dose is merely secondary; but if the millionth part of a grain will answer the purpose as well, or even in many cases better than a whole grain, it is allowable, certainly, and even reasonable, to use no more. Now experience teaches us that such is the fact; and hence our use of small doses; but we must at the same time be careful to administer them on the homœopathic principle. Others, who do not evince such ignorance, say that cures are performed by a system of diet. If this be so, let them diet too; it is surely much better and more pleasant to perform cures by little sugar-plumbs and diet, than by nauseous potions and drastic purges. Imagination is, with others, the chief actor in this wonderful drama, and all homœopathic cures are accomplished through its agency. But this is triumphantly refuted by the very superior efficacy of the medicine in all diseases of children. The same remark holds good in reference to the lower animals, in which, we trust, no one will ascribe the cure of their diseases to imagination, or faith in the physician. But even granting the absurdity, still, if cures can be performed in this way, the method is a superior one, and a very pleasant one. Some, again, say our medicines are totally inert, while others contend that we use poisons. The first class deserve no answer: to the second, a passing remark is all that is necessary, to wit: if homœopathic medicines are poisons, when used in the millionth or ten millionth part of a grain, what epithet should be applied to allopathic medicines, since they are, in the majority of instances, the same drug. These objections are but poor subterfuges for valid and true answers to the propositions and practices of the homœopathic school; and until something of a far superior and more available cast is brought forward, homœopathy must and will go on, for truth is powerful and will prevail; and facts will stand fast and cannot be cast down nor trodden under foot, except by facts of a stronger nature, and more powerful calibre. No answer has yet been given to the doctrine. Many have been attempted by the weak and ignorant, as well as by the strong and learned; but it still stands, and will stand, like Hahnemann, its immortal founder, who, though persecuted and ridiculed, is still, in his old age, a monument of truth, of learning, and of greatness, reverenced by all who know him as the greatest benefactor of the human race, and destined, in future years, to be held in still greater reverence, not with that superstitious feeling which encompassed the great and good men of olden times, but with that truly free and enlightened feeling which characterizes the present times, in which free inquiry and uncompromising assent to what is true and just, are making rapid strides, and superstitious error, and a slavish yielding to dictation, are passing away.

In conclusion, the Translator would merely remark, that he has taken some liberties with the text, by making additions where he perceived a deficiency, and adding some entire articles, for which he is chiefly indebted to the United States Dispensatory, and the Encyclopedia of Plants. He hopes the profession will find the work of some value, and that it will be particularly so to the country practitioner, who is frequently obliged to prepare his own medicines, and carry out his own dilutions. The work may be considered as a fundamental one, and should be in the library of every homœopathic practitioner.

AUTHOR'S PREFACE.

In the New Manual of Homœopathic Medicine which we have lately published, we have purposely omitted to precede the part comprising the medicines, with instructions relating to their preparation, thinking that it would be preferable to unite those instructions in a work *ex professo*, which would contain all the necessary details respecting each medicine in particular, and which would respond to the progress which homœopathy has made in these latter days. Such is the motive which has caused us to undertake the new Homœopathic Pharmacopœia and Posology which we now publish. Respecting its composition, we have considered it a duty to carefully study all that has been written on the preparation of homœopathic medicines, and we believe we have gathered together all that the German and American homœopathic literature possesses on the subject worth mentioning. Among the German works, we will cite the *Homœopathic Pharmacopœia of Dr. Buchner*, which, by the manner in which the articles are treated, as well as by the instructions of all kinds there to be found, deserves to be placed in the first rank. We thought, at first, of translating this work with additions and remarks, but feeling that a work of such a kind would fail in order and unity, we have preferred to make a new work, to give it an entirely independent form, putting to profit all that has yet been published which we have deemed worthy of attention.

We chiefly owe to the work of *Dr. Buchner*, the *idea* of giving to each medicine, not only the necessary instructions for its homœopathic preparation, but likewise details on its physical properties. As to the physical description, in the majority of cases, we have made it after the best French authors and our own knowledge. At the same time we have been careful to point out the preparations identical with those which have served in the study of medicines, the effects of which have been gathered into the Materia Medica of our school, showing the difference between the usual preparations and those which certain German innovators have recently proposed to substitute for them.

The work has been distributed into *three parts*, the *first* of which treats of *general rules* for the preparation of homœopathic medicines; the *second*, of the obtaining and preparation of each substance in *particular;* and the *third*, of the *administration* of medicines. The subject of this last part is not found in any of the preceding Homœopathic Pharmacopœias; but as this work is intended for the use of physicians as well as pharmaceutists, we have thought that it would be of advantage to both, and, perhaps, chiefly to physicians, to find united in one work the *Homœopathic Pharmacopœia and Posology*.

The number of substances described in this work amounts to 310, of which 200 only are treated in our *New Manual;* we have thought it proper to introduce about 110 articles not yet admitted into treatises on the Materia Medica, though they have been placed in the German Pharmacopœias, in order that those who would study their effects, might agree on the substance and preparation of their studies. That is also the reason why we have not hesitated to give admission to the medicines of which Dr. Fickel (Heyne, Hoffbauer, &c.)

has published the imaginary or forged pathogenetic effects; for how ridiculous soever it might have been to admit them into the Materia Medica, the description of the physical characters of these substances in a Pharmacopœia, will break no one's bones, and may be the means, on the contrary, in engaging us in the more exact study of their effects. Moreover, the number is not very great; they are *Actæa spicata, Aquilegia vulgaris, Atriplex olida, Chenopodium glaucum, Cahinca, Nigella sativa, Osmium, Physalis Alkekengi seu Solanum vesicatorium;* all that has been published on these substances, in the French homœopathic journals, should be totally rejected, since they are but the translations of erroneous publications, as above mentioned.

As to the order in which the substances are arranged, it appeared preferable to divide them according to the kingdoms of nature, whence derived, and to precede them with general considerations, and a glance at the classes and genera to which they belong. Thus, in the *first* chapter of the second part, will be found a general coup d'œil on the mass of our medicines; in the *second,* on the *minerals* and chemical products; in the *third,* on the *vegetables;* in the *fourth,* on the *animal substances.* In each of these chapters, we have again divided the substance into two orders, viz., 1st. Those found in our Manual, or *generally used.* 2nd. Those not as yet found in the Materia Medica, not having been studied, and which we have designated as substances *little used.* Finally, in the *fifth* chapter, we have also treated of the nature and homœopathic use of some imponderable matters, as well as of several accessory substances, which, though not employed as medicines, have appeared to us to merit the attention of homœopathic physicians. Our chief object in treating of these last substances is, above all, to engage homœopathic pharmaceutists to keep them in their shops, since the greater part of those found in commerce are always more or less adulterated.

In general, we have endeavoured to give to our work a form which may render it suitable to be consulted, not only by those who would prepare the medicines, but by those also who feel sufficiently interested in our science to wish to know the physical characters of the substances which we employ as medicines, and the uses made of them without the domain of medicine.

GENERAL VIEW

OF SUBSTANCES TREATED OF IN THIS WORK,

With indication of the attenuation of the most used of each medicine, and of the method (dry or humid) by which each one is ordinarily prepared.

Note 1.—The letter *a.* placed at the end of the name of a medicine, indicates that it is prepared *immediately* with ALCOHOL; the letters *tr.* on the other hand, indicate that the *three* first attenuations of a medicine are made by TRITURATION with the sugar of milk. As to those which are followed by the two signs *tr.* and *a.*, they are such as may be prepared either the one way or the other, but preferably by TRITURATION. Finally, the letters *aq.* indicate that the first attenuation is made with PURE WATER, the second with *diluted alcohol*, and that it is not until the *third* that we make use of alcohol undiluted.

Note 2.—The asterisk (*) placed before a name, indicates the medicines which, in default of being yet experimented with, do not form a part of the *Materia Medica*, though they are treated of in the Pharmacopœias. The substances preceded by a *small zero* (°), are those which are NOT *medicines properly so called*, but which we have nevertheless thought proper to treat of in this work.

Note.—The *cipher*, placed at the end of the name of medicines, indicates the attenuation most generally used; those substances where there is no cipher, are those not yet ascertained.

* Absinthium. *a.*
* Aceti acidum. *aq.*
° Acetum.
Aconitum Napellus. *a.* 24.
Actæa spicata. *a.*

° Adeps suilla.
° Æther sulfuricus.
Æthusa Cynapium. *a.*
Agaricus muscarius. *a.* 30.
Agnus castus. *a.* 9.

* Albumen. *tr.*
° Alcool.
* Allium sativum. *a.*
Aloës gummi. *tr. a.*
Alumina. *tr.* 30.
Ambra grisea. *tr.* 6.
* Ammoniacum gummi. *tr.*
Ammonium carbonicum. *tr.* 18.
* Ammonium causticum. *a.*
Ammonium muriaticum. *tr.* 12.
Anacardium orientale. *tr. a.* 30.
Angustura. *tr. a.* 30.
Anisum stellatum. *tr. a.*
Antimonium crudum. *tr.* 12.
* Antimonium metallicum. *tr.*
° Aqua destillata.
* Aquilegia vulgaris. *a.*
* Archangelica officinalis. *a.*
Argentum foliatum. *tr.* 6.
* Argentum nitricum. *a.*
* Aristolochia Clematitis. *a.*
* Armoracia officinalis. *a.*
Arnica montana. *a.* 6.
Arsenicum album. *a. tr.* 30.
* Arsenicum citrinum. *tr.*
* Arsenicum metallicum. *tr.*
* Arsenicum rubrum. *tr.*
Artemisia vulgaris. *a.*
Arum maculatum. *a.*
Asa fœtida. *a.* 9.
Asarum europæum. *a.* 12.
* Asparagus officinalis. *a.*
* Atriplex olida. *a.*
Aurum foliatum. *tr.* 12.
* Aurum fulminans. *a.*
Aurum muriaticum. *a.*
* Barbus. *tr.*
* Baryta acetica. *aq.*
Baryta carbonica. *tr.* 18.
* Baryta caustica. *a.*
Baryta muriatica. *tr.* 30.
Belladonna. *a.* 12.
Berberis vulgaris. *a.* 30.
Bismuthum. *tr.* 30.
* Bismuthum metallicum. *tr.*
* Boletus Satanas. *tr.*
Borax veneta. *tr.* 30.
Bovista. *tr.* 30.
* Bromium, *tr.*
Brucea anti-dysenterica. *tr. a.*
Bryonia alba. *a.* 12.
° Cacao.
* Cabinca. *tr. a.*
Caladium seguinum. *a.* 30.
* Calcarea acetica. *aq.*
Calcarea carbonica. *tr.* 30.
* Calcarea caustica. *a.*
* Calcarea muriatica. *tr.*
Calcarea phosphorica. *tr.*
* Calcarea sulfurica. *tr.*
* Calendula officinalis. *a.*
Camphora. *a.* 0.
* Cancer fluviatilis. *a.*
* Cancrorum oculi. *tr.*
Cannabis sativa. *a.* 12.
Cantharis. *tr. a.* 30.
Capsicum annuum. *a.* 9.
Carbo animalis. *tr.* 15.
Carbo vegetabilis. *tr.* 15.
Cascarilla. *tr. a.*
° Castanea.
Castoreum. *a.* 30.
Causticum. *a.* 30.
° Cera, Ceratum, Cereoli.
Chamomilla vulgaris. *a.* 12.
Chelidonium majus. *a.* 0.
* Chenopodium glaucum. *a.*
China. *tr. a.* 9.
Cicuta virosa. *a.* 30.
Cina. *tr. a.* 9.
Cinnabaris. *tr.* 9.
Cinnamomum. *tr. a.*
Cistus canadensis. *a.* 15.
Citri succus. *aq.* 3.
Clematis erecta. *a.* 9.
Coccionella septempunctat. *a.* 3.
Cocculus. *tr. a.* 12.
Coffea cruda. *tr. a.* 9.
Colchicum autumnale. *a.* 15.
Colocynthis. *tr. a.* 30.
* Conchæ. *tr.* 30.
Conium maculatum. *a.* 30.
Convolvulus arvensis. *a.*
Copaivæ balsamum. *a.* 3.
Corallium rubrum. *tr.* 30.
Crocus sativus. *tr. a.* 6.
* Crotalus horridus. *tr.* 30.
Croton tiglium. *tr. a.*
Cubebæ. *tr. a.*
* Cuprum aceticum. *aq.*
° Cuprum carbonicum. *tr.*
Cuprum metallicum. *tr.* 30.
* Cuprum sulfuricum. *tr.*
Cyclamen europæum. *a.* 3.

° Oleum olivarum.
Oniscus Asellus. *tr. a.*
* Ononis spinosa. *a.*
Opium. *tr. a.* 6.
* Osmium. *tr.*
* Ovi membrana. *tr.*
* Padus avium. *a.*
Pæonia officinalis. *a.* 3.
Paris quadrifolia. *a.* 9.
Petroleum. *tr.* 18.
Petroselinum. *a.* 3.
Phellandrium aquaticum. *tr. a.* 6.
Phosphorus. *tr. a.* 30.
Phosphori acidum. *aq.* 3.
* Physalis alkekengi. *a.*
* Pichurim. *tr. a.*
Pinus sylvestris. *a.* 18.
Platina. *tr.* 6.
* Plumbum aceticum. *tr.*
Plumbum metallicum. *tr.* 12.
Prunus spinosa. *a.* 3.
Pulsatilla nigricans. *a.* 12.
* Rana bufo. *a.*
Ranunculus bulbosus. *a.* 12.
Ranunculus sceleratus. *a.* 12.
Ratanhia. *tr. a.* 30.
Rhabarbarum. *tr. a.* 9.
Rhododendrum chrysanthum. *tr. a.* 18.
Rhus toxicodendron. *a.* 30.
Rhus vernix. *a.* 30.
* Rosmarinus officinalis. *a.*
Ruta graveolens. *a.* 12.
Sabadilla. *tr. a.* 30.
Sabina. *a.* 24.
° Saccharum lactis.
° Saccharum sacchari.
Sambucus nigra. *a.* 3.
Sanguinaria canadensis. *a.* 3.
Sapo domesticus. *a.*
* Sassafras. *a.*
Sassaparilla. *tr. a.* 12.
Secale cornutum. *tr. a.* 3.
* Sedum acre. *a.*
Selenium. *tr.* 30.
Senega. *tr. a.* 9.
Senna. *tr. a.* 6.
Sepiæ succus. *tr.* 30.
* Serpentaria. *tr. a.*
* Serpyllum. *a.*
Silicea. *tr.* 30.
Solanum mammosum. *a.* 15.
Solanum nigrum. *a.* 15.
Spigelia. *tr. a.* 30.
Spongia tosta. *tr. a.* 3.
Squilla maritima. *a.* 18.
Stannum. *tr.* 6.
Staphysagria. *tr. a.* 30.
Stramonium. *a.* 12.
Strontiana carbonica. *tr.* 30.
* Strontiana caustica. *a.*
Sulfur. *tr.* 30. *a.* 0.
* Sulfur alcoolisatum. *a.*
Sulfuris acidum. *aq.* 3.
Tabacum. *a.* 6.
Tanacetum vulgare. *a.*
Taraxacum. *a.* 3.
Tartarus emeticus. *tr.* 12.
Tartari acidum. *a.*
Taxus baccata. *a.*
Terebinthinæ oleum. *a.*
Teucrium mar. ver. *a.* 9.
Thea sinensis s. cæsarea *tr. a.* 3.
Theridion curassavicum. *a.* 30.
Thuya occidentalis. *a.* 3.
Tongo. *tr. a.*
* Ulmus campestris. *a.*
Urtica urens. *a.*
Uva ursi. *a.*
Valeriana officinalis. *a.* 12.
Veratrum album. *a.* 12.
Verbascum Thapsus. *a.* 3.
* Verbena officinalis. *a.*
Vinca minor. *a.*
* Vincetoxicum. *a.*
° Vinum.
Viola odorata. *a.* 9.
Viola tricolor. *a.* 9.
Zincum metallicum. *tr.* 30.
Zincum sulfuricum. *tr.*
Zingiber officinalis. *tr. a.*
° Zoo-magnetismus.

TABLE OF WEIGHTS AND MEASURES.

In this work it was thought best to retain the French weights and measures; but for the convenience of the reader, comparative tables of the French and English weights are subjoined.

MEASURES OF WEIGHT.

		Troy grains.		*lb.*	*oz.*	*dr.*	*gr.*
Milligramme	=	.0154					
Centigramme	=	.1544					
Decigramme	=	1.5444					
Gramme	=	15.4440					
Decagramme	=	154.4402	=	0	0	2	34.4
Hectogramme	=	1544.4023	=	0	3	1	44.4
Kilogramme	=	15444.0234	=	2	8	1	24.
Myriagramme	=	154440.2344	=	26	9	6	0.

MEASURES OF LENGTH.

		English inches.		*miles.*	*fr.*	*yds.*	*ft.*	*inches.*
Millimetre	=	.03937						
Centimetre	=	.39371						
Decimetre	=	3.93710						
Metre	=	39.37100	=	0	0	1	0	3.371
Decametre	=	393.71000	=	0	0	10	2	9.710
Hectometre	=	3937.10000	=	0	0	109	1	1.100
Kilometre	=	39371.00000	=	0	4	213	1	11.000
Myriametre	=	393710.00000	=	6	1	156	1	2.000

MEASURES OF CAPACITY.

		English cubic inches.		*Apothecaries' Measure.*
Millilitre	=	.061028	=	16.2318 minims.
Centilitre	=	.610280	=	2.7053 fluidrachms.
Decilitre	=	6.102800	=	3.3816 fluidounces.
Litre	=	61.028000	=	2.1135 pints.
Decalitre	=	610.280000	=	2,6419 gallons.
Hectolitre	=	6102.800000		
Kilolitre	=	61028.000000		
Myrialitre	=	610280.000000		

HOMŒOPATHIC

PHARMACOPŒIA AND POSOLOGY.

FIRST PART.

ON THE PREPARATION OF HOMŒOPATHIC MEDICINES IN GENERAL.

INTRODUCTION.

Nature and form of Homœopathic Medicines.

1. We make use of the same simple substances in homœopathy as in the old school; but, instead of making of them, as in it, compound remedies, we seek on the contrary to procure each medicine in all its purity, and to administer it without any admixture, which might alter its proper virtues. Without going into detail here on the preference to be given to this mode of administration, we should, nevertheless, observe, that it is bound to the principle of homœopathy in so firm a manner, that it cannot be sundered without injury to the practice. In consequence of the principle, that no medicine can be employed with success, except so far as it is known in its pure effects, homœopathy has subjected to examination a number of simple medicines, which it is important now to reproduce, such as they have been experimented on, if we wish to rely on these observations. Even for the medicines which have not yet been experimented on, it is not the less important to submit them to these experiments in all

their purity and simplicity; for though each compound remedy forms, after all, also a kind of remedial unity, which may be studied in its effects, still we can never reproduce a second time precisely the same effects as the first, whilst the productions of nature exhibit at all times and in every place the same properties.

2. In thus rejecting all the compound remedies of the old school, as improper to be submitted to study and to be employed in practice, homœopathy claims not, however, the pretension to use only perfectly simple bodies, such as sulphur for example, metals and other elementary substances; she derives on the contrary her medicines from three kingdoms of nature, the same as the old school, and all the various chemical combinations, which, after invariable laws are constantly produced in the same manner, can be of use to it as remedial means.

In one word, the simplicity of homœopathic preparations, of which we speak, has no reference to the primitive substance, which serves for the medicine, but to the medicine itself, which, as such, ought not to be composed but of one only remedial substance, and prepared in such a manner that the virtues of that substance be as pure and as developed as possible.

3. If all substances endowed with remedial virtues, presented themselves under a form as convenient as some mineral waters, for example, nothing would be more natural nor more rational than to employ them as nature presented them. But with a great many of these substances, the real virtue is found in a state more or less latent, and could not be put into activity except by the destruction of the primitive matter, and the addition of another substance, which, in quality of simple vehicle, receives the developed virtue and transmits it to the organism. In other substances, on the contrary, the remedial virtue is found developed, but it is so energetic that, without the addition of a substance which can moderate the effects, we cannot employ them without danger to the health, or even the lives of the sick. In fine, there are yet other substances which, though their virtues need not to be either developed or moderated, present themselves under a power which opposes as well to their dispensation as preservation, and which, in consequence, equally exacts the addition of foreign substances in order to be conveniently prepared for use.

4. The preparation and administration of medicines being then impossible under any mixture, it is important to discover substances which, at the same time operating under the form of medicines, are innocent enough in themselves not to alter the virtues of them. This condition, simple as it may appear in theory, is not, however, so easy to fulfil as it appears—for, perhaps, there exists not a substance in the world, which, under such and such circumstances, may not exercise a pathogenetic influence, and, consequently, alter the specific effects of a medicine with which it may be mixed. Even *pure water*, the substance the most innocent that we know, is not completely exempt from this inconvenience, and even were it so, it would not suffice alone, neither for the preparation nor the preservation of medicines. In consequence homœopathy has substituted two other vehicles, viz: 1. *Alcohol* or spirits of wine, for the preparation of liquid or soluble substances. 2. *Sugar of milk*, for the preparation of dry substances—and though these two substances are not entirely void of medicinal effects, the practical facts are still the same as if these substances were entirely pure, since all the preparations which are made in this manner, are constantly the same among themselves.

5. By means of these two substances, *pure alcohol and sugar of milk*, homœopathy makes all its medicinal preparations, without exception, whether under the form of tinctures or powders. The first are obtained, that is the tinctures, in mingling with alcohol the juice recently expressed from fresh plants, or in infusing in this liquid the dry substances, the active principles of which can be extracted in this way. The powders, on the other hand, are obtained by the trituration of the insoluble substances with a suitable quantity of sugar of milk. The *alcoholic tinctures* and the *powders* are then the only preparations known in homœopathy. All kinds of *essences, syrups, pastes, tisans* and other inventions of the old school, are entirely foreign to it.

6. From this, however, it does not follow that homœopathy always employs the *primitive* preparations of medicines; on the contrary, in the majority of cases she considers them too energetic to be administered such as they are obtained. But instead of seeking to diminish their energy by the means which the old school call *correctives*, homœopathy endeavours to obtain this end by the simple *attenuation* of the primitive substance. It is thus that, seeing that a grain or a drop of

the primitive preparation of a poisonous substance, for example, would be too active, she attenuates this drop or this grain in mingling it with a new quantity of vehicle, until a preparation is obtained, which is neither too strong nor too weak to operate the cure, nor too energetic to fear any unfortunate consequences. Homœopathy thus prepares out of each substance a series of *attenuations*, of which the following one contains ordinarily the 100th or sometimes the 10th part of the active principle of the preceding one, and it is generally from one of these attenuations, and rarely from the primitive preparation of a medicine, that the homœopathic physician administers to his patients.

7. Finally, as to the form under which the homœopathic physician dispenses his medicines, it is not less simple than the preparation, and is equally made without any other mixture than that of the least medicinal substances, such as *alcohol, pure water, sugar of milk* and *globules* composed of *sugar and starch*. The attenuations of each medicine being previously prepared, the patient receives of them the dose prescribed, either in form of *solution*, with a convenient quantity of pure water, or water mixed with alcohol, or in form of *powder*, mixed with a small quantity of sugar of milk, or yet again in form of *globules* impregnated with the alcoholic attenuation of the medicine.

8. How simple soever may be the preparation of homœopathic remedies, as to its principle, it nevertheless exacts much precaution and very particular care, if we would be sure to have medicines as active and as sure as possible in their effects. To this end also homœopathy has prescriptions and positive rules, which it is important to know before all, in order to follow them with exactitude, and to prevent thus the faults, which, diminutive as they may appear in themselves, are, nevertheless, very serious in practice. In the following chapters we shall pass in review all these rules and prescriptions in treating in succession 1. Of *vehicles* which serve for the preparation of medicines. 2. Of the *preparations of medicines in their primitive state*. 3. Of *attenuations*. 4. *Of the dispensation and preservation of homœopathic medicines*. These four chapters containing all that has reference to the general pharmacopœia: we shall occupy ourselves in the second part of this work with the *special* pharmacopœia, that is to say, with the rules to be observed in the preparation of each medicine in particular, and with the

description of primitive substances which homœopathy has introduced into its pharmacy.

CHAPTER I.

OF VEHICLES WHICH SERVE FOR THE PREPARATION OF HOMŒOPATHIC MEDICINES.

9. The vehicles which homœopathy uses for the preparation of its medicines, are in all of the number of four, viz: 1. *Alcohol, or spirit of wine.* 2. *Sugar of milk.* 3. *Globules* composed of sugar and starch. 4. *Pure water.* Some physicians have wished to add a fifth to the above, viz: *ether*, and we shall see below (28) to what destination this liquid is suitable. As to the four vehicles which we have just cited, homœopathy has thus far used them for all its preparations; and it is important to obtain them as pure as possible, in order to be sure to obtain preparations, in every respect, identical with those with which Hahnemann and his disciples have made their pure and clinical observations. This purity is not, however, always the distinctive quality of the objects which we find in commerce or that nature furnishes, and that is the reason why it is almost indispensable that homœopathy should know how to prepare herself vehicles, or at least to render them proper for the use she makes of them. We shall endeavour to give in this chapter the instructions necessary to this end.

10. Alcohol (*spiritus vini, spiritus vini alcoholisatus*, spirits of wine, alcoholized spirits of wine) is never found in nature—it is always the product of art—but it is formed every time that sugar is found in contact with a fermentable matter in water, and at a suitable temperature; that is to say, that it is developed in the course of fermentation, to which has been given, after this phenomenon, the name of *spirituous* or *alcoholic*. As all liquors which have undergone

the spirituous fermentation contain alcohol, and as those which abound in the saccharine material, are by that susceptible of affording it, it results that we may obtain it from a great number of vegetable substances, such as wine, beer, cider, malt, grape dregs, sugar-cane juice, germinating cerealia, pounded cherries, molasses, juice of carrots or beets, potatoes, honey, &c. The Tartars extract it even from the milk of their mares.

11. From whatever substance we obtain it, alcohol is identical—but we must always have recourse to means more or less complicated to obtain it pure. In every case it contains a more or less large quantity of water, and very often it is mixed either with acetic acid, or a small proportion of prussic acid or empyreumatic oil, &c., according to the substances from which it has been extracted. The alcohol which seems to be the best for homœopathic preparations is that obtained from the *dregs of grapes*, (marc de raisin*) without the addition of other substances, or else the *alcohol of rye* or *wheat*. The least suitable kinds are such as come from the laboratories of chemists or pharmaceutists, and which, for the most part, are drawn from the residue of some chemical preparation, such as the resin of jalap, &c. Alcohol extracted from potatoes is not more suitable for homœopathic preparations, since it contains a large quantity of empyreumatic oil, of which even the chemical proceedings, which consist in clearing it by the chloride of lime and powder of charcoal, do not entirely purify it. This oil is often found even in the alcohol from rye or wheat; but in this case it is sufficient to mingle this spirit with a suitable quantity of pure olive oil, and to shake it from time to time for several days; in this way the empyreumatic oil combines with the olive oil and swims on the alcohol, whence it may easily be taken.

12. Alcohol *pure* and perfectly anhydrous, is a colourless liquid, of a remarkable fluidity, of a sweet and penetrating odour, of a hot and burning flavour, and whilst it is rubbed between the hands, it should not lather nor emit any foreign odour. Its specific weight is much less than that of water, in which it dissolves perfectly and in all proportions, with disengagement of heat. Exposed to the air, it evaporates in part, and the part which remains loses its power in becoming saturated with the humidity of the atmosphere, of which it

* This is the refuse of the grape, after the juice has been pressed out, in the process of making wine.

is exceedingly greedy. At the approach of a candle, or by the effect of the electric spark, alcohol burns rapidly, with a flame white at the centre and blue at the edges, and leaves no residue. Put in contact with other substances, it dissolves a great many, such among others, as phosphorus and sulphur (both in small quantities), the fixed alkalies, balsams, resins, camphor, sugar, volatile oils, extractive matter, &c. Acids have a marked action on it; some dissolve in it simply, whilst others are transformed into *ether*.

13. Alcohol, in the state of complete purity, has a specific gravity of 0.791. It then contains not a trace of water, and marks by the *alcoholmeter* 100 degrees of force. But it is never employed at this stage of concentration; that which commerce presents, as well as that which we find in medicine, is always more or less weakened. According to the proportions with which water is mixed with it, we may generally distinguish *four* kinds, viz. 1st. Spirits of wine of *commerce*, the weakest quality, having a specific gravity of but 0.910 to 0.920. 2d. *Rectified* spirits of wine, the quality which is obtained by mingling 7 parts of water with 17 parts of the *best rectified* spirits of wine (see 3d); the specific gravity of this spirit is from 0.890 to 0.900, and its degree of concentration 60°. 3d. The *best rectified* spirits of wine, superior quality, the specific gravity of which is from 0.830 to 0.840, and its degree of concentration 85°. 4th. *Alcoholized* spirits of wine, or *absolute alcohol*, the most concentrated quality, having a specific gravity of 0.810 to 0.820, and containing from 96° to 100° of alcohol. For the preparation of the *mother tinctures* of homœopathy, the most suitable quality is the *absolute alcohol* of 95°; for the *attenuations*, we may, in the majority of cases, be content with a spirit of wine of 60 to 70 degrees.

14. In order to obtain an alcohol as anhydrous as possible, recourse has been had to various chemical measures, which succeed well enough, as regards the concentration, but the majority of these measures (lime, acetate of lime, sulphate of soda, alum, &c.) constantly produce a more or less powerful alteration in this liquid. Even chloride of lime is not exempt of this fault, which may easily be recognised, in burning rectified alcohol by this means, after having added to it nitrate of silver, and afterwards examining the residue. This is the reason why the homœopathist should never make use of alcohol rectified in these chemical ways, but endeavour to

obtain the desired quality by more innocent proceedings. That which appears to be the most suitable, consists in obtaining the concentration by simple evaporation. For a long time it has been remarked, that alcohol preserved in vessels closed with prepared bladder acquires strength, whilst it loses strength if closed by caoutchouc, insomuch that to concentrate it, it is only necessary to put it in beef or pig bladders and suspend them in a warm and dry place. To this effect, after having carefully cleansed the bladder, we paint it with a thin coat of fish-glue; then we fill it with the alcohol we wish to concentrate and suspend it, well closed, in a perfectly dry place and at a temperature of 20° to 25° R. The drier the air that surrounds the bladder, the more prompt is the evaporation of the water; and in leaving the bladder in proper conditions until we perceive the odour of alcohol, we may be sure of obtaining a quality as anhydrous as possible.

15. The most simple and the most sure method of obtaining an alcohol as concentrated and as pure as homœopathy wants, would then be, to take the first quality brandies and to concentrate them after the method indicated above. Alcohol obtained in this way is generally in a state of concentration of 95° to 96°, and thus is perfectly suitable for the preparation of alcoholic extracts; only, before employing it, it should be once again rectified by a new distillation. For this, we should be careful to use only glass apparatus, since copper or tin vessels often give out to the product of distillation some of their material, an adulteration, which is the more to be guarded against, as, often, chemical means are not capable of revealing it, though it should be strong enough to alter the effects of medicines, which might be prepared with a product of that kind.

16. Respecting the brandies from which we might wish to obtain alcohol, we have said above that the best were those obtained from the dregs of grapes or else from rye. But in taking these liquors such as they are found in commerce, we should always be well assured that they are pure. Often we find in them lead, which we may detect by treating them with the liver of sulphur, which causes a brownish or blackish precipitate. Should they contain copper, liquid ammonia produces a blue colour. The adulteration of brandies by alum may be discovered by the addition of a solution of potash, and the mineral sulphates by acetate of barytes. In fine, to be sure that the alcohol we use is really made of the

wished for substance, we mingle 30 parts of it with 0.15 parts of liquid caustic potash, and beating this mixture with spirit of wine, we permit it to evaporate until there remains but 4 parts. We take this residue, to which we add 4 parts of weak sulphuric acid, in a well stopped small flagon, taking care to shake the mixture; in unstopping afterwards the flagon, we will perceive a perfect odour of the substance of which the brandy has been made.

2. *Sugar of Milk.*

17. Sugar of milk, *saccharum lactis*, is a salt of a sweet taste, slightly sugary; it forms masses moderately thick, hard, crystalline, semi-transparent, colourless and inodorous. By its properties, both physical and chemical, this substance, which is exclusively proper to the milk of different animals, seems to be intermediate between sugar and gum. Sufficiently purified, sugar of milk contains no azote; it dissolves in 12 times its weight of cold water and 4 times its weight of boiling water. Alcohol dissolves it but in a very small proportion, and ether not at all; it does not alter by the air, is not susceptible of undergoing the vinous fermentation, melts, puffs up, and is transformed into a kind of gummy matter by the action of fire, decomposes the acetate of copper the same as common sugar; in fine, treated with nitric acid, it forms mucic acid, and by sulphuric acid or muriatic acid diluted, the sugar of grapes. Its proportion, as that of the other constituent principles of milk, varies in the different kinds of mammiferæ. In general it abounds more in the milk of the ass than in that of the cow, or mare, or goat, &c. According to Berzelius, one thousand parts of skimmed milk give 35 and the same quantity of cream gives 44 parts of sugar of milk mingled with saline matters.

18. It is in the mountains of Switzerland that the sugar of milk is prepared which we find in commerce. It is prepared from the evaporation of the whey, which they obtain in such large quantities in the preparation of cheese. It presents many varieties, according to its degree of purity. The crystalline sugar in grape form is considered the most pure; the other kinds always contain more or less animal matter. We often also find in commerce, under the name of sac. lac. inspissatum, the whey of milk solidified and dried; but this is a kind that in no ways is proper for homœopathic prepara-

tions. The sugar of milk, which we find at the druggists, is, in the majority of cases, more or less altered by mortars of copper or iron in which it has been pulverized, and still more often impregnated with exhalations of a quantity of aromatic substances, in the midst of which it is preserved. Hence the necessity of the homœopathic physician to prepare it himself, every time that he has it in his power, or at least to purify it by a new crystallization, if he is obliged to provide himself with it from the druggist. This, however, is not without difficulty, since the sugar of milk does not crystallize, in watery solution, but very slowly, and always in an incomplete manner. It is only by treating it with equal parts of alcohol and water, that we can succeed well; the operation, it is true, becomes more costly, but considering the advantages which this procedure offers, we think that the cost is no reason for its rejection.

19. To purify the sugar of milk in this way, we dissolve about two and a half pounds of the best quality in ten pounds of rain water or distilled water in a boiling state, then filter the solution through filtering paper, in a vessel of porcelain or glass, and mix it with four kilogrammes of absolute alcohol; after which place the vessel containing this mixture in a dry place, and leave it perfectly still. The sugar of milk being insoluble in absolute alcohol, and this being very attractive of water, drawing away a large quantity, the crystallization advances pretty rapidly, and often, at the end of three or four days, a crust of white and brilliant crystals may be obtained, of the weight nearly of the sugar of milk that was dissolved in the water. When this crust is formed, it is taken away, washed with distilled water, to which has been added a little alcohol, and then dried on blotting paper. That done, we may consider the sugar as altogether suitable for all the homœopathic preparations, even the most delicate—it is completely colourless and inodorous—tested by the most active reagents it shows not a trace of foreign salts.

20. Notwithstanding the process we have described above, it would be of little avail, were the sugar of milk not of a good quality in the first instance. In order to be sure of that, it should be separated from all fatty substances and other foreign matters which milk contains, which is recognisable by its perfectly white colour, by its due degree of resistance to the atmospheric air and its odour and pure and natural taste. The adulteration of sugar of milk with common sugar

may be known by its sugary taste—with alum, by the aid of acetate of lead or oxydulated nitrate of mercury. To examine sugar of milk that has been boiled in copper vessels, we dissolve a certain quantity in water and pour on it some caustic ammonia, which colours it blue, should it contain any of that metal. Nitrate of silver detects the presence of kitchen salt, and acetate of lead, that of sulphuric acid. When prepared from sour whey, it reddens the tincture of tourne sol.

21. To reduce the crystallized sugar of milk to powder, we first break the crust in the direction of the crystals, upon a sufficiently thick piece of wood with a wooden hammer and a strong knife—then we put the pieces in a mortar of porcelain, when we break and triturate them until the powder becomes sufficiently fine for use. That done, we pass the powder through a sieve of crape which we have fitted above and below with parchment. The finest part, after being sifted, is found below the sieve, whilst the grosser part above should be triturated again. To preserve sugar of milk, it should be placed in a dry place, in order to keep it from the moisture of the air and prevent it from spoiling.

3. *The Sugar Globules.*

22. The sugar globules (*globuli saccharini*) are small *nonpareilles* destined to be saturated with homœopathic medicines, in order to be able to dispense these last with more facility. They are generally found at the confectioners, who prepare them from sugar and starch; but as the sugar of the cane or the beet, which enters into this preparation, is not pure enough for the purpose indicated, it is better to have globules made expressly from sugar of milk, or else with the ordinary purified sugar. As to the size of these globules, they should not be too large, so that we may be able to dispense the smallest doses. Hahnemann proposed to give them the size of a poppy seed, so that about 40 of them would weigh about one and a half grains, (one centigramme.) This form has been adopted by the majority of homœopaths—some, however, use them of the size of a millet seed.

23. To charge these globules with the active principles of the medicine, and to prepare them so that in a large quantity they may not deteriorate, we imbibe them first with those alcoholic attenuations which we desire—then, after being well assured that all have been well impregnated, we dry

them and put them in a well stopped bottle. The complete desiccation of the globules before bottling them, is absolutely indispensable, since without that precaution, they fall into powder in a short time, and afterwards lose, in becoming decomposed, their medicinal virtue. This is the reason why, after imbibition in a suitable bottle, it is well to turn them out on paper with raised edges, where they may be agitated until they do not adhere one to the other. Should we wish afterwards to put them into the same bottle in which we have imbibed them, we should take care to dry it also, before making use of it, or to empty it afresh and dry the globules until they do not adhere to the bottle. All the globules so imbibed have a dry and smooth hue, whilst in their natural state they are white and brilliant.

4. *Water.*

24. Among all the vehicles there is not one that is more free from medicinal virtue, properly so called, than pure water; but, on the other hand, nothing is more rare than to find in nature this fluid in a perfectly pure condition. Under whatever form water presents itself, it is more or less charged with foreign matters, such as gas, salts, earths, &c. The purest quality of water is rain water, which, as well as distilled water, has neither odour, nor taste, nor colour; besides atmospheric air, which this water contains, there is but a small portion of fixed matters,—only after a storm, we find, occasionally, a trace of nitric acid combined with ammonia. The water of springs and wells constantly contain many kinds of neutral salts, earths, and muriatic compounds. As to the waters of rivers, lakes, and ponds, in inhabited countries, it is far from the conditions of pure water to merit attention here.

25. Homœopathy uses water for three different purposes, viz: 1. for the chemical operations, which require the purification of many primitive substances; 2. for the preparation of some of the attenuations; and 3. for the administration of medicines in the form of watery solution. For the last of these uses, we may well enough make use of river or spring water well filtered; for the chemical operations, rain water procured during a calm, answers in all cases; but for the preparation of the attenuations, we must have the purest water we can possibly obtain. For this, distilled water, which is

found in the pharmacies, is not suitable; for even if it has not been distilled in copper or other metallic vessels, it is always to be feared that it is impregnated with foreign matters, derived from substances, which, perhaps, but a short time previously had been distilled in the same apparatus, and of which the ordinary care employed in cleansing them, is far from discharging the whole.

26. To obtain a perfectly pure water, the homœopath must himself undertake the distillation in vessels of porcelain or glass, as indicated under the head of alcohol. The most suitable water to distil is rain water, above all, if we take care, as we have above remarked, not to procure that which falls during a storm, or when the sun shines. We must not, even in an ordinary rain, gather the first rain that falls, since this commonly contains the impurities suspended in the air; it is only after rain has fallen four or six hours that we are able to gather it in its purest possible condition. Still this water contains a certain quantity of carbonic acid, and hence, before submitting it to distillation, we will do well to boil it in a porcelain vase and let it cool. Respecting the distillation itself, we must be cautious gradually to augment the fire under the apparatus, and to preserve, by wet cloths, the neck of the retort at a moderate temperature, so that the vapour, in passing, may not dissolve from the sides of the vessel even a trace of silex or alkali. The first distillation should be rejected, and when the liquid in the retort is diminished two-thirds, we must cease. A good distilled water should leave no residue on evaporation; it should be perfectly limpid, insipid and inodorous, and neither precipitate by muriate of barytes, nor nitrate of silver, nor hydrosulphuric acid, nor the hydrosulphates. To preserve it, it should be put into bottles or new jars of yellow glass, that we have been careful to cleanse at first with a part of the same water, and which we place afterwards in a place as cool as possible.

5. *Ether.*

27. *Sulphuric* ether or ether par excellence (*æther sulphuricus, spiritus sulphurico-ethereus*) is a light, volatile, odorous and inflammable liquid. Like the other *hydratic* ethers, as the *phosphoric, arsenic* ethers, &c., it is composed of two volumes of bicarbonated hydrogen gas and one volume of vapour of water, so that it may be considered

either as alcohol deprived of a certain proportion of the elements of water, or as a hydrate of bicarbonated hydrogen. Recently prepared, it is neither alkaline, nor acid, and when burnt, it shows no trace of sulphuric acid, an evident proof that the sulphur enters for nothing into its composition. It unites with difficulty with water, which requires ten times its weight to dissolve it, but with alcohol and all the essential oils it unites in all proportions. The fixed oils also, the strong acids, balsams, several kinds of resins, phosphorus, sulphur, bromine, and many hydrochloric salts, are perfectly soluble in ether.

28. In homœopathy, we as yet are not acquainted with any etherial preparation, except phosphorus, which some have proposed to substitute for the alcoholic preparation of this substance. This substitution of etherial tinctures for alcoholic tinctures, not only for phosphorus, but also for many other substances, appears to us to be suitable in a great many cases, and we should not hesitate in the least to advise it to all the homœopathic physicians and pharmaceutists, were we well assured that the medicines would not undergo any modification in being indifferently treated by the one or the other of these vehicles. The knowledge of the chemical constituents, of which ether is composed, is not sufficient for us to conclude on its pathogenetic effects, and so long as this doubt is not settled by pure experiments, we think that all those who wish to be guided by the observations contained in the homœopathic materia medica, will do well to procure such preparations as have been employed by the authors of these observations. From this, however, it does not follow, that we should not prepare any etherial tincture, and we are ourselves far from wishing to interdict it here, but we only insist on the necessity not to confound them with those of alcohol, and to note at least on the label, the vehicle with the aid of which they have been prepared.

29. Ether, such as it is found in our shops, under the name of rectified ether, is ordinarily pure enough; it only sometimes contains a little alcohol, of which, however, it ought to be freed. To do this, we shake it a short time with double its volume of water, and when it is separated from it, we pour it on quick lime, with which it should be shaken at intervals for some days. In afterwards distilling this mixture, until there remains in the retort about two-thirds, the third which has passed into the recipient is perfectly pure

ether. Often, however, we find it adulterated with a quantity of sulphuric acid or other acids. The adulteration with water is known by the watery residuum evident, whilst at a mean temperature we expose a small portion of ether to evaporation. The presence of sulphuric acid betrays itself by its disagreeable odour, and that of other acids by its reddening tournesol. Finally, to preserve ether free from all deterioration, it should be put into little bottles, the mouths of which terminate in points, so that they may be hermetically sealed by the flame of a lamp. When ether has been deteriorated by the action of the air or the light, it is less volatile, of an acrid and burning taste, and miscible with water in all proportions.

CHAPTER II.

OF THE PREPARATION OF HOMŒOPATHIC MEDICINES IN THEIR PRIMITIVE STATE.

1. *General Observations and Rules.*

30. In order to obtain good homœopathic preparations, it is necessary, first of all, to procure the primitive substances of the best possible quality, and in the state most suitable for their destination. All the substances, which are furnished us by the animal and vegetable kingdoms, always lose more or less of their power in drying, and this is the reason why every homœopathic physician and pharmaceutist should endeavour to procure them himself, as much as possible, in the fresh state, and immediately to submit them for preparation. As to the substances which are only found in far distant lands, and which, in consequence, we can only obtain in the

tincture, prepared on the spot where they grow, or else the substance itself in a dry state, it is better to accept this last, in this state, than to trust to a preparation, the purity of which it is impossible to be sure. The cunning of our age has carried to such an extent the falsification of drugs, that it is impossible, with confidence, to make use, for homœopathic preparations, of the products of commerce, and among them, the tinctures are those which are the worst, and consequently, the least proper. As to the substances, which are generally sold in powder, we need equal precaution; above all should they be clear, as amber, castor, &c. Should it be impossible to procure them in their natural state, we should never accept them, unless we are perfectly assured of their purity. The same may be said of all the chemical products which are found in commerce; there is not a single one, which homœopathy can make use of, without a previous careful examination of its quality.

31. A point, not less important than the good quality of substances, is the exact choice of the particular kind, which homœopathy makes use of, and this is a point upon which we believe ourselves bound to insist so much the more, since not only some pharmaceutists, but also homœopathic physicians, have often thought to introduce a real advantage, in substituting, for substances used in homœopathy, others, which appeared to them either more energetic or more pure in their chemical qualities. However great these advantages may be in a scientific view, it is not the less certain, that the least essential change introduced into the preparation of a medicine may cause the most disastrous consequences to the safety of practice. What is most important to the practitioner is, not that the preparation should be more or less scientific, but that it should be similar with that which has been employed in the experiments, and the more the conformity in this point of view, so much the more the preparation will be perfect to the end it ought to fulfil. Thus, to obtain the *calcarea* or subcarbonate of lime, for example, such as is employed in homœopathy, it is absolutely necessary to prepare the oyster shell just as Hahnemann prescribed, though such preparation is far from containing the pure subcarbonate of lime. It is thus also that cinchona, opium, nux vomica, &c., such as are used to prepare the tinctures of the same names, can never be replaced by the quinine, the morphine, the strychnine, &c., without inconvenience, notwith-

standing these last substances are reputed to contain the active principles of the first in a perfectly pure state.

32. It is absolutely the same as to the measures adopted by homœopathy in the pharmaceutical preparations of its medicines. Here, as in the gathering and chemical preparation of substances, the strictest observation of prescribed rules is binding. All the substances which homœopathy transforms into *tinctures*, should be prepared alone with alcohol, and those which are neither soluble in this fluid nor in water, by the simple trituration with sugar of milk. The vehicles, such as alcohol, sugar of milk, water, &c., ought to be perfectly pure and good. At the same time, the proportions indicated for the mixtures, as well as the manipulations prescribed for the solution and division of substances, ought to be observed with the utmost possible exactitude. Often, it is true, these indications and prescriptions are of a nature to leave a certain latitude in their execution, according to the use we wish to make of the medicines, or the degree of energy which we propose to give to them; but even in this last case, the principles which have dictated the rules ought always to serve as guides in their application; and, in every case, where the indications are positive, homœopathic physicians and pharmaceutists have no business, under any pretext whatsoever, arbitrarily to depart from them.

33. In addition to the precision to be observed in the process of the preparation, it is also necessary to prevent, with the greatest care, any foreign influence, so that the virtues of the medicines be not changed, and the action thus rendered uncertain. For this it is requisite, in the first place, to make them in a place where the temperature is not above that of houses in general, and where the substances are not exposed to the direct rays of the sun. At the same time, the atmosphere in which we work should be pure and exempt from every odour or vapour, but, above all, of every medicinal emanation, such as are generally found in the pharmacies in ordinary; for all these exhalations, placed in contact with homœopathic preparations, are liable to change their virtues. The same may be said respecting vessels or other instruments, which have been used for the preparation of substances very odorous or susceptible of adhering tenaciously, as musk, essences, arsenic, corrosive sublimate, &c. We should never make use of such vessels, without having previously cleansed them with the most perfect care. As to small bottles and

corks, which have already been in use, they should never be employed but for the same substance, no more than the cloth which has been used for filtering or expressing the juice of a plant; for, notwithstanding all the endeavours we may use to clean them, we can never be sure that we have entirely purged them of all particles that may adhere to them.

34. Homœopathy exacts a much greater cleanliness than is ordinarily given to vessels of pharmacy, notwithstanding the care bestowed on it. Even the washing in large quantities of water, as in rivers, which has been recommended, are far from fulfilling the conditions. No matter how we look on it, a vessel, for example, which has served for the trituration of substances such as sulphur, musk, asafœtida, &c., constantly preserves its odour, even after having been washed and dried several times. As to the cleansing with certain chemical articles, such as acids, chlorine, lime, potash, &c., it cannot be tolerated in any case, since these substances themselves, whilst they have been in a vessel, need to be carefully cleaned out. Some have still imagined to clean the vessels with spirits of wine, but even this is a great error, for either the spirits of wine dissolves the substance we wish to get rid of, or it does not dissolve it; in this last case, it will clean out nothing, and, in the first, it will form, with the rest of the substance, a medical preparation, which, though weak, will always be stronger than one of the last dilutions, and no homœopath in effect, will look upon these preparations as suitable for the end proposed. The best way to obtain the perfect purity of vessels is, at first to clean them with boiling water several times, and then to expose them to the continual action of a strong heat, as for example of an oven, or else to burn, several times, in them absolute alcohol of the greatest purity. As to the stones, which have served for the pulverization of a metal, we should cleanse them before employing them again for the preparation of another substance, by scraping their surface with a piece of glass.

35. Finally, as to the vessels themselves, it is necessary, that all which are used in homœopathic preparations, should be of a substance not calculated to alter the effects of substances. Hence, all the mortars, pestles, and spatules, as well as the spoons and other instruments needful, should be of quartz, porphyry, glass, porcelain, or horn; those of metal, marble, serpentine, or wood are absolutely inadmissible. To close the bottles, stoppers of glass are always to be preferred

to those of cork, above all for the substances prepared with sugar of milk, to which the cork stoppers often give a disagreeable odour. For the corrosive substances, such as the acids, iodine, kreosote, &c., glass stoppers are indispensable. If, for the alcoholic preparations, we would, nevertheless, use stoppers of cork, we should procure them of the best quality, never used before. Before making use of them, we should temper them in pure water, after which we should wash them in spirits of wine, and let them dry at a moderate temperature. It has also been advised to boil them, in order to make them larger and softer; but prepared in this way, they become very susceptible of imbibing the humidity of the air and of constantly changing their size.

2. *Particular Rules for the Preparation of Plants in the fresh state.—Tinctures.*

36. That the plants may be entirely suitable to medical use, we should gather them a little before, or better still, during their flowering, and we should never take those which grow on a very humid spot and deprived of the sun and of the free air, unless the nature of the plant require those conditions. In the majority of cases, it is important not to gather the flowers and the leaves during a continued cold or damp time, since then the etherial oils, the corrosive resins and the alkaline matters, do not become developed, as they should, and it permits not the separation of albumen but in a very incomplete manner. The most favourable moment is, when, after several warm days, there has been a shower of rain; for it is then that the formation of the active principles and the free developement of hydrogen are the most favoured. In every case, where homœopathy indicates nothing particular, we constantly use the entire plant, flowers, body and root. Before submitting it to preparation, we wash it carefully with fresh water, in order to wash away the dust and other impurities adhering to it.

37. After this, to prepare the plant, in order to bring together all the properties of its different parts, we cut it up as small as possible, we put it into a mortar of stone and reduce it to a fine paste, which is put into a piece of suitable cloth, in order to submit it to the action of a press of wood expressly constructed, thus to obtain the juice of the plant. This juice is at once mixed intimately with an equal quantity of alcohol,

and put into well stopped bottles. At the end of 24 hours, we decant the clear liquor, which swims on the precipitate of fibrine and albumen, and we put it apart for medical use. Alcohol prevents fermentation from taking place in the vegetable juice, and the virtue of this is thus preserved completely, without alteration, and forever, provided we only take care to keep it from the rays of the sun and in well stopped bottles. The medicine thus obtained by expression, and by the mixture of the juice with an equal quantity of alcohol, is the *mother tincture* of the plant, obtained by expression (*per expressionem*).

38. The preparation of the mother tincture, *by expression*, is, however, only applicable to plants abounding in juice—for those plants containing much thick mucilage and albumen, it is better to make their preparations by *macerating* them in a double proportion of alcohol. To do this we should at first half dry them in exposing them in the shade, in an airy place, and at a slighly elevated temperature, after which we cut them as fine as possible and then add the necessary quantity of alcohol. As to those plants which have but an excessively small quantity of juice, such as the laurel rose, thuya, &c., we should begin by pounding them alone; then, after reducing them to a fine and moist paste, we imbibe this paste with the double of alcohol, so that the juice, thus mixed with this liquid, may be expressed more easily. The medicine obtained after this method, is the mother tincture by maceration (*per macerationem*).

39. In addition to these two measures for obtaining the mother tinctures, there is yet a third, which, though inferior to the two preceding, deserves, nevertheless, to be mentioned, as convenient in some particular cases. It is, above all, whilst the circumstances do not permit us to express the juice of the fresh plants, immediately after having gathered them; and that, fearing that their withering, no matter how little, may injure their virtues. Under these conditions we may remedy this inconvenience in *digesting* separately in alcohol each part of the plant. To do this we begin by sundering the root into four, and cutting it into little pieces—we do the same with the leaves; then after putting each of these two parts into a separate bottle of sufficient size, we pour upon them an equal quantity of alcohol. In thus digesting the separate parts during some time, and reuniting afterwards in one bottle the obtained products, we have a mother tincture

by digestion (*per digestionem*), which will not only be perfectly pure, but also sufficiently impregnated with the active principles to merit confidence. For the rest, in every case, unless absolutely obliged to have recourse to this proceeding, the preparation of the mother tinctures by expression and maceration is far preferable; but every time that we are obliged to hunt the plants which we want, in distant countries, where we cannot carry the apparatus necessary for expression, we should prefer preparing them at once, by digestion, to carrying them home withered and bereft of their active principles.

3. *Of the Preparation of Exotic Vegetable substances.*

40. All exotic vegetable substances used in homœopathy, such as plants, bark, grains, resins, wood, &c., should be selected in the crude state, and never when in powder. For, even should we fear no adulteration with other matters, the ordinary means employed in pulverizing them are not of a kind to prevent all adulteration possible. All vegetable substances, even when perfectly dried, still contain when entire and in the crude state, a certain amount of humidity, which becomes useless in the state of powder, and which, if not dissipated, deteriorates the powder in a short time.

If then the homœopath would be perfectly sure to have a powder not only pure but yet susceptible of preservation without any alteration, he must absolutely himself undertake the necessary preparation.

41. Hahnemann first taught the best way to reduce foreign substances to an unalterable powder, and free from all humidity. This way consists in spreading the powder on a flat surface of tin with raised borders, and to shake it till it no longer forms lumps, until all the particles equally and easily slip on each other, like fine sand. To succeed well, we must take care to keep the heater constantly full of water of an equable temperature, so as not to expose the powder to a too elevated heat, since all heat, too intense, destroys organic substances. In enclosing the powders thus obtained in bottles well stopped and sealed, and protecting them from the sun's rays and the light of day, we may preserve them a long time, without becoming mouldy or altering in any way. The only thing which is yet doubtful is, whether by this procedure, those substances of volatile principles do not lose their virtues

during the operation, and whether, in consequence, it would not be preferable to prepare of them an alcoholic tincture immediately after pulverization.

42. To prepare the tincture of dry substances, we begin by breaking them in a mortar of marble—then, after having reduced them to a fine powder, we add twenty parts of alcohol, in which we digest them six or eight days, after which we decant the clear liquor, in order to preserve it for practice. Those substances which are very susceptible of attracting the humidity of the air, should be deprived of it before pulverization, or else should be powdered in a warm mortar, and, if they are particularly hard and tenacious, they should be grated or filed. As to the proportion in which alcohol ought to be added, many physicians have proposed to make it 1 to 10, instead of 1 to 20—that is to say to pour but 10 parts of alcohol on the pulverized substance—but independent of the certainty there is in the proportion of 1 to 20, the vehicle will necessarily take up all the medicinal virtues, and the tinctures of many substances, as cinchona, opium, ratanhia, &c., seem to be in this proportion so fully saturated that it is very doubtful whether, in the proportion of 1 to 10, they would really acquire more energy.

43. Lately, Hahnemann has advised to make no more tinctures of dry vegetable substances, but to prepare them after the manner of solid mineral substances; that is to say, by triturating them with the necessary quantity of sugar of milk. It is evident that, for all the substances which we wish to employ, but at a certain degree of concentration, and to mingle with the vehicle, but in the proportion of 10 to 100, this procedure would have for the preservation of the preparations all the inconvenience that we have spoken of in the beginning of this article. Even in weighing the substance with the vehicle, but in the proportion of 1 to 100, the humidity it would communicate to the trituration would still be too sensible not to fear the alteration of the preparation, should it be put into stopt bottles. But the question differs when we wish to use only a preparation of a low attenuation, (6, 15, 30;) in this case, the proposed plan would do, in effect, not only for *dry* vegetable substances, but also for all the *fresh* plants which contain too small a quantity of juice to afford tinctures by *expression;* for not wanting to preserve of the preparation of these low attenuations, above the *third* trituration, this would always be sufficiently exempt,

for example, from vegetable humidity, to leave nothing to desire, and the triturations being, in general, less subject to alteration than the tinctures, this proceeding would unite the double advantage of preserving all the active principles of the medicines, and of rendering their preparations as unalterable as possible.

4. *Of the Preparation of Mineral and Animal substances—Trituration.*

44. All the non-vegetable substances made use of in homœopathy, such as animal substances, mineral bodies, and chemical products, are generally prepared by trituration with sugar of milk, whether, in their natural state, they are liquid or solid, soluble or non-soluble in alcohol. Certain substances only, such as the acetate of copper, several acids, and all those of which the chemical qualities do not permit a mixture with sugar of milk, should be prepared in a particular way, which will be specially indicated under the head of each substance. As to the substances which are soluble in alcohol, we can equally well prepare the tinctures of them by solution in 20 parts of this liquid; but for the safe preservation of the preparations, and the developement of the medicinal virtues, the trituration with sugar of milk merits by far the preference. Even for those recent animal substances which are commonly prepared by digestion in 20 parts of alcohol, after reduction to a fine paste, the trituration is infinitely better.

45. To submit all these substances to trituration, we may, in the majority of cases, take them such as they are found in their pure state; only as to the metals, if we cannot procure them in very thin leaves, like gold, silver, tin, &c., it is necessary to reduce them to powder. To effect this we may treat them in two ways, the first of which consists in rubbing under water a small fragment of the regulus against a good hone, until we have obtained a sufficient quantity of metallic powder. The majority of homœopaths employ this measure, but should the stone we use be too soft, the powder, obtained in this manner, is rarely pure, and, in such a case, it is better to obtain it by the decomposition of the solutions of these metals in acids. In plunging in such solution a small polished rod of a metal whose affinity with oxygen is stronger than that of the metal in solution, this last is immediately precipi-

tated on the rod, and adheres to it in the form of powder. To obtain, then, this powder perfectly pure, we wash it frequently with distilled water, until it does not show a trace of acid. The reduction to powder of metals by the file, is a proceeding which is suitable to iron alone, since, by the observation of Wells, it is proved that the metal, thus obtained, easily acquires the virtues of that against which it has been rubbed.

46. As the trituration of substances with sugar of milk has chiefly in view the developement of all the active principles, by the division of molecules, it is essential that the proportion in which the medicine is mixed with the vehicle be not too great, and that the quantity that is submitted to trituration at one time, be small enough to be well manipulated. To effect this, Hahnemann has proposed never to make a trituration which contains more than 5 grammes (100 grains)* of sugar of milk, and to mingle the medicine in the proportion only of 1 to 100, that is to say, of the weight of 5 centigrammes (1 grain) nearly, so that the trituration being made, each gramme of this contains but one centigramme of the primitive medicine. This proportion of 1 to 100 is, in general, that upon which all the homœopathic physicians, nearly, rely; but, as for many substances, the volume of 5 centigrammes of their weight is too small in proportion to that which the sugar of milk makes, and as it is essential that the whole should be impregnated with the medicine, many physicians have, lately, preferred making all the *first* triturations in the proportion of 10 to 100. In consequence, instead of taking but 5 centigrammes (1 grain) of the medicine, they take 50 (10 grains) to mix with 5 grammes (100 grains) of sugar of milk, so that each gramme of the trituration, when finished, contains 10 centigrammes of the medicine. It is easy to see that this proceeding merits in every case the preference, since not only it affords a greater surety for the exactitude of the mixture, but also, because afterwards, to establish the proportion indicated by Hahnemann, we have only to take 50 centigrammes (10 grains) of the obtained trituration, and triturate them anew with 5 other grammes (100 grains) of sugar of milk.

47. As to the operation of the trituration, Hahnemann recommends the following. After having weighed the ne-

* See Table of Weights at the commencement of the work.

cessary quantity of the medicine, and of the sugar of milk, we take about a third of this last and place it, with the entire quantity of the medicine, in a mortar of porcelain; we mingle these two portions with a spatula of bone or horn, and we triturate with sufficient force six minutes; we detach with the spatula the mass from the sides and bottom of the mortar and pestle, and mingle them anew, after which we continue the trituration for another six minutes. That done, we again detach the matter from the mortar and pestle and add the *second third* of the sugar of milk, which we mingle with the rest with the spatula and triturate afresh during six minutes; we detach, triturate and detach afresh as for the first third; finally we add the last third of the sugar of milk, which is mingled, triturated and detached in the same way and during the same space of time as with the two first. In thus triturating each third during twice six minutes, and counting about four minutes for the time taken up in detaching and remingling the powder, we shall occupy just one hour in the preparation of each trituration.

48. In the first article of this chapter we have already observed that, for the triturations, mortars of serpentine can in no way be admissible, and that the best are of porcelain. Wood and glass are not more suitable either—the first, on account of its porosity; the second, because the rubbing detaches from it particles, which contain sodium. As to those of porcelain, the unpolished ones are to be preferred, since the smoother the surface, the less true is the rubbing, and this is the reason why, if we can only obtain mortars of polished porcelain, we must unpolish them in working them previously with sand. The pestle should be of the same material as the mortar, and treated in the same way. To prevent, with the greatest certainty, all possible alteration of the preparations, either by particles of silex which the porcelain might afford, or by the remains which previous triturations might leave in the mortar, it has been proposed to coat this, as well as the pestle, with a thin covering of pure ichthyocolla, mingled with a little sugar of milk, and to renew this covering for each new preparation. We cannot decide on the absolute necessity of this method, but we think, nevertheless, that it merits, at all times, the serious attention of practitioners.

49. As to the form of mortars, it is easy to see that those with flat bottoms are no ways suitable, since, in such, the

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substance would tend to enter the corners, which would impede the trituration being made equally. The best form to give the interior of mortars is that of the butt end of an egg. At the same time, it should have a large enough capacity to allow the rubbing with the necessary force, and hindering the powder from dispersing; its sides should be level and without the least inequality, and its weight such as, during the process, it can easily be held in the left hand without fatigue. The pestle should be large enough at its base to fit exactly to the concave bottom of the mortar. In order to detach the triturated mass, which adheres to the pestle and mortar, Hahnemann advises us to use a spatula, but this operation is much better accomplished with a hard brush of a suitable form, made for the purpose. As to the other necessary instruments, such as the spatula, spoon, &c., we have already said that they should be of bone, or horn, or porcelain, and that those in metal are absolutely inadmissible, except the mortars of iron to break down certain substances of considerable hardness before preparing them for trituration.

CHAPTER III.

OF HOMŒOPATHIC ATTENUATIONS.

1. *On the Attenuations in general.*

50. In speaking of the nature and form of homœopathic medicines, we have already observed that, instead of correcting the too energetic effects of some substances by the addition of another medicinal substance, homœopathy seeks to mollify them by the preparation of a series of *attenuations*, in which the medicine is found mingled in the vehicle but in a very small proportion. In the commencement of his medi-

cal career, Hahnemann limited himself in these attenuations to 1 to 100; that is to say, in *mingling* a very small quantity of the concentrated substance to a quantity 100 times larger of a substance non-medicinal; but seeing that these preparations often acted too powerfully still, he soon went further and prepared a *second,* and then a *third* attenuation, in mingling, for the second the 100th part of the first, and for the third the 100th part of the second to 100 parts of the vehicle. This third attenuation, though only containing the medicine in the proportion of 1 to 100-3, or of 1 to 1,000,000, Hahnemann still found at times too active, which induced him to carry the attenuations yet further, and to go from attenuation to attenuation, so at last to find the one the most appropriate. It is thus that, latterly, he has carried the number of attenuations, for all the medicinal substances without distinction, up to 30, so that, in this last attenuation, the medicine is found mingled with the vehicle but in the proportion of 1 to 100-30 or of 1 to 1,000,000-10.

51. How absurd soever the first view of these infinitesimal attenuations may appear, it is not the less true that, even the 30th, far from having lost all efficacy, often shows itself too energetic; and Dr. Korsakow, of St. Petersburg, who has carried the attenuations as high as 1500, has declared the same fact as to the last preparation of his series. In effect, in examining attentively the degree of intensity with which the various homœopathic attenuations act, we may easily perceive that the diminution of their energy is in no way proportioned to the diminution of their matter. On the contrary, many substances, which, in their state of concentration, have little or no action on the body, as the lycopodium, vegetable charcoal, &c., often become very active at the second or third attenuation, so that we are almost inclined to believe, that the mode of preparation adopted by Hahnemann rather contributes to develope than to weaken the virtues of medicines, or, at any rate, to render them more apt to exercise, in the smallest doses, their influence on the organism. Hence Hahnemann has, for a long time, ceased to look upon these preparations as *dilutions,* in the true acceptation of this word; and if, at the present time, he wishes all the medicines to be carried to the 30th attenuation, it is only in the thought that, by this procedure, they can best develope all their active principles, and become more suitable to practice.

52. To explain the truly unheard of fact of the efficacy of his attenuations, Hahnemann has endeavoured to set down, as a principle, that, the more we destroy the material parts of a substance, so much the more we develope or loosen the dynamic force, or, in other words, the *spirit* of the medicine; and that, to augment the energy of preparations to an incredible extent, we have only to carry them from attenuation to attenuation, in submitting them at the same time to a great number of triturations and shakes. If this principle were conformable to experience, it would result that, from a substance, for example, of which one grain would be sufficient to cause death, the same dose of the 30th attenuation would produce the same effect in a much more certain manner, which, however, is not the fact. If we would even limit this principle to those substances which only exhibit their virtues by attenuation, it is still equally adverse to observation, that the 30th attenuation, for example, of these substances have an action *absolutely* more energetic than the 6th, 12th, 15th, &c. On the contrary, to judge from the experience of many homœopaths, the degrees of energy among the attenuations of a medicine are so small, that thus far a decision has not been formed with certainty, whether it is the first or the last attenuations which exhibit the strongest action. This is the reason why, in admitting the efficacy of the attenuations, many homœopaths have rejected the explanation given by Hahnemann, and have considered the procedure by which they acquire their efficacy as analogous to the infection by miasm. According to them, the active principle of the drug being set free by the destruction of the matter, it communicates itself to the vehicle, which by that becomes infected and as active as the drug itself.

53. As to the comparison with miasms, this last opinion is, without contradiction, that which merits the most attention; but the explanation which it gives is far from satisfying all demands, since, instead of explaining the difficulty, it refers it to another order of facts, which, though generally admitted, are not, however, themselves yet explained. Miasm, though being an imponderable body, is not the less for that a body—that is to say, matter, and amenable to the laws of matter—Now, every action of matter, whether mechanical or dynamical, is proportioned to the quantity of active atoms which a given volume presents; and every one knows, that not only a large stone weighs more than a small one, but also that a

magnet of considerable volume is capable of developing and of manifesting a much stronger action than another which is less voluminous. If, then, we would pretend that there is manifested somewhere the action of a body either ponderable or imponderable, we are absolutely obliged to admit also the presence of a certain quantity of atoms; and, what is still more certain, is, that as this quantity diminishes in a given volume, the action of it will also diminish in energy. Thus we see that, even should we prove that our attenuations, to be able to act, only need to be impregnated with imponderable particles, like miasms, we still shall have accomplished nothing in demonstrating that their energy shall not diminish in proportion to the loss of matter which they suffer, nor nothing either, in explaining how an attenuation, for example, which shall contain but the billionth part of the medicinal atoms of another, shall manifest an intensity not only equal, but often, also, superior to that of this last.

54. These facts are, however, such as we cite them; and, perhaps, we should not have found any thing astonishing, if, at the beginning, we had better reflected on the manner in which our medicines act in general, and on the changes which substances undergo by our mode of preparation. We ought to have noticed, that each medicinal dose contains a great number of atoms which are perfectly inactive, by the fact alone that they are shut up in the interior of molecules, and do not come into contact with our organs; and that, of consequence, every time that, by any means whatever, we come to divide these molecules into smaller corpuscules, and to augment thus their whole surface, the energy of the dose will so augment that the smallest part will become capable of exercising an influence, if not superior, at any rate equal to that of the entire dose in its primitive condition. It is thus that Dr. Doppler, of Prague, has the first explained the efficacy of our attenuations; and such is, according to him, the effect which the infinite division produces on the molecules, that if the molecules of a fine powder are, at the dose of 5 centigrammes, (1 grain,) in a condition to constitute, by the totality of their surface, a total superficies of 100 metres square; and if each trituration of 20 minutes only divided each molecule into 100 lesser corpuscules, the molecules of the 30th attenuation would be so divided that, at the dose of one drop only, they would occupy, by the totality of their

surfaces, a total superficies of many millions of decametres square.

55. If this calculation, which each one can easily verify, is just, there is nothing, in truth, more easy than to conceive, not only how the 30th attenuation may yet be able to exhibit efficacy, but also, how a single globule of this attenuation may still have virtue enough to render a tumbler of water almost as energetic as the pure drug. For, let us suppose that the total superficies of a drop of the 30th attenuation can cover, by the surfaces of its infinitely small molecules, even only four thousand decametres square, on imbibing with this drop 200 sugar globules, each globule will contain enough to cover a superficies of at least 200 metres square, and will act, in consequence, with a force not less than that which 10 centigrammes, (2 grains,) of a non-attenuated substance would exhibit, but which will be reduced to a powder fine enough for the molecules of each centigramme to cover a total superficies of 20 metres square. Now, if one globule of the 30th attenuation has such power, it is clear that, in dissolving it in a volume of 8 spoonfuls, (4 ounces, or 120 grammes,) of water, the preparation we shall obtain will in no instance be less efficacious than a mother tincture, which, in 30 grammes, (one ounce,) of liquid, will contain 5 centigrammes, (one grain,) of the preceding, and dissolved so that the molecules of this grain may cover a total superficies of 500 metres square. All these calculations are, it is true, not rigorously exact; but if there is error, it is rather on account of having placed the ciphers too low than too high; and if we suppose, which is more than probable, that each trituration of 20 minutes changes each molecule of the primitive substance into more than two or three smaller corpuscules, the result will be still more astonishing.

56. Arguments have been raised against homœopathic preparations, that if the influence exercised by trituration and succussion were really such as the homœopaths pretend, the energy of the attenuations ought not only to increase with the number, but also increase in a prodigious manner, since more powerful means are employed in each attenuation, to effect the division of the molecules. This is undoubtedly true in principle, and we should each day prove this fact in practice, were it possible always to make use of the increase in surface, which a given volume has gained in this manner. But the total surface, which, after the usual triturations and

successions, a single globule of the 20th attenuation would afford, is really so vast, *that if time be not allowed it*, it will never find sufficient space in the organs to develope itself, so that all its infinity of molecules can enter into action; and it is thus that all that we could add to this quantity of molecules would only increase the number of those which remain inactive. This is the explanation, also, why 2, 3, or 4 globules, and even a whole drop of an attenuation often appears to produce no more effect than a single spoonful of a solution of a globule, in 8 spoonfuls of water; and if we seek the reason why these last attenuations are not distinguishable from the first by any other quality than that of a more prolonged action, it is still in the same way that we shall find the means to account for it.

57. There are, however, certain substances, whose energy really augments in a sensible manner, as the attenuations advance, and which, often altogether inert in their natural condition, become by this method of preparation, not less active than the most energetic medicines. Such are those substances which, even in the state of the finest powder, have probably their truly active molecules still shut up in a species of envelope, which prevents them from being put into immediate contact with the organs, and which the ordinary means of pulverization and of solution are incapable of destroying. For in rubbing, as ordinarily done, the substances by themselves, the molecules of a powder, already very fine, escape the force which tends to render them finer yet, and it is only in triturating them with another substance, against the corpuscules of which they can be rubbed, that we can succeed in accomplishing an infinite division. But still we shall only arrive at it in a very incomplete way, if, at the same time, we do not take care to spread out as much as possible the newly obtained particles, in proportion as the trituration increases the number, since the more the molecules remain agglomerated one with the other, so much the less will it be easy to divide the whole. This is the reason why many substances frequently do not seem to develope all their virtue till after three successive triturations, made so that each new trituration shall contain the 100th part of the preceding.

58. What we have just said of the trituration of substances in powders, equally applies, in the same way, to the attenuation of liquid substances, and to the succussion of soluble substances with a liquid vehicle. For, though the molecules of

liquids, on account of their globular nature, are absolutely incapable of being divided by any kind of ordinary rubbing, being triturated with a vehicle in form of powder, or being treated by succussion with a liquid vehicle, they undergo, as well as solid substances, infinite division. The same holds good for all substances ordinarily insoluble in water or alcohol, whilst, by sufficient triturations, their molecules are sufficiently divided to be held in suspension between the molecules of these liquids—then they become abstracted not only from the law which held them in a state of aggregation, but being shaken with the vehicle, which has dissolved them, they also receive all the other ulterior divisions of which liquid substances are susceptible. It is thus that after the third trituration the attenuation even of metals may be continued, without the least inconvenience, by the succussion of these substances with the liquid vehicles; and it is thus also that all the attenuations made in this way, tend, as well as the triturations, to increase the resources of our doses, so that if we submit to new succussions the solution made with a single globule of the 30th in 8 ounces of water, we may render this solution such that each drop of it shall form a dose much stronger than that of the globule which was dissolved in it.

59. If then there is a method more than any other capable of furnishing energetic medicines, it is, without contradiction, the mode of preparation adopted by homœopathy. As to the substances, which, in their natural state, have already their virtues suitably developed, this proceeding will not, it is true, augment the energy of the usual doses of the school, since, as we have above said, there is scarcely a means of making use of all the resources which these doses shall gain—but the advantage we shall derive from them will always be that of finding the attenuations of these substances, at the dose of a single globule, not only equally as efficacious as the entire dose of which they have been made, but also more appropriate in exercising a longer and more continued action. The same may be said of those substances whose virtues are latent, when their virtues shall be fully developed—the attenuations made beyond this point cannot act with any more striking effect over the energy of usual doses—but the farther we shall carry them, the more we shall see that the smallest possible dose is still more than sufficient to produce all the effects that can be produced by medicines, given in the

strongest usual doses—that may even be carried to the point that, if by simple mixture and without any succussion, we dissolve a single globule of a sufficiently high attenuation in a volume of three or four glasses of water, and even more, each teaspoonful of this mixture would still be equal to produce all that could be obtained from an entire drop of the ordinary medicinal preparations.

60. From this we see that if we wish to obtain much from little (*multum per pauca*), it is indispensable to prepare the medicines after the prescribed method of homœopathy—whilst, if we wish to render the effects, at times already too violent of usual doses, more prompt and more violent still, this proceeding will be not only useless, but altogether contrary to the end we propose. For though the resources of doses augment by this method of preparation, it is, nevertheless, not the less ascertained, that many substances also lose by attenuation, their primitive energy, as for example, all poisons which, as all homœopaths well know, are much less to be feared in their attenuations than in their primitive state. This will even be the case in all substances, whose molecules, besides the property of being easily absorbed and spread in the organism, have yet that of undergoing a certain solution or division. In the attenuations they will still possess the first of these properties, but, as soon as art has divided them more than the organism can do, none of the subsequent attenuations can, at a given dose, be in a state to furnish to the absorbing faculty as many active elements as the substance in its primitive condition. Up to this point the energy of doses will even gradually diminish; whilst, this limit passed, their resources will augment in proportion as art shall operate, in the subsequent attenuations, the ulterior division of molecules, the same as that which takes place in other substances. This is what explains how a single method can at the same time diminish the energy of doses, and augment the resources, or else how is it possible that a like proceeding can endow a single globule of the 30th with more resources than have whole drops of the mother tinctures, without rendering, at the same time, the substances too energetic, still more deleterious?

61. All the theoretic explanations, which we have just given, would be altogether without value, if practice did not confirm all the facts which we have above mentioned. Many homœopaths, it is true, have supposed that they have observed that the last attenuations which they make use of, do

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not always produce effects conformable to those which they had the right to look for, if the theory, upon which this doctrine is based, were correct. But, according to our view, these exceptions are rather made to confirm the theory than to destroy it; above all, if we remember that these contradictory observations have been made, for the most part by individuals who did not themselves prepare their attenuations, or who, according to their way of observing, did not conform more or less exactly, for their preparation, to the rules indispensable to be observed. For what is certain is, that if we neglect to operate in each new attenuation, a new division of molecules, the first attenuations thus obtained, may still have resources enough; but as we advance in this way, the more they will become exhausted. If the division of molecules in the first triturations has been carried to a sufficiently high degree, it is even possible that, without any new division, we may continue the simple partition of doses up to the 30th, without this last failing resources; but the preparations thus obtained will not the less be pure *dilutions* and not *dynamizations*, as they would be, if, in each one, we had anew augmented the resources of the doses. In the following article we shall expose the rules and precautions to be observed, in order to prepare the attenuations, so that they shall all be true *dynamizations.*

2. *Of the Preparation of the Attenuations.*

62. We have already said, on many occasions, that the homœopathic attenuations are obtained, in general, in such a way that the first contains one grain (5 centigrammes),* or one drop of the medicine to attenuate, mingled with 100 grains (5 grammes) of sugar of milk, or 100 drops of alcohol; and that after sufficient triturations and succussions, the second is obtained in manipulating, in the same manner, the 100th part of the 1st with 100 new parts of vehicle; the 3rd, in submitting to the same process the 100th part of the second, and so on to the 20th. This way of making the attenuations, in the proportion of 1 to 100, is that of Hahnemann, and which is always understood, when we indicate an attenuation by its number. Latterly, however, it has been found more suitable to make the mixtures only in the proportion of 10 to

* See Table of Weights at the commencement of the work.

100, so that instead of mingling but *one* grain or *one* drop with 100 parts of vehicle, we mingle each time 10. This process has the advantage of giving more certitude that, in in each preparation the molecules of the medicine are well mingled with those of the vehicle, though, on the other hand, it permits less extension. But as we can easily repair this inconvenience, in preparing each time two attenuations, in the proportion of 10 to 100, instead of 1 to 100, we recommend this process to all the homœopathic physicians and pharmaceutists; in cautioning, however, these last, that every time that they shall make use of another proportion than that of 1 to 100, they shall take care to indicate it on the label of the preparations, in order that we may know in what proportion the number, which each attenuation bears, is made.

63. In general, we can lay it down as a principle, that the smaller the proportion in which the medicine is mingled with the vehicle, the more difficult will it be to obtain a perfectly intimate mixture, and to spread the molecules of the drug over all the points of the preparation; likewise, the larger the volume of each preparation, the less will it be easy to make the necessary division of the medicinal molecules. One drop of a medicine poured into a lake, will never make a homœopathic attenuation, though the proportion which this drop bears to the lake in question, is far from being a fraction so small as that which is found in the 30th attenuations. But what causes this attenuation, notwithstanding the infinitely small proportion in which it contains the drug, to have, nevertheless, all its virtues, is that it has been obtained by degrees, in preparing at first at the farthest but 100 grains, or 100 drops, of a vehicle with 1 or 10 of the drug, and in not taking of this preparation to prepare a second, except after having well impregnated it, in all its points, with the molecules of the drug. It is thus that we are successively enabled in effect, to spread out the number, always increasing, of infinitely small particles, so that at last, at the 30th, they are as much spread out through the whole preparation as in the first. This is the reason, also, why the attenuations obtained in the proportion of 10 to 100, are much more sure than those of 1 to 100; and it is also the reason why *we should never prepare any attenuation which contains more than* 100 *grains,* (5 *grammes,*) *or more than* 100 *drops of the vehicle.*

64. The attenuations of substances, which, from the first, have been prepared under the form of *tinctures*, are made of

alcohol from the first to the last. For this, if we wish to preserve all the attenuations, we prepare for each substance 30 small bottles, *quite new*, each of the capacity of 150 drops; we fill all these bottles with alcohol to two-thirds of their capacity, and mark, as well on the label as the cork, the name of the substance we are about to attenuate. This done, we take one of these bottles and pour into it, after the process of Hahnemann, *one* drop of the mother tincture, and give to it 100 or 200 sufficiently strong shakes, after which we mark on the bottle the cypher 1, to indicate that the preparation it contains is the *first* attenuation. Of this attenuation, we in like manner pour *one* drop into another of these bottles, containing about 100 drops of alcohol, and after having submitted it also to 1 or 200 shakes, we mark it with the cypher 2, to indicate that this one contains the *second* attenuation. In this manner we oontinue to prepare and to label to the 30th, in pouring each time one drop of the attenuation just obtained, into the bottle which will contain the following attenuation. The same is good, when we wish to prepare each attenuation in the proportion of 10 to 100; but instead of pouring but *one* drop each time, we must pour *ten*; but as, after this method, we want each time *two* attenuations to equal *one* in the proportion of 1 to 100, the same cyphers will not be suitable to indicate these two sorts of attenuations, but we may make them agree, in using, for the preparation of 10 to 100, *halves*, in such a way as to designate the *first* of this series by ½, the second by 1, the third by 1½, the fourth by 2, and so on to the 30th.

65. For the substances which, from the first, have been prepared by *trituration*, we prefer to obtain the *three* first by the same process. To effect this, we take one grain, (5 centigrammes,) of the *first preparation*, obtained by the trituration of one grain of the primitive substance with 100 grains, (5 grammes,) of sugar of milk, and which carries the name of the 1st *attenuation;* we mix this grain, (5 centigrammes,) with 100 other grains, (500 centigrammes,) of sugar of milk, and triturate this mixture as described in the article on the preparation of dry substances. This trituration made, we give to it the name of the 2nd *attenuation*, and we take of it one grain to mingle with 100 other grains of sugar of milk to obtain the 3rd attenuation. Of this trituration we then take one grain, which we dissolve in a bottle filled with 100 drops of water to two-thirds of its capacity,

and shake this mixture, as in the attenuations made with alcohol, to which we give the name of 4th *attenuation.* This 4th attenuation should be made with water, or at least with equal quantities of water and alcohol, because the sugar of milk does not dissolve in the least in pure alcohol, but all the following attenuations are then made with pure alcohol, the same as the tinctures. Should we wish to make the triturations, for the first as well as the subsequent ones, not in the proportion indicated by Hahnemann, but in that of 10 to 100, we shall be obliged to make *six* of them instead of *three,* and we cannot designate the *first* of this series but by the cipher ½, the second 1, the 3rd by 1½, and so on. The attenuation made with diluted alcohol should then bear the cipher 3½.

66. As we rarely preserve all the attenuations, and we seldom use in practice but the 1st, 3rd, 6th, 9th, 12th, 15th, 18th, 24th, 30th, it would be altogether useless to sacrifice, each time, more bottles than necessary, since if, for example, we wish not to preserve the 2nd attenuation, it will suffice, in order to obtain the 3rd, to pour out nearly to the last drop the bottle which contains the 2nd, to fill it afresh with 100 drops of alcohol, and to submit this mixture to the necessary number of shakes. It is thus that, should we wish to have but the 30th attenuation of a substance, we can make all the intermediate attenuations, in throwing away to nearly the last drop of the attenuation last obtained, and in filling this with 100 fresh drops of alcohol. In a series of attenuations of such a length, we can even, as regards those we throw away, make use of distilled water; but for the two last, that which we wish to preserve, and that which precedes it, it is most proper to use alcohol. The alcohol, which is proper for the preparation of the attenuations, should not be so concentrated as we would use for the preparation of the mother tinctures, but we must not either have it less than 60° or 70° centigrade.

67. There was a time when Hahnemann, for fear of giving too great a force to his preparations, advised to give each attenuation only one or two shakes, whilst, at present, he counsels the contrary; that is to say, to give each attenuation a considerable number of shakes, (2 to 300,) so as to be sure of obtaining preparations sufficiently efficacious. It is in starting from this last point of view that many homœopaths have even tried to construct machines of succussion, by

means of which they might submit their attenuations to 2 or 3000 shakes of the greatest force, whilst others have not dared even to displace a bottle, for fear that the movement beyond the prescribed cypher, might impart too great energy to the dose. The fact is, that, as we have shown, the succussion increases the effect of the doses; and if each attenuation ought to be a new dynamization, the succussion consisting of two shakes only is insufficient. If, as we have also shown, the first attenuations have operated a considerable division of the molecules, we may obtain, perhaps, 10 or even 12 subsequent attenuations, which, without having been subjected to any new succussion, shall yet have each one sufficient resources; but, in continuing in this way, we shall inevitably arrive at nothing but pure *dilutions*, which, deprived more and more of their active elements, shall be by degrees weakened, even to the utter extinction of their virtue.

68. Hence, however, it does not yet result, that, to obtain as many new dynamizations as attenuations, it is indispensable to make use of machines, such, among others, as the famous *catapult*, invented and recommended by Mr. Mure, as the only means to obtain efficacious preparations. For, after the explanations which we have just given in the preceding paragraph, it is easy to see that, so soon as the succussions shall have given to an attenuation sufficient resources, all the surplus added to it shall be of no advantage, not even in the small homœopathic doses, for the only reason, that there would be no method of making use of them. This is why we believe, that if we impress on each attenuation 1 or 200 shakes, this number will be more than sufficient in every case; and those who have no machines, will find that, apart from the inconvenience of being fatigued, their arms are as appropriate as the best mechanism, to impress on the attenuations the *indispensable* resources. Do we not see every day that the homœopathic preparations, which have made a great many journeys, during which they have been shaken for weeks at a time, do not show more intensity in their effects than those which have not undergone, at the farthest, but 200 shakes at each attenuation; an evident proof that the resources, which, by this process, they should have gained, had no effect on their *indispensable* elements, but on what was superfluous.

69. Another question of no less importance would be to know, if, to obtain all the advantages that attenuations can

give, it is indispensable to go as far as the 30th. What is certain is, that the mass of new particles, which is furnished by the division of molecules, must be diminished from time to time, in order to permit those which remain, to be better spread out and thus to facilitate their ulterior division. But what is equally certain is, that this division of molecules can no longer have any object, as soon as it has succeeded in developing all the virtues of substances of latent virtue, or even in rendering too energetic substances incapable of experiencing any further solution in the organism. This is the case, in all probability, after having arrived at the 6th or even at the 3d attenuation; and if we, ever so little, examine the manner in which all our attenuations act, from the 15th or even the 10th up to the 30th, it is easy to discover, that this process has no more influence, in a *sensible* manner, even in the smallest possible doses; so that we are almost inclined to think, that all that we could do, beyond the 12th, would be superfluous. Nevertheless, as the attenuations carried out farther do not for that become less suitable for use than the preceding, provided they have been well prepared, we have not hesitated to carry, according to received usage, the *officinal* number to 30, leaving to those who may find it too high, as well as to those who would go still higher, the care of fixing themselves the cypher which shall appear to them the most suitable.

70. In the commencement of his homœopathic career, Hahnemann had fixed, for each substance in particular, the attenuation to which it appeared to him to be employed with the greatest success; but latterly, to simplify the preparation of medicines, and render it more uniform, he has advised to carry them all, without distinction, to the 30th. So in the old homœopathic pharmacopœias we find, carefully noted, the number of attenuations suitable to each substance—numbers, which many persons respect as a sort of gospel, imagining that all would be lost, if they had not the medicine at the attenuation which the authors of pharmacopœias have been pleased to mark out. In the first part of our manual, that which contains the medicines, we have attached these several cyphers to each substance; but we did it rather to satisfy the demands of those who had not courage enough to lay aside these arbitrary authorities, than to obey our own conviction. All homœopaths, even Hahnemann himself, make use of different attenuations, from the 1st to the 30th, and not one of

those who have entered the least into the spirit of homœopathy, any longer regard those ancient cyphers than as purely *arbitrary* marks. In spite of all this, we still bring them forward in this work, not as a rule to follow, but only to avoid making a reproach respecting our pharmacopœia, that it is not so complete as the preceding ones, and wanting in what certain individuals yet consider as the *sine quâ non* condition of all success in homœopathy.

3. *Of the Denomination of Homœopathic Attenuations.*

71. We have already said, in speaking of vegetable substances, that the preparations unattenuated, made with alcohol, are called *mother tinctures.* Caspari wished to make a distinction between those prepared from the extraction of dry substances, and those prepared from the juice of the fresh plant, in calling the first *essences* and the last *tinctures;* but this distinction has no value in practice, and this is the reason why we give to all the preparations made with alcohol, the name of *tinctures.* As to the attenuations, the most simple nomenclature to follow, and that which is in use in France, is to designate them by the name of their number, to wit: 1st, 2d, 3d, &c. and only to apply this denomination to preparations made in the proportion of 1 to 100, so that, if we should prepare in the proportion of 10 to 100, we must only give these names of 1st, 2d, &c. to each second attenuation of this series. In this way we shall always have the advantage of easily knowing the fraction of the primitive drop in each attenuation, since all the denominators of these fractions increase as the powers of 100. In the 1st attenuation each drop contains the 100th part of the primitive drop; in the 2d, the 100^{2nd} or the 10,000th; in the 3d, the $100^{3rd} =$ 1,000,000th part, &c., so that in the 30th, each drop will contain but the $100^{30th} =$ the $100{,}000^{10th}$ part of the primitive drop.

72. Besides this denomination, the Germans have still another, which, for them, is not less clear than the one of which we have just spoken, but which, literally translated into French, would give rise to the most serious errors. It is the way of designating the attenuations by the fraction which each one contains of the primitive drop, and thus to give them the name of *millionth, billionth, trillionth,* &c., as far as the *decillionth.* By this process, what we call *millionth,*

would be the 3d attenuation, since, in effect, this contains in each of its drops the 100^{3rd} = 1,000,000th part of the primitive drop. If the French understood by these words, billion, trillion, &c., the same cyphers as the Germans, nothing would be easier than to know, each time, the precise attenuation, which they were to designate, since the denominators of fractions increase each time two zeros, all that would be necessary would be to divide the number by 2 to obtain the ordinary cypher of the attenuation. Thus in dividing by 2 the number of 6 zeros, which represents the cypher of million, we obtain 3, which is to say that it is the 3d attenuation, which has thus been designated; but it is not the same for the rest of these names. What the French would call the trillionth, would be the 6th, since 1 trillion = 1,000 billions = 1,000 milliards = 1,000,000,000,000, which gives 6 times two zeros; but what the Germans understand by the trillionth, is the 9th, since, with them, counting is not as in France; 1,000 millions = one billion, 1,000 billions = one trillion, &c.; but on the contrary, a million millions = one billion, a million billions = one trillion, which causes an increase not of 3 but fully of 6 zeros, each cypher representing one of these names.

73. To have a good understanding of what in their writings the Germans would designate by these names, we should always have present in the memory, that, with them, these names constantly represent a *millionth* power, and thus augmenting each time 6 zeros, equivalent to 3 times 2 zeros, they find their application every *third* attenuation, and correspond in this respect with the *Roman* cyphers, which the Germans employ, not as synonymes of the Arab cyphers, but to designate the *millionth powers*, that is to say every *third* attenuation. The following is the table of designations used in Germany, for the attenuations made in the proportion of 1 to 100.

Mother tincture = 0

First attenuation	= 1	= 100	= hundredths.
Second	„	= 2	= 10,000	= ten thousandths.
Third	„	= 3	= I	= *millionths.*
Fourth	„	= 4	= 100 I	= hundred millionths.
Fifth	„	= 5	= 10,000 I	= ten thousand millionths.
Sixth	„	= 6	= II	= billionths.
Seventh	„	= 7	= 100 II	= hundred billionths.

Eighth atten.	= 8 =	10,000 II	= ten thousand billionths.
Ninth „	= 9 =	III	= trillionths.
And so on:			
Twelfth „	=12=	IV	= quadrillionths.
Fifteenth „	=15=	V	= quintillionths.
Eighteenth „	=18=	VI	= sextillionths.
Twenty-4th „	=24=	VIII	= octillionths.
Thirtieth „	=30=	X	= decillionths.

74. To avoid all error, each time that in a German book, or in a literal translation, we shall meet one of these cyphers, we should always multiply by 3 the *Roman* cypher, in order to obtain the *Arab* cypher, corresponding to it, which in France gives its name to the attenuation. The Germans only write their attenuations in *Roman* cyphers, since they scarcely ever make use of the intermediate attenuations, such as 2nd, 4th, 5th, 6th, &c., and that is what the translators of homœopathic observations should always bear in mind, so as not to write for $\mathrm{VIII}^{\circ\circ\circ}$, the signs 8th glob. 3, but correctly 24th glob. 3. The same should be taken notice of by the pharmaceutists, who ought always to know in the cases, where chance may place in their hands a prescription written by a German physician, which should exhibit $\mathrm{X}^{\circ\circ\circ}$, that this does not mean the 10th, but truly the 30th attenuation. As to the custom adopted to call in French as well as in German the same attenuations, *billionth*, *trillionth*, *decillionth*, &c., it may be continued, taking care constantly to call to mind, that these cyphers are not correct, except in the first of these tongues; for otherwise, we should render into French the trillionth by the *quintillionth*, the sextillionth by the *undecillionth*, and the decillionth (the cypher of which that represents the fraction has 60 zeros) by the *unde-vigesillionth*.

CHAPTER IV.

OF THE DISPENSATION AND PRESERVATION OF HOMŒOPATHIC MEDICINES.

1. *Of the Dispensation of Homœopathic Medicines.*

75. Homœopathic medicines are generally administered in the form of powder. To effect this, we mix the drop or the prescribed number of globules with a few grains of sugar of milk, and enclose it in a paper, to be administered to the patient either dissolved in a spoonful of water or in the dry state. The sugar of milk being only intended in this case to act as the vehicle and not to produce a new dynamization, we have no need of rubbing it up with the medicinal dose; we should even guard against doing it, if we wish that this last should not act with too much force, since by doing so, we should still increase the power. Again, should we wish this dose to act more promptly and with more energy, we dissolve it in a spoonful of water, which immediately developes more powers, and presents them to the organs in a greater extension than whilst the dose is taken dry. In some cases also, in order not always to administer to the patient a white powder, which might in time become disgusting to him, we may add to the sugar of milk a small portion of the powder of cocoa, liquorice or salep; these powders will give to the doses another colour, without interfering, in the least, with their virtues. The quantity of sugar of milk we ought to add to the dose is usually 2, 3 or 4 grains; but for those patients who would not be satisfied with such small powders, we may add as much as they wish.

76. Another method, not less frequently made use of in homœopathy, is to dissolve the dose we wish to administer in a quantity, 4 or 6 ounces, of water, and to give to the patient a single spoonful, or several, at intervals, more or less extended. As, in this case, the water is no more designed

than the sugar of milk, to augment the powers of the doses, but only to develope them, and render the reception easier, it would equally be adverse to the end proposed, to submit this solution to new successions. In general, the best way to obtain these solutions is, to put the dose in a bottle of a sufficiently large size to permit to pour on it the wished for quantity of filtered water, and to leave the medicine dissolve of itself; after which we give to this solution some shakes, sufficient only to well mingle the parts, without, however, operating a new division of molecules. We will only add, that if, for each solution, we give a new bottle, we shall do better than if we should make the solution in a tumbler belonging to the patient himself, for, notwithstanding the most careful recommendations on the part of the physician, these tumblers are scarcely ever cleansed with sufficient care, to prevent all alteration of the medicine by the particles which might remain of the preceding medicine.

77. Finally, a third mode of administration is, to make the patient *smell* the medicine. To effect this, we put a single globule, impregnated with the attenuation we wish, in one of those little tubes, which we make use of to preserve the saturated saccharine globules, and we place the bottle unstopt in one of the nostrils of the patient, who inspires the air from it. Should we wish to increase the dose, we make the patient snuff up more or less strongly, according to the case, with the other nostril. If the nostrils are plugged up by a cold, a polypus, or something else, the patient should inspire with the mouth, in holding the opening of the vial between the lips. For small children, we hold the vial very near under one or both nostrils, when asleep. Lately, Hahnemann, to increase the effects of olfaction, has preferred dissolving the globule in equal parts of alcohol and water, in a bottle of the capacity of about 150 drops, and having shaken this mixture some seconds, to make the patient smell it; as, by this process, the powers of the globule are more developed, and the surface upon which the evaporation operates, becomes at the same time larger, there is no doubt that it is well calculated to accomplish the object.

78. In homœopathic prescriptions, we generally make use of the same abbreviations as those which are found in the repertories. In the formulæ, we usually designate the number of required globules by a cypher, placed like the numeration of a fraction, above the cypher indicating the degree of

attenuation. Thus Aur. 3/15 means 3 globules of the 15th attenuation of Aurum. Others indicate the number of globules by points, above all the Germans, who then mark the attenuation by a *Roman* cypher, as for example, Aur. V···, or Aur. V°°°, which in each case means Aurum 15th, 3 globules. Others again, above all in prescribing whole drops or grains, write as follows: Aur. 15th gtt. ij. or gr. ij. &c. which means Aurum 15th, 2 drops or two grains. To indicate the quantity of sugar of milk we should add to the medicine, we usually write below the line mentioning the medicine *pulv. sacch. lact.* q. s., if this quantity should not exceed 2 or 3 grains; otherwise, if we would add more, we indicate the quantity by grains, &c. The same holds good respecting the water in which we would dissolve the dose, and which we generally indicate thus: *Aq. dest.* unc. 4 or 6, &c.

79. In cases where the imagination of the patient must be gratified, we add to the medicinal doses a few powders of sugar of milk alone, and indicate generally by the side of the line which contains the name of the medicine the numbers of the powders which should contain the dose, each one, and afterwards by the side of the other line, the numbers which should contain only the sugar of milk. Thus, for example, if we wish to give the patient 6 powders, of which 3 only contain the medicine, (Aurum for example,) we would write, should these powders be taken alternately,

Aur. 3/15. No. 1. 3. 5.
Pulv. sacch. lact. q. s. No. 2. 4. 6.

or else, if the three first of these powders should contain the medicine:

Aur. 3/15. No. 1. 2. 3.
Pulv. sacch. lact. q. s. No. 4. 5. 6.

A still more simple way consists in not indicating all the sugar of milk in the prescription, but placing the numbers which should contain this vehicle only, behind those which should contain the medicine, and separate them from these last, by the following sign (#), as for example:

Aur. 3/15. No. 1. 3. 5. # 2. 4. 6.

or else:

Aur. 3/15. No. 1. 2. 3. # 4. 5. 6.

2. *Of the Preservation of Homœopathic Medicines.*

80. The preservation of homœopathic medicines exacts,

under more views than one, the most careful attention. In the ordinary pharmacies, it is impossible to avoid the emanation of different substances, which are all calculated to cause the most serious alterations in homœopathic preparations, in regard to their curative powers, and this is the reason why they should be strictly preserved in a place apart. For the same reason, preparations of different substances should never, strictly, be shut up in the same case, nor even in the same chest, or at least should never be left any length of time open in the vicinity of preparations of other substances, since the emanation of these may cause a change in their virtues. The same may be said of the powders, which we prepare to administer to the sick—remaining any length of time near very odorous preparations, or even those of dilutions of other substances, they would be exposed to contract, not only the odour, but also the properties of substances in the close neighbourhood of which they have been. So likewise, in dispensing the doses in a place perfectly exempt from all medicinal odour, we must be careful to restop the bottle, immediately after having made use of it, in order that the medicine should not evaporate and fill by its emanations the place in which we might be called upon to disperse yet other medicines.

81. All these medicines, without excepting the powders, ought to be preserved in bottles; boxes afford too great access to air, and allow too much evaporation. For the alcoholic tinctures, cork stoppers are the best, since they adapt themselves in a more exact manner than those of glass, and better prevent evaporation. As to substances very strong and very volatile, it is better to tie a piece of prepared bladder over the stopper. Besides, these stoppers ought to be changed from time to time, above all those of bottles which contain metallic solutions; and in general, we should not neglect to do so as soon as we discover that their extremity begins to change colour; for in this last case, alcohol may, without this precaution, dissolve a little of their medicinal virtue, and disturb the action of the preparation. Acids do not allow the use of cork stoppers, they attack them immediately, and the portion dissolved alters the purity of the medicine; we must, therefore, use stoppers of ground glass. But to be sure that these last, which always stop badly enough, do not permit any evaporation of any part of the acid, we coat them with wax, as well as the neck of the bottle.

82. As nothing has more influence on the preservation of homœopathic medicines than heat, the rays of the sun, and light of the day, we must be very careful to exclude as much as possible these causes of alteration. The action of the solar light and of the light of day easily acidifies alcohol, in a sufficiently short space of time, and, besides, destroys the virtues of medicines. This is the reason why we should preserve homœopathic preparations in a cool and obscure place, and assure ourselves, from time to time, that they are good. We discover that they have become acidified in letting fall a drop on the surface of a smooth piece of pure carbonate of lime, flattened by pressure; if the drop insinuates itself tranquilly, the tincture is still good, but if it forms bubbles, it has become acid, and cannot, of consequence, be made use of any more. As to substances and their dilutions, which are more especially sensible to the action of the light, as the prussic acid, phosphoric acid, &c. it is prudent to preserve them in bottles of black glass, or, at any rate, covered with black paper. Finally, it is suitable also to put the homœopathic medicines, above all, the acetate of lime, hepar sulphuris, barytes, and all the preparations which are preserved in the form of powder, out of the way of humidity, because they lose in like manner their virtues when they are so exposed.

SECOND PART.

ON THE PREPARATION AND MODE OF OBTAINING EACH MEDICINE IN PARTICULAR.

CHAPTER I.

GENERAL VIEW OF THE SUBSTANCES WHICH COMPOSE THE HOMŒOPATHIC PHARMACY.

1. *Of Homœopathic Medicines in General.*

83. HOMŒOPATHY employs, generally, as medicines, the same simple substances as the old school, and in like manner obtains them from the three kingdoms of nature. But, as in homœopathy, neither chemistry nor natural history, but *pharmacodynamique* (the medicinal power of remedies) governs pharmaceutics, and as, in accordance with the principles of this doctrine, no remedial substance can be admitted into the materia medica without having been previously studied in its *pure* effects, it is very natural that the homœopathic pharmacopœia should not be so rich in remedial substances as that of the old school. Those, the effects of which have been thus far studied, amount to about two hundred, and from this number at least a fiftieth might be deducted, if we were disposed to be very rigorous, and only to admit those of which the materia medica could give the

complete pathogenetic symptoms. Nevertheless, as it may be useful to be acquainted with all those substances which, up to this time, the different homœopathic physicians have thought worth their attention, we have determined to mention the whole, as contained in the pharmacopœia, and have added even those whose names have only once been mentioned in the annals of our science.

84. Hence in the following chapter there will be found the description of more than three hundred substances from the three kingdoms of nature, whilst in our Manual but about two hundred are mentioned; *but all those which are not described in our Manual, are remedies of which the name only is known, and which cannot be prescribed without having been studied (as to the effects) on the human system in a healthy state.** It is true, that if, in the pharmacopœia, we once pass the limits pointed out by the *pure materia medica*, there is no reason why we should not go further and take not only all the substances found in the materia medica of the old school, but also all those which the inexhaustible resources of nature may furnish us. Hence we have often deplored the tendency shown by our school to register every year more than ten new remedies in its pharmaceutic code, frequently without studying either of them, and with all our pains in endeavouring to ascertain the principle on which one name was registered in preference to another, we have been able to discover nothing but mere *caprice*.

85. If we cast a rapid glance over the genera and families whence are derived the remedies of which we make use, it will appear very evident that we are far from having even all the most efficacious substances, and that if we wished to give a description of all those which deserve to be studied, it would almost be necessary to write a dictionary of Natural History. It has, therefore, appeared to be the most simple plan, to give hereafter a general view of the substances whose effects have been studied, as well as of those only *proposed* in the homœopathic pharmacopœias, in order that every one on seeing the deficiences shown by this view, may easily

* Among these last substances, there are nevertheless some, of which, since the publication of the first volumes of our Manual, a commencement of the pathogenetic effects has been published. We shall not fail to give an account of these to the public in a supplement, as soon as there shall be materials sufficient to form a volume.

conclude as to what remains to be done. As for the description of the substances, we go no further than to give those which have been, thus far, mentioned in the writings of our school; in treating, in each division first, those whose pathogenetic effects are not entirely unknown, and afterwards those, of which, at this time, we know nothing but the names, and pathogenetic descriptions of which it would be in vain to look for in the whole homœopathic bibliography.

2. *Inorganic Substances and Chemical Products.*

86. The *mineral* substances and *chemical* products which enter into the homœopathic pharmacopœia, are found, as in that of the old school, among the *non-metallic* bodies, the *acids*, the *alcalis*, the *earths*, the *metals*, and the compounds of the latter. The number of those which, of these substances, is received in homœopathy, amounts in all to 100, 60 of these have been studied on the healthy human subject, whilst as regards the other 40, they have been only inscribed in the pharmacopœia. We intend to notice them, making use of the Latin names under which these substances are treated of in the writings of our school, and which differ but little from those generally in use. In adopting, for the exposition of the pathogenetic symptoms in the materia medica, the alphabetic order of remedies, it has been found most convenient to unite as much as possible all products derived from the same base; instead, therefore, of writing, as usual, *acidum nitricum, acidum phosphoricum*, &c., we have prefered *nitri acidum, phosphori acidum*, &c., in order to place the first of these remedies near *nitre*, and the other near *phosphorus*. In like manner with the names *murias barytæ, carbonas barytæ*, &c., in place of which we have preferred *baryta muriatica, baryta carbonica*, &c., in order to be enabled, in the alphabetical order of the materia medica and the repertories, to place or arrange them near each other, and so on, with all the names of this kind.

87. The remedies which are found among the *non-metallic* bodies, the *acids* and the *alcalis*, are in all 30, the pathogenetic effects of 15 only of which are known, viz:—

1. NON-METALLIC bodies, studied: *Carbo animalis, Carbo vegetabilis, Graphites, Iodium, Kreosotum, Hepar-sulfuris, Petroleum, Phosphorus, Selenium, Sulfur;* proposed

for study: *Alcohol sulfuris, Bromium, Natrum sulfuratum,* (sulphuret of soda.)

2. ACIDS, studied: *Muriatis acidum, Nitri acidum, Phosphori acidum, Sulfuri acidum, Tartari acidum;* proposed for study: *Aceti acidum, Hydrocyani acidum, Molybdæni acidum.*

3. ETHERS, proposed for study: *Nitri spiritus dulcis.*

4. ALCALIS, studied: *Causticum;* proposed for study: *Kali causticum, Natrum causticum, Ammonium causticum; Calcarea caustica, Baryta caustica, Strontiana caustica,* (*Sapo domesticus.*)

88. The *earths* and the *earthy and alcaline salts* thus far admitted in homœopathy, amount in all to *twenty-five,* twenty-two of which have been studied on the healthy human system, viz.

1. EARTHS, studied: *Alumina, Silicea.*

2. CARBONATES, studied: *Ammonium carbonicum, Baryta carbonica, Calcarea carbonica, Kali carbonicum, Magnesia carbonica, Natrum carbonicum, Strontiana carbonica.*

3. NITRATES, studied: *Kali nitricum, Natrum nitricum.*

4. CHLORATES, studied: *Kali chloricum.*

5. SULPHATES, studied: *Magnesia sulfurica, Natrum sulfuricum;* proposed for study: *Calcarea sulfurica,* (*Gypsum.*)

6. BORATES, studied: *Borax.*

7. ACETATES: *Baryta acetica, Calcarea acetica.* (In general, carbonates of substances are preferred to their acetates.)

8. HYDROCHLORATES, studied: *Ammonium muriaticum, Baryta muriatica, Magnesia muriatica, Natrum muriaticum;* proposed for study: *Calcarea muriatica.*

9. HYDRIODATES, studied: *Kali hydriodicum.*

10. PHOSPHATES, studied: *Calcarea phosphorata.*

89. Among the *metals* and their compounds, *forty-two* in all are found in the homœopathic pharmacopœia, *eighteen* of which have been studied as regards their pure effects, viz.

1. PERFECT METALS, studied: *Argentum, Aurum, Platina;* proposed for study: *Argentum nitricum, Aurum fulminans, Aurum muriaticum.*

2. METALS of the SECOND order, studied: *Mercurius vivus et solubilis, Mercurius corrosivus, Mercurius sulphuratus ruber,* (Cinnabaris,) *Niccolum;* proposed for study:

Mercurius dulcis, *Mercurius præcipitatus ruber*, *Mercurius acetatus*, *Mercurius præcipitatus albus*, *Osmium*.

3. METALS of the THIRD ORDER, studied: *Manganum aceticum;* proposed for study: *Manganum metallicum.*

4. METALS of the FOURTH order, studied: *Cuprum metallicum*, *Ferrum magneticum*, *Ferrum metallicum;* proposed for study: *Cuprum carbonicum*, *Cuprum sulfuricum*, *Cuprum aceticum*, *Ferrum aceticum*, *Ferrum muriaticum*, *Ferrum oxydat. hydrat.*

5. METALS of the FIFTH order, studied: *Antimonium crudum*, *Bismuthum nitricum*, *Plumbum*, *Stannum*, *Tartarus stibiatus*, *Zincum;* proposed for study: *Antimonium metallicum*, *Bismuthum metallicum*, *Plumbum aceticum*, *Zincum sulfuricum.*

6. METALS of the SIXTH order, studied: *Arsenicum;* proposed for study: *Arsenicum metallicum*, *Arsenicum citrinum*, (*auri pigmentum*,) *Arsenicum rubrum*, *Molybdænum.*

3. *Vegetable Substances.*

90. The plants which enter into the homœopathic pharmacopœia, are, as those of the old school, taken from nearly all the classes of the vegetable kingdom. The different plants mentioned in the homœopathic pharmacopœias amount to about 150; but of this number the pathogenetic effects of scarcely 100 are well known; and there are more than 30 whose pharmacodynamic virtues are not indicated in the materia medica of our school, and consequently, their names only are found here. In the general view which we propose to give, we shall enumerate the plants according to the natural families of Jussieu, and shall place between parentheses those whose powers are not known to the materia medica; and it would be useless to seek for a pathogenetic description of them in any book whatever. Among these last, several have, nevertheless, been quoted in our Manual, though we could only give their names; these are they which, though placed between parentheses, are subsequently found printed like the others, in italic type; whilst those, of whose effects we have as yet no knowledge, are printed in Roman letters.

91. Among the 50 first natural families of Jussieu, the homœopathic pharmacopœia reckons from 70 to 80 remedies, viz.

I. Class.—FUNGI: *Agaricus musc.*, (Boletus satanas,) *Bovista;*—MUSCI: *Lycopodium;*—FILICES: (*Filix mas.*)

II. Class.—AROIDEÆ: *Arum maculatum, Caladium seguin;*—GRAMINEÆ: (Lolium temulentum,) *secale cornutum.*

III. Class.—ASPARAGI: (Asparagus,) *Paris quadr.*, (Sassafras,) sarsaparilla;—JUNCI: *Colchicum*, (Juncus pilos.,) *Sabadilla, veratrum;*—ASPHODELEÆ: (Allium sativ., (*Aloës*,) Squilla marit.;—IRIS: *Crocus sativ.*

IV. and V. Class.—CANNÆ: *Zingiber;*—ARISTOLOCHIA: (Aristolochia,) *Asarum* europ., (Serpentaria.)

VI. Class.—THYMELEÆ: Daphne indica, Mezereum;—LAURI: *Camphora*, (Cinnamomum,) *Nux Moschata*, (Pichurim;—POLYGONEÆ: *Rhabarbarum;*—ATRIPLICES: (Atripleæ olida,) (Chenopodium.)

VIII. Class.—LYSIMACHIÆ: *Cyclamen europ.*, Menyanthes; PEDICULARES: *Euphrasia, Ratanhia, Senega;*—JASMINEÆ: (Olea europæa;)—VITICES: *Agnus castus*, (Verbena;)—LABIATÆ: *Lamium album*, (Rosmarinus offic.,) (Thymus,) *Teucrium;*—SCROPHULARIÆ: *Digitalis, Gratiola;*—SOLANEÆ: *Belladonna, Capsicum, Dulcamara, Hyoscyamus, Solanum nigrum, Solan. mammos., Stramonium, Tabacum, Verbascum;*—CONVOLVULI: (*Convolvulus arvens.*,) (Jalappa;)—GENTIANÆ: *Spigelia;*—APOCINEÆ: *Ignatia, Nux vomic., Oleander*, (Vincetoxicum.)

IX. Class.—RHODODENDRA: *Ledum palustre*, Rhododendron;—ERICÆ: *Uva Ursi.* X. Class.—CHICORACEÆ: *Lactuca viros., Taraxacum;*—CORYMBIFERÆ: *Arnica*, (*Artemisia vulg.*,) (Calendula,) *Chamomilla, Cina, Millefolium, Tanacetum vulg.*

92. Among the other six classes of the natural families of Jussieu, the homœopathic pharmacopœia counts almost as many remedies as in the preceding, viz.

XI. Class.—DIPSACEÆ: *Valeriana;*—RUBIACÆ: (cahinca,) *China, Coffea, Ipecacuanha;*—CAPRIFOLIA: *Sambucus.*

XII. Class.—ARALIÆ: *Ginseng;*—UMBELLIFERÆ: *Æthusa*, (Ammoniacum gummi,) (Archangelica,) *Assafœtid., Cicuta, Conium*, Heracleum, (Œnanthe crocata,) (*Petroselinum*,) *Phellandrium, Vinca minor.*

XIII. Class.—RANUNCULACEÆ: *Aconitum*, (*Actæa spicata*,) (Aquileja,) *Clematis, Helleborus nig., Pæonia, Pulsatilla, Ranunculus bulb., Ranunculus sceler., Staphysagria;*—PAPAVERACEÆ: *Chelidonium, Opium, Sangui-*

naria canad.;—CRUCIFERÆ: (Cochlearia;)—HYPERICA: *Hypericum perforatum;*—AURANTIA: (*Citron,*) *Thea cesaræa;*—CAPPARIDES: Drosera;—MAGNOLIÆ: (*Anisum stellatum;*)—MENISPERMA: *Cocculus;*—BERBERIDES: *Berberis;* —CISTI: *Cistus canad., Viola odorat., Viola tricol.;*— RUTÆ: (*Dictamnus,*) *Guaiacum, Ruta.*

XIV. Class.—SEMPERVIVÆ: (Sedum acre;)—MYRTI: *Eugenia, Granatum;*—ROSACEÆ: (*Fragaria vesc.,*) *Laurocerasus,* (Prunus padus,) *Prunus spinosa;*—LEGUMINOSÆ: *Copaivæ balsam.,* (Genista,) *Hæmatoxylum campech., Indigo,* (Ononis,) *Senna, Tongo;*—TEREBINTHACEÆ: *Anacardium, Brucea dysent., Rhus toxic., Rhus vernix;*— RHAMNI: *Eronymus* europ.

XV. Class.—EUPHORBIÆ: *Cascarilla, Croton tiglium, Euphorbium, Jatropha;*—CUCURBITACEÆ: *Bryonia, Colocynthis;*—URTICÆ: *Cannabis,* (*Cubebæ,*) (Lupulus,) (Urtica urens;)—AMENTACEÆ: (Ulmus campestr.;)—CONIFERÆ: *Sabina, Taxus baccata, Terebinthina, Thuya.*

3. *Animal Substances.*

93. The remedies heretofore taken from the animal kingdom by homœopathy, are much less numerous than those derived from the other kingdoms of nature. Among the ancients, physicians preferred directing their attention to this kingdom, either because it more nearly approaches the human species, or because the good or evil which might be caused by animals more strongly excited their curiosity. The number of animal substances submitted to experiments is limited thus far, to certain *entire* insects, and to some parts extracted from the bodies of certain other animals, as well as to some excretory products, such as *musk, castoreum,* &c. Thus the animal substances used in homœopathy, may be divided into three classes, viz. 1st. *Entire Animals;* 2nd. *Animal Matters;* 3rd. *Animal Concretions and Zoophytes.*

94. The *animal substances* used in homœopathy are *twenty-six* in number, viz.

1. ANIMALS, experimented on: *Aranea diadema, Cantharides, Coccionella septempunctata, Theridion curassavicum;*—proposed for experiment: *Cancer astacus, Formica, Lacerta agilis, Meloë majalis, Melonthola vulgaris, Oniscus asellus, Rana bufo.*

2. ANIMAL MATTER, experimented on: *Ambra grisea,*

Barbus, Crotalus, Lachesis, Mephitis, Moschus, Oleum animale, Sepia;—proposed for experiment: *Album ovi, Membrana ovi, Oleum jecoris morrhuæ.*

3. Animal Concretions and Zoophytes, experimented on: *Conchæ,* (Calcarea,) *Corallium rubrum, Spongia marina;*—proposed for experiment: *Cancrorum oculi.*

The *morbid products* which Isopathy has endeavoured to introduce into the homœopathic pharmacopœia, such as *sudor pedum, herpes faciei,* &c., are the results of a morbid aberration of the imagination, and can find no place here.

CHAPTER II.

PREPARATION OF MINERAL SUBSTANCES AND CHEMICAL PRODUCTS.

1. *General Remarks.*

95. Mineral substances and chemical products are usually all treated by *trituration* as far as the third attenuation of the proportion of 1:100, after which a grain, (5 centigrammes,) of the third, is dissolved in 100 drops of a mixture of equal parts of alcohol and water, which gives the fourth attenuation, after which the succeeding attenuations are made by alcohol, like those of the tinctures. This manner of treating substances, first by 3 triturations, prior to attenuating them by liquids, (the liquid way,) is preferable even for the substances which might be soluble in alcohol or in ether, such as sulphur, petroleum, kreosote, &c., inasmuch as trituration, more than any other process, developes the latent virtues of substances, and renders them in the highest degree unalterable. For those only whose chemical properties prevent their mixture with the sugar of milk, such as the greater portion of

the acids, &c., trituration is not applicable. As regards the acids, immediate attenuation with alcohol would be attended with serious inconveniences, on which account the two first attenuations are made with distilled water, the 3rd with alcohol and water, in equal proportions, and the following only with alcohol of 70° to 80°, (centigrade.)

96. We have already said in the first part of this work, that whatever homœopathy prescribes for the chemical preparation of substances, must be rigidly followed, even when these prescriptions should not be such as to enable us to obtain the most scientific products. We cannot too strongly insist on this, since all success in practice depends on having preparations precisely similar to those which have been experimented on. In the following articles we shall frequently point out several methods of obtaining substances by chemical processes; but in most cases, all tend to enable us to procure preparations perfectly identical, and the difference between them consists only in the greater or less simplicity of the processes. But in all cases where the homœopathic preparation differs in essential properties from that furnished by other chemical processes, we have not failed to point out clearly those which must be followed in order to obtain the medicines used in homœopathy.

2. *Preparation of the Mineral substances generally used.*

ALUMINA, *Aluminum oxydatum, Argilla pura;* Fr. Alun, Argile; Ger. *Thonerde, Alaunerde;* Eng. Alumine.—Usual dose: 30.

97. Guyton Morveau first gave the name of *alumina* to a salifiable base, procured from alum, long confounded with lime and silex, but now recognised as a distinct substance and believed to be an oxide of *aluminium.* After silex, alumine is one of the most widely disseminated substances in nature, and is found almost pure in the sapphire, in corundum and in adamantine spar. Combined with acids, such as the phosphoric, the sulphuric, &c., it forms *wavellite* and aluminite, but in general it is found combined with other earths or metallic oxides, in clays, schists, &c. It is extracted from alum, which is a supersulphate of alumine and potassa or ammonia,

by pouring an excess of ammonia into a slightly concentrated solution of this salt; the precipitate which is formed, being carefully washed and dried, is *pure alumine*. It is a white powder, very fine, soft to the touch, tasteless, infusible, it adheres to the tongue, forms a paste with water without dissolving in it, and in general absorbs water with avidity. Of this powder, take one grain (5 centigrammes), in order first to make three triturations with sugar of milk, prior to dissolving it, and making the succeeding attenuations with alcohol.

AMMONIUM CARBONICUM, *Carbonas (sub) ammonii; Sal volatile anglicanum;* Fr., Ammoniaque carbonaté, Sous-carbonate d'ammoniaque, Alcali volatil concret, Sel volatil d'Angleterre; Ger., *Flüchtiges Laugensalz*. Eng., Carbonate of ammonia. Usual doses, 18, 30.

98. Formerly this salt was procured from animal substances submitted to the action of fire; but when obtained in this manner it is rendered impure by an oily matter which discolours it and furnishes but very variable preparations, charged with the animal oil of Dippel, and sometimes even with hydrocyanic acid, which necessarily modify its properties. This salt is obtained pure by the distillation of a mixture of muriate of ammonia, of sub-carbonate of lime, of potash or of soda. For this purpose, triturate together one half ounce of sal-ammoniac and the same quantity of crystallized carbonate of soda; introduce this mixture into a vial not closely corked and which is placed in a sand-bath up to the level of the mixture. The action of the fire having sublimed the carbonate of ammonia into the upper part of the vial, it is to be broken in order to remove the salt. This salt is white, of a fibrous appearance, of the same smell and taste as liquid ammonia, very soluble in cold water, partially decomposed by hot water, very volatile, even at the ordinary temperature; it is decomposed by the alkalis and effervesces with acids. *Three triturations of it are to be made* before the attenuations are made in the liquid way.

AMMONIUM MURIATICUM, *Murias s. Hydrochloras ammonii, Sel ammoniacum;* Fr., Ammoniaque muriaté, Muriate ou Hydrochlorate d'ammoniaque, Sel ammoniaque; Ger., *Salmiac, Salzsaures Ammonium;* Eng., Muriate of ammonia, Hydrochlorate of ammonia, Sal ammoniac. Usual doses, 12, 30.

99. This salt is found in considerable quantities in the neighbourhood of volcanos, in coal mines, in lakes, mineral waters, plants, and even in the urine and excrements of certain animals, &c. It is manufactured at Clichy and Grenelle, near Paris, by distilling animal matters, decomposing the sub-carbonate of ammonia they furnish by means of sulphate of lime, and the sulphate of ammonia which results, by muriate of soda. This process gives a sal ammoniac more or less pure; but it is sometimes sophisticated by muriate of soda, which is easily detected by its decrepitating in the fire; in other cases it contains also a little oxide of lead, which may be discovered by its non-volatility. Before making use of this salt in homœopathy, it will therefore be always necessary to purify and crystallize it, not only to separate from it foreign substances, but because it is more easily triturated when in the form of crystals than sublimed. For this purpose filtered water is boiled in a porcelain vessel, into which sal ammoniac, sublimed and pulverized, is introduced until complete saturation takes place; this solution, while still in a state of ebullition, is filtered into another vessel of porcelain, which is set in a cool place in order to crystallize. At the end of 24 hours the liquid is decanted, is immediately made to boil, and the process goes on as before. The crystals obtained are placed on blotting-paper and well dried in heated air, after which they are kept under the name of *ammonium muriaticum depuratum.* Of this preparation, at first three triturations are made with sugar of milk, prior to making the subsequent attenuations in the liquid way.

ANTIMONIUM CRUDUM, *Stibium sulfuratum nigrum, Sulfuretum antimonii;* Fr., Sulfure ou Proto-sulfure d'antimoine, antimoine cru; Ger., *Schwefelspiessglanz;* Eng., Crude antimony, Sulphuret of antimony. Usual doses, 6, 9, 12, 18, 30.

100. This mineral is very common in France; it is found in compact masses, formed of needle shaped crystals. It is of a dark bluish-gray colour, less brilliant than metallic antimony, but more fusible; specific gravity 4,133 to 4,516. It is easily pulverized, and gives, when pure, a reddish-brown powder, whilst that of commerce has a blackish colour. It is without taste or smell, insoluble in water and not volatile, but in a state of powder it oxidizes partially. Its powder is

often adulterated with iron; in this case, by heating and detonating it with three parts of nitre, a yellowish residue is obtained. It is also frequently mixed with galena, which is discovered by dissolving the powder in 8 parts of nitric and hydrochloric acid, and by treating the residue, well washed, with hydro-sulphuretted water; if the mixture acquires a yellowish-red-colour, the powder is pure; if it becomes black, it is mixed with galena. If crude antimony is mixed with oxide of manganese, we obtain, by heating it with nitre, a greenish mass, and there is no detonation; finally, if sophisticated with iron containing arsenic, the nitrate of silver will detect it. In all cases, to make sure of the purity of this metal it ought not to be taken in the form of powder, but as it is found, in the crude state, and those pieces having the largest and most brilliant laminæ should be selected. The pieces must be pulverized and ground with water on a hard stone, which, after several repetitions, will give a blackish powder, perfectly pure, without smell or taste, and insoluble either in water or alcohol. The *three* first attenuations are made by *trituration*.

ARGENTUM, *Argentum foliatum;* Fr., Argent; Ger., *Silber, Blattsilber;* Eng., Silver, Silver-leaf. Usual doses, 2, 6, 30.

101. This metal, known from the earliest ages, is found in nature either in the native state, or combined with different substances, such as gold, mercury, iodine, selenium, sulphur, lead, &c. It occurs in France, and in nearly all countries, but principally in Mexico and Peru. As that which is found in commerce is generally alloyed with other metals, and chiefly with copper, and as it is highly important to homœopathy to have it entirely pure, this result is obtained by dissolving the silver of commerce in muriatic acid, and by heating strongly the product obtained with carbonate of soda. If silver-leaf of undoubted purity could be obtained, it would be the most convenient for medical use; the thinnest leaves must be chosen, which, when placed between the eye and the light, appear of a beautiful blue, and translucent, and dissolve completely in nitric acid. If the leaves contain copper, the solution will exhibit a bluish tint, which, when too intense, indicates that the silver must be rejected as unsuitable for homœopathic purposes. If the leaves contain lead, it will be detected by

adding sulphuric acid to the solution; diluted with 60 parts of water, a white precipitate will be thrown down, which is sulphate of lead. Pure silver, therefore, can alone be used in homœopathy; we first make *three triturations* with sugar of milk; the rest of the attenuations are made in the liquid way.

ARSENICUM ALBUM, *Acidum arseniosum;* Fr., Arsenic, Oxyde blanc d'arsenic, Acide arsenieux; Ger., *Arsenik, Arsenige Säure;* Eng., Arsenious acid, White arsenic. Usual dose, 30.

102. The substance used in homœopathy under the name of *arsenic,* is *arsenious acid.* This acid is found in nature, but that of commerce, improperly called *arsenic,* is furnished by the ores of arsenical cobalt, from which it is extracted by sublimation. It is found in compact masses, heavy, white or yellowish, usually opaque at the surface, transparent and vitreous internally; exposed to the atmosphere, this opacity increases, and the arsenic at the same time becomes lighter and more soluble; its taste is sweetish, very slight, almost insipid. It is seldom adulterated; still it has been found mixed with chalk. In order to prepare it for homœopathic use, we introduce, agreeably to the old prescriptions of Hahnemann, one grain, (5 centigrammes,) into a somewhat long vial with a narrow neck, with 4 measured grammes of distilled water; this vial is to be exposed to the flame of a spirit lamp, until the arsenic is dissolved, taking care to add water as it evaporates. An equal quantity of alcohol is then to be added, that is to say, 4 grammes, and the whole to be well mixed; that being done, one drop of the preparation is to be added to one thousand drops of a mixture of equal parts of water and alcohol, (of 80° to 90°;) of this fluid, drop ten drops into a bottle containing ninety drops of alcohol, this bottle, containing the second attenuation, is labelled No. 2; all the succeeding attenuations are made in the usual manner. Of late, Hahnemann has substituted for this process that which is used for all minerals, and agreeably to which it is sufficient to triturate one grain of white arsenic with 100 grains of sugar of milk, in making thus *three triturations* in succession, in order afterwards to make remaining attenuations by the liquid way.

Aurum foliatum, *Aurum purum;* Fr., Or en feuilles, Or pur; Ger., *Gold, Blattgold;* Eng., Gold leaf, Pure gold. Usual doses, 3, 9, 12, 30.

103. This perfect metal is most generally found native, sometimes alloyed with other metals, such as silver, iron, lead, sulphur, &c.; it abounds most in South America, Mexico, Peru, Siberia, and Hungary; much of it is found in the form of dust in the sand of rivers, from which it is separated by washing. Gold coin is never free from alloy: in order to procure it entirely pure, a piece of gold, first reduced into thin leaves, is to be dissolved in *aqua regia;* this solution is to be evaporated to complete dryness, the dry residuum is to be again dissolved in distilled water, to which a solution of sulphate of iron is to be added, until no further action takes place. In this manner a deep-red precipitate, almost black, is obtained, which, after having been washed in weak muriatic acid and distilled water, gives, when melted, pure gold. Pure gold is very brilliant, of an orange-yellow colour when in mass, and of an emerald-green when in a state of fusion, or when reduced to very thin leaves, and held up against the light; it is inodorous, insipid, difficult of fusion, crystallizable, soft, very tenacious, malleable in the highest degree, and of a specific gravity of 19.257. Water, air, fire, do not alter it, even when in leaves; but a strong electric discharge transforms it into a purple powder, without, perhaps, changing its chemical properties. If perfectly pure gold can be obtained in leaves, it is in the most convenient form to make the *three* usual *triturations;* the other attenuations are made by the liquid way.

Aurum Muriaticum, *Murias s. Deuto-chloretum auri;* Fr., Or muriaté, Muriate or Deuto-chlorure d'or; Ger., *Salzsaures Gold.* Eng., Muriate or Deuto-chloride of gold. Usual doses, ?

104. This salt is in small quadrangular prisms or truncated octahedrons, of a beautiful yellow, becoming green when dried *in vacuo,* fusible at a moderate heat, very deliquescent, inodorous, but slightly bitter, styptic, and leaving a metallic after-taste. It is obtained by dissolving one part of pure metallic gold in a mixture composed of one part of nitric and

two parts of hydrochloric acid, evaporating the solution to dryness and dissolving the product afresh in hydrochloric acid. It is soluble in alcohol and in ether. The concentrated solution is saffron-yellow, inclining to red. The great deliquescence of this salt renders its preservation very difficult, and on this account, the old school, in its preparations, directed it to be triturated with common salt, which would not answer for homœopathic preparations. Trituration with sugar of milk has been attempted, but without favourable results. The attenuations should be made with alcohol.

Baryta carbonica, *Carbonas (sub) barytæ;* Fr., Baryte carbonatée, sous-carbonate de baryte; Ger., *Baryt, Schwererde;* Eng., Carbonate of Barytes. Usual doses, 18, 30.

105. Carbonate of Barytes is but rarely found native; thus far it has only been discovered in England, in Siberia, and in Styria, where it occurs massive and differs visibly from *heavy spar* (sulphate of barytes) in dissolving completely in nitric acid. For homœopathic use, it is prepared in the following manner.

Crystallized Chloride of Burium, well pulverized, is to be boiled for two minutes with six parts of alcohol, in order to free it from the chloride of strontium, which might be mixed with it; the powder is then to be dissolved in six parts of boiling distilled water and precipitated by carbonate of ammonia; the precipitate is to be repeatedly washed with distilled water and then dried. The attenuations are to be first prepared by *three triturations,* like those of the minerals.

Baryta muriatica, *Murias s. hydrochloras barytæ;* Fr., Baryte muriaté, Hydrochlorate de baryte, Muriate de baryte; Ger., *Salzsaure Baryt, Salzsaure Schwererde;* Eng., Muriate of Barytes, Hydrochlorate of Barytes. Usual dose, 30.

106. This salt, which is not found native, is in square laminæ, transparent; it is unalterable in the air, soluble in water, of a pungent, acrid, and bitter taste, fusible in the fire, in which it is converted into chloride. *Three triturations* are to be made with sugar of milk, the rest is to be done in the liquid way.

BISMUTHUM, *Bismuthum nitricum precipitatum*, *Bismuthi magisterium;* Fr., Bismuth, Magistère de bismuth, Sous-nitrate de bismuth, Blanc de fard, Blanc d'Espagne; Ger., *Wismuth*, *Salpetersaures Wismuth;* Eng., Subnitrate of bismuth, White oxide of bismuth, Magistery of bismuth, Pearl White. Usual doses, 2, 30.

107. To obtain this salt, dissolve metallic bismuth in a sufficient quantity of nitric acid, pour the solution, drop by drop, into from fifty to one hundred times its volume of pure water, taking care to stir it well, and at the end of two hours decant carefully the liquid; add to this last a quantity of water equal to the preceding, but containing some drops of sub-carbonate of potassa, and stir it up well with the salt. That which finally subsides is, after some hours, separated from the supernatant fluid and thoroughly dried on blotting-paper. The small quantity of sub-carbonate of potassa added to the solution the second time, is intended to free it from any portions of arsenic or antimony it might contain, and which, unless separated by the potassa, would remain combined with the precipitate. Pure sub-nitrate of bismuth is in the form of powder, of a brilliant-white, composed of small nacreous particles, considerably heavy, inodorous, and almost insipid, dissolving in water with great difficulty. The *three* first attenuations are made by *trituration*.

BORAX VENETA, *Boras*, *Sub-boras*, *Sodæ*, *Natrum boracicum;* Fr., Borax, sous-borate de soude, Soude boratée; Ger., *Borax*, *Boraxsauses Natrum;* Eng., Borax, Borate of Soda. Usual dose, 30.

108. Crude Borax is known under the name of Tincal, and comes from Asia, either crystallized or in irregular masses, which are usually coated with a greasy or soapy substance. Three kinds of borax are known in commerce, that of India, that of Bengal, and the Chinese. Borax is purified by melting it by means of fire, dissolving it in water, and crystallizing it; this was formerly done at Venice; hence its name, *Borax Veneta*. Borax is a neutral salt, composed of boracic acid and soda; the soda predominates, and is not completely saturated with the acid. When purified, this salt is in white hexaedral or octahedral prisms, slightly efflorescent, its surface becoming covered with a powdery substance like flour;

it dissolves in 12 parts of cold and in 2 parts of hot water, but is insoluble in alcohol. The *three* first attenuations are effected by *trituration.*

CALCAREA CARBONICA, *Carbonas* (*sub*) *calcis;* Fr., Chaux carbonatée, Sous-carbonate de chaux; Ger., *Kalkerde, Kohlensaure kalkerde;* Eng., Carbonate of Lime, Chalk. Usual dose, 30.

109. The sub-carbonate of lime is met with in great abundance in nature; more or less pure, it constitutes the marbles, chalk, a species of alabaster, limestone, various stalactites, &c. It is found dissolved, in small quantities, in many gaseous mineral waters, in well waters, &c.; it forms, in part, the basis of the skeletons of animals, of coral, of the nacre of pearl, of egg-shells, of the shells of Mollusca, of various concretions, &c., in which it often occurs associated with phosphate of magnesia and animal matter. For homœopathic use, we take the sub-carbonate of lime derived from the animal kingdom, and particularly that furnished by the *shell of the oyster.* For this purpose we bruise a somewhat thick and well cleaned oyster-shell, and take a grain of the snow-white calcareous substance which is found between the two surfaces, this is to be triturated with 100 grains, (5 grammes,) of sugar of milk, after which two successive triturations are to be made, before dissolving them and making the remaining necessary attenuations with alcohol. The carbonate of lime thus obtained is not, in fact, rigorously pure; but as a medicine, it is to be preferred to all other preparations, inasmuch as this is the one that has been experimented on under the name of sub-carbonate of lime.

CALCAREA PHOSPHORATA, *s. phosphorica, Phosphas calcis;* Fr., Chaux phosphatée, Phosphate de chaux; Ger., *Phosphorsaure Kalkerde;* Eng., Phosphate of lime.

110. This salt is insoluble, white, pulverulent, and insipid; it forms the base of the skeleton, of the horns and teeth of vertebrate animals, of certain animal concretions, &c. The preparation employed for the experiments whose results are found in our Manual, was obtained by lime-water, to which was added some drops of phosphoric acid, until a deposit was formed, which was afterwards washed, dried, and triturated. The first *three* attenuations are made by trituration.

CARBO ANIMALIS; Fr., Charbon animal; Ger., *Thierkohle;* Eng., Animal charcoal. Usual doses, 15, 24, 30.*

111. To prepare this substance, place a thick piece of ox-hide on burning coals, and let it burn until all flame ceases; the burning charcoal is to be laid quickly between two slabs of stone, to extinguish it immediately, for if it remained burning, exposed to the air, the greater portion of it would be destroyed.

Besides the animal matter, there is in ox-hide a certain quantity of tannin, which, after having been burned, leaves a residuum of carbonate of potassa. Animal charcoal retains less of the form of the carbonized body than vegetable charcoal; it is less inflammable, but has a more sensible metallic lustre; in burning it gives out nitrogen and carbonic acid.

According to Weise, the best animal charcoal is obtained from veal; to effect this, take a piece of veal with the ribs (the bones should form only one-third of the whole weight,) cut in pieces, not too small, and roast it in a coffee-roaster over a sufficiently brisk fire, until the inflammable air begins to appear in the shape of small flames, which show themselves round the roaster; after which continue the roasting for a quarter of an hour; if it is continued until the inflammable air ceases to appear, the preparation, according to Weise, loses all its efficacy. We dare not decide on the merit of this preparation; we will only observe that the animal charcoal which has been experimented on in homœopathy, was prepared from *ox-hide*, agreeably to the directions we have given, and that it is necessary that all homœopaths should have the same preparation. The first *three* attenuations are made by *trituration.*

CARBO VEGETABILIS, *Carbo ligni;* Fr., Charbon vegetal, Charbon de bois; Ger., *Holzkohle;* Eng., Vegetable charcoal or carbon, Wood charcoal. Usual doses, 12, 15, 30.

112. Well burned charcoal of any species of wood, is uniform in its effects, when its inherent medicinal virtue has been properly developed. Hahnemann uses the charcoal of the *birch.* Pure vegetable carbon has neither taste nor smell;

* As may readily be supposed, the two *charcoals* are placed in this chapter, not as *minerals*, but as *chemical products.*

it is perfectly black, very porous, light, with a shining fracture; it prevents the putrefaction of water and other substances, and even checks it when it has already commenced. For medical use, it is proper to select charcoal in large pieces, brittle, dense, and yet sufficiently light, retaining the form and texture of the wood, which are bright, do not soil, and which, on being ignited, exhale neither smoke nor unpleasant smell; for in the latter case, they are but half carbonized and contain resinous particles. Those charcoals which have throughout a dull appearance, are soft, and soil, are supercarbonized, and have lost a part of their carbon. The *three* first attenuations of this substance are made by *trituration*.

CAUSTICUM, *Tinctura acris sine kali;* Fr., Causticum, Teinture âcre sans potasse; Ger., *Ætzstoff*, *Ætzstoff-Tinctur;* Eng., *Caustic.* Usual dose, 30.

113. To obtain in a state of purity this pretended principle of causticity of the alkalis, Hahnemann has pointed out several processes, all of which, whatever differences may exist between them, produce preparations sufficiently analogous in their effects, and which are only distinguished by the degree of potency. The most energetic preparation, *the only one now used*, is that which, by preference, bears the name of *Causticum*, and is obtained in the following manner: take about one kilogramme of lime recently burnt, and after having steeped it for a minute in distilled water, place it in a dry bowl, where, after the developement of much heat and vapour, it soon falls into powder. Sixty grammes of this powder, mixed in a porcelain mortar with an equal quantity of bi-sulphate of potassa, previously fused at a high heat, form, with sixty grammes of boiling water, a thick mass, which is to be placed in the alembic. It is then distilled until entirely desiccated. The product of the distillation, weighing about forty-five grammes, which has the transparency of water, contains the *causticum* in a state of concentration. Its taste is extremely astringent, and produces a sensation of burning in the throat. This liquid congeals, like water, at a very low temperature; it much accelerates the putrefaction of animal substances plunged in it. Hydrochlorate of baryta does not detect in it the presence of sulphuric acid, nor does the oxalate of ammonia that of any trace of lime. One drop of this fluid mixed with 100 drops of spirit of wine gives the

first attenuation; the subsequent attenuations are made like those of all tinctures.

114. To obtain the other preparations of this substance, known by the name of *tinctura acris sine kali*, but which are no longer used, Hahnemann had given the following process. Take the *acrid tincture of antimony*, (*teinture âcre d'antimoine*,) the strongest is blood-red, saturate it with concentrated nitric acid until it begins to redden litmus paper; or, having taken the strong tincture of antimony, recently prepared, pour into it, drop by drop, sulphuric acid, (containing 100 drops of water to 150 of acid,) until it begins to act on blue test paper; the slight excess of acid is destroyed by means of a little quicklime. Another preparation, analogous to this, but a little less powerful, is obtained by treating *caustic potassa* (pierre à cautère,) by alcohol, which, in like manner, is freed from potassa by sulphuric acid.

There is still another which is prepared with slaked lime, on which the very strongest alcohol is poured, and which is afterwards neutralized by sulphuric acid. Although less coloured and not so powerful as the second, it produces, nevertheless, the same medicinal effects when given in stronger doses.

CINNABARIS, *Sulfuretum hydrargyri rubrum, Mercurius sulfuratus ruber;* Fr., Cinnabre, sulfure rouge de mercure, Mercure sulfuré rouge; Vermillon; Ger., *Zinnober*, *Schwefel-Quecksilber;* Eng., Cinnabar, Red sulphuret of mercury, Bi-sulphuret of mercury. Usual doses, 9, 30.

115. This mercurial substance is found native in abundance, particularly in Spain, in Illyria, in Friuli, in Peru, often in amorphous masses, combined with arsenic, but frequently, also, crystallized. It is obtained artificially by submitting to sublimation six parts of pure mercury with one part of refined sulphur. The purest native cinnabar comes from China, that of Hungary, also, is very pure. *Artificial* cinnabar, which alone is used in homœopathy, is in voluminous masses, of an aciculated appearance, of a violet-grey, but when reduced to powder, of a lively and pure red, without mixture of yellow; it has neither taste nor smell, and is insoluble in water and alcohol. The cinnabar of commerce is frequently sophisticated with *minium*, (rouge d'Angleterre,) or other usually fixed substances; but these adulterations are seldom

found, except in pulverized cinnabar, whilst that which is in masses is almost always pure. It is, however, better to prepare it for ourselves. The attenuations as far as the *third*, are made by *trituration*.

Cuprum, *Cuprum metallicum;* Fr., Cuivre, Cuivre metallique; Ger., *Kupfer, Metallisches kupfer;* Eng., Copper, Metallic copper. Usual dose, 30.

116. Copper is found in nature in great abundance; sometimes native in different forms, sometimes as an oxide combined with other substances. We have *native pyritous, pyritous-hepatic, grey copper, sulphuret, red oxydule, arseniferous oxidule, muriate, blue carbonate, green carbonate, arseniate*, &c. It is found native chiefly in North America and in Siberia. There are also copper mines in Sweden, Norway, Silesia, Bavaria, France, England, Hungary, &c. It is said also to be found in many plants, such as *Helen.*, *Dulcam.*, and in the ashes of *Quinquina*, of *Coffea*, &c. It is said to be found in the greatest purity in the island of Cyprus, whence its name of κυπρος, copper. Metallic copper is commonly obtained from its sulphuret by successive roastings and the use of charcoal; the product is known in commerce by the name of *rosettes*. Pure copper is in a solid metal, of an orange-red, very brilliant, harder than gold and silver, more sonorous than all other metals, the most ductile of all, after platina and silver, very malleable, acquiring a very peculiar and disagreeable smell by being rubbed. The best is that which comes from Japan, in the shape of small ingots. To render copper available for homœopathic use, we take one of these ingots, and melt six parts of it with two of solid nitre, a process by which the metals which might be combined with the copper remain in the scoriæ; we dissolve the copper thus obtained, as directed in No. 45, in order to have it in the form of powder. Another method of obtaining *pure copper in powder*, consists in dissolving three parts of perfectly pure sulphate of copper in eight parts of boiling water, to which eight parts of honey are added, stirring the whole together, and causing it to boil for half an hour; it is then to be removed from the fire, and a large quantity of cold water added to it, the fluid is to be decanted, the copper reduced to powder is to be placed on a filter, washed, and dried by exposure to a moderate heat. Of the powder ob-

tained by one or other of these methods, take one grain, (5 centigrammes,) and triturate it with one hundred parts of sugar of milk; the process which consists in grinding copper under water, on a grindstone, in order to obtain the powder, is less likely to give pure preparations. The *three* first attenuations are made by *trituration.*

FERRUM, *Ferrum metallicum;* Fr., Fer, Fer metallique; Ger., *Eisen, Metallisches Eisen;* Eng., Iron, Metallic iron. Usual doses, 6, 12, 30.

117. This metal is found in the three kingdoms of nature, but it rarely occurs native, and, perhaps, only in aërolites, in a mountain in Missouri, in another in the department of Isere, in France, in the mines of Saxony, in Brazil, in Senegal, and in the island of Bourbon. Metallic iron is solid at the ordinary temperature, of considerable hardness, large-granular, somewhat lamellated, acquiring a sensible odour by friction, of a bluish-grey, very difficultly fusible, the most tenacious of metals, very ductile, but more susceptible of being drawn into wire than of being rolled. The iron of commerce is occasionally mixed with cast iron, which is discovered by the black spots which are formed in treating it with hydrochloric acid, or with sulphuric acid diluted with three times its volume of water. Iron, also, frequently contains copper, which is detected by treating it with sulphuric acid and caustic ammonia. For this purpose, dissolve iron in dilute sulphuric acid, as mentioned above; add caustic ammonia in excess, and filter the solution until it appears perfectly limpid, and does not alter by exposure to the air. If it exhibits a strongly bluish tint, and if, when mixed with pure sulphuric acid, it gives a precipitate of copper upon immersing in it a piece of polished iron, we are certain of what it contains. But if, on the contrary, after evaporating the ammoniacal solution to about one-twelfth, no trace of a precipitate can be discovered by the same process, the iron may be considered as perfectly free from copper. To prepare iron for homœopathic use, it is pulverized by means of a good file, which gives *iron-filings,* a powder which every homœopathic physician should prepare for himself, since the *iron-filings* of commerce are seldom free from other metals. The *three* first attenuations of this powder are made by *trituration.*

Ferrum chloratum *s. muriaticum, Murias s. hydrochloras ferri;* Fr., Muriate ou hydrochlorate de fer; Ger., *Salzsaures eisen;* Eng., Muriate or hydrochlorate of iron.

118. This salt is obtained by the combination of pure iron-filings with hydrochloric acid; the solution is filtered and evaporated to crystallization. The salt thus obtained is of a beautiful greenish-blue, less green than the sulphate of iron, of a well marked styptic taste and easily soluble in water and in alcohol. The *three* first attenuations are made by *trituration.*

Ferrum magneticum, *Ferrum oxydulatum magneticum, Lapis magneticus;* Fr., Fer magnetique, Deut-oxyde de fer, Aimant naturel, Pierre d'Aimant; Ger., *Magnetstein, Magnetisches Eisenerz;* Eng., Magnetic oxide of iron, Loadstone. Usual doses ?

119. The ore of iron, known under the name of *magnetic oxide of iron* or that of *loadstone,* is a natural combination of protoxide and peroxide of iron, which has the property of attracting iron, and that of possessing poles which correspond with those of the earth. It is a mineral which usually occurs in irregular, brittle, granular fragments, black, verging a little to blue; the loadstone of a black colour is more esteemed than the brown or reddish. It is chiefly found in Bohemia, in the Tyrol, in Switzerland, Sardinia, Corsica, Sweden, Norway, Scotland, Elba, China, the East Indies, North America and Brazil. Pieces of this mineral, of forty pounds weight, are found in the magnetic mountain in Siberia. In order to make it useful in homœopathy, it must be pulverized and the *three* first attenuations are made by trituration.

Graphites, *Plumbago, Percarburetum ferri;* Fr., Graphite, Plombagine, Percarbure de fer; Ger., *Graphit, Reisblei;* Eng., Graphite, Plumbago, Black-lead, Carburet of iron. Usual dose, 30.

120. Graphite, perfectly pure, is a mineral carbon, which, for ten parts of carbon, contains only one of iron. It is occasionally found in mines; those of England and Passau pass for the best. A species of artificial graphite is formed in high furnaces during the smelting of iron. It is a

grey, blackish, shining substance, greasy to the touch, insipid, inodorous, and used for making pencils, called *lead-pencils*. To prepare graphite for medical use, *if the English cannot be procured*, it must be boiled for an hour in a sufficient quantity of rain-water, after which the fluid is to be decanted and the graphite to be digested in a solution of equal parts of sulphuric and hydrochloric acids, diluted with twice their volume of water. After repeatedly stirring the mixture for twenty-four hours, decant the fluid, wash with rain-water and dry it. Pure graphite should contain no earthy particles; sulphuric and hydrochloric acids should dissolve but a little iron, and hydrosulphuric acid should not produce any cloudiness in the solution of this mineral. To make the homœopathic preparation of graphite, take one grain (5 centigrammes) of black-lead, the purest possible, *which is to be separated from a very thin English lead-pencil*, and triturate it with one hundred parts of sugar of milk. The three first attenuations are made by *trituration*.

HEPAR SULFURIS CALCAREUM, *Calcarea sulfureta, Sulfuretum calcis;* Fr., Foie de soufre calcaire, Sulfure de chaux; Ger., *Kalkartige Schwefelleber, Kalkschwefel;* Eng., Sulphuret of lime. Usual doses, 3, 30.

121. This substance is a combination of sulphur with *calcium*, known since the close of the last century, and produced in 1768 by *Couton*. It may be economically obtained by decomposing, at a high temperature, sulphate of lime by carbon. For homœopathic purposes it is procured by direct combination of oyster-shells with sulphur. For this purpose, a mixture of equal parts of oyster-shells, finely pulverized, and purified flowers of sulphur are kept at a white heat for ten minutes, after which they are preserved in a well stopped bottle. Sulphuret of lime is a yellow or reddish mass, porous, friable and very slightly soluble in water, with which it gives a *hydrosulphuret*. The *three* first attenuations are made by *trituration*.

IODIUM *Iodina;* Fr., Iode; Ger., *Iod, Iode, Iodin;* Eng., Iodine. Usual dose, 30.

122. The combustible, simple, and non-metallic body, discovered by *Courtois* in 1813, and examined more carefully

by *Gay-Lussac*, derives its name from ιωδης, violaceous, on account of the beautiful violet colour of its vapour. This substance is found in many of the fuci, &c., which grow in waters of the ocean, as well as in most of the sponges. It is extracted from the mother waters, which are left in the manufacture of soda, where it is found in the state of hydriodate of potassa. To obtain it, pour an excess of concentrated sulphuric acid into those waters and boil the liquid in a glass retort with a receiver. The sulphuric acid combines with the potassa and the hydrogen of the salts, whence result sulphate of potassa, water, sulphurous acid and iodine. This last is volatilized and passes into the receiver, where it condenses. To purify it, it must be distilled afresh with water containing a little potassa; it is afterwards to be compressed between two sheets of paper, and introduced, while dry, into a tube closed at one end, pressed down and fused. Iodine thus prepared is solid at the ordinary temperature, and is in the form of laminæ which have a metallic lustre, but with very little tenacity. Its bluish colour is somewhat like that of sublimed arsenic or plumbago, and its odour approaches that of chlorine. Iodine is soluble in one hundred parts of water, and ten of alcohol or ether; if exposed to the air, it evaporates at the ordinary temperature. The iodine of commerce is not only constantly damp, but also adulterated with other substances, such as graphite, sulphuret of antimony, &c. To purify iodine, add an equal quantity of iron filings, and sublime it over a spirit lamp. By dissolving iodine in spirit of wine, a pure tincture may also be obtained, since neither graphite nor antimony are soluble in that fluid. As iodine is susceptible of alteration when mixed with sugar of milk, it is best not to prepare it by trituration, but to make an alcoholic tincture with twenty parts of alcohol to one of iodine.

KALI CARBONICUM, *Carbonas (sub) potassæ; Sal tartari;* Fr., Potasse carbonatée, Sous-carbonate de potasse, Sel de tartre; Ger., *Kali, Kohlensaures kali, Gewächslaugesalz;* Eng., Carbonate of potassa, Sub-carbonate of potassa. Usual dose, 30.

123 Sub-carbonate of potassa is found in the ashes of all vegetables, except those which grow on the sea-shore, and is obtained either by igniting tartar, by the deflagration of nitre with carbon, or by heating to a red heat sulphate of potassa

with carbon, iron, and sub-carbonate of lime. It is procured in the large way by lixiviating wood-ashes and evaporating the product to complete dryness. In order to destroy the foreign substances that might be associated with potash thus obtained, the whole is calcined in furnaces built for the purpose, until the product acquires a whitish colour. There is also in commerce a sub-carbonate of potash, which is obtained by the incineration of the residue of the grapes after the wine is expressed, (*marc de raisin;*) this is much purer than common potash, and is almost entirely soluble in water. To obtain sub-carbonate of potassa, such as is used in homœopathy, moisten with a little water fifteen grammes of cream of tartar, (super-tartrate of potassa,) so as to form a ball, which is to be wrapped in paper, and suffered to dry; it is afterwards heated red-hot on burning coals. This operation finished, place the ball in a porcelain saucer, covering it with a cloth, carry it into a cellar, where it is to be left to absorb moisture from the air for fifteen days. By this means the potassa is separated from the lime, so that it contains no portion of it. One drop of the clear fluid obtained by this process is treated with sugar of milk; the *three* first attenuations are made by *trituration.*

KALI CHLORICUM, *Chloras potassæ;* Fr., Potasse muriatée, Chlorate de potasse, Muriate oxygenée de potasse; Ger., *Chlorsaures Kali;* Eng., Chlorate of potassa. Usual doses, 1, 3, 30. ?

124. This salt is procured by passing a current of chlorine through a solution of caustic potassa; after several days, the operation is stopped, the shining scales found at the bottom of the vessel are collected and washed with a little cold water to remove the hydrochlorate of potassa and chloride of potassium they might contain; then, after completely purifying them, they are dissolved in hot water, and suffered to crystallize. This salt must not be confounded with the *chloride of potassa,* nor with that of *potassium.*

It is in rhomboidal plates, of a pearly white, brittle, of a cool, harsh taste, soluble in fifteen times its volume of cold water; it is fusible on burning coals, it detonates by a blow, and inflames on contact with sulphuric acid, which causes it to be used for the chemical matches which inflame on being dipped into sulphuric acid. If chlorate of potassa dissolved in distilled water becomes cloudy on the addition of a solution of silver, it shews that it is rendered impure by the chloride of potassium, and if, at a red heat, the residuum exhibits alkaline properties, we may conclude that it contains nitre. The *three* first attenuations of this substance are made by *trituration.*

KALI HYDRIODICUM; *Hydriodas potassæ;* Fr., Potasse hydriodique, Hydriodate de potasse; Ger., *Hydriodsaures kali;* Eng., Hydriodate of potassa. Usual dose, 30.

125. To obtain this preparation, place in contact with each other one part of pure iodine with four parts of water and one-half part of iron-filings. There is a slight disengagement of heat, and the liquid becomes deep brown. Heat this last gently until it becomes clear like water. Then filter and boil it, adding pure carbonate of potassa until all the iron is separated. If too much carbonate of potassa has been added, it must be neutralized by a small quantity of pure hydrocyanic acid. *The fluid then consists of hydriodate of potassa,* it is to be filtered and carefully evaporated until crystals are obtained, which are laid aside and dried. When dry this is no longer hydriodate, but *iodide of potassa;* nevertheless, even in its dry state, this substance is known by physicians under the name of *hydriodate of potassa.* It is formed of white cubic crystals, of an acrid and pungent taste, like salt, slightly deliquescent, and entirely soluble in water and alcohol. The iodide of potassa of commerce is occasionally adulterated with chloride of potassium, which is detected by the red colour obtained on dissolving one part of this iodide in 12,000 parts of water, to which is added a little solution of platina. We use in homœopathy, not the liquid *hydriodate of potassa,* but the substance in the state of crystals, that is to say, the *iodide,* one part of which is to be treated with one hundred parts of sugar of milk. The *three* first attenuations are made by *trituration.*

KREOSOTUM; Fr., Kréosote; Ger., *Kreosot;* Eng., Kreosote. Usual dose, 30.

126. This substance is found in different kinds of tar, in the smoke of wood, in empyreumatic acetic acid, &c. Dr. *Reichenbach,* of Blansko, has obtained it from vinegar of

wood; but the proportion of kreosote furnished by this liquid is but inconsiderable. The body which furnishes it most abundantly is the *tar of the beech tree.* For this purpose this tar is distilled, the oil obtained is rectified; at first it produces *eupion,* and afterwards a kind of *kreosote,* which falls to the bottom when dropped into water. By changing the receiver, these two last fluids are easily separated, the last of which, the kreosote, is taken, the acetic acid which renders it impure, is removed by means of carbonate of potassa, after which the acetate of potassa is separated by water, the kreosote, which floats in masses on the water, is collected and dissolved in the lixivium of potassa, which at the same time separates a portion of *eupion.* This last substance being separated, the lixivium is saturated with sulphuric acid, in order to isolate the *kreosote.* The kreosote obtained is to be dissolved afresh in the lixivium of potassa, and the process is to be repeated until the kreosote no longer contains any trace of eupion. Pure and perfectly anhydrous kreosote is a colourless, transparent fluid, slightly oleaginous, and strongly reflecting the light; a little greasy to the touch, of a penetrating smell, an acrid, caustic taste with a sweetish after-taste, not shewing either acid or alkaline properties, evaporating easily, and perfectly soluble in alcohol and ether. The attenuations are prepared with alcohol.

MAGNESIA CARBONICA; *Carbonas (sub) magnesiæ;* Fr., Magnesie carbonatée, Carbonate (sous) de magnesie; Ger., *Bittererde, Talkerde, Kohlensaure talkerde;* Eng., Carbonate of magnesia. Usual dose, 30.

127. This salt frequently occurs native, but more usually in the form of a white, earthy mass, than crystallized. It is prepared artificially by decomposing the sulphate of magnesia, dissolved in water, by means of a solution of sub-carbonate of potassa, collecting and washing the precipitate. The greater the purity of the sulphate of magnesia and of the carbonate of potassa, the weaker the dilutions; the more care taken in the washings and the more rapid the drying, the lighter, whiter, and more valuable in commerce is the magnesia obtained. The best is that which comes from England. This salt, usually in large cubic masses, of a dead white, is soft to the touch, insipid and inodorous, adheres strongly to the tongue, effervesces with acids; fire decom-

poses it, pure water does not dissolve it, but in carbonated water it dissolves almost entirely. It is often adulterated by carbonate of lime, which is detected by the insoluble residuum left on dissolving it in weak sulphuric acid. To prepare the magnesia used in homœopathy, take one part of the whitest and lightest, which triturate with one hundred parts of sugar of milk. The *three* first attenuations are prepared by *trituration.*

MAGNESIA MURIATICA, *Murias s. hydrochloras magnesiæ;* Fr., Magnésie muriatée, Muriate ou hydrochlorate de magnésie; Ger., *Salzsaure talkerde;* Eng., Muriate of magnesia. Usual doses, 12, 18, 30.

128. This salt is found in many mineral waters, in some saline waters, and in sea-water, which contains 3.50 parts in 30. To obtain this salt suitable for homœopathic purposes, take pure and hot hydrochloric acid, procured by distilling sea-salt with an equal weight of phosphoric acid, (melted by fire and afterwards fallen down in a state of oleaginous deliquescence,) dissolve in it as much magnesia as possible, at 8° R.; filter the solution while hot, and evaporate it to dryness at a uniform heat. This salt, which is very deliquescent, must be kept in a corked bottle; it has a very bitter taste, effervesces with acids, is decomposed by heat, and is difficult to crystallize. The *three* first attenuations of this substance are made by *trituration.*

MAGNESIA SULFURICA, *Sulfas magnesiæ, Sal anglicanum;* Fr., Magnesie sulfatée, Sulfate de magnesie, Sel d'Epsom; Ger., *Schwefelsaure talkerde;* Eng., Sulphate of magnesia, Epsom salts. Usual doses ?

129. This salt is frequently found in nature, either in mineral waters, or in the form of crystals, on the Alps, in Switzerland, at Montmartre, &c. It is prepared artificially by the evaporation and distillation of the mother waters, (*bittern,*) or by various other processes, all of which furnish preparations more or less impure. The greatest part of that of commerce comes from Epsom, in England, under the name of *Epsom Salts;* the mineral waters of *Sedlitz, of Seidschütz,* and of *Egra,* furnish also a large quantity; but the purest is that which is extracted from the earths and

stones of the mountain of La Garde, near Genoa; nevertheless, even this last is far from being entirely pure. In general, none of the sulphate of magnesia of commerce is pure, and never can be used in homœopathy without being purified by repeated distillations and crystallizations. In order to separate it from the alkaline or earthy salts with which it may be combined, dissolve it in an equal volume of boiling water, filter the solution while hot, and set it aside to crystallize. If it contains metallic salts, it is purified by heating it to a red heat, or by boiling its aqueous solution with sub-carbonate of magnesia, after which it is to be filtered while still boiling, and set to crystallize. If *magnesite*, (a mineral formed by the sub-carbonate of magnesia,) can be procured, it would be better to prepare this salt ourselves. For this purpose, dilute sulphuric acid with 2, 3 parts of its volume of water, add pulverized magnesite as long as there is an excess of acid; in this manner is obtained a mass of crystals, which must be exposed for some time to the influence of the air to separate the oxide of iron usually found in magnesite. It is then dissolved in water, filtered, and suffered to crystallize afresh. The *three* first attenuations are made by *trituration.*

MANGANUM CARBONICUM, *Manganesium, Carbonas (sub) mangani;* Fr., Manganèse carbonaté, Sous-carbonate de manganèse; Ger., *Braunstein;* Eng., Carbonate of manganese. Usual dose, 30.

130. Hahnemann mentions the *acetate* of manganese, but homœopathic physicians generally prefer the *carbonate*, the effects of which are the same as those of the acetate, but which possesses the advantage over the latter, that it can be treated by trituration, and thus furnishes preparations less susceptible of alteration. To obtain the carbonate, triturate well together equal parts in weight of black oxide of manganese and of crystallized sulphate of iron, to which add a little syrup of sugar in order to make the whole into a paste, of which form balls of the size of a hen's egg; these must be heated among burning coals and kept for some minutes at a white heat. The solution of this mass in distilled or rain water, contains sulphate of manganese, while the residuum consists of oxide of manganese in excess, mixed with oxide of iron. Introduce into the fluid, carbonate of soda, which throws down a white

powder; this is to be repeatedly washed and then dried. This powder is *carbonate of manganese;* the *three* first attenuations of it are to be made by *trituration.*

MERCURIUS VIVUS, *Hydrargyrum vivum*, *Argentum vivum;* Fr., Mercure vif, Vif argent; Ger., *Merkur*, *Quecksilber;* Eng., Mercury, Quicksilver.—Usual doses, 3, 12, 30.

131. This metal is found in various forms and in different combinations, either amalgamated with silver or united with sulphur, as cinnabar, &c.; there are mines of it in Hungary, Transylvania, Russia, Spain, Peru, and the East Indies. In commerce this metal is often alloyed with lead and bismuth; it is freed from these metals by boiling on its surface an aqueous solution of mercurial nitrate for about an hour, care being taken to renew the water as it evaporates. This solution takes up the lead and the bismuth, and deposits in their place its mercury, which unites with the other. The purest mercury may be obtained by the distillation of artificial cinnabar with iron-filings; sulphuret of iron is formed and the mercury passes over into the receiver, which should be filled with water. This mercury is then collected on a piece of leather, and by means of a press is freed from all humidity. In a state of perfect purity, mercury is of a very brilliant tin-white, without an iridescent pellicle, fluid at the ordinary temperature, and evaporates easily in the air. Placed in a spoon and heated over the fire, it should not decrepitate, nor leave any residuum on being evaporated; the water in which it is triturated or shaken should remain clear; vinegar after having been in contact with it should not acquire a sweetish taste, &c. The *three* first attenuations are made by *trituration.*

MERCURIUS SOLUBILIS HAHNEMANNI GRISEUS, *Hydrargyrum oxydulatum nigrum;* Fr., Mercure soluble de Hahnemann; Ger., *Hahnemann's auflösliches Quecksilber;* Eng., Black oxide of mercury. Usual doses, 3, 12, 30.

132. This mercurial preparation is neither an *oxide* nor a *protoxide* of mercury, but an *ammoniaco-mercurial sub-proto* nitrate, which, as it does not keep well, and is very liable to pass to the maximum of oxidation, should be prepared in a very small quantity at a time. Hahnemann himself has

long since abandoned this preparation, preferring to it, *in all cases*, that of metallic mercury which we have mentioned above. Nevertheless, as there are many homœopathic physicians who imagine that metallic mercury is not so efficacious as the uncertain preparation, *black oxide of mercury*, we will point out the method recommended by Hahnemann to obtain it. Having purified the mercury, as described above, it is dissolved, cold, in common nitric acid, which requires many days; the salt which results is dried on blotting-paper, and triturated in a glass mortar for half an hour, adding one-fourth of its weight of the best alcohol. The alcohol which has been converted into ether is thrown aside, and the trituration of the mercurial is contained with fresh alcohol, for half an hour each time, until this fluid no longer has the smell of ether. That being done, the alcohol is decanted, and the salt dried on blotting-paper, which is renewed from time to time. Afterwards it is triturated for a quarter of an hour, in a glass mortar, with twice its weight of distilled water; the clear fluid is decanted, the salt is again washed by a second trituration with a fresh quantity of water, the clear fluid is united to the preceding, and thus we have the aqueous solution of all that the saline mass contained of mercurial nitrate really saturated. The residuum is composed of other mercurial salts, of chloride and sulphate. Finally, this aqueous solution precipitates, by caustic ammonia, the so-called *black oxide of mercury*, (*blackish-grey oxidule of mercury*,) the *three* first attenuations of which are made by *trituration*.

Mercurius corrosivus, *Mercurius sublimatus, Deuto-chloretum hydrargyri, Hydrargyrum corrosivum;* Fr., Sublimé corrosif, Deuto-chlorure de mercure; Ger., *Ætz-sublimat, Quecksilberchlorid;* Eng., Corrosive sublimate, Corrosive chloride of mercury. Usual doses, 15, 30.

133. The most simple mode of obtaining this salt, consists in distilling together to dryness, in a glass retort, three parts of pure metallic mercury, and five parts of concentrated sulphuric acid; the saline mass which results, is triturated with equal parts of common salt, the whole being afterwards sublimed in a sand-bath. This salt may also be obtained by a very simple method, in the wet way, by dissolving *red precipitate* in hydrochloric acid, and evaporating the solution either to dryness, or for crystallization. Corrosive sub-

limate is prepared in the large way in laboratories; those of Holland furnish it in boxes of the size of subliming vessels; that of England is in masses of the form of loaves weighing from 12 to 16 pounds each. When obtained by the wet way, this salt is in much elongated prismatic acicular crystals, of a beautiful white, and of great purity; obtained by the dry way it is in loaf-like masses, of a dead-white in the centre, transparent at the circumference, convex, and polished on the upper side, bristling with crystals on the lower, of a disagreeable metallic taste, dissolving in 16 parts of cold, and in 3 parts of boiling water, in 2½ parts of cold, and in 1½ of boiling alcohol, or in 3 parts of ether. Many organic substances, such as oil, fat, *sugar*, *concentrated alcohol*, starch, &c., transform it into *chloride of mercury*, when placed in contact with it; on this account it appears to be improper to treat this salt by triturations with sugar of milk; the *first* attenuation, on the contrary, is made with water, the *second* with aqueous alcohol, and it is only with the third that we begin to use common alcohol.

MURIATIS ACIDUM, *Acidum muriaticum, s. hydrochloricum;* Fr., Acide muriatique ou hydrochlorique; Ger., *Salzsäure;* Eng., Muriatic acid. Usual doses, 3, 30.

134. This acid is rarely found in a free state in nature; it occurs, combined with water, in the neighbourhood of volcanos, and combined with sodium in the three kingdoms of nature. To obtain it artificially, distil together, in a retort sufficiently large, 3 kilogrammes of common salt and 4 kilo. of concentrated sulphuric acid, with 2 kilo. of water, causing the gas to pass into a receiver containing 2 kilo. of distilled water, in order to condense it. If the product of this distillation is of a yellow colour, or contains sulphuric acid, precipitate it by chloride of barium and distil it afresh, or rectify it by re-distilling it with half a pound of common salt; the coloured portion which first passes into the receiver is to be rejected; that which comes over afterwards is pure hydrochloric acid, which is to be kept in bottles with ground glass stoppers. The hydrochloric acid of commerce is never pure; it contains, nearly always, sulphuric acid, chloride of iron, sulphurous acid, and even arsenic; when pure and in a fluid state, this acid is colourless, limpid, and of a pungent smell and very acrid taste; it does not freeze, nor diffuse fumes like

concentrated acid. Placed in contact with organic substances, it destroys them, and combined with alcohol, it forms a kind of ether, so that the *three* first attenuations cannot be made with either sugar of milk or alcohol. The *first*, therefore, is made with distilled water, the *second,* with a mixture of equal parts of alcohol and water, and we begin to use common alcohol only with the *third.*

NATRUM CARBONICUM, *Carbonas (sub) sodæ;* Fr., Soude carbonatée, Sous-carbonate de soude; Ger., *Mineralisches Laugensalz;* Eng., Carbonate of soda. Usual doses, 12, 30.

135. This salt is found native; it abounds in Egypt, in a valley called the *Natron-Lakes*, and is crystallized in these lakes by natural evaporation; it is also the basis of the waters of Vichy and other thermal waters, and is found in the plants growing on the maritime coasts of France. It is prepared on a large scale in Egypt, Spain, and France, by the incineration of the plants which grow on the sea-shore; these ashes are sold under the name of *artificial soda, (soude factice;)* they are of a blackish colour, and contain all those impurities found in ordinary ashes, such as various sulphates, muriate of soda, carbon, and silex. The *Spanish*, or *Alicant barilla,* is considered the best; the most impure is the *Kelp:* it contains iodide of soda. There is another kind which comes from Hungary, and is purer than any other; it is found in that country at the bottom of lakes which have been dried up by the heat of the sun. It is also prepared by heating sulphate of soda, charcoal, and lime, to a red-heat, and lixiviating the product. For homœopathic use, we take rough carbonate of soda, which is purified by submitting it to a fresh crystallization. For this purpose, this salt is first washed, dissolved by heat, and the solution suffered to cool, taking care to stir it from time to time with a spatula, to prevent the formation of regular crystals. The crystallized salt is then placed in a funnel, the end of which is closed with a little cotton, and when the adherent moisture has run off, it is to be wet from time to time with a fresh quantity of distilled water, observing that the last has drained off before more is added. When the water which drains off is no longer clouded by the addition of nitrate of silver, after having been saturated with nitric acid, it will be unnecessary to continue the washing, as the

salt remaining in the funnel will be pure sub-carbonate of soda. This salt, when pure, has a cooling, slightly alkaline taste; on exposure to the air, it effloresces; it is insoluble in alcohol, but dissolves in twice its weight of cold water. The *three* first attenuations are made by *trituration.*

NATRUM MURIATICUM, *Murias s. hydrochloras sodæ, sal culinare;* Fr., Soude muriatée, Muriate ou hydrochlorate de soude, Sel de Cuisine; Ger., *Salzsaures natrum, Küchensalz;* Eng., Chloride of sodium, Muriate of soda, Common salt. Usual doses, 12, 30.

136. This salt is found native and anhydrous, *(sal fossile s. gemmæ,)* in various parts of Europe, as in France, near Vic, &c., either in mines, or forming mountains, as in Spain. It also exists in sea-water, in salt springs, and in many mineral waters. The common salt of commerce always contains a little magnesia, sulphate and chloride of lime. To free it from these salts, dissolve one part in three parts of boiling distilled water; filter the solution and let it crystallize at a temperature of 40° of *Reaumur.* This salt, which, by its taste, gives a name to what is called *salt,* when pure is not altered by exposure to the air, is colourless, fusible, and even volatile to a certain degree; it is very soluble in water, particularly when cold; it does not dissolve in alcohol, and sulphuric and nitric acids decompose it.

For homœopathic use, the crystals with pyramidal hollows are preferred to their lateral cubes. The *three* first attenuations are made by *trituration.*

NATRUM NITRICUM, *Nitras sodæ;* Fr., Soude nitratée, Nitrate de soude; Ger., *Salpetersaures natrum;* Eng., Nitrate of soda. Usual doses ?

137. This salt, known under the name of *cubic* or *rhomboid nitre,* is found native in India and in Peru, in the desert of Atacama, where it forms a mine of forty leagues in extent, and whence it is even introduced into France. In this state, nevertheless, it is not entirely pure; it contains, on the contrary, sulphate of soda, hydrochlorate of soda, and some traces of calcareous salt. It may be prepared artificially, by dissolving sub-carbonate of soda in three parts of hot water, and adding to the solution, while still hot, nitric acid until there

is no longer any effervescence, and it does not redden litmus paper. The fluid obtained is then filtered, in order to clarify it, exposed to a moderate heat and evaporated to the consistence of a syrup, or until it begins to crystallize; after which it is allowed to settle and kept cold for two or three days. At the end of that time, the fluid is decanted, the crystals are dried on blotting-paper, and kept in a bottle hermetically closed. The crystals of this salt are usually cubic or rhomboid; the slower the evaporation, the more beautiful the crystals; they dissolve readily in three parts of cold, and in one of hot water, and even in alcohol, but in minute quantities. This salt has a cooling and bitter taste; exposed to the air, it attracts moisture, without, however, deliquescing. The *three* first attenuations are prepared by *trituration.*

NATRUM SULFURICUM, *Sulfas sodæ, Sal Glauberi;* Fr., Sulfate de soude, Sel de Glauber; Ger., *Schwefelsaures natrum, Glaubersalz;* Eng., Sulphate of soda, Glauber's salt. Usual dose, 30.

138. This salt is found tolerably abundant in nature, either in a state of efflorescence, on the surface of rocks, in lands abounding in sea-salt, or in a state of solution in the water of the ocean, in that of various lakes, mineral springs, &c. It occurs in Siberia, Sweden, Italy, and Bohemia. It is not always manufactured directly, but is often obtained, as an accessory product in the manufacture of other salts. The sulphate of soda of commerce is never perfectly pure; it often contains sulphate of magnesia or of copper, and sometimes even of lead. In the first of these cases, potash produces a precipitate, and if it contains copper, ammonia colours it blue, while the lead in it will discolour the water in which the salt is dissolved.

To free it from all these foreign substances, dissolve it in water, crystallize it afresh and dry it at a moderate heat. This salt, when pure, forms crystals of great beauty, they are channelled hexahedral prisms with dihedral terminations; but, exposed to the air, they fall down into a white powder, known under the name of *sal mirabile delapsum.* This salt is insoluble in alcohol, but it dissolves in three parts of water, at the same time absorbing caloric. For homœopathic use, it is taken in crystals; the *three* first attenuations are made by *trituration.*

NICCOLUM CARBONICUM; Fr., Nickel carbonaté; Ger., *Kohlensaures Nickel;* Eng., Carbonate of Nickel. Usual dose, 30.

139. Nickel in a metallic state and entirely pure, is white, with a shade of grey; it acts by attraction on the magnetic needle, and may acquire poles; exposed to heat with contact of air, it is converted into a pure green oxide. The substance from which it is usually obtained is *kupfernickel,* in this it is combined with arsenic and iron. It occurs in nature under many forms, and in various combinations. In the mines in different parts of Germany, of France, (at Ste. Marie aux Mines, and at Allemont,) and of England, arsenical nickel usually occurs, which is found coated with oxide of nickel. It frequently accompanies arsenical cobalt. The nickel of commerce is in porous masses, of a dark grey, which are obtained by first preparing, in the wet way, oxide of nickel, which is afterwards reduced by means of a small quantity of pulverized charcoal. To obtain this metal, as used in homœopathy, dissolve it in dilute nitric acid, and evaporate the solution to dryness; re-dissolve and again evaporate to dryness, repeating this process three or four times. Dissolve the product of the last evaporation in liquid caustic ammonia, which must be entirely free from carbonic acid; this may be ascertained by trying whether or not it produces a precipitate by hydrochlorate of lime. The solution is then evaporated to dryness, after which the dry mass is mixed with two or three times its weight of *black flux,* (a mixture of two parts of tartar and one part of nitre decomposed in a red-hot crucible,) placed in a crucible, and kept in a hot fire for half an hour or three quarters. From the product thus obtained the attenuations are made, the *three* first of which are prepared by *trituration.*

NITRUM, *Nitras potassæ, Kali nitricum, Sal petræ;* Fr., Nitre, Potasse nitraté, Nitrate de potasse, Salpêtre; Ger., *Salpetersaures kali, Salpeter;* Eng., Nitrate of potassa, Nitre, Saltpetre. Usual doses, 3, 24, 30.

140. This saline substance is daily found in stables, cellars, and other places in the vicinity of animal or vegetable putrefaction. Nitrogen, oxygen, and potassa are its component parts, potassa being its base, and nitric acid being formed by the combination of the two others. This salt is found in old

walls and rubbish, in various minerals, in the water of some lakes, in certain animal matters, (the wood-louse among others,) and, above all, in many plants. In most cases, this salt is obtained artificially, by lixiviating what are called *salt-petre* earths, and submitting the product to many successive purifications, which give the products known as *rough salt-petre*, &c., and finally what is called *refined saltpetre*, which is judged to be entirely free from the foreign salts which the preceding sorts may still contain. For homœopathic use, however, the nitre requires still to be purified. For this purpose, dissolve it in twice its weight of boiling water, add to this solution a solution of carbonate of potassa, until no longer discoloured; then filter through filtering-paper covered with a layer of charcoal powder of the thickness of a knife-blade, after which evaporate it, crystallize by exposing it in a cool place. The nitre thus obtained still contains common salt, which is got rid of by dissolving it in an equal weight of boiling water and stirring it until cold, in order to prevent the formation of regular crystals. When the nitre is thus completely precipitated, it is put into a filter sprinkled with water, the water it contains is suffered to drain off, and it is then dried on blotting-paper. Nitre thus purified and triturated, forms a powder entirely dry and of a dazzling white, whilst that which contains foreign salts, is of a white more or less dirty, and liable to attract moisture from the atmosphere. The *three* first attenuations of this salt are made by *trituration.*

NITRI ACIDUM, *Acidum nitri s. nitricum, Aqua fortis;* Fr., Acide nitrique, Eau forte; Ger., *Salpetersaure, Scheidewasser;* Eng., Nitric acid, Aqua fortis. Usual doses, 3, 18, 24, 30.

141. This acid is not found native in a free state, but it exists in all nitrates combined with a base. To obtain this acid as used in homœopathy, pulverize 15 grammes of perfectly pure nitre, (See No. 140,) introduce this into a small retort coated with clay; add an equal quantity of phosphoric acid of an oily consistence; shake the mixture slightly, expose it to the flame of a lamp and pure nitric acid, which does not fume, and of a specific gravity of 12,00, will come over. Pure nitric acid is fluid at the ordinary temperature, colourless, exposed to a considerable degree of cold it congeals; it boils more readily than water, is of an acid and caustic taste, and has a weak and disagreeable smell; it destroys organic matters and colours them yellow. The attenuations of this acid can neither be made with sugar of milk nor with pure alcohol, with which it forms an ether; the *first* is therefore made with *water*, the *second* with alcohol diluted with twice its volume of water, and it is only with the *third* that we can begin to use common alcohol.

NITRI SPIRITUS DULCIS, *Spiritus nitri dulcis, Spiritus ætheris nitratus, spiritus nitrico-æthereus, Æther nitricus s. nitri, Naphtha nitri;* Fr., Esprit de nitre dulcifié, Ether nitrique alcoolisé; Ger., *Versüsster salpetergeist;* Eng., Spirit of nitrous ether, Sweet spirit of nitre. Usual doses, O.

142. The ether used in homœopathy, under the name of *nitric ether*, is not the nitric ether of the moderns, but that which is known by the name of *alcoholized nitric ether*. It is obtained by submitting to distillation a mixture of six parts of alcohol and one of ordinary nitric acid of a specific gravity of 1.30, and rectifying the product by calcined magnesia in order to remove the free acid and a kind of yellow oil it usually contains. Ether thus obtained is kept in well stopped bottles, care being taken to make them completely full, and to tie prepared bladder over the stopper; because ether, when exposed to the air is very liable to become acid, on account of the nitrous acid which is combined with the alcohol, and which is oxidized by the oxygen of the air, or by attracting the moisture of the air, which causes this acid to become disengaged and to appear in its free state. Alcoholized nitric ether is colourless, perfectly limpid, of a strong and agreeable smell, a sweetish and aromatic taste, miscible in water and alcohol in all proportions; it becomes acid in the air, and evaporates at a low temperature without leaving any residuum. That of commerce is frequently rendered impure by hydrochloric or nitric acid; in this case, by dissolving it in water, and adding some drops of a solution of silver, a precipitate will be obtained.

PETROLEUM, *Oleum petræ, Naphtha montana;* Fr., Huile de pétrole; Ger., *Bergöl, Steinöl;* Eng., Petroleum, Barbados tar. Usual doses, 18, 30.

143. This substance, which exudes from the earth through the fissures of rocks, and which is found floating in the water, most frequently occurs in Asia, particularly in Persia, and in Europe, principally in Italy, near Modena, as also in the South of France, in Switzerland, Bavaria, and Hungary. There are four sorts, viz. 1st. Black petroleum, *(Oleum petræ nigrum,)* a substance of a dark brown colour, thick, viscous, insupportably fetid, and liable to concrete in the air; 2nd. Red petroleum, *(Ol. petr. rubrum,)* of a yellowish-red, more fluid than the preceding, of an empyreumatic smell, and subject to thicken in the air; 3rd. White petroleum, *(Ol. petr. album,)* of yellow-wine or honey colour, leaving a residuum, and giving out a bituminous smell when burned; 4th. Mountain naphtha, *(Naptha montana,)* the finest kind, perfectly limpid, colourless, very fluid, volatile, very inflammable, and of an aromatic smell. In homœopathy, we use the third kind; the *white petroleum.* It should be very fluid and of a very clear yellow; which shows that it is not adulterated with the fixed vegetable oils. But, for greater certainty, it may be tested by mixing it with sulphuric acid; this acid does not act on it, but converts the fixed oils which may be mixed with it, into a kind of sulphuret. Another test, still more simple, consists in letting fall a few drops of it on very white paper; if the petroleum is pure, these drops evaporate in a free and warm atmosphere without leaving the slightest trace of grease. To ascertain that it is not sophisticated with oil of turpentine or any other vegetable essential oil, mix it with an equal quantity of spirits of wine; shake the mixture, then by filtering through filtering-paper which has previously been moistened with spirits of wine, the pure petroleum is obtained, which remains on the paper, whilst the spirits of wine, combined with the other oil, passes through the filter. For some time past there has been found in commerce a clear yellow essential oil, which is derived from pit-coal, and which, when used to adulterate petroleum, is not detected by those marks which show the presence of oil of turpentine. This oil does not, like oil of turpentine, redden test-paper, nor does it inflame when mixed with a compound of sulphuric and fuming nitric acid; but what serves to detect its presence is, that it has a specific smell, empyreumatic, penetrating, and very disagreeable, a smell which repeated rectifications with water even will not suffice to destroy.

The *three* first attenuations of purified petroleum are made by *trituration*.

PHOSPHORUS; Fr., Phosphore; Ger., *Phosphor;* Eng., Phosphorus. Usual dose, 30.

144. This substance, well known by its property of retaining the rays of light, never occurs native, but, united with oxygen, exists in the blood, flesh, brain, teeth, and many species of grain: in the mineral kingdom it is found as phosphate of lime in the mountains of Estremadura, &c. In a state of perfect purity, it is transparent, colourless, or of a yellowish-white, solid, ductile, crystallizable, inflammable, insoluble in water, but slightly so in ether and alcohol. To purify phosphorus so as to render it suitable for homœopathic use, it is sufficient to remelt it frequently under water, or to press it, under hot water, through closely woven cloth, or to distil it in a glass retort, the beak of which is plunged into a receiver full of water. If the phosphorus is of a red colour, it will be sufficient to put it into water to which nitric acid has been added, and to heat the water until it boils. The adulteration of phosphorus by sulphur is detected by its greater hardness and deep colour. As for the attenuations of this substance, there are *three* modes of making them, viz. 1. By *trituration* with sugar of milk, as far as the *third* and afterward by the liquid way; 2. By *sulphuric ether*, for the first attenuation; 3. By alcohol alone. To make the first attenuation of phosphorus by means of ether, take one hundred drops of well rectified sulphuric ether, and introduce into it one grain of phosphorus in small pieces. This should be done in a cool place, and in a well stopped bottle. The solution being effected, after shaking the bottle, take two drops, which are to be mixed with one hundred drops of alcohol, which give the *second* attenuation. The others are all made with alcohol, in the usual manner. But, as it has not been proved that sulphuric ether does not affect the virtues of the medicine with which it is mixed, the preparation with pure alcohol should be preferred. For this purpose, mix, in a bottle, 5 grains, (25 centigrammes,) of purified phosphorus, with 500 drops of alcohol, the most anhydrous possible, place the bottle, slightly corked, in a vessel filled with hot water, and melt the contents. That being done, cork the bottle tightly, shake until the solution is entirely

cold, close it hermetically, tie a prepared bladder over the cork, place it in a cool and dark place, and shake it as often as possible. At the end of some weeks, or still better, of some months, the alcohol will be found completely saturated with phosphorus. Then take one drop, which mix with 100 drops of alcohol, this gives the *second* attenuation; the others are made as usual.

PHOSPHORI ACIDUM, *Acidum phosphori s. phosphoricum;* Fr., Acide phosphorique; Ger., *Phosphorsäure;* Eng., Phosphoric acid. Usual doses, 3, 9, 30.

145. Phosphoric acid is found in the three kingdoms of nature, most frequently in the animal kingdom, and almost always combined with bases. To obtain it, three or four processes are mentioned; but as, for homœopathic use, it is necessary, above all, to obtain it such as has been used in experiments on the healthy human subject, we shall content ourselves by pointing out only the process of Hahnemann, the author of these experiments. The following is the mode directed by him. Place in a porcelain vessel one pound of calcined and well powdered bones, pour on them a half kilogramme of concentrated sulphuric acid, let the whole stand for twenty-four hours, stirring it frequently with a glass spatula; then add a kilogramme of concentrated alcohol, mix all together and put it into a cloth bag, which submit to the action of a press. The fluid being thus expressed, let it stand for two days to clarify. Then decant the clear portion, concentrate it over the fire in a porcelain vessel, and fuse it by raising it to a red heat. The product is the phosphoric acid desired; it should be perfectly transparent and clear as crystal. Take it while still hot, break it in pieces, and place it in a well stopped bottle to prevent the contact of the air from causing it to deliquesce. The first attenuation is made with distilled water, the second with a mixture of equal parts of alcohol and water, and only with the *third* we begin to use common alcohol.

PLATINA, Fr., Platine; Ger., *Platina;* Eng., Platina. Usual doses, 6, 30.

146. This metal, of a silver-white, has as yet only been found in America, Spain, Russia, and the auriferous sands of

the Rhine; it usually occurs in the form of small grains, commonly alloyed with other metals, from which it is very difficult to separate it. When pure this metal is of a rather deeper colour than silver, very ductile, nearly infusible, heavier and more unalterable than any other metal; it is not oxidized in water, nor at any temperature. To prepare it for homœopathic use, take 20 grains (1 gramme) of chemically pure platina, dissolve it in aqua regia, with heat; dilute the solution in a suitable quantity of water, into this plunge a rod of well polished steel, around which the platina will be seen precipitating and forming a crystalline crust. The metal obtained in this way is a spongy mass, iron-grey, without lustre, soft, porous, and of little density. It should be frequently washed in distilled water, and well dried. Pure platina in powder may also be obtained by boiling the chloride with alcohol; the metal is precipitated by this process, and if carefully washed in distilled water, it forms a preparation entirely suitable. One grain (5 centigrammes) of the powder obtained by either of these two processes is used to make the attenuations, if pure platina in leaves sufficiently thin, like those of gold or silver, cannot be procured. The *three* firs attenuations are made by *trituration*.

PLUMBUM METALLICUM; Fr., Plomb metallique; Ger., *Metallisches Blei;* Eng., Metallic lead. Usual doses, 12, 30.

147. Lead rarely occurs native, but it is frequently found as a salt, particularly as a sulphuret, known under the name of *galena*, as a chloride, as a seleniuret, or as a carbonate. It is very common in France, England, Savoy, Spain, and many other countries. It is obtained by smelting galena with iron, but the lead of commerce is usually mixed with copper and iron. To procure pure lead, dissolve the lead of commerce in nitric acid, dilute the solution properly with water, and plunge into it a rod of zinc, around which the lead soon begins to precipitate and crystallize in the form of a *tree*. Perfectly pure lead may also be obtained by heating to a red heat, in a clay crucible, nitrate of lead until every trace of nitric acid disappears; after which the oxide is reduced by means of charcoal; or, heat acetate of lead in a glass retort, and shake it until all the lead is precipitated. Pure lead is a bluish-grey metal of little tenacity, soft, easily colouring

paper, sufficiently ductile, but not suitable for making wire. It has a specific smell when rubbed, and a slight metallic taste. To make the attenuations, take the powder produced by the first mentioned process; the *three* first attenuations are made by *trituration.*

SELENIUM; Fr., Selenium; Ger., *Selen;* Eng., Selenium. Usual dose, 30.

148. This very remarkable substance, discovered by Berzelius in 1817, is rarely found in nature, and always combined with other metals, such as lead, copper, cobalt, bismuth, mercury, silver, &c. It is thus found in Norway, Sweden, Transylvania and some parts of the Hartz. It has also been found in the magnesia of commerce. This metal is solid at the ordinary temperature, of a deep lead-grey, brilliant, brittle, very fusible, volatile, acidifiable and of a specific gravity of 4.31. When finely pulverized it forms a scarlet-red powder, and has neither taste nor smell. For homœopathic use, take metallic selenium, which is easily reduced to powder by simple trituration. The *three* first attenuations are made by *trituration.*

SILICEA PURA; Fr., Silice; Ger., *Kieselerde*; Eng., Silex. Usual dose, 30.

149. This earth is found in nature in considerable masses, either pure, as in rock-crystal, or combined with various oxides; quartz, the sandstones, the pyrites, and in a great measure the agates, the opals, &c. consist nearly altogether of it. To obtain this earth pure, take half an ounce (15 grammes) of rock-crystal, which reduce into fragments by frequently heating it red hot and instantly plunging it into cold water; or if rock-crystal cannot be procured, take the same quantity of white and pure sand, which must be washed in distilled vinegar; mix either one or the other with two gros (8 grammes) of effloresced sub-carbonate of soda, and melt the whole in an iron crucible until all effervescence ceases and it becomes clear; after which pour it on a flat piece of marble. The result will be a crystalline glass, which, after cooling, is to be put into a vessel with four times its weight of distilled water, then covered with paper. The solution will soon take

place, and the siliceous earth will fall to the bottom of the vessel, whilst the supernatant will contain nothing but pure soda. To cause a more rapid precipitation of the silex, which is in a state of such minute division, a little alcohol may be added to the water. The precipitate being entirely formed, it is to be collected on filtering-paper and pressed between many sheets of it, after which it is to be exposed to the air in a warm place. The silex thus obtained is a fine white powder, harsh to the touch, gritting between the teeth, and without taste or smell. The *three* first attenuations are made by *trituration.*

STANNUM; Fr., Etain; Ger., *Zinn;* Eng., Tin. Usual doses, 6, 30.

150. This metal, known from the remotest antiquity, is rarely found native, but frequently in the state of an oxide, particularly in the East Indies and England. The purest tin is that which comes from the East Indies, next to it the English is the best; but it contains a small portion of arsenic, which renders it hard. The tin of commerce is almost always impure; in general it contains copper, lead, bismuth and even arsenic; adulterations which are detected by the dull white of this tin when melted, whereas pure tin has the appearance of amalgam. The presence of copper is made known by liquid ammonia; that of bismuth by distilled water, with which the solution of tin in nitric acid should be mixed; that of lead by a solution of sulphate of soda, which should be added to the preceding solution and by the white precipitate which takes place. The presence of zinc is known by means of a solution of carbonate of potassa, which is to be added to the solution of tin in nitric acid, when freed from the copper and lead, this will give a white precipitate, which, after being dried, will show a yellow colour upon being heated. The presence of arsenic is shown by the yellow precipitate produced by hydro-sulphuric acid. To free tin from the arsenic it may contain, tin in leaves reduced to fine powder is to be deflagrated with nitre, the product is to be washed and heated to redness on burning coals. Metallic tin thus purified is placed, in order to pulverize it, in a hot mortar and triturated with very dry and fine common salt, it is then dissolved in distilled water, which leaves the tin in powder as a residuum. This powder is used to make the attenuations,

if *pure* tin in thin leaves cannot be procured. The *three* first attenuations are made by *trituration.*

STRONTIANA CARBONICA, *Carbonas Strontianæ;* Fr., Strontiane carbonatée, Carbonate de Strontiane; Ger., *Strontianerde, Kohlensaurer Strontian;* Eng., Carbonate of Strontian. Usual dose, 30.

151. This salt is found in nature in a fossil state, and known under the name of *Strontianite,* but it is extremely rare. To procure it suitable for homœopathic use, take sulphate of strontian, known by the name of *poudre des Celestins,* boil it in water for an hour, one part with three times its weight of carbonate of potassa or soda, filter it rapidly, wash the residuum, dissolve it in nitric acid, crystallize it carefully, and lastly, precipitate the salt by sub-carbonate of soda. It may also be obtained, by heating to redness, in a crucible, sulphate of strontian with one-sixth of its weight of charcoal-powder; this will produce sulphuret of strontian, *(foie de strontiane,)* which dissolve in boiling water, and afterwards precipitate the salt by means of sub-carbonate of potassa, or, the sulphur may be precipitated by nitric acid, and the solution of nitrate of strontian thus obtained, be decomposed. Finally, we may attain the desired result by preparing hydrochlorate of strontian as we prepare hydrochlorate of baryta, and by afterwards decomposing the salt produced by sub-carbonate of soda. The first of these three methods is that commonly adopted. The *three* first attenuations are prepared by *trituration.*

SULFUR s. SULPHUR; Fr., Soufre; Ger., *Schwefel;* Eng., Sulphur, Brimstone. Usual doses, O (tincture,) 3, 6, 30.

152. Sulphur is found in nature in considerable abundance, either native, as in the vicinity of many volcanos, or combined with various metals, composing the sulphurets called *pyrites;* with hydrogen in sulphurous waters, or with oxygen, as sulphurous or sulphuric acids, and with these acids forming sulphates. Lastly, it is found in many organic substances, such as the flowers of the elder, the linden, in carmine, mustard, anise, in leguminous plants, white of egg, and hair. On the large scale sulphur is procured from pyrites by simple distillation, or from native sulphur; obtained in either way, it

is in *two* distinct forms, viz: 1st. *cylinders* or *rolls*, the shades of which vary, according to their purity; 2nd. in fine *powder*, known as *flowers of sulphur* or *sublimed sulphur*. This last, which alone is used in homœopathy, is obtained by mixing equal parts of *roll* sulphur and white sand, this is introduced into a glass retort, and distilled in a sand-bath. The *flowers of sulphur* thus prepared contain generally a little sulphuric acid, which is removed by frequent washings in pure water and drying on blotting-paper; after which they are known in commerce under the name of *washed flowers of sulphur*. For homœopathic purposes, however, these washed flowers of sulphur are not sufficiently pure, on which account, before using them, they should be washed afresh with alcohol to free them completely from the least trace of sulphuric acid which might adhere to them. Flowers of sulphur frequently, also, contain arsenic, which is known by their orange-yellow colour, as well as by their alliaceous odour when thrown on burning coals. Occasionally selenium may be present in sulphur, in which case it will be of a dirty yellow. When pure, sulphur is of a canary-yellow, insoluble in water, but soluble in 200 times its weight of alcohol. In its natural state, it occurs generally crystallized, or in amorphous masses with a shining fracture, and so brittle as to break in the hand. When strongly heated it is volatilized and inflames on the contact of air. To prepare the attenuations, take *washed flowers* of *sulphur*, which wash afresh in alcohol; then if you wish to obtain *triturated sulphur (sulfur trituratum)* make the *three* first attenuations by *trituration*. But the preparation now most in use is the tincture of sulphur *(Tinctura sulfuris s. Spiritus vini sulfuratus)*, which is obtained by mixing together in a small bottle one hundred drops of the best alcohol with 5 grains (25 centigrammes) of flowers of sulphur washed, (and purified by a fresh washing with alcohol;) this bottle after being corked is slightly shaken, then, at the end of twenty-four hours, the clear liquid is decanted into another bottle and kept under the name of *Tincture of Sulphur*. One drop of this preparation mixed with 100 drops of alcohol, will form the second attenuation, and so on of the rest.

Sulfuris acidum, *Acidum sulfuricum s. sulfuris*, *Acidum vitrioli;* Fr., Acide sulfurique, Acide vitriolique; Ger., *Schwefelsaurer vitriol;* Eng., Sulphuric acid, Vitriolic acid, Oil of vitriol. Usual doses, 3, 30.

153. This acid is found in nature, sometimes in a free state, but usually combined with water. It has, however, been also found in the form of small acicular crystals, in many grottos of volcanic mountains; it constitutes the most important ingredient in the so called *sour springs* in America, to the south of the Erie Canal. But it is principally as combined with bases that this acid abounds in nature. When entirely anhydrous, it is in white, opaque crystals, like amianthus, volatile at the ordinary temperature, susceptible of uniting with the hydrogen of the atmosphere, and of forming vapours with it. In commerce there are *two* kinds of this acid, viz. 1. *The sulphuric acid of Nordhausen, or of Saxony*, a brownish liquid, *fuming*, and almost completely anhydrous. 2. *English sulphuric acid*, which is obtained by the combustion of sulphur in vast leaden chambers. This last is not fuming, it is less concentrated than that of Nordhausen. For homœopathic purposes, we use the first of these, the *sulphuric acid of Nordhausen*, known under the name of fuming sulphuric or vitriolic acid; but before using it, it is indispensable to subject it to a fresh distillation. For this purpose, introduce it into a glass retort heated by a sand-bath; the first product which passes into the receiver is perfectly anhydrous sulphuric acid, and as soon as this has passed over in the form of white vapours, the ebullition of the acid ceases. Then the receiver must be changed, and the real distillation carried on by carefully increasing the heat of the fire; it is to be continued until only the tenth part of all acid used remains in the retort. The product of this distillation is pure concentrated sulphuric acid, which combines with water, under whatever form it may be presented to it. The *first* attenuation is made with *distilled water;* the *second* with aqueous alcohol; and it is only with the *third* that we can begin to use a pure spirit of wine of 70 to 80 degrees centigrade.

TARTARUS EMETICUS S. STIBIATUS, *Antimonium tartaricum, Tartras potassii et antimonii;* Fr., Tartre émétique ou stibié, Tartrate antimonié de potasse, Tartrate de potassium et d'antimoine; Ger., *Spiessglanz-weinstein, Brech-weinstein;* Eng., Tartrate of antimony and potassa, Tartarized antimony, Emetic tartar. Usual doses, 6, 12, 30.

154. To obtain this salt, take equal parts of oxide of anti-

mony, (*Stibium oxydatum griseum,*) and pure tartar, pulverized, digest them together for an hour in a porcelain vessel, with equal parts of distilled water, and when the mass reaches the boiling point, add five times its weight of boiling distilled water, filter the solution while hot, and let it crystallize. The first crystallization being completed, decant the fluid and crystallize afresh and repeat the operation until the crystals are entirely colourless; then triturate all the crystals obtained, dissolve them in fifteen times their weight of cold distilled water, filter the solution, crystallize afresh, pulverize the crystals and put the powder into a well stopped bottle. Emetic tartar of commerce contains iron, copper, or sulphuret of antimony, so that for homœopathic use it is necessary to prepare it ourselves. To make the attenuations, first make a thick paste by triturating 100 grains (5 grammes) of sugar of milk with 15 drops of distilled water, add 1 grain (5 centigrammes) of pure emetic tartar, and proceed as usual. The *two* succeeding attenuations are made by *trituration,* without, however, the necessity of moistening the sugar of milk.

Tartari acidum, *Acidum tartari s. tartaricum;* Fr., Acide tartrique ou tartarique; Ger., *Weinsteinsäure;* Eng., Tartaric acid. Usual doses ?

155. Heretofore this acid has been found only in the vegetable kingdom; combined with potassa, it occurs especially in the juice of the grape; with other acids or in a free state, in the root of the dandelion, in the pine-apple, potato, acid cherries, tamarinds, and green mulberries. It is obtained artificially from tartar. To effect this, take carefully purified sub-carbonate of lime, to which add water, and make it boil, then mix with it pure tartar, pulverized as long as the mass continues to effervesce, this will require about one hundred parts of tartar to twenty-three of sub-carbonate of lime. By this operation, the free tartaric acid drives off the carbonic acid, so that the products which are formed contain tartrate of lime, and a neutral salt, which is soluble tartrate of potassa. In order to obtain the tartaric acid, we begin by adding to this solution hydrochlorate of lime, and continue to do so as long as a precipitate of tartrate of lime forms. Lastly, we digest together the two precipitates with diluted sulphuric acid, by which process the tartaric separates and crystallizes,

when evaporation takes place. This salt, when entirely pure, is in crystals, very acid and very soluble, white, transparent, inodorous, and perfectly dry. If it attracts moisture from the air, it shews that it contains malic, sulphuric, or nitric acids. The presence of sulphuric acid is detected by nitrate of barytes; that of nitric acid by the peculiar smell when tartaric acid containing it is heated; that of metallic salts, by hydro-sulphuric and gallic acids; that of calcareous salts by the insolubility of these salts in alcohol. *All* the attenuations are made with alcohol.

ZINCUM METALLICUM; Fr., Zinc; Ger., *Zink;* Eng., Zinc. Usual dose, 30.

156. This metal occurs abundantly in nature, but always in combination either with sulphur, as in *blende* or *pseudo-galena*, with oxygen as in tutty, or with oxygen and silex, as in calamine, &c. It is obtained in the large way, from calamine, as in France, or from blende, as in England. It is a metal of a bluish-white, very brilliant, of a lamellar fracture, tenacious, difficult to file, but very ductile, brittle, and pulverizable at a temperature of 205° R., and fusible at 360°. When rubbed between the fingers, it communicates to them a peculiar smell and taste; exposed to the air it is oxidized and coated with a thin greyish pellicle. *Two* kinds of this metal are met with in commerce, viz. 1st. That from the *East Indies, or China;* and 2nd. That from *Goslar*. These two kinds always contain more or less lead, and frequently in addition, tin, iron, or cadmium. To detect these adulterations, dissolve one part of zinc in four parts of pure nitric acid; if the solution is clear, there is no tin, for its presence would be shewn by a white precipitate; on neutralizing the solution by sub-carbonate of soda, there will be a precipitate of oxide of iron if it contains iron; or, on adding hydrocyanate of iron the iron in the solution will give a white precipitate. Finally, if lead is present, the sulphate of potassa added to the solution will throw down a white precipitate. To prepare this metal for homœopathic use, rub under water a piece of pure metallic zinc on a fine hone, dry the grey powder thus obtained, and make the *three* first attenuations by *trituration.*

ZINCUM SULFURICUM; *Sulfas zinci, Vitriolum album s. Zinci*; Fr., Sulfate de zinc, Vitriol blanc ou de zinc; Ger., *Schwefelsaures Zink;* Eng., Sulphate of zinc, White vitriol. Usual doses?

157. This salt, known under the name of *white vitriol*, &c., is manufactured on a large scale near Goslar, in the Hartz, where it also occurs native. It comes to us in masses, having the form of sugar loaves, or in small crystals like those of Seidlitz salt, with which we should be careful not to confound it. The sulphate of zinc of commerce is seldom pure; it generally contains sulphate of iron or sulphate of copper. It is freed from these foreign substances by dissolving and crystallizing it afresh, or by precipitating the other metals by means of a rod of zinc plunged into the solution. This salt is crystalline, white, unalterable in the air, very soluble in water, fusible in the fire in its water of crystallization, inodorous and of a disagreeable taste. The *three* first attenuations are made by *trituration*.

3. *Mineral substances and chemical products which are but little used.*

ACETUM ACIDUM; *Acidum aceticum;* Fr., Acide acetique; Ger., Essigsäure; Eng., Acetic acid.

158. This acid has been found only in the animal or vegetable kingdoms, where it occurs in great abundance, either in a free state, as in the gums, &c., or as a salt combined with lime, potassa, alumine or magnesia. It is obtained by distilling in a sand-bath to dryness 192 grammes of crystallized acetate of lead with 4 grammes of sulphuric acid, diluted with 18 grammes of water, and rectifying the product with 6 grammes of manganese in case the product should be rendered impure by sulphuric acid; or with 3 grammes of acetate of potassa, if it should contain lead. Acetic acid is liquid, colourless, of a lively and penetrating, but agreeable, smell, of a hot and pungent taste, volatile, inflammable and strongly attractive of water, on which account it must be kept in bottles hermetically closed. It unites with water in all proportions, and dissolves in alcohol, with which it forms an ether. The attenuations, therefore, must be made like those of sulphuric, nitric, and muriatic acids.

AMMONIUM CAUSTICUM; Fr., Ammoniaque liquide; Ger., *Wässeriges Ammonium;* Eng., Water of ammonia, Solution of ammonia.

159. Ammonia, known under the name of *volatile alkali*, is found in the three kingdoms of nature, although not always formed; but it is formed whenever, during the putrefaction and fermentation of animal and vegetable matter, nascent hydrogen and nitrogen are in contact and exposed to the air. This alkali also occurs, but combined with sulphuric or hydrochloric acid, in certain lakes and many volcanic products, as likewise in the vegetable kingdom, in the flowers and fruits of numerous plants, particularly the *tetradynamiæ.* It is a colourless, transparent gas, of an acrid and caustic taste. It is very soluble in water, which combines with it in all proportions, and which, when it has absorbed the third of its weight of it, that is to say, when completely saturated with this gas, takes the name of *Water of Ammonia.* This fluid has all the physical properties of *gaseous* ammonia, except the form. For homœopathic purposes, *concentrated water of ammonia,* that is, the *completely saturated* preparation, is used, the attenuations of which are made with alcohol.

ANTIMONIUM METALLICUM; *Stibium;* Fr., Antimoine, Antimoine metallique; Ger., *Spiessglanz*; Eng., Antimony, Regulus of antimony.

160. This metal rarely occurs native, but frequently as an oxide or sulphuretted oxide, and most generally as a sulphuret. It is obtained in the state of regulus by cast iron, which, by means of heat, combines with the sulphur, and leaves the antimony in a metallic state. It is principally in Hungary, Bohemia, Sweden, England and Spain that this metal is procured from the mines, and it is exported in cakes, the surface of which exhibits a species of crystallization frequently compared to the leaf of the fern. Antimony is a metal of a silvery-white, with a slight bluish tint, brilliant, harder than tin and lead, crystallizable, fusible, volatile, combustible, of a perceptible taste and smell, very brittle and easily pulverized. The *three* first attenuations must be made by *trituration.*

Argentum nitricum, *Nitras argenti;* Fr., Argent nitraté, Nitrate d'argent; Ger., *Salpetersaures Silber;* Eng., Nitrate of silver.

161. The salt we indicate by this name, is not the *fused* nitrate of silver, called also *lapis infernalis* or *lunar caustic*, but the *crystallized* nitrate of silver. To obtain this salt, take the purest silver, dissolve it at a moderate heat in twice its weight of pure nitric acid, which gives a perfectly colourless solution if pure silver is used; whereas, if it contain copper the solution will have a greenish-blue colour. This solution is then evaporated and set to crystallize. When pure, this salt is in colourless, transparent, thin plates, varying in form, of a caustic, styptic and metallic taste; it does not attract humidity from the atmosphere, but is partially decomposed by the light. It dissolves in equal parts of cold water and in two parts of boiling alcohol, which nevertheless abandons it, so that it retains but a very small portion of it when cold. Notwithstanding this, it would perhaps be better to make the first solution in boiling alcohol, than to prepare it by triturations with sugar of milk; the solution thus made, would retain sufficient portions to constitute the *first* attenuation, from which the others might be made with cold alcohol, in the usual manner.

Arsenicum metallicum, *Arsenicum;* Fr., Arsenic métallique; Ger., *Arsen;* Eng., Metallic arsenic.

162. This metal occurs native in a lamellar form, under the name of *cobalt ore*, or *fly powder*, or combined with oxygen, as arsenious acid, in the form of acicular crystals, or in the form of sand and united with other metals. It is obtained by sublimation from arsenical cobalt, and is in lamellar pieces, brittle, of a brilliant steel-grey, very alterable in the air, very volatile, combustible, insipid, and inodorous, but diffusing an alliaceous smell when dried on burning coals. It is easily pulverized; in consequence, however, of its great inflammability, it is necessary to pulverize a very small quantity at a time. The *three* first attenuations are effected by *trituration.*

Arsenicum citrinum, *Sulfuretum arsenici flavum, Aurum pigmentum;* Fr., Arsenic jaune-citron, Sulfure d'arsenic jaune, Orpiment; Ger., *Rauschgelb*, *Gelbes schwefel-arsen*, *Operment;* Eng., Orpiment, King's-yellow.

163. This metallic substance occurs native in Hungary, Servia, and Wallachia, and the Levant. It is tender, slightly flexible, composed of translucid, brilliant laminæ, which sometimes have a bright polish, of a lemon-yellow, verging to green, diffusing on the fire a suffocating smell of garlic and sulphur. It is also obtained by fusing together 61 parts of metallic arsenic and 39 parts of sulphur, and submitting the whole to sublimation; or by passing a current of hydrosulphuric acid into a watery solution of arsenious acid, or of an arseniated alkali mixed with hydrochloric or any other acid. The sulphuret of arsenic thus prepared takes the name of *false orpiment*, (*faux orpiment*,) or of *sulphuric oxide of arsenic* (*oxyde d'arsenic sulfurique*).

Arsenicum rubrum, *Sulfuretum arsenici rubrum*, *Rubinus arsenicalis;* Fr., Arsenic rouge, Sulfure d'arsenic rouge, Réalgar; Ger., *Rother arsenik*, *Rothes schwefelarsen*, *Realgar;* Eng., Realgar.

164. This mineral is found in the craters of many volcanos, where it has been produced by sublimation, particularly at the Solfatara, near Naples, and at Guadaloupe, where it is called red sulphur (soufre rouge). It is seen on the St. Gotthard combined with *dolomite*, or quartz, in many mines, such as those of Nagyag, in Transylvania, it occurs in transparent crystals of different forms, of a scarlet-red. It is obtained artificially by subliming a mixture of native arsenic and sulphurous pyrites; or by fusing together metallic arsenic with orpiment. The product of this operation bears the name of artificial realgar, (*faux-réalgar*,) or that of *artificial red sulphuret of arsenic*. It is of a brown-red, in solid masses, concrete, amorphous, and gives, when triturated, an orange-yellow powder.

Aurum fulminans; Fr., Or fulminant; *Ger.*, *Knallgold;* Eng., Fulminating gold.

165. This metallic substance, which at first was obtained by combining oxide of gold with ammonia, is more advantageously prepared by means of pure chloride of gold. It is

thus procured by precipitating the chloride by ammonia, after which the precipitate is washed and dried at a moderate temperature. It is a solid, yellow, insipid substance, detonating with violence by friction or a blow, so that the bottles containing it should be covered only with paper. Hence it follows that it should never be submitted to trituration.

BARYTA ACETICA, *Acetas barytæ;* Fr., Baryte acétatée, Acetate de baryte; Ger., *Essigsaurer baryt;* Eng., Acetate of baryta.

166. This preparation is now no longer used in homœopathy, the *carbonate of baryta* is preferred; it has the same medicinal properties, besides which it has this advantage, that it may be treated by trituration, and thus furnish preparations less subject to alteration. However, to make our work complete, we will describe the mode of preparing it. Dissolve carbonate of baryta in acetic acid, chemically pure, and evaporate the fluid to the point of crystallization. One grain of the crystallized salt is dissolved in 100 drops of distilled water, which gives the *first* attenuation; the second is made with aqueous alcohol, the rest with common spirits of wine.

BARYTA CAUSTICA S. PURA, *Baryta oxydata;* Fr., Baryte caustique, Protoxide de barium; Ger., *Ætz-baryt, Reine schwererde;* Eng., Caustic, or pure baryta.

167. This earth, discovered by Scheele, in 1774, has been called heavy earth, *(terre pesante,)* on account of its great specific gravity. It is principally found in heavy spar, (sulphate of baryta,) which is a compound of baryta with sulphuric acid, and which often contains a small portion of strontian. It is also found, but more rarely, in witherite.

In order to obtain pure baryta, dissolve hydrochloride of baryta in distilled water, to the solution add sub-carbonate of potassa, the precipitate which results is to be washed and afterwards dried. We thus have the sub-carbonate of baryta, which mixed with 6-10 parts of wood-charcoal, and made into a ball with gum-dragon, is placed in a crucible; it is surrounded with pulverized charcoal, covered with another crucible, and exposed for an hour to a good forge fire. The earth thus obtained is a greyish-white mass, friable, anhydrous, of an acrid taste, corrosive, effervescing with acids, dissolving in water in the same manner as lime, and in considerable quantity, and forming crystals on cooling. To render it suitable for homœopathic purposes, proceed as with calcarea caustica. (See No. 171.)

BISMUTHUM METALLICUM, *Marcasita;* Fr., Bismuth metallique; Ger., *Wismuth-Metall;* Eng., Metallic bismuth.

168. This metal occurs in nature in different states, either native or as an oxide, or combined with sulphur; it is found in Bohemia, Saxony, France, in Normandy, &c. It is obtained in the large way from its ores, by means of heat; but the metal thus procured usually contains arsenic, iron, &c. To separate it from these, dissolve it in nitric acid and precipitate it by means of water. Then dry the precipitate, add *black flux* and reduce it in a crucible at a low heat. The metal is found at the bottom of the crucible, and may easily be freed from the saline mass which covers it. It is a yellowish-white lamellar brittle metal, but little affected in the air, very fusible, burning with a bluish flame and easily pulverized. The *three* first attenuations are to be prepared by *trituration.*

BROMIUM, *Murides, Murina;* Fr., Brome; Ger., *Brom;* Eng., Bromine.

169. Bromine, discovered by *Balard,* of Montpellier, is found in sea-water combined with iodine, or in the mother-waters of salt-works or bittern, combined with chlorine; it is also found in the dead sea, in the salt springs of Kreutznach, in barilla, in certain mollusca, in rock salt, and in some ores of zinc. It is obtained from the bittern or mother-waters of salt-works, by pouring on their surface a stratum of ether, which takes up the bromine, and shaken with potassa, gives a bromide. This bromide is mixed with peroxide of manganese, and treated with dilute sulphuric acid, which gives red vapours that are condensed and kept under vitriol, in a bottle hermetically closed; this fluid is placed, chemically, between chlorine and iodine; it is blackish, in a thinner stratum, hyacinth-red, stains the skin yellow, of a very disagreeable, suffocating smell, of a nauseous, caustic and astringent taste, very volatile, evaporates in the air, acts on organic substances like chlorine, soluble with difficulty in water, but

easily in alcohol and ether. The attenuations should all be prepared with alcohol.

Calcarea acetica, *Acetas calcis;* Fr., Chaux acetatée, Acetate de chaux; Ger., *Essigsaurer kalk;* Eng., Acetate of lime.

170. This preparation is no longer in use; all homœopaths prefer the *carbonate of lime*, which possesses the same properties, and has moreover the advantage of being more suitable for trituration, and thus furnishing more unalterable preparations. The following is the mode of making this preparation. Boil oyster-shells for an hour in river-water, then, after having bruised them with a wooden mallet, dissolve them in distilled vinegar, by degrees bring the solution to the boiling point, in a porcelain vessel, and leave it in that state till saturated. That being done, filter the liquid, and let it evaporate to one-fifth, also in a porcelain vessel. This substance is of a deep yellow colour, and in time lets fall a brownish mucilaginous substance, the precipitation of which renders it clear. Mixed with alcohol in equal parts, this solution will not become mouldy. The attenuations are all made with alcohol.

Calcarea caustica *s. pura, Calx;* Fr., Chaux caustique ou vive; Ger., *Gebrannter kalk;* Eng., Quicklime, Pure lime.

171. This earth is found in all the three kingdoms of nature, but always combined with acids or with silex. Pure lime is white, of a specific gravity of 2.30. It is infusible and has a caustic taste like that of ley. To prepare lime for homœopathic use, introduce 30 grammes (1 ounce) of quicklime into a heated bottle, pour over it 150 grammes (50 ounces) of water; cork the bottle and let it stand till cold. Then shake the bottle and add to the mixture 150 grammes of concentrated alcohol. After several days, during which the bottle is frequently to be shaken, decant the fluid into small phials, which are to be closed hermetically and kept under the name of *Spiritus calcareus*, or *Tincture of caustic lime.*

Calcarea sulfurica, *Sulphas calcis;* Fr., Chaux sulfatée, Sulfate de chaux; Ger., *Schwefelsaurer kalk;* Eng., Sulphate of lime.

172. This salt is found in nature crystallized, and forms, under the names of plaster of paris, gypsum, &c. entire mountains. It is obtained as an accessory product in extracting phosphoric acid from calcined bones, as well as in preparing tartaric acid. When to a solution of lime in sulphuric, hydrochloric or nitric acid, the sulphate of an alkaline substance is added, the sulphate soon precipitates, and the less this solution contains of water, the more rapid will be the precipitation and the more pulverulent the product obtained. The sulphate of lime dissolves in 500 times its weight of water; it is entirely insoluble in alcohol. The *three* first attenuations must be made by *trituration*.

CALCAREA MURIATICA, *Murias s. Hydrochloras Calcis;* Fr., Chaux muriatée, Muriate ou hydrochlorate de chaux; Ger., *Salzsaurer kalk;* Eng., Chloride of calcium, Muriate of lime.

173. This salt is found in sea-water, in the bittern or mother-water of salt-works, and is obtained as an accessory product during the preparation of spirit of ammonia, of sub-carbonate of ammonia, &c. It is procured pure by saturating sub-carbonate of lime (prepared oyster-shells) with sulphuric acid. This salt, crystallized, contains 49.13 of water, rapidly attracts moisture from the atmosphere, and readily deliquesces. It is very soluble in water and in alcohol, and all the attenuations should be prepared with the latter.

CUPRUM ACETICUM, *Acetas cupri, Ærugo, Viride æris;* Fr., Cuivre acetaté, Acétate de cuivre, Verdet, Vert-de-gris; Ger., *Essigsaures kupfer, Grünspan;* Eng., Acetate of copper, Verdigris.

174. This preparation is no longer used in homœopathy, since all are satisfied that metallic copper is superior to it. To obtain acetate of copper, dissolve verdigris in pure acetic acid until the solution is completely saturated, then evaporate the acid slowly and dry the crystals on blotting-paper. The first attenuation is made with distilled water; the second with aqueous alcohol, and the remainder with spirits of wine of 70 to 80 degrees, centigrade.

Cuprum carbonicum, *Carbonas (sub) cupri;* Fr., Cuivre carbonaté, Sous-carbonate de cuivre; Ger., *Kohlensaures kupfer;* Eng., Carbonate of copper.

175. This salt exists in nature in the form of blue carbonate, malachite and anhydrous carbonate. It is obtained artificially by precipitating a solution of copper diluted with water, by sub-carbonate of potassa, and washing the precipitate with cold water. This salt is of a magnificent blue, frequently crystallized, but often, also, in earthy masses of a sky-blue, easily pulverized. The *three* first attenuations should be made by *trituration.*

Cuprum sulfuricum, *Sulphas cupri, Vitriolum cupri s. cæruleum;* Fr., Cuivre sulfaté, Sulfate de cuivre, Vitriol bleu ou de cuivre; Ger., *Schwefelsaures kupfer, Kupfervitriol;* Eng., Sulphate of copper, Blue vitriol.

176. This salt is found in nature, in the galleries of copper mines, or in solution in the waters flowing from mines containing it, whence it is extracted by evaporation. To procure it suitable for medical purposes, heat copper with concentrated sulphuric acid, dissolve the product in water, and let it crystallize. This salt is in large crystals of a beautiful blue colour, of a metallic smell, disagreeable, styptic. When heated, it loses its water of crystallization, and becomes a white powder, which is anhydrous sulphate of copper. The blue vitriol of commerce is almost always rendered impure by iron or zinc; on which account the homœopathic physician should prepare it himself. The *three* first attenuations should be made by *trituration.*

Ferrum aceticum, *Acetas ferri;* Fr., Fer acétaté, Acetate de fer; Ger., *Essigsaures eisen;* Eng., Acetate of iron.

177. We may say of this as of all the acetates, it is no longer in use. When this preparation was in use, it was obtained by heating iron wire to a white heat, quenching it in acetic acid, evaporating the solution, and drying the residuum. The attenuations, as far as the *third,* were made with sugar of milk; but all homœopaths now prefer metallic iron.

Ferrum oxydatum hydratum, *Hydras oxydi ferri, Carbonas (sub) ferri, Rubigo;* Fr., Oxyde de fer, Oxyde de fer hydraté ou carbonaté, Sous carbonate ou hydrate de fer; Rouille; Ger., *Eisen-oxyd-hydrat, Kohlensaures eisen, Rost;* Eng., Carbonate of iron, Rust of iron.

178. The most simple method of obtaining this salt, is to dissolve in hot water sulphate of iron, filter the solution, and add an aqueous solution of sub-carbonate of soda as long as any precipitate forms; this is to be separated by means of a filter, after which it is to be dried and kept in a well corked bottle. This salt forms a fine powder, brownish-red, inodorous, and not attracted by the magnet.

Hydrocyani acidum, *Acidum hydrocyanicum;* Fr., Acide prussique; Ger., *Blausäure;* Eng., Hydrocyanic acid, Prussic acid.

179. This acid has only been found in the animal and vegetable kingdoms. It occurs ready-formed in many plants, such as the lauro-cerasus, the peach tree, the apricot tree, the wild plum tree, &c. For homœopathic use, the acid prepared according to *Schrader's* method has been proposed, and as it is important for regularity in observation that all homœopaths should make use of the same preparation, we also adopt that of *Schrader*. According to that author, prussic acid is obtained by introducing 30 grammes of prussiate of potassa, well pulverized, into a glass retort, the extremity of the neck of which is placed in a receiver containing 30 grammes of alcohol of 26°, and cooled with ice. That being done, pour on the salt a mixture of 60 grammes of phosphoric acid of a specific gravity of 1.13 and 90 grammes of spirit of wine of 26°, and heat the retort as long as any thing passes over into the receiver. When the product is cold, mix it well with so much spirit of wine of 26° as that the whole shall make 180 grammes, and keep it in small bottles hermetically closed. Concentrated prussic acid is an inodorous, slightly acid, and very volatile fluid. Exposed to the air, it evaporates, and absorbs so much caloric that the remainder congeals. It is of a lively and suffocating smell, which, when the acid is very dilute, resembles that of bitter almonds or lauro-cerasus. The taste is at first cooling, then acrid, and finally burning. The majority of homœopaths, instead of prussic acid, make use of the juice of the lauro-

cerasus, (See No. 268.) The attenuations of this acid must be made with alcohol, and kept in bottles hermetically closed.

KALI CAUSTICUM, *Potassa caustica;* Fr., Potasse caustique, Potasse; Ger., *Gewächs-laugensalz, Kaustisches kali;* Eng., Potassa, Caustic potassa.

180. Potassa, or *vegetable alkali,* (comp. *natrum causticum,* No. 188.) forms a component part of all plants, except those which are found near the sea in a soil impregnated with sulphate and hydrochlorate of soda. This alkali is much less abundant in the mineral kingdom, but it is found there, as well as in the animal kingdom. Potash is obtained by the incineration of plants in contact of air, lixiviating the product and evaporating the ley to dryness. The potash of commerce is never pure; it is almost always mixed with sulphate or hydrochlorate of potassa. When pure and concentrated, it is white, brittle, very caustic, readily deliquescing in the air. It is soluble in alcohol; but in this state it attacks glass, unless much diluted; so that this property does not prevent keeping in glass bottles the attenuations made with alcohol, from the *first* to the *last.*

MAGNESIA CALCINATA S. PURA; Fr., Magnesie calcinée; Ger., *Gebrannte Magnesia;* Eng., Calcined magnesia.

181. Pure magnesia is not found in nature, but it occurs, combined with carbonic acid, in magnesite; with silicic acid in meerschaum, serpentine, &c.; with nitric acid in bittern, or the mother-water of salt-works, &c. It is also a component part of many animal and vegetable matters. It is obtained by calcining sub-carbonate of magnesia, until it no longer effervesces with weak hydrochloric acid. It is a substance more or less caustic, according to its degree of calcination, slightly alkaline, white, pulverulent, almost insipid, and insoluble in water. Exposed to the air, it is easily transformed into sub-carbonate, on which account, the bottles in which it is kept should have ground-glass stoppers. The magnesia of commerce is sometimes adulterated with quicklime, or carbonate of lime; in the first of these cases, it becomes heated with the contact of air, and colours corrosive sublimate yellow when triturated with it; if, on the contrary, it contains subcarbonate of lime, it effervesces with liquids.

MANGANUM ACETICUM, *Acetas mangani;* Fr., Manganèse acétaté, Acétate de manganèse; Ger., *Essigsaurer braunstein;* Eng., Acetate of manganese.

182. When this preparation was still used in homœopathy, it was obtained by boiling the carbonate of manganese (see No. 130) with distilled vinegar until the acid was completely saturated, and evaporating the solution to a syrupy consistence. The attenuations were all made with alcohol.

MANGANUM METALLICUM, *Manganesium;* Fr., Manganèse; Ger., *Mangan, Braunstein-metall;* Eng., Manganese, Metallic manganese.

183. This metal is found in nature in the state of oxide, or combined with sulphur, as a colouring matter in many fossils, or a component part of mineral waters. The pure metal is of a silver-grey, without taste or smell; having a slight metallic lustre, the fracture granular, easily filed and reduced to powder. The *three* first attenuations of this metal reduced to powder should be prepared by *trituration.*

MERCURIUS ACETATUS, *Acetas mercurii, Hydrargyrum acetatum;* Fr., Mercure acétaté, Acetate de mercure; Ger., *Essigsaures Quecksilber;* Eng., Acetate of mercury.

184. Acetic acid does not act strongly on metallic mercury, but it readily combines with the oxides of that substance. Acetate of mercury is obtained by the solution of deutoxide of mercury in acetic acid, or by the solution of a mixture of acetate of potassa with nitrate of mercury. For this purpose, introduce into a glass retort deutoxide of mercury, or sub-carbonate of mercury; pour upon it eight parts of distilled water, place the mixture in a sand-bath, and when it commences boiling, add acetic acid until the mercurial oxide is dissolved. That being effected, filter the fluid as quickly as possible, set it aside and let it crystallize. This salt, when pure, forms white crystals, greasy to the touch, lamellar, and brilliant; it is fixed, becomes black by the combined action of light and humidity, is difficultly soluble in water, and completely insoluble in alcohol. The *three* first attenuations should be made by *trituration.* But in gene-

ral, metallic mercury is preferred, and the acetate of mercury is not more used than the other acetates.

MERCURIUS DULCIS, *Hydrargyrum muriaticum mite, Murias s. Proto-chloretum mercurii, Calomelas;* Fr., Mercure doux, Mercure muriaté, ou Proto-chlorure de mercure, Calomel; Ger., *Versüsstes Quecksilber, Calomel;* Eng., Mild chloride of mercury, Submuriate of mercury, Calomel.

185. This salt occurs native in the Palatinate and in Spain, under the name of *horn quicksilver.* It is obtained artificially by various methods, which, however, do not all furnish uniform preparations. For homœopathic use the following process has been proposed. Moisten four parts of corrosive sublimate with a little alcohol, and after trituration in a glass mortar, add three parts of metallic mercury, and triturate until the small globules of mercury disappear. Then dry the mixture at a gentle heat, sublime it, triturate the product, sublime it afresh, pulverize it, add alcoholized spirit of wine, and digest it until the corrosive sublimate is completely dissolved. This being done, separate the powder from the alcohol and dry it. Pure calomel is of a dazzling white, unalterable in the air, volatile in the fire, and almost tasteless. The *three* first attenuations should be made by *trituration.*

MERCURIUS PRÆCIPITATUS ALBUS, *Hydrargyrum ammoniato-muriaticum;* Fr., Precipité blanc, (des anciens,) Oxy-chlorure ammoniacal de mercure; Ger., *Weisser Præcipitat;* Eng., Ammoniated mercury, White precipitate.

184. Dissolve together in 500 grammes of hot distilled water, 80 grammes of corrosive sublimate and the same quantity of purified sal ammoniac; when the solution is cooled and filtered, add an aqueous solution of sub-carbonate of soda until a white precipitate is formed, which is to be filtered and washed on the filter with cold water until the water passes from the filter perfectly pure and tasteless; the product is then to be dried by exposing it to a current of air. The same salt may be obtained by a much more simple method,

which consists in dissolving corrosive sublimate in 20 parts of cold distilled water, and adding, little by little, with constant stirring, liquid ammonia until a white pulverized precipitate no longer forms. White precipitate is a powder of a dead-white, of a disagreeable acrid and metallic taste, insoluble in alcohol, and very sparingly soluble in water, by which it is decomposed, if it remains long in contact with it. The first *three* attenuations should be made by *trituration.*

MERCURIUS PRÆCIPITATUS RUBER, *Hydrargyrum oxydatum rubrum;* Fr., Precipité rouge, Oxyde rouge de mercure; Ger., *Rother Præcipitat;* Eng., Red oxide of mercury, Red precipitate.

185. Dissolve *two* parts of mercury in *three* parts of nitric acid, at first exposing the mixture to a gentle heat, which is to be gradually increased; evaporate the solution to dryness, triturate the residuum with pure mercury till the globules disappear, moistening the powder from time to time with pure water; dry the mass, heat it to redness in an open vessel, until no more red vapours form, after which, reduce the residuum, when cold, to powder by trituration. Red precipitate thus obtained forms a fine powder of a beautiful clear red, it is inodorous, but has a disagreeable, acrid and styptic taste. The action of light renders it yellow and decomposes it, it is scarcely soluble in water and alcohol. The first *three* attenuations must be made by *trituration.*

MOLYBDÆNUM; Fr., Molybdène; Ger., *Wasserblei;* Eng., Molybdenum.

186. This metal is found in nature only in the state of a sulphuret. It is of a bluish-grey, hard, brittle, very refractory, almost insoluble, and acidifiable. It is obtained by the reduction of one of its oxides or by that of molybdic acid with hydrogen. Nitric acid and aqua regia dissolve it, sulphuric acid converts it into a brown mass. For homœopathic use the metal in powder must be taken, and the *three* first attenuations are to be made by *trituration.*

MOLYBDÆNI ACIDUM, *Acidum molybdicum;* Fr., Acide molybdique; Ger., Molybdænsäure; Eng., Molybdic acid.

187. To obtain this acid, calcine sulphuret of molybdenum at a red heat in an open vessel, and extract the acid by means of caustic ammonia. To free it from this combination, precipitate it by nitric or acetic acid, or expose the compound to a high heat, and wash the acid obtained in water, dry and melt it in a glass vessel or a platina crucible. This is a white, porous, light mass, fusible, volatile, becoming yellow at a high temperature, of a metallic taste, soluble in 570 parts of cold water. The *three* first attenuations should be made by *trituration.*

NATRUM CAUSTICUM, *Soda caustica;* Fr., Soude caustique; Ger., *Kaustisches Natrum;* Eng., Caustic soda.

188. This alkali is found in great abundance in the mineral kingdom, either in the pure state, or combined with acids, and thus forming the base of many minerals. It is to the mineral kingdom what potassa is to the vegetable, and hence it was formerly called *mineral alkali.* It is found in the free state in the *natron lakes* in Egypt, as well as in many lakes in Hungary, and also in the state of efflorescence on the bottom of many dried-up marshes in hot countries. Combined with hydrochloric acid it forms sea-salt, rock-salt, and that of salt-springs, and with sulphuric acid the base of many mineral waters. It is found in the ashes of plants growing on the shores of the ocean, but which, when cultivated far from thence, are entirely deprived of it. In the animal kingdom soda is more abundant than potassa, which last occurs in it in very small quantity. Pure or caustic soda is in flattened fragments, white, of the taste and smell of ley; exposed to the air, it at first becomes soft, and then dries, passing into the state of sub-carbonate. The first attenuation should be made with water, the second with aqueous alcohol, the remainder with common alcohol.

NATRUM SULFURATUM, *Sulfuretum sodæ;* Fr., Soude sulfurée, Sulfure de soude; Ger., *Schwefel-natrum;* Eng., Sulphuret of soda.

189. To prepare this sulphuret, take equal parts of sulphur and sub-carbonate of soda, fuse them together at a gentle heat in a covered crucible until the mass no longer effervesces, after which pulverize the mass while still hot, and put it into

well stopped bottles. The *three* first attenuations should be made by *trituration*.

Osmium; Fr., Osmium; Ger., *Osmium;* Eng., Osmium.

190. This metal, discovered in 1804, by *Tennant*, is found in the ore of platina, combined with *iridium*. To obtain it, pulverize in a steel mortar the hard insoluble particles which remain when platina is dissolved in aqua regia, and which are a compound of osmium and iridium. Wash this powder in hydrochloric acid, add an equal part, by weight, of anhydrous nitre, introduce the mixture into a porcelain retort with a glass receiver, tubulated, and which, by means of a tube, is in communication with a bottle containing liquid ammonia, in order to be better able to collect and fix all the osmium which is developed. The retort is then brought to a white heat, and the temperature kept up until no more bubbles of gas are formed in the ammonia. The saline mass which remains in the retort is then dissolved in cold water and mixed, in a bottle with a ground glass stopper, with aqua regia containing nitric acid in excess. This being done, the mixture is subjected to distillation, taking care not to suffer the osmic acid, which is very volatile, to evaporate. To the solution of osmic acid thus obtained, add hydrochloric acid in excess, and plunge into it a rod of zinc, on which the metallic osmium will soon begin to precipitate. In this state, osmium is black or bluish-black, easily pulverized, infusible, and volatile when in contact with oxygen.

Plumbum aceticum, *Acetas plumbi, Saccharum saturni;* Fr., Plomb acétaté, Acétate de plomb, Sucre de saturne; Ger., *Essigsaures blei, Bleizucker;* Eng., Acetate of lead, Sugar of lead.

191. To obtain this preparation, to which indeed metallic lead is now preferred, take *English acetate of lead*, dissolve it in hot distilled water, set it in a warm place that it may crystallize, then evaporate the remaining fluid one-half and let it crystallize afresh. The crystals have a sourish-sweet smell, a styptic taste, they effloresce slightly in the air, and carbonic acid decomposes them. In the dry state, acetate of lead should possess the qualities mentioned, it should be per-

fectly white, and soluble in one and a half parts of water and in alcohol. If mixed with nitrate of lead, it is less soluble, not so white, and detonates when placed on burning coals. It is frequently sophisticated with acetate of lime. When not well kept, it is yellowish and less soluble. If this substance is to be made use of, the *three* first attenuations should be made by *trituration*.

SAPO-DOMESTICUS; Fr., Savon de ménage; Ger., *Hausseife;* Eng., Soap, Domestic soap.

192. It is the white Marseilles soap which homœopaths make use of under this name. It is to be dissolved in alcohol, and all the attenuations are to be prepared by means of that fluid.

STRONTIANA CAUSTICA; Fr., Strontiane caustique; Ger., *Kaustischer Strontian;* Eng., Caustic strontian.

193. This earth is found in nature in the state of sulphuret and carbonate; it was first discovered at *Strontian*, in Scotland, whence its name. In general, it is not abundant; it is to baryta, as to its chemical properties, what soda is to potassa. Caustic strontian is obtained in the same manner as caustic baryta; it is a solid, greyish alkali, soluble in water. To make the attenuations, dissolve it in two parts of boiling water, and afterwards treat it with alcohol.

SULFUR ALCOOLISATUM, *Alcool sulfuris Lampadii*, *Carboretum sulfuris*, *Carbonium sulfuratum;* Fr., Soufre alcoolisé, Alcool de soufre, Soufre carboné; Ger., *Schwefelalcool;* Eng., Carburet of sulphur.

194. We obtain this compound of carbon and sulphur by the distillation of sulphuret of iron with carbon, or by passing the vapour of sulphur through a porcelain tube filled with burning coals. Carburet of sulphur is a colourless, transparent fluid, of an acrid taste, and a fetid and penetrating smell; it is very volatile, insoluble in water, but very soluble in alcohol. The attenuations should be made with alcohol.

CHAPTER III.

OF THE PREPARATION OF VEGETABLE SUBSTANCES.

1. *General Remarks.*

195. What is most essential in the preparation of vegetable substances is, that each plant be gathered in the season when its virtues are the most developed, and that each gathering be made in a calm and dry time, when the plants are neither moistened by rain nor dew. Besides, it is not less important that all plants be gathered on their appropriate locality, since it has been proved, that the same plant, gathered from different localities, has often different virtues; that all those which usually grow on a dry and mountainous location have, in general, much fewer efficacious principles than if we gathered them on a humid and marshy locality. The same holds good of plants exposed to the air and sun; they are to be preferred to those which grow in the shade, and in places which are not sufficiently ventilated, unless it should happen, in the nature of them, to inhabit covered and shady spots. Wild plants deserve the preference over those which are cultivated in our gardens.

196. We do not always use the *entire* plant in homœopathy; many medicines, on the contrary, are only prepared from the leaves, the flowers, the barks, the roots, or the fruit of the plant, and for others again, we only make use of their resins, or gums, or of the products obtained through chemical processes, by fermentation, &c. The medicines which we prepare from the entire plant are, Arnica, Artemisia vulg., Asarum, Belladonna, Chamomilla, Drosera, Euphrasia, Filix mas, Fragaria vesc., Gratiola, Lactuca, Paris quadr., Petroselinum, Pulsatilla, Ranunc. scel., Ranunc. bulb., Taraxacum, Vinca minor, Viola tricolor, viola odorat.; Allium sativ., Aquileja, Absinthium, Atriplex olida, Calendula, Chenopod. glauc., Hypericum perfor., Lolium temulentum, Ononis spinosa, Sedum, Thymum, Verbena. All these plants are, for the most part, indigenous; we gather them a short time before

their flowering, with the exception of the narcotic and aromatic plants, such as Bellad., Chamom., and of all those whose flowers are developed simultaneously with the leaves, or which only have all their virtues during their flowering, as, for example, Pulsatilla, &c. The active parts of all these plants are obtained by *expression*, and are mixed with alcohol, after which they are preserved under the form of *tinctures*.

197. The plants of which we only make use of the LEAVES (or the stems) are, Aconitum, Æthusa, Caladium, Cannabis, Clematis, Conium, Digitalis, Dulcamara, Hyoscyam., Ledum, Menyanthes, Millefolium, Oleander, Prunus lauroc., Prunus padus, Rhododendron, Rhus tox., Rhus vernix, Ruta, Sabina, Senna, Solanum nigr., Solan. mamos., Spigelia, Tabacum, Tanacetum, Taxus baccata, Teucrium, Thea, Thuya occident., Uva ursi, Verbasc; Aristolochia, Asparagus, (the stems,) Rosmarinus offic., Heracleum. The FLOWERS only: Crocus sativ., Lamium album, Prunus spinosa. All the plants, the leaves of which only are used, should be gathered during a dry time, and in the middle of the day. When, by chance, we cannot gather them before the flowering season, we had better still take the leaves of those which are in flower than of those which are not yet in flower. The best time to gather the flowers is in the morning, just as they have opened, and the sun has absorbed the dew. Those plants of which the stems only are used, ought to be gathered at the beginning of autumn, because then their juice is more active than at any other season. We likewise prepare all these substances with alcohol, and preserve them under the form of *tincture*.

198. The plants of which the BARK, the WOOD, or the ROOT alone are made use of, are, BARKS,—Angustura, Brucea, Cascarilla, China, Cinnamomum, Mezereum, Sambucus, Sassafras, Ulmus campest. ROOTS.—Actæa, Arum mac., Berberis, Bryonia alba, Chelidonium, Cicuta, Colchicum, Cyclamen, Dictamnus, Granatum, Helleborus niger, Ipecacuanha, Jalappa, Pæonia, Ratanhia, Rheum, Sarsaparilla, Senega, Squilla, Valeriana, Veratrum, Zingiber;—Archangelica, Cahinca, Cochlearia, Juncus pilosus, Œnanthe crocata, Serpentaria. The *barks* of resinous trees should be gathered before or whilst the leaves and the flowers are opening, those of non-resinous trees towards the end of autumn. The *woods* are gathered in the first days of spring, before the sap has risen; and it is important that the trees or shrubs of which they are gathered, be neither too old, nor yet too young. As

to the *roots*, we take those of annual plants, before the beginning of autumn, those of bi-annual at the beginning of the spring of the second year, before the stems are developed, and those of perennial plants, in the autumn, or in the spring of the second or third year, before they become ligneous; in general, it is never in summer that the roots should be gathered, because at that season the juice is more expanded in the rest of the plant. Hence we also gather the roots of trees and shrubs in the spring, when the bark can yet be easily detached. As to the preparation of all these parts, in general we prepare the alcoholic *tinctures* of those we obtain in the fresh state. As to those which come from exotic plants, and which we can only have in the dry state, we pulverize them and extract the active principles, in adding to them 20 parts of alcohol; and we preserve them also under the form of *tincture*, or else we make the *three* first attenuations by *trituration* with sugar of milk, *which is far the best in all cases where the nature of the substances will permit it.*

199. The plants of which we employ the FRUITS and SEEDS, are, Agnus castus, Anacardium, Anisum stellat., Capsicum, Cina, Citrum, (the juice of the fruit,) Cocculus, Coffea, Colocynthis, Croton tigl., Cubebæ, Eugenia, Evonymus, Iatropha, Ignatia, Lycopodium, Nux moschata, Nux vomica, Phellandrium, Staphysagria, Veratrum.—Lupulus, Dipterix, Olea, Pichurim.—The BALSAMS and the RESINS of the following: Aloes, Assafetida, Copaiva, Euphorbium, Guaiacum, Jalappa, Opium, Terebinthina:—Ammoniacum, (gummi.)—Of the FUNGI, we employ Agaricus musc., Boletus, Bovista. Finally, the plants of which we procure the active principles by *chemical* processes, are, Camphora, Indigo. As to the preparation of all these substances, we have just remarked above, that *every time that we are able*, it is better to make the *three* first attenuations by *trituration*, than prepare the alcoholic tinctures.

2. *Vegetable Substances generally used.*

ACONITUM NAPELLUS; Fr., Aconit napel; Ger., *Napel sturmhut, Eisenhut;* Eng., Large blue wolfsbane, Monkshood, Aconite.—Ranunculaceæ, Juss.—Polyandria trigynia, L. Usual dose, 24, 30.

200. The genus of this plant derives its name from ακων,

rock, because, in general, its species inhabit high mountains; the specific name of this species comes from *napus*, turnip, because its root resembles a small turnip. We find the aconite chiefly on the summit of the Alps, in Switzerland, (on the Rhigi,) in the mountains of Bohemia and Silesia, at a greater elevation above the sea than the *veratrum*. The stem of this plant is cylindric, branchy, and glabrous, 6 to 9 decimetres in height; the leaves are petiolated, divided into 5 or 7 lobes, deep, almost to the foot stalk, deep-green on their upper surface, light-green beneath, shining on both sides. Its violet flowers form a long spike at the summit of the stem, and present a calyx null, two nectaries pedicelled and revolute, 3 to 5 capsules. It is at the beginning of its flowering, in the month of June or July, that we gather the *wild* aconite; that which is cultivated in our gardens is by no means proper for homœopathic use, and would only furnish doubtful results. We express the juice of the fresh herb part of the plant, which we mix with equal parts of alcohol, which gives the mother tincture with which we afterwards prepare the alcoholic attenuations after the known method.

ÆTHUSA CYNAPIUM; Fr., Cigüe des jardins, Petite cigüe; Ger., *Garten-schierling;* Eng., Garden hemlock.—Umbelliferæ, Juss.—Pentandria digynia, L. Usual dose, 9.

201. This is an annual plant which grows in cultivated places, in old gardens, fallow-grounds, &c. It then sometimes shoots up 3 and 6 decimetres in height, so that the name of *little* is not strictly applicable to it. It is the plant which, according to authors, is often confounded with the parsley, but it is rather with the chervil that it may be confounded by its leaves. What distinguishes these two plants is, that the leaves of the chervil exhale an agreeable odor when rubbed, whilst those of the garden hemlock develope a sickening smell; moreover, the seeds of this last are globular and striated, those of the chervil elongated; in the æthusa, the involucelle exists but on one side, in the chervil it is complete; the parsley is a bi-annual plant, or even perennial, whilst the æthusa is only annual; finally, the leaves of parsley are large and cuneiform, whilst those of hemlock are cut off. It is also often confounded with the cicuta virosa; but to avoid this error, it is only necessary to remember that this is *spotted,* and the

æthusa *striated.* We prepare the herb part of the plant as we directed for aconite.

Actæa spicata, *Christophoriana;* Fr., Christophoriane, Herbe St. Christophe; Ger., *Christophs-kraut;* Eng., Herb Christopher, Baneberry.—Ranunculaceæ, Juss.—Polyandria monogynia. L. Usual doses ?

202. This plant grows in thickets and mountain-woods, and is found all over Europe. Its perennial root is black outside, yellow within, spongy, of a disagreeable odor, nauseous taste; stem herbaceous, from 6 to 9 decimetres in height; leaves pedunculated, brilliant; flowers in long terminal spikes; berries black, soft, ovoid We use in homœopathy the root gathered before the time of flowering, (in the month of May,) or else the tincture made from the berries.

Agaricus muscarius, Fr., Agaric moucheté, Oronge fausse, Champignon rouge; Ger., *Fliegenschwamm, Fliegenpilz,* Eng., Bug agaric.—Champignons, Juss.—Cryptogamia, fungi, L. Usual dose, 30.

203. This fungus, at its birth, has an oval form, and is enclosed in a kind of *volva,* the stalk is tuberous, and hollow when old, of 10 to 16 centimetres in height, with a cap at first bomb-shaped, afterwards flattened, of a red scarlet, having lamellæ of a yellowish-white—these lamellæ disposed in rays, which proceed from the centre to the circumference. The odour of it is disagreeable, and the taste acrid and caustic. To render it proper for homœopathic usage, we clean the stalk and the cap, and after having deprived them of their epidermis, we cut them into small pieces, on which we pour an equal quantity of alcohol. We use the *tincture* thus made to produce the alcoholic attenuations.

Agnus castus, *Vitex agnus castus*; Fr., Gattilier commun; Ger., *Keusch-lamm;* Eng., Chaste tree.—Gattiliers or Verbenaceæ, Juss.—Didynamia angiospermia, L. Usual doses, 9, 30.

204. This plant derives its name of *agnus castus* (chaste lamb), from the circumstance of the Greek ladies covering their beds with the leaves of it, during the absence of their

husbands, to prevent any impure ideas. It is a bush, which, on account of its beautiful leaves, has been well cultivated in our gardens, but which grows naturally along the basin of the Mediterranean, in Provence, in Greece, on sandy spots and at the foot of rocks. It often attains a height of 12 to 15 decimetres, and is very branchy; the leaves are 5 digitated folioles, lanceolated—flowers a great many, in long spikes, very apparent, of a violet-blue—berries dry, divisions monosperm, resembling the pepper in grain. We mix with equal parts of alcohol the expressed juice of the leaves and flowers, or better still, of the berries, which we should select of an appearance as fresh, and of a taste and flavour as strong as possible, should we not be be able to procure them on the spot where they grow.

Aloe; Aloès; Ger., *Aloë*; Eng., Aloes.—Liliaceæ, Juss.—Hexandria monogynia, L. Usual doses?

205. The substance which we employ under this name in homœopathy, is the dried juice of the plant. Three kinds are distinguished in commerce, viz: 1. *Socotrine* aloes. 2. *Hepatic* aloes. 3. *Caballine* aloes. The most pure is the *Socotrine* aloes, it has a peculiar aromatic odour; its taste is of an intense and lasting bitter—we find it in pieces of a deep, shining brown—it softens in the hand and becomes sticky—its powder is of a golden-yellow. It is of this kind we make use for homœopathic preparations—we pulverize and extract the active principles with 20 parts of alcohol, or else we prepare with it the *three* first attenuations by *trituration,* which is preferable.

Anacardium orientale, *Semecarpus anacardium;* Fr., Anacarde, Fève de Malac; Ger., *Elephantenlaus, Malakka-nuss;* Eng., Malacca bean.—Terebinthinaceæ, Juss.—Pentandria digynia, L. Usual dose, 30.

206. This tree with grey bark is found in the Indies, where it grows in the old forests. The fruit it bears is about 2 centimetres long and enclosed in a spongy receptacle. It is surrounded by two envelopes, between which is found an acrid, caustic, black fluid. It is of this *fluid* (not of the whole part, as the homœopathic pharmacopœias say) that, according to Hahnemann, we ought to make the preparation—they are

the effects of the *fluid* and not of the fruit that Hahnemann has published. We prepare the tincture with 20 parts of alcohol, or better still, we make the *three* first attenuations by the trituration with sugar of milk.

ANGUSTURA, *Angustura cortex*; Fr., Angusture vraie, Ecorce de Bonplandia trifoliata; Ger., *Angustura rinde;* Eng., Angustura bark.—Rutaceæ, Juss.—Pentandria monogynia, L. Usual dose, 30.

207. The true Angustura is a bark of a tree of equatorial America, called by Willdenow, Bonplandia trifoliata, and belonging to the genus Galipea. The bark which is sent to us, has, generally, a yellowish-grey colour, like to that of the yellow cinchona. It is chosen in preference, for homœopathy, in pieces of from 5 to 15 centimetres long, and two millimetres thick, slightly rolled, and smooth within, spotted without with little white points on a coloured base, and covered with a whitish envelope, spongy and easily detached. Besides, these pieces should be of a brilliant fracture, porous, of the colour of canella, of a disagreeable aromatic odour, of an aromatic, bitter, penetrating taste. Reduced to powder the angustura ought to have a colour like that of rhubarb. The *false angustura*, on the other hand, is always in large, hard, heavy bits, of a dull white fracture, covered outwardly with a powder of the colour of rust or gold, without aromatic odour, and not susceptible of producing an alcoholic tincture which becomes turbid on the addition of water, which always takes place in that of the true angustura. It is better to prepare the *three* first attenuations by *trituration*, than by digestion with 20 parts of alcohol, which would be done should we wish to preserve it under the form of tincture.

ANISUM STELLATUM, *Illicium anisatum;* Fr., Anis ètoilé, Anis de la Chine, Badiane; Ger., *Anis, Stern-anis;* Eng., Star anise seed.

208. The vegetable which furnishes the anise seed, grows in China, in Japan, the Philippines, &c. It is a bush something like the laurel, with aromatic bark, yellow axillary flowers, calyx of 6 leaves, 27 petals, many two-valved capsules, monosperm, disposed around; fruit star-shaped, formed by the assemblage of 6 or 8 capsules, oval, compressed, uni-

valve, close at the base and open above, containing each one seed, shining, oval and flattened. This fruit has an aromatic odour, intense and agreeable, and a taste acrid, bitter, hot and piercing. We pulverize the capsules with the seeds, and make the *three* first attenuations by *trituration*, or else, if we prefer the tincture, we digest the powder in 20 parts of alcohol.

ARNICA MONTANA; Fr., Arnique des montagnes; Ger., *Berg wohlverleih;* Eng., Mountain arnica, Leopard's bane. —Corymbiferæ, Juss.—Syngenesia polygamia, L. Usual doses, O. 6, 12, 30.

209. This plant naturally inhabits the high mountains of the middle of Europe, or the ventilated pasturages of the hills of the north of this part of the world, and is also found in America; gathered on a locality covered with moss, it is not proper for homœopathic use. It has its roots black, slender, fibrous, which come off from a kind of rhizoma; stems simple; leaves oval, marked with entire lines, sessile; flowers large, radiated, of a beautiful yellow; fruit a hairy pappus, enclosed in a double-like calyx or involucrum. Before making use of this plant, it is indispensable to clean the flowers, because they are often soiled by the eggs of the musca arnicæ. The root of this plant soon loses a portion of its virtue, should it remain a long time exposed to the air, but the powder may be preserved in bottles well stopt. We prepare the powder of the root in making the *three* first attenuations by trituration, or else we digest it in 20 parts of alcohol to make the tincture. Should we be able to obtain the fresh plant, we gather it when in flower, and we prepare the *tincture* in mingling the expressed juice of the whole plant with equal parts of alcohol.

ARTEMISIA VULGARIS; Fr., Armoise commun; Ger., *Gemeiner beifuss;* Eng., Mugwort.—Corymbiferæ, Juss.—Syngenesia polygamia superflua, L. Usual doses ?

210. This plant is found all over Europe, where it grows along the highways, barren places, among rubbish, in fields and their borders, along ditches, &c. It is a perennial plant, of an agreeable odour, and of an aromatic, bitter taste. The leaves are large, winged, pinnatifid, white and downy be-

neath; the stems are straight, glabrous, branchy, hard, rough, 6 to 9 decimetres in height; the flowers are many, small, in bunches, of a rusty-yellow, calix imbricated, a little hairy; the root is cylindric, crooked, and attains all its virtue in the month of November. We express the juice of the *whole* plant, and prepare a *tincture* in mingling it with 20 parts of alcohol.

Arum maculatum; Fr., Aron tacheté, Gouet, Pied de veau; Ger., *Gefleckter aron.*, *Aronswurzel;* Eng., Wake robin, Cuckoo pint.—Aroideæ, Juss.—Gynandria polyandria, L. Usual doses ?

211. This plant is found all over Europe, in the umbrageous forests and thick and shady woods. The root is tuberous, fleshy, of a brownish-yellow on the outside, and white and feculent within; the leaves are large, radical, hastate, sagittate; lobes deflexed; spadix club-shaped, obtuse, shorter than the spathe; the shaft rising up from the root to a cubit in height, cylindric, channelled, carrying on its summit a single spathe. The berries are of the colour of cochineal, and contain 1, 3, 5 seeds. In the fresh state, this plant has an acrid, biting taste, like that of pepper, and is full of a milky, acrid, and caustic juice. For homœopathic use, we gather the root of the plant before the leaves are developed, and we prepare the *tincture* by digesting them in 20 parts of alcohol.

Asafœtida, *Ferula asa-fœtida;* Fr., Gomme resine de ferule; Ger., *Stink asand*, *Teufels-dreck;* Eng., Asafœtida.—Umbelliferæ, Juss.—Pentandria digynia, L. Usual doses, 3, 6, 9, 30.

212. The substance which homœopathy uses under this name is the gum-resin of the *ferula asafœtida,* a perennial plant which is found in Persia, Media, Lybia, Syria, and even in India. To obtain the gum, which the ancients already knew under the name of *succus cyrenaicus,* we cut the root of the plant and let the juice run out, which at first is white, but which becomes yellow on exposure, and concretes into a substance composed of rusty-coloured, irregular pieces, more or less large, mixed with pieces of a white colour, of a very strong and very fetid alliaceous odour, and acrid taste. In commerce we distinguish three kinds of asafœtida, viz:

bouillie, which at last becomes brown and changes to powder, so that when struck it emits a kind of smoke. We gather this fungus in the month of August and September, and make the *three* first attenuations by trituration.

BRUCEA ANTIDYSENTERICA; Fr., Brucée; Ger., *Braune brucea;* Eng., Anti-dysenteric brucea.—Terebinthacea, Juss.—Pentandria monogynia, L. Usual doses ?

217. It was an error in our Manual to give to this plant the name of *false angustura,* since it is in part proved that this bark does not come from the *brucea* antidysenterica, as formerly supposed. It grows in Abyssinia—it is a bush with pinnated leaves unpaired, composed of six opposite and serrated folioles, diœcious—calyx in 4 leaflets—4 petals. In the males, one gland of 4 lobes, which probably is an ovary aborted in the bottom of the calyx—in the female, 4 ovaries, 4 stigmas, 4 capsules. The bark of this bush resembles considerably the angustura, but may be distinguished—1st. As it is in larger pieces and that these last have on their upper surface spots of a reddish-brown, or of a greenish-white. 2nd. By its taste, which is of an insupportable bitterness, and without the least aroma. We powder the bark and make the *three* first attenuatious by *trituration,* or else prepare the tincture with 20 parts of alcohol.

BRYONIA ALBA; Fr., Bryone blanche; Ger., *Zaunrübe*; Eng., White bryony, Wild hops.—Cucurbitaceæ, Juss.—Diœcia gynandria, L. Usual doses, 12, 30.

218. It is not the *bryonia dioïca* but the *bryonia alba,* of which Hahnemann made use in his experiments, and though in Belgium and in a certain part of Germany the bryonia *dioïca* is more abundant than the bryonia *alba,* it is not so in France, nor in all Germany, where may be found the bryonia *alba* about the hedges, if not in abundance, at any rate as abundantly as the bryonia dioïca. The perennial root of this plant is as large as the arm, or at times as even the thigh—it is fleshy, succulent, branchy, of a yellowish-white, circularly wrinkled without, acrid, bitter, disagreeable to the taste and of a nauseating odour, which, however, disappears by desiccation. Its climbing stalk rises sometimes to the height of many metres—it is glabrous, creeping, chan-

nelled and armed with spiral creepers—its leaves are alternate, angular, hispid, tuberculous on both sides, rough to the touch, palmated, 5 lobed, the middle of which is trifid, elongated—flowers axillary, monœcious, in bunches, the male being supported on very long peduncles, the female larger than the male—calyx 5 toothed, sharp, corolla 5 divisions, stamens 5, of which 4 are united 2 and 2 by the filaments and the anthers, the 5th free—berries round, black, (those of *dioïca* red) polyspermous. We dig up the root before the plant flowers and prepare the *alcoholic tincture.*

CALADIUM SEGUINUM; *Arum seguinum;* Fr., Pediveau veneneux; Ger., *Giftiger aron;* Eng., Poisonous pediveau, Dumb cane caladium.—Aroïdeæ, Juss.—Gynandria polyandria, L. Usual dose, 30.

219. This is one of the poisonous plants of America, where it grows on the wet prairies in the neighbourhood of Paramaribo. It forms a bush of a round stem, naked, height of 16 to 19 decimetres, green, milky; leaves ovoid, oblong, smooth, pointed, amplexicaule. The juice of this plant makes an indelible stain on linen, and is so caustic that, put on the tongue or mouth, it produces swelling, inflammation, and loss of speech; so that we should be specially cautious in the preparation of this plant. We prepare the alcoholic tincture with the herb; others prepare the root.

CAMPHORA, *Laurus camphora;* Fr., Camphre, Laurier camphrier; Ger., *Kampfer;* Eng., Camphor.—Laurineæ, Juss. —Enneandria monogynia, L. Usual doses, O. 30.

220. The camphor laurel grows in China, where it is known under the name of Tschang; in Japan and Cochin China; it has evergreen leaves, and surrounded with a bark of a greyish-brown, and rough. It is from this tree that we chiefly obtain the product called *camphor*, though it may also be extracted from many others. Camphor is a peculiar substance, colourless, translucid, and at the usual temperature, emitting a kind of volatile oil, concrete, of a peculiar odour, penetrating, diffusible. It is obtained in China or Japan, by cutting into pieces the tree, root, trunk, branches, and leaves, and putting them into large reservoirs full of water, covered

with earthen capitals, furnished with a lining of rice straw. A moderate heat is then applied, and the camphor, volatilized by the steam of the boiling water, rises into the capital, where it is condensed upon the straw; it is then taken and sent to Europe, under the name of *crude camphor*. In this state it consists of agglomerated grains, of a greyish colour and oleaginous appearance, more or less impure. It is then purified, in submitting it to sublimation. Camphor thus obtained is the *camphor of China or Japan*. Another kind, more rare and more fine than this, comes to us from Sumatra or Borneo, where it is obtained from the Dryobalanus camphora caleb. A third kind yet comes from the East Indies, from the Laurus cinnamomum; but it is rarely found in commerce. When purified by sublimation, camphor is of an icy whiteness, translucid, light, of an oily hue, of a fresh and slightly acrid taste, of a strong, penetrating, persisting smell, which spreads some distance. It swims on water, and does not go out when placed in a burning state in this liquid; kept in a dry, unclosed vessel, it evaporates without leaving a trace of its existence; in a closed vessel it sublimates in part. It is soluble in alcohol and brandy; it inflames easily and burns with a white flame, without leaving a residue, but in spreading, a thick, very odorous smoke. It may also be extracted from the fresh roots of the *Cassia lignea*, from sassafras, ginger, as well as from the essential oils of lavender, thyme, rosemary, sage, peppermint, cubebs, juniper, black pulsatilla, asarabacca, &c. We make the *mother tincture* in dissolving 1 part of pure camphor in 20 parts of alcohol.

Cannabis sativa; Fr., Chanvre cultivé; Ger., *Hanf;* Eng., Hemp.—Urticeæ, Juss.—Diœcia pentandria, L. Usual doses, 0. 3, 12, 30.

221. Hemp is originally from India and Persia, and grows spontaneously in almost all countries where it is cultivated. Plant straight, 2 or 3 metres or more in height, above all the females; leaves stipulate, digitate, the inferior opposite, the superior alternate, the florals sometimes simple; the male flowers in axillary and terminal panicles; the female at the summit of the branches; two axillaries, separated by the rudiment of a young twig; males, calyx in 5 parts; corolla null; females, calyx of one piece, entire, opening at the side; corolla null, two styles, one seed in the calyx, swollen. The inhabi-

tants of the country often call the *male hemp* that which bears the seed; but that is taking one for the other. To make the homœopathic preparation of hemp, we take the *flowering* tops of male and female plants and express the juice, and make the *tincture* with equal parts of alcohol; others advise only to use the flowering tops of the female plants, because these best exhale, during their flowering, a strong and intoxicating odour, whilst the male plants are completely inodorous.

Capsicum annuum; Fr., Piment, Poivre long ou povre de Cayenne; Ger., *Spanischer pfeffer;* Eng., Cayenne pepper.—Solaneæ, Juss.—Pentandria monogynia, L. Usual doses, 9, 30.

222. This annual plant is originally from the East Indies, but it is also found in South America, in the West Indies, in the isles of the great Pacific Ocean, in the interior of Africa, &c. It may be raised any where abundantly; the stem is thick, roundish, smooth, and branching, rises to two or three feet in height, and supports ovate, pointed, smooth, entire leaves, which are placed without regular order on long footstalks; the flowers are solitary, white, and stand on long peduncles at the axills of the leaves; the calyx is persistent, tubular, and five cleft; the corolla monopetalous and wheel-shaped, with the limb divided into five spreading, pointed, and plaited segments; the filaments short, tapering, and furnished with oblong anthers; the germen ovate, supporting a slender style, which is longer than the filaments, and terminates in a blue stigma; the fruit is a pendulous, pod-like berry, light, smooth, and shining, of a bright scarlet, orange, or sometimes yellow colour, with two or three cells, containing a dry loose pulp, and numerous flat, kidney-shaped, whitish seeds. For homœopathic use, we take the capsules and the grains at maturity, powder them, and infuse them in 20 parts of alcohol, or better yet, we make the *three* first attenuations by *trituration.*

Cascarilla, *Croton elutheria;* Fr., Cascarille; Ger., *Cascarillea-rinde;* Eng., Cascarilla.—Euphorbiaceæ, Juss.—Monœcia monadelphia, L. Usual doses, ?

223. The bark used in homœopathy, under the name of Cascarilla, is not, as has been thought, the bark of *croton cas-*

carilla, but that of *croton elutheria*, a bush of 16 to 19 decimetres in height, and which grows abundantly enough in Peru, Paraguay, the Antilles, and above all, in the isle of Eleutheria, so that it was formerly called Eleutherian; the stem is branched, and covered with a brown bark, of which the external coat is rough and whitish; the leaves are long, very narrow, somewhat pointed, entire, of a bright green colour on the upper surface, downy, and of a silvery whiteness on the under; they are placed alternately on short foot-stalks; the flowers are small, greenish, and disposed in long terminal spikes; the bark comes to us in pieces 5 to 10 centimetres long, rolled on itself, solid, friable, moderately thick, whitish-grey, streaked, and covered with a kind of lichen without of a brownish-grey, and smooth within, fracture red, ligneous, dull, a little aromatic, of a bitter taste, piercing and hot; thrown on coals, this bark burns quickly, emitting a musky odour. The best kind is that whose fracture exhibits resinous, shining particles. We prepare it the same as all dry substances, either in making the *three* first attenuations by *trituration*, or in preparing the *tincture* with 20 parts of alcohol.

CHAMOMILLA VULGARIS, *Matricaria chamomilla;* Fr., Camomille commun; Ger., *Feld-kamille, Halmerchen;* Eng., Common chamomile.—Corymbiferæ, Juss.—Syngenesia polyandria superflua, L. Usual doses, 12, 30.

224. This annual plant grows in uncultivated places, as well as in the fields of wheat, above all, in gravelly lands, and is found all over Europe; it is a plant of fibrous root, stems naked, ramose, straight, diffuse, 4 or 5 decimetres in height; leaves glabrous, pinnated, (tri-pinnated,) with capillary incisions; flowers many, white, with yellow disc, and in corymbs; calyx hemispherical, imbricated, scariose; receptacle naked, conical; rays open; scales of calyx equal on the margin; grains ovoid, fine, without a tuft; they are often confounded with the Roman chamomile, *anthemis nobilis*, which differs from the common chamomile by its perennial stalk, its receptacle chaffy, its penduncles hollow, its rays turned in, and its odour stronger. We obtain the *mother tincture* by expressing the juice of the *entire* fresh plant, and mixing it with 20 parts of alcohol; we gather the plant during its flowering.

CHELIDONUM MAJUS; Fr., Grande chelidoine; Ger., *Schöll-kraut, Schwalbenwurz;* Eng., Celandine.—Papaveraceæ, Juss.—Polyandria monogynia, L. Usual doses, O. 30.

225. This perennial plant grows all over Germany, as well as in France, on waste places, old walls, hedges, borders of highways, near habitations, &c.; the root is fusiform, of the thickness of a finger, of a reddish-brown without, yellowish within, containing, as well as all parts of the plant, an acrid, yellow juice; stem ramose, hairy, 5 or 6 decimetres high; leaves thin, winged, pinnatifid, bluish-green beneath, clear green above; flowers yellow, axillary or terminal; peduncles in umbels; umbel simple, of 4 or 5 rays; calyx caducous and two leaved; corolla of 4 petals; petals ligulate, threads united with the anthers, imitating petals; silique polyspermous, unilocular, linear, thin. We use the juice of the root recently expressed to obtain the *mother tincture*, mixed with equal parts of alcohol; many also make use of the *whole* plant; the root should be gathered before the flowering of the plant, in the month of May; the entire plant when in flower.

CHINA, *Cinchona officinalis, Chinæ cortex, Quinquina;* Fr., China; Ger., *China rinde;* Eng., Peruvian bark.—Rubiaceæ, Juss.—Pentandria monogynia, L. Usual doses, 9, 12, 15, 30.

226. The tree, whence this bark is obtained, grows in the environs of Loxa, in Peru, and that which furnishes the *royal quinquina*, on the high mountains of South America. There are from 16 to 53 kinds of quinquina, all different in their effects, according as they have been selected from the branches or the trunk of such or such kind of quinquina tree, as well as according to the age of the tree. The best kinds are the *royal yellow*, gathered from the *cinchona angustifolia* of Ruiz, or from the *lancifolia* of Mutis, and the *quinquina Loxa*, or Peruvian bark, gathered from the *cinchona condaminea* of Humboldt; the first is rolled or flat, 4 to 9 millimetres thick, of a reddish-yellow within, fibrous fracture, studded with shining points, covered with foliated lichens; the second kind, the *Loxa*, is formed of the bark of branches, and comes to us in finer pieces, more thin, more rolled, of a brownish-grey, mingled with white spots without, of a reddish-

brown within, fracture brown, smooth, of a musty odour, bitter taste, styptic, and almost balsamic. We procure it enclosed in skins. The good cinchona barks should be fresh, heavy, of a medium thickness, very dry, a peculiar odour, perfect bitterness, free as much as possible from lichens, of a brownish-red or blackish without, of a canella colour, or a red-yellow within; the fracture of these barks should neither be fibrous nor pulverulent, but smooth and somewhat shining. We make use, in homœopathy, either of the *Loxa* bark, or else of the *royal yellow* bark, which we prepare in the same manner as all the dry drugs, in making the *three* first attenuations by trituration, or else, which, however, is not so good, in infusing the powder with 20 parts of alcohol, to obtain the *mother tincture.*

Cicuta virosa; Fr., Cicutaire vénéneuse, Ciguë d'eau; Ger., *Wasser-schierling;* Eng., Water hemlock, Cowbane.—Umbelliferæ, Juss.—Pentandria digynia, L. Usual dose, 30.

227. This perennial plant inhabits the borders of ditches and rivulets, swamps, meadows, ponds, lakes, &c., all over Germany, and the north and west of France; the root is thick, white, fleshy, elongated, transparent, full of hairs, and hollow; it contains in its bark a yellow juice; its odour is strong and disagreeable, its taste acrid and caustic; stem straight, elevated 3 to 6 decimetres, ramose, fistulous, glabrous, striated; leaves compound, 2 or 3 times winged, with lanceolate, incised leaflets, like the teeth of a saw; umbels loose, naked; involucelles 3 or 5 rayed; flowers white, uniform; fruit ovoid, furrowed with 10 small entire sides. We employ the fresh root, which we gather at the beginning of the flowering, and from which we express the juice, which we mingle with an equal part of alcohol to preserve it as a *tincture.*

Cina, *Artemisia contra*, *Semen contra;* Fr., Armoise d'Alep (non de Judée); Ger., *Zittwer-samen*, *Wurm-samen;* Eng., Worm-seed.—Corymbiferæ, Juss.—Syngenesia polygamia superflua, L. Usual doses, 9, 30.

228. The opinion which attributes the seed known under the name of *semen contra,* to the worm-seed of Judea, is all

but generally adopted. We distinguish in commerce two kinds, the *semen contra* of *Aleppo* or of the *Levant*, and the *semen contra* of *Judea* and *Barbary*. According to the botanist Nees d'Esembeck, the first of these kinds comes from the *artemisia contra*, whilst the other, the semen contra of the Indies comes from the *artemisia conglomerata*, that is to say, the worm-wood of Judea. According to Kunze, it is the *artemisia santonica palmata* and *odoratissima* which furnish this seed; whilst according to Sanders, it comes from a kind of *chenopodium*. The best kind is that which comes from Aleppo or the Levant—it is of a colour greener than the other—all the parts are glabrous—its flowers rather large—its odour more free, more aromatic—it is less mixed with foreign matters, dust, small sticks, &c.—its fragments not broken. For homœopathic use, we take the *semen contra* of Aleppo, which we infuse in 20 parts of alcohol, should we wish to prepare it as a *tincture;* or we make the *three* first attenuations by *trituration*, should we wish to possess more unalterable preparations and more developed in their virtues.

CINNAMOMUM, *Laurus cinnamomum;* Fr., Cinnamome, Laurier cannelier, Cannelle; Ger., *Zimmt*, *Æchter zimmt;* Eng., Cinnamon.—Laurineæ, Juss.—*Enneandria monogynia*, L. Usual doses, ?

229. The true cinnamon is the bark of the laurel cinnamon, a tree which grows in the isle of Ceylon, East Indies, as well as in the islands of Sumatra and Java and on the coast of Malabar. It attains a height of 7 to 10 metres—its roots are covered with a bark which has the smell of camphor—its wood is hard and the inner part without odour—leaves three nerved, oval, oblong, nerves disappearing towards the summit—flowers are small, whitish, disposed in panicles, of an exquisite odour, which is perceived at some distance—berries oval, of a bluish brown, spotted with white. When the sap is abundant, the bark of this tree is easily peeled off—the exterior bark is rejected, which is thick, grey, rough—the second only is preserved, which is thin—it is cut in pieces and exposed to the sun—it rolls up itself of the size of a finger, and its colour becomes of a rusty yellow. The good cinnamon ought to be of an extremely agreeable odour, penetrating, soothing, and of a sweetish taste, slightly

heating, with an after taste somewhat pungent, and a little styptic. Should it have a strong taste, acrid, slightly bitter and resembling the clove berry, it is a sign that it is of an inferior quality or even another kind of bark. We take the best cinnamon, powder it and infuse it in 20 parts of alcohol, should we wish the *tincture*, or else, what is far preferable, we make the *three* first attenuations by *trituration*.

Cistus canadensis; Fr., Ciste hélianthème; Ger., *Sonnenröschen;* Eng., Canadian rock-rose.—Cistineæ, Juss.—Polyandria monogynia, L. Usual doses, 1, 15, 30.

230. This plant is a bush with stipules, semiligneous, recumbent; stipules lanceolate; leaves oblong, rolled, slightly hairy, white beneath; calyx very downy; flowers yellow. We express the juice of the fresh plant and mix it with equal parts of alcohol.

Citri succus, *Citri acidum;* Fr., Jus de citron, Acide citrique; Ger., *Citronensaft*, *Citronensäure*; Eng., Lemon juice, Citric acid.—Aurantiaceæ, Juss.—Polyadelphia icosandria, L. Usual dose, 3.

231. This is the juice of the lemon which has thus far been employed the same as expressed from the ripe lemon. Should we wish to make attenuations, we must make the first with distilled water, the second with diluted alcohol, and the others with ordinary alcohol.

Clematis Erecta, *Flammula jovis;* Fr., Clematite droite; Ger., *Brenn waldrebe;* Eng., Upright virgin's bower.—Ranunculaceæ, Juss.—Polyandria polygynia, L. Usual dose, 9, 30.

232. This perennial plant grows over the greater part of Germany, Switzerland, France, Hungary, Gallicia, Greece, &c., on woody hills, along hedges, &c.; stems upright, naked, ramose towards the top; leaves opposed, pinnated; leaflets oval, lanceolated, very entire; flowers white, of 5 petals or of 4. We express the juice of the leaves and stem, at the time the plant is going to flower, and prepare the *mother tincture* with an equal part of alcohol.

Cocculus, *Menispermum cocculus;* Fr., Coque de Levant; Ger., *Kockelskörner;* Eng., Cocculus indicus.—Menispermeæ, Juss.—Diœcia monadelphia, L. Usual doses, 12, 30.

233. The plant from which we gather these fruits, is a kind of bush which grows in the East Indies, in Egypt, on the coast of Malabar, and in the isles of Ceylon, Java and Celebes, on rocks and stones, and on the shores of the sea; its fruits come to us in a dry state; they are inodorous, spherical, reniform, of a black or brown grey, of the size of a small pea, wrinkled, resembling laurel berries. They are surrounded with two barks, of which the first is hard, ligneous, dull, and the second, white and still harder, enclosing a white almond which has a taste acrid, caustic and bitter, whilst the barks are almost insipid. For homœopathic uses we powder the almond with the barks and digest the whole, at a gentle heat, with 20 parts of alcohol, unless we prefer to make the *three* first attenuations by trituration.

Coffea arabica, *Coffee cruda;* Fr., Café moka, Café cru; Ger., *Roher kaffee;* Eng., Mocha coffee.—Rubiaceæ, Juss. —Pentandria monogynia, L. Usual doses, 3, 9, 30.

234. The tree which bears this well known fruit, is originally of Arabia Felix and of Ethiopia, where it attains a height of 5 or 8 metres or more, but it is now cultivated in equatorial America and in many European countries, where it perfectly succeeds. The fruit of this tree is a berry which, green at first, becomes afterwards red, and at last almost black; in each berry is found two hard grains, enveloped with a kind of paper-like membrane, and forming each one a demi-ovoid; these grains are the well known seeds known under the name of *crude coffee.* We particularly distinguish 4 kinds: 1st. Mocha coffee, so called from the town of Mocha, in Arabia. This is the best quality, and is distinguished by its small grains, very odorous, yellow, rounded, coming from monospermous fruit. 2nd. Bourbon coffee, in grains more elongated, but generally also rounded, having, however, less odour than those of Mocha. 3. Java coffee, which has a rusty yellow colour. 4. Martinique coffee, the least estimated. For homœopathy, we take the best Mocha, unburnt, powder it finely in an iron mortar moderately heated, taking care to detach frequently with a horn spatula what sticks to the

sides. Then, should we wish to make the attenuations by the dry process, we triturate one grain of this powder with 100 grains of sugar of milk and so on, as for all the dry drugs—but if, on the other hand, we would prepare the *tincture*, we put the powder in a bottle and digest it eight days with four times its weight of alcohol; at the end of these eight days, we decant the liquor and express well the sediment, which is afterwards boiled in a glass capsule with 30 times its weight of distilled water, till reduced to one-fourth; that done, we clarify this liquor and mix it with the alcoholic liquor. Twenty drops of this mixture, attenuated with 80 drops of alcohol, forms the *first* attenuation; the rest are prepared after the usual way.

Colchicum autumnale; Fr., Colchique, Tue chien, Veillotte, Safran des près, Safran bâtard; Ger., *Herbst zeitlose;* Eng., Meadow saffron.—Junceæ, Juss.—Hexandria trigynia, L. Usual doses, 6, 15, 30.

238. This perennial plant grows in many districts of Germany, France and the South of Europe, in meadows, where it flowers in autumn, and announces the beginning of winter. The root forms a bulb of the size of a pigeon's egg—it is furnished with fibrous radicles at its base, round on one side and flat on the other—naturally it is covered with dark coats, of which the external one is brown, the inner shining and of a clear colour—in the fresh state it contains a milky juice of an acrid taste, bitter and of a disagreeable odour—the flower rises in autumn immediately from a lateral bulb which the bulb of the preceding year has produced, and which has grown during the winter and spring—the flowers are rosy coloured with long tubes, disappearing in a few days, and are followed by leaves only in the following spring—the leaves are large, flat, erect, spear-shaped, about 5 inches long, and one inch broad at the base, and come off with the capsules, which are triangular, sessile, three pointed—the seeds are round, ovoid, wrinkled, of a deep brown. We gather the root in the spring, express the juice and treat it the same as all the fresh plants.

Colocynthis, *Cucumis colocynthis;* Fr., Coloquinte; Ger., *Koloquinte;* Eng., Bitter cucumber, Colocynth.—Cucurbitaceæ, Juss.—Monœcia syngenesia, L. Usual dose, 30.

239. The colocynth is a species of cucumber originally from Japan, which now grows at the Cape of Good Hope, in Arabia, Syria, the isles of the Archipelago and Southern Spain. The fusiform root of this plant gives birth to stems which trail upon the ground or rise upon neighbouring bodies to which they attach themselves by their numerous tendrils—leaves of a triangular shape, many cleft, variously sinuated, obtuse, hairy, of a fine green colour on the upper surface, rough and pale on the under, and stand alternately upon long petioles—flowers solitary and yellow, and appear singly at the axills of the leaves—fruit is a globular berry or pepo, of the size of a small orange, yellow and smooth when ripe, and contains within a hard coriaceous rind, a white, spongy, medullary matter, enclosing numerous ovate, compressed, white seeds; the pulp of this fruit is cellular, spongy, light, white, almost inodorous, but of an excessive bitterness. We receive this fruit, deprived of its rind, from Aleppo and Alexandria; the white, dry and light fruit is the best; often also we meet with, under the name of colocynth, the fruit of another cucurbitaceous plant of the size of a small apple, but these fruits are rounder and lighter than the true cucumbers; their outer rind adheres strongly to the dried pulp and is very fragile; the taste of this pulp is also very bitter, but the bitterness is much less intense than that of the colocynth. To prepare this last for homœopathic purposes, we powder the fruit well dried with the seeds and treat it as for all the other dried substances, either by *trituration* or by alcohol.

CONIUM MACULATUM; Fr., Grande Ciguë; Ger., *Flecken-schierling;* Eng., Hemlock.—Umbelliferæ, Juss.—Pentandria digynia, L. Usual dose, 30.

240. This sufficiently known plant grows all over Germany, as well as in France and all Europe, in made ground, waste places, along hedges and highways. The bi-annual root is cylindrical, white, spindle-shaped; stem herbaceous, branching, 2 to 6 feet high, round, hollow, smooth, shining, slightly striated, and marked with brownish-purple spots; the lower leaves are tri-pinnate, more than a foot in length, shining, and attached to the joints of the stem by sheathing petioles; the upper are smaller, bipinnate, and inserted at the divisions of the branches; both have channelled footstalks and incised leaflets, which are deep-green on their upper surface,

and paler beneath; the flowers are very small, white, and disposed in compound terminal umbels; the fruit is roundish, ovate, striated, tuberculous, and composed of two plano-convex, easily separable seeds, which have on their outer surface five crenated ribs; being rubbed between the fingers the plant emits a fetid, musky, disagreeable odour; this odour is sufficient to distinguish it from parsley, which is aromatic, and which also has not spotted stems, nor hollow petioles, nor, finally, the leaves of such a sombre hue; as to wild chervil and little hemlock, (petite ciguë,) with which we may still confound the *conium*, neither one nor the other of these plants have purple spots which distinguish this last, nor involucres, nor tuberculous seeds, and the chervil in particular has besides the stems bulging at the joints, the leaves downy, and the seeds elongated; we make use in homœopathy of the *herb* of the plant, which we gather at the commencement of the flowering season, in the month of June; we express the juice and treat it as that of other fresh plants.

Convolvulus arvensis; Fr., Liseron des champs, Petit liseron, Liset; Ger., *Winde, Gemeine Winde;* Eng., Bind weed.—Convolvulaceæ, Juss.—Pentandria monogynia, L. Usual doses, ?

241. This plant grows in Germany as well as in France, in the fields, and is very common in these countries; herb milky, voluble; leaves digitate, pointed on both sides; peduncles one flowered; calyx in 5 deep parts; corolla campanulate, plicate. We gather the whole plant, express the juice, and treat it as the juice of all fresh plants.

Copaivæ balsamum; Fr., Baume de Copahu; Ger., *Copaif-Balsam, Weisser Peru balsam;* Eng., Balsam copaiba.—Leguminosæ, Juss.—Decandria monogynia, L. Usual doses, O. 1, 3, 30.

242. This balsam comes from a tree known by the name of *copaifera officinalis*, which grows naturally in various countries of South America, and also cultivated in the Antilles. We obtain the balsam by perforations or incisions made in the tree; it differs in colour, consistence, odour, and taste, according to the kind of tree from which it is taken. In general, we regard that which comes from Brazil as the

best; it is liquid, of a clear colour, almost colourless, of a strong resinous odour, aromatic, and of a taste acrid, hot, lasting, bitter. The balsam which comes from the Antilles, and which is much inferior to the preceding, is thicker, more coloured, of gold-yellow, or even brownish, less transparent, of a disagreeable odour, resembling that of turpentine. The true balsam of copaiba dissolves in alcohol, in ether, as well as in the fixed and volatile oils; in becoming old, it attains the consistence of honey. In commerce, we often find it adulterated with fixed oils, which potash reveals, as well as alcohol, in which these oils are insoluble; the presence of oil of turpentine is revealed by heat and by smell. One drop of this balsam dissolved in 100 drops of concentrated alcohol gives the first attenuation.

Crocus sativus; Fr., Safran cultivé; Ger., *Safran;* Eng., Saffron.—Irideæ, Juss.—Triandria monogynia, L. Usual doses, 3, 6, 30.

243. The saffron is originally from Greece, Persia, and other oriental countries, but at present cultivated also in Austria, France, Italy, and Germany. It needs a black earth, somewhat gravelly, light, neither moist nor clayey, and which has not been manured for sometime, a year at least. The saffron has a bulb of the size of a small nut; we put the bulbs in the earth to the depth of 24 centimetres, to preserve them from the frost. One pound of dry saffron requires five pounds of green saffron, and one pound of this last requires more than 100,000 flowers. The only part that is used of the flower is the three stigmas which the pistil bears; they are dried and sold under the name of saffron; these stigmas are of a lively colour, yellowish-red, and a very strong aromatic odour; the saffron is found in commerce in the dry state, and formed in shape of loaves. We distinguish several kinds, 1st. *Levant saffron,* the best and dearest of all; 2nd. *Austrian saffron,* very pure, and unmixed with the pistils; 3rd. *French* or *Italian saffron*; 4th. *English saffron;* and last of all, *Spanish saffron,* the least estimated of all; the saffron of commerce is a compound of reddish delicate filaments; if good, it is not mixed with whitish or tangled filaments, which is always an evidence of the presence of pistils and stamens, parts which have none of the virtues of the stigmas; it should be unctuous to the touch, but little friable,

of an agreeable odour, of a sweetish aromatic taste, and of a yellow colour so intense that the saliva becomes easily coloured, and a very small quantity colours in a very short time much alcohol or water; it is often adulterated with the flowers of *carthamus*, *calendula*, *punica granatum*, &c., or even with smoked fibres of beef; we easily recognise the first of these frauds, in infusing it in water, which swells up the foreign bodies, whilst the second is discovered by the odour which the meat developes when we cast a little on hot coals. For homœopathic purposes, we prepare the saffron as all the dry substances, either by treating it at once with alcohol, (20 parts,) or by making the *three* first attenuations by trituration.

CROTON TIGLIUM; Fr., Graine de tigli, Graine de Moluques, Pignon d'Inde; Ger., *Tigli-baum;* Eng., Croton tree.—Euphorbiaceæ, Juss.—Monœcia monadelphia, L. Usual doses, ?

244. This plant, which grows in the Indies, China, Moluccas, Ceylon, Malabar, &c., forms a bush, ramose, smooth barked, greyish-green colour, and light wood; leaves oval, glabrous, pointed, serrated; flowers terminal, in bunches; seeds elongated, ovoid, a little angular; these seeds contain an almond of a rusty colour, enclosed in greyish, smooth, thin, and transparent covering; the meat of this almond is so acrid and caustic that it still burns a very long time after being put upon the tongue; there is extracted from it an oil called croton oil, *(oleum crotonis,)* and which partakes of all the caustic virtues of the seed; it is thick, yellow, of a peculiar odour, and of a warm, acrid, pungent taste. For homœopathic purposes we use the seeds, which we powder, and treat the same as all dry vegetable substances, either by alcohol (20 parts) or by making the *three* first attenuations by *trituration*.

CUBEBÆ, *Piper cubeba;* Fr., Cubèbe, Poivre à queue; Ger., *Cubeben*, *Stielpfeffer;* Eng., Cubebs.—Urticeæ, Juss.—Decandria trygynia, L. Usual dose, ?

245. Cubebs grow in Japan, New Guinea, Peru, &c.; this is a climbing, perennial plant, with a smooth, flexuous, jointed stem, and entire, ovate, oblong or lanceolate leaves, which in the old vine are unequal at the base, less than an inch long,

and supported upon short channelled footstalks; the flowers are pedicelled, and form long, pendent spikes; the fruit is a berry which grows in clusters, of the size of an ordinary pepper grain, which it resembles so much, that when they have not the tail-piece, they are difficult to be distinguished; the odour of this pepper is agreeable, and more aromatic than that of the common pepper; its taste is also less hot and pungent; the more the grains are heavy and smooth, the more we may be assured that there is no adulteration. For homœopathic use we treat them as other dry substances.

CYCLAMEN EUROPÆUM; Fr., Cyclame, Pain de pourceau; Ger., *Erdschiebe, Schweinsbrod;* Eng., Sow-bread.—Lysimachiæ, Juss.—Pentandria monogynia, L. Usual doses, 3, 30.

246. Sow-bread grows about shady places and in hilly countries, at the foot of the Alps, in the middle of Europe, in Tartary, &c.; but it is also cultivated in our gardens; the root is thick, flat, brown without, whitish within, orbicular, forming a kind of flat surface, whence proceed long petioles; leaves radical, pedunculated, rounded, veined, green, and brilliant above, of a purple-red beneath, spotted white near the edge; flowers of a fine purple, or white and red; corolla reflected back; berries covered with a capsule. For homœopathic use we take the *fresh* root, gathered in autumn, and prepare the same as all other fresh vegetable substances.

DAPHNE INDICA, *Daphne odora;* Fr., Laureole de Chîne; Ger., *Indischer seidelbast;* Eng., Sweet scented spurge laurel.—Thymeleæ, Juss.—Octandria monogynia, L. Usual doses, ?

247. A shrub very similar to the common laurel by its bearing and foliage, but which is very distinguishable by its disposition, and the character of its flowers. It rises about two feet high, on a straight stem, naked, divided above into several branches, ascending, glabrous, leaves at the top; these leaves are alternate, (and not opposite, as described by Linnæus,) sparse, little separated one from the other, open or reflected, persistent, and situated in the superior part of the branches, sessile, oval-lanceolate, pointed at the two ends, green, glabrous, coriaceous, unequal, and length of one inch and a

half to two inches, and one inch in their greatest breadth; flowers white, odorous, almost sessile, 10 to 15 together on a common terminal peduncle, straight, and very short; they form at the top of each branch a glomerated bouquet, well filled, and of a beautiful appearance; these flowers become blackened by desiccation; their common peduncle is furnished below with several bracteæ, lanceolate, concave, the greater part a little shorter than the flowers, which they accompany; this shrub grows naturally in China, and is cultivated in the botanical garden, (Jardin du Roi,) at Paris. It should be prepared like other vegetable substances.

DICTAMNUS ALBUS; Fr., Dictamne, Fraxinelle; Ger., *Diptamwurzel;* Eng., White fraxinella, Bastard dittany.—Rutaceæ, Juss.—Decandria monogynia, L. Usual doses, ?

248. This perennial plant grows in southern Germany, Italy, France, Russia, in mountain-woods, and on stony hills; not thick, rolled, succulent, a little spongy; stem upright, 6 to 9 decimetres in height, angular, streaked-green, furnished with red, resinous glands; leaves alternate, shining, pinnated; flowers terminal, in spikes, of a snowy-white, or of a clear red, with stripes of a deeper colour; seeds ovoid, black; the whole plant exhales, when fresh, a strong resinous odour, and an essential oil, which inflames without injuring the plant, when, in a dry hot air, we approach a candle to it. We express the juice of the fresh plant, and treat it like other fresh vegetable substances.

DIGITALIS PURPUREA; Fr., Digitale pourprée; Ger., *Paperfingerhut;* Eng., Purple foxglove.—Scrophulariæ, Juss.—Didynamia angiosperma, L. Usual dose, 30.

249. This beautiful plant grows among underwood on the hills, in clayey, sterile soils, &c., in all France, as well as on the basaltic hills, in the fields and vallies of southern Europe, &c.; it is also cultivated in our gardens; it has a bi-annual or perennial fibrous root, which sends forth large tufted leaves, and a single, erect, downy, and leafy stem, rising from 2 to 5 feet in height, and terminating in an elegant spike of purple flowers; the lower leaves are ovate, pointed, about 8 inches in length, and 3 in breadth, and stand upon short, winged footstalks; the upper are alternate, sparse, and lan-

ceolate; both are obtusely serrated at their edges, and have wrinkled velvety surfaces, of which the upper is of a fine deep-green colour, the under paler and more downy; the flowers are numerous, and attached to the upper part of the stem by short peduncles, in such a manner as generally to hang down upon one side; at the base of each peduncle is a floral leaf, which is sessile, ovate, and pointed; the calyx is divided into 5 segments, of which the uppermost is narrower than the others; the corolla is monopetalous, bell-form, swelling on the lower sides, irregularly divided at the margin into short obtuse lobes, and in shape and size bearing some resemblance to the end of the finger of the glove; the mouth of the corolla is guarded by long, soft hairs; its general colour is bright purple, but sometimes the flowers are whitish; the internal surface is sprinkled with black spots upon a white ground; the filaments are white, curved, and surmounted by large yellow anthers; the style, which is simple, supports a bifid stigma; the seeds are very small, numerous, of a dark colour, and contained in a pyramidal, two-celled capsule. For homœopathic purposes, we use the leaves of the plant of the second year, gathered before the flowering, in the month of June; we express the juice, and treat it like that of other fresh plants.

DROSERA ROTUNDIFOLIA, *Rorella;* Fr., Drosère à feuilles rondes, Rosée du soleil; Ger., *Sonnenthau*; Eng., Sundew. —Capparideæ, Juss.—Pentandria trigynia, L. Usual dose, 30.

250. This plant grows on turfy grounds, covered with moss, in the north of Europe, as well as in Bavaria, in South America and in the North of Asia; the perennial root is thin, of a deep brown; stem upright, thin, glabrous, rough, 5 to 20 centimetres high; leaves radical, covered with glandular hairs, reddish, from each one of which there exudes, by the heat of the sun, a drop of limpid, acrid and mucilaginous fluid; flowers alternate, in spikes, on a shaft, white, opening during dry, fine weather for a moment, about mid-day. We gather the whole plant at the beginning of the flowering season, in July. We express the juice and treat it like other fresh plants.

DULCAMARA, *Solanum Dulcamara;* Fr., Douce-amère, Morelle grimpante; Ger., *Bittersüss nachtschatten;* Eng., Bitter sweet, Woody nightshade.—Solaneæ, Juss.—Pentandria monogynia, L. Usual doses, 24, 30.

251. This perennial plant grows over almost all Europe in moist places, in ditches, on the borders of rivers, along hedges, &c.; it is a climbing shrub with a slender, roundish, branching, woody stem, which rises to six or eight feet in height; the leaves are alternate, petiolate, ovate, pointed, veined, soft, smooth and of a dull green colour; the flowers are disposed in elegant clusters, somewhat analogous to cymes and standing opposite to the leaves; calyx very small, purplish, and divided into five blunt persisting segments; corolla wheel-shaped, with pointed reflected segments, which are of a violet-blue colour, with a darker purple vein running longitudinally through their centre, and two shining greenish spots at the base of each; filaments very short and support large, erect, lemon-yellow anthers, which cohere in the form of a cone around the style; the berries are of an oval shape and a bright scarlet colour, and continue to hang in beautiful bunches after the leaves have fallen; the odour of the leaves and stems is somewhat nauseous, and narcotic; their taste is first sweet, then bitter. We make use of the juice recently expressed of the leaves and stems, in gathering the plant before the flowering season; this juice is then heated the same as that of other fresh plants.

Eugenia jambos *s. jambosa;* Fr., Jambos, Jame rosade; Ger., *Jambus myrthe;* Eng., Malabar plum-tree or rose-apple.—Myrtaceæ, Juss.—Icosandria monogynia, L. Usual doses, ?

252. This beautiful tree is a native of the Indies and warm countries of America; it is never without flowers or fruit, and attains a height of 6 to 13 metres; the bark of the trunk is of a reddish-brown, that of the branches cracked but smooth; leaves alternate, entire, lanciniated, veined and full of points, in length 6 to 8 lines, of a deep green above, of a pale green below; peduncles terminal, ramose, multifloral; flowers large, of a dull yellow; fruit almost spherical, of the size of a medium pair, of a fine pale yellow, approaching to the rose; seeds monosperous, with 4 angles and enveloped in a thin pellicle; the fruit is eaten, but the seeds, and above all the envelope, are considered poisonous; the root of this tree

is, it is said, one of the most violent poisons. In homœopathy we use the fresh seeds washed; we mix 10 parts of alcohol with them and decant the clear liquor at the end of 8 days; the tincture thus obtained serves for the attenuations.

EUPHORBIUM OFFICINALIS; Fr., Euphorbe officinale; Ger., *Wolfsmilch, Euphorbien-harz;* Eng., Euphorbium spurge. —Euphorbiaceæ, Juss.—Monœcia androgynia, L. Usual doses, 24, 30.

253. This gum-resin is extracted from several kinds of euphorbia growing in warm climates of Africa, chiefly at the Cape, along Mount Atlas, &c. In the fresh state, it is a milky juice which flows out in abundance on incision; it comes to us in irregular pieces or in rounded tears, about the size of a pea or larger, often forked and perforated with one or two small conical holes, produced by the prickles of the plant, around which the juice has concreted and which sometimes remain in the holes; the masses are occasionally large and mixed with impurities, the surface is dull and smooth, bearing some resemblance to that of tragacanth; consistence somewhat friable; light yellowish-red; odour scarcely perceptible; taste at first slight, but afterwards excessively acrid and burning; colour of the powder yellowish; triturated with water, it renders it milky and is partially dissolved; alcohol dissolves a large portion, forming a yellow tincture, which becomes milky on the addition of water. We must be careful in making the powder, as it is very acrid; we should place a band over the eyes and nose, &c. We prepare the euphorbium like all the dry vegetable substances, either in making the *three* first attenuations by *trituration*, or in infusing it in 20 parts of alcohol, and using the mother tincture thus obtained for the attenuations by the wet method.

EUPHRASIA OFFICINALIS; Fr., Euphraise officinale; Ger., *Augentrost;* Eng., Eye-bright.—Pediculareæ, Juss.—Didynamia augiosperma, L. Usual doses, 0, 3, 30.

254. This annual plant grows in the meadows, on the borders of forests, over all Europe. We distinguish several varieties: 1st. *E. pratensis*, Schenck. 2nd. *E. neglecta*, a more rare variety, growing on the Bavarian Alps. 3d. *E. nemorosa*, Pers., chiefly growing on the dry swards of

woods. 4th. *E. alpestris*, on the higher mountains. 5th. *E. imbricata*, Wimm., in the Pyrenees; the variety which we employ under the name of *E. officinalis* is the *E. pratensis*; root very small, hairy; stem rounded, downy, 8 to 16 centimetres high, rarely simple, more often ramose; leaves alternate, sessile, oval, obtuse, glabrous, thick, wrinkled, sharp toothed; flowers axillary, in a terminal spike; calyx cylindric, 4 leaved; corolla white, labiated, lobed; capsule double, oval, oblong; anthers two horned, spinous at base, on one of the lobes. We gather the *entire* plant in middle of July, and prepare it like all the fresh plants.

Evonymus europæus; Fr., Fusain, Bonnet de prêtre; Ger., *Spindel-baum, Pfaffenhütchen;* Eng., Spindle tree.—Rhamnaceæ, Juss.—Pentandria monogynia, L. Usual doses, 6, 30.

255. The spindle tree is a bush 1 to 5 metres high, which grows in the hedges and thickets all over Europe; stems with quadrangular branches, leaves opposite, scarcely stipulaceous, nearly sessile; peduncles axillary, solitary, multifloral, in umbels; calyx in 5 parts, flat, covered at the base by a disk in escutcheon; fruit red and quadrangular, bonnet-shaped, which has given them the name of Priest's Cap, (Bonnet de Prêtre;) seeds white, bitter, and of an acrid taste. We gather the fruit just as it begins to turn red, (in the month of August,) express the juice and treat it the same as all other fresh vegetable substances.

Filix mas, *Polypodium s. aspidium filix mas;* Fr., Fougere male; Ger., *Mannliches farrenkraut;* Eng., Male fern.—Filices, Juss.—Cryptogamia, L. Usual doses, 0, 9, 30.

256. The male fern grows over all Europe, in Asia and America, in tufted woods, thickets, about hedges, &c.; it has a perennial, horizontal root, from which numerous annual fronds or leaves arise, forming tufts from a foot to four feet in height; the stipule or footstalk and midrif are thickly beset with brown, tough, transparent scales; the frond itself is oval, lanceolate, acute, pinnate, and of a bright green colour; the pinnæ or leaflets are remote below, approach more nearly as they descend and run together at the summit of the leaf;

they are deeply divided into lobes, which are of an oval shape, crenate at the edges and gradually diminish from the base of the pinna to the apex; the fructification is in small dots on the back of each lobe, placed in two rows near the base and distant from the edges. We may confound this plant with the *arthyrium filix fœmina*, which in some countries grows yet more often than the male fern, but whose root is ascending, shorter and blacker when dry, whilst the long horizontal root of the male fern becomes brown in desiccation. We gather the *whole* plant, from the month of July to September, and express the juice after having added a little alcohol to it.

Fragaria vesca; Fr., Fraisier vulgaire; Ger., *Gemeine erdbeere;* Eng., Wood strawberry.—Rosaceæ, Juss.—Icosandria polygynia, L. Usual doses, ?

257. This perennial plant is spread over the whole of Europe and over a great part of America; it inhabits woods, meadows, fields and hills; root brown, horizontal; stem upright, rounded, downy, of the length of a finger and more; leaves ternate, plicated, petiolated; flowers white, inodorous; berry oval, red, of a delicious odour, and exquisite taste. We gather the plant at the beginning of its flowering, and treat it as the recently expressed juice of other plants after the known method.

Granatum, *Punica granatum;* Fr., Grenadier; Ger., *Granaten-baum;* Eng., Pomegranate.—Myrtaceæ, Juss.—Icosandria monogynia, L. Usual doses, 0, 1, 30.

258. This tree, of the height of 5 to 7 metres, inhabits the middle of Africa, southern Asia, as well as the warm countries of Europe, such as Greece, Italy, Spain, Provence, &c.; it is also cultivated in some parts of Germany; the trunk is unequal, with numerous branches, which sometimes bear thorns; leaves opposite, oblong, entire, lance-shaped, pointed at each end, smooth, shining, of a bright-green colour, and placed on short footstalks; flowers are large, of a rich scarlet colour, and stand at the end of the young branches; the petals are roundish and wrinkled, and are inserted in the upper part of the tube of the calyx, which is red, thick, and fleshy;

the fruit is a globular berry, about the size of an orange, crowned with the calyx, covered with a reddish-yellow, thick, coriaceous rind, and divided internally into many cells, which contain an acidulous pulp, and numerous oblong, angular seeds, of a reddish-blue. The root of this plant, the only part used in homœopathy, is found in commerce in irregular pieces resembling chips, flat or rolled, of various sizes. We use the external bark of the root; the root is more effectual in the fresh state; but if we are not able in that condition, we must give the preference to such as come from the East Indies. The recent root is prepared like all the fresh vegetable substances; the dry root like all dry substances, that is to say, either by trituration or by digestion in 20 parts of alcohol.

Gratiola officinalis; Fr., Gratiole des boutiques.—Herbe à pauvre homme; Ger., *Gnaden-kraut, Wilder aurin;* Eng., Hedge hyssop.—Scrofulariæ, Juss.—Decandria monogynia, L. Usual doses, 6, 9, 12, 30.

259. This annual plant inhabits the wet meadows, borders of ponds and ditches, the bed of rivers, and the borders of lakes, all over the south and temperate part of Europe. The root is rampant, horizontal, white, hairy; stem straight, simple, knotty, quadrangular, glabrous, 3 or 4 decimetres high; leaves opposite, sessile, amplexicaule, lance-shaped, saw-like, glabrous, of a clear green, marked at the root with 5 and at the top with 3 nerves; flowers axillary, solitary, pedunculated, of a reddish-white; calyx in 5 divisions; corolla tubular, with 5 unequal lobes; capsule oval, oblong, with 2 valves and 2 monospermous cells; seeds small, many, elongated. In the fresh state, this plant has a repugnant, bitter, and acrid taste; its odour is almost null. We gather the plant *fresh* and *entire* in the month of June, before the developement of the flowers, and treat it like other fresh plants.

Guaiacum officinale; Fr., Gaïac, Gayac; Ger., *Guajak-Harz;* Eng., Guaiacum, gum resin.—Rutaceæ, Juss.—Decandria monogynia, L. Usual doses, 0, 3, 30.

260. The plant from which we receive the gum resin, known under the name of *gum guaiacum,* is a large and beautiful tree which grows in South America, especially at

St. Domingo, Jamaica, Brazil, &c. The wood and bark of this tree are found in commerce in large pieces, irregular, hard, but fragile; the bark is compact, grey outside, spotted, resinous, and apparently greasy; the wood is of a taste slightly and generally inodorous, but when burnt, giving out an aromatic smoke; the inner part of this wood is of a colour deep-green, and contains much resin; the outer part is more yellow, lighter, and less resinous. It is from this wood we obtain by decoction the *resin of guaiac*, but we also obtain it in a direct way, in the country itself, where it oozes from the tree, either naturally or in consequence of incisions made in it; it comes to us in masses, hard, large, irregular, semi-transparent, of a deep-brown or green outside, of a bluish-green, and full of white and brown spots inside, with a waving and shining fracture, and of a specific weight of 1.205 to 1.228. It is without odour, but of a taste slightly bitter, which pricks the tongue a little; it is very friable and affords a powder of a greyish-white, which, on exposure to the air, soon becomes green. It is soluble in alcohol, and but slightly in water. It is at times adulterated with the resin of the pine tree, but on throwing a little of this resin on the fire, the smell of turpentine will soon discover this mixture. Often, also, it is mixed with colophony, which is revealed by caustic potash, which forms a clear solution, whilst the resin of guaiac is pure, and a troubled one when there is any colophony present. We prepare this resin like all the dry substances, either in making the *three* first attenuations by *trituration*, or by dissolving it immediately in alcohol, (20 parts for the *mother tincture.*)

HÆMATOXYLUM CAMPECHIANUM; Fr., Bois de Campèche; Ger., *Campeschen-holz;* Eng., Campeachy logwood.—Leguminosæ, Juss.—Decandria monogynia, L. Usual doses, 6, 9.

261. This tree, whose well-known wood is much used for black, violet, and grey dyes, grows in America, chiefly in Mexico and the Antilles; it is a tree of middle size; the trunk is crooked and covered with a dark, rough bark; the branches are also crooked, with numerous smaller ramifications, which are beset with sharp spines; the sapwood is yellowish, but the interior layers are of a deep-red colour; the leaves are alternate, abruptly pinnate, and composed of

3 or 4 pairs of sessile, nearly obcordate, obliquely nerved leaflets; the flowers, which are in axillary spikes or racemes near the ends of the branches, have a brownish-purple calyx, and lemon-yellow petals; they exhale an agreeable odour, said to resemble that of the jonquil. We find it in commerce in large sticks, of a particular odour, heavy, compact, deprived of their sapwood, and having a blackish-brown colour externally. For homœopathic use we digest this wood in 20 parts of alcohol, and the *tincture* thus obtained serves to prepare the attenuations.

Helleborus niger; Fr., Hellebore noir; Ger., *Schwarze niesswurz;* Eng., Black hellebore, Christmas-rose.—Ranunculaceæ, Juss.—Polyandria polygynia, L. Usual doses, 9, 12, 30.

262. This plant grows on the mountains of Burgundy, the Vosges, Pyrenees, Alps, the south-west of Germany, Bavaria, Austria, Silesia, &c. The root is perennial, knotted, blackish on the outside, white within, and sends off numerous long, simple, dependent fibres, which are brownish-yellow when fresh, but become dark brown upon drying; the leaves are pedate, of a deep green colour, and stand on long footstalks, which spring immediately from the root; each leaf is composed of 5 or more leaflets, one terminal, and 2 or 3 or 4 on each side, supported on a single partial petiole; the leaflets are ovate, lanceolate, smooth, shining, coriaceous, and serrated on their upper portion; the flower-stem, which also rises from the root, is 6 or 8 inches high, round, tapering, reddish towards the base, and bears one or two large pendent, rose-like flowers, accompanied with floral leaves, which supply the place of the calyx; the petals, 5 in number, are large, roundish, concave, spreading, and of a white or pale rose colour, with occasionally a greenish tinge; there are two varieties, the *Helleborus niger humilifolius*, and the *H. n. altifolius*; in the former of which the leaves are shorter than the flower-stem; in the latter, longer. We take the *fresh root*, which we dig up about Christmas, the flowering season, and treat it like fresh plants.

Hyoscyamus niger, Fr., Jusquiame; Ger., *Bilsenkraut;* Eng., Henbane.—Solaneæ, Juss.—Pentandria monogynia, L. Usual doses, 12, 30.

263. This plant grows over almost all Germany, in a great part of France, North America and Asia, and chiefly inhabits gravelly places, waste lands, the vicinity of dwellings, along highways, &c. Henbane is a biennial plant, with a long, tapering, whitish, fleshy, somewhat branching root, bearing considerable resemblance to that of parsley, for which it has sometimes been eaten by mistake; the stem is erect, round, branching from one to three feet in height, and thickly furnished with leaves; these are large, oblong, ovate, deeply sinuated, with pointed segments, undulated, soft to the touch, and at their base embrace the stem; the upper leaves are generally entire; both the stem and leaves are hairy, viscid, and of a sea-green colour; the flowers form long, one-sided, leafy spikes, which terminate the branches and hang downwards; they are composed of a calyx, with five pointed divisions, a funnel-shaped corolla, with five unequal, obtuse segments at the border, five stamens inserted into the tube of the corolla, and a pistil with a blunt round stigma; their colour is an obscure yellow, beautifully variegated with purple veins; the fruit is a globular, two celled capsule, covered with a lid, invested with the persistent calyx, and containing numerous, small, irregular, brown or ash-coloured seeds, which are discharged by the horizontal separation of the lid; the whole plant has a rank, offensive smell. For homœopathic purposes, we gather the herb of the plant at the beginning of its flowering, in the first days of July, express the juice and treat it like that of all other fresh plants.

IGNATIA AMARA, *Strychnos Ignatii;* Fr., Fève St. Ignace; Ger., *Bittere Fiebernuss;* Eng., Bean of St. Ignatius.—Apocyneæ, Juss.—Pentandria monogynia, L. Usual doses, 15, 30.

264. This species of *strychnos* forms a sort of vine, the leaves of which are ovoid and shining; it grows from the Philippine isles as far as Cochin China; the fruit is of the size of a melon, and contains 20 to 24 seeds. The seeds (*beans of St. Ignatius*) are of the size of a large almond, of the length of three centimetres, irregular, angular, hard and stone-like, glabrous, inodorous, and semitransparent; on the outside they are of a blackish-grey or clear brown, striated, downy; inside they are of a brown-yellow, and somewhat shining; they have a disagreeable, murky odour, but weakly

so, and a taste excessively bitter; the best are the largest, heaviest, and those which have not been opened. In commerce, this fruit is actually extremely rare, and the majority of druggists sell impudently the grains of nux vomica for those of the bean of St. Ignatius. The way to distinguish the two is that those of the nux vomica are of a greenish-grey, very flat, having the form of a coat button, whilst those of St. Ignatius' bean are of a blackish or brownish-grey, of the form of an almond and angular. For homœopathic use, we powder the bean in holding the mortar constantly in very warm water, after which we make the *three* first attenuations by *trituration*, if we should not rather prefer to obtain the *mother tincture* in digesting in 20 parts of alcohol one part of the powder.

INDIGO, *Indigofera tinctoria;* Fr., Indigo; Ger., *Indigo;* Eng., Indigo.—Leguminosæ, Juss.—Diadelphia decandria, L. Usual doses, 30.

265. This plant is originally from the East Indies, where it grows in very great abundance; it forms a bush, straight, ramose and downy. We obtain by fermentation the colouring material known under the name of indigo; it is a kind of starch of a blue colour, which is found in commerce in cubic pieces, more or less large; the best kind comes from America, where it is obtained near Guatemala from the *indigo argentea*; the character of good indigo are a colour deep, brilliant, violet or else reddish; it should be solid, fracture without streaks; drawn over the nail, it should leave a metallic hue; put in water, it should swim; when burnt, it should leave very little residue; treated with alkalies, it should not change colour; sulphuric acid dissolves it, and this solution attenuated with water should afford a fine blue tincture. Indigo is insoluble in water and ether, and in alcohol but in a very trifling proportion. We sometimes see it full of white spots, arising from the moisture, the indigo not having been sufficiently dried before its transportation. We prepare the *three* first attenuations by trituration.

IPECACUANHA, *Cephaelis ipecacuanha;* Fr., Ipecacuanha; Ger., *Brech-wurzel;* Eng., Ipecacuanha.—Rubiaceæ, Juss. —Pentandria monogynia, L. Usual doses, 3, 9, 30.

266. We distinguish in commerce three sorts of ipecacuanha, to wit: 1st. Ipecac., *black* or *striated*, obtained from the *psychotria* emetica. 2nd. Ipecac., *white* or *undulating*, obtained from the *Richardsonia scabra* of Brazil and from the *viola ipecac.*, L. 3rd. Ipecac., *gray*, coming from the cephaelis ipecac. It is this last that we employ in homœopathy; it comes from Brazil also, where the plant which furnishes this root grows in shady places of the provinces of Pernambuco and of Bahia, at Mariana as well as the Antilles; it is a small shrubby plant with a root from 4 to 6 inches long, about as thick as a goose quill, marked with annular rugæ, simple or somewhat branched, descending obliquely into the ground, and here and there sending forth slender fibrils; the stem is 2 or 3 feet long; but being partly under ground, and often procumbent at the base, usually rises less than a foot in height; it is slender; in the lower portion leafless, smooth, brown or ash-coloured and knotted, with radicles frequently proceeding from the knots; near the summit pubescent, green and furnished with leaves seldom exceeding six in number; these are opposite, petiolate, oblong, obovate, acute, entire, from 3 to 4 inches long, from one to two broad, darkish green and somewhat rough on their upper surface, pale, downy and veined on the under; at the base of each pair of leaves are deciduous stipules, embracing the stem, membranous at their base, and separated above into numerous bristle-like divisions; the flowers are very small, white, and collected to the number of 8, 12, or more, each accompanied with a green bracte, into a semi-globular head, supported upon a round, solitary, axillary footstalk, and embraced by a monophyllous involucre, deeply divided into 4, sometimes 5 or 6 obovate, pointed segments; the fruit is an ovate, obtuse berry, which is at first purple, but becomes almost black when ripe, and contains two small plano-convex seeds; the interior of the root is resinous, white and traversed by a white line; the whole root has a feeble but disagreeable odour, and a taste mucilaginous, slightly bitter and nauseous. The root of the *Richardsonia scabra*, *(white ipecac.)* is longer, softer, and more flexible; the epidermis of it is of a clearer grey, the rings less near and deeper; the fracture less resinous; the taste not at all bitter. For homœopathic use, we employ, as above said, the *cephaelis ipecac.* or *grey ipecac.* The whitish or yellowish roots which are found mixed with this sort, should be rejected, as well as those which are

spongy, and also all such as have no rings. As to the preparation of this medicine, it can be made like all the dry substances by *trituration* with sugar of milk, or else the *tincture* formed by *digestion* in 20 parts of alcohol.

JALAPPA, *Convolvulus s. ipomœa jalappa, Ipomœa macrorrhiza;* Fr., Jalap; Ger., *Trichter-winde;* Eng., Jalap.—Convolvulaceæ, Juss.—Pentandria monogynia, L. Usual doses, ?

267. This creeper grows in the environs of Mexico, Vera Cruz, in Florida, and Carolina. The tuber either comes whole or divided longitudinally into two parts, or in transverse circular slices; the entire tubers are irregularly roundish, or ovate and pointed, or pear-shaped, usually much smaller than the first, and marked with circular and vertical incisions, made to facilitate their drying; in this state the root is preferred, as it is less apt to be defective, and is more easily distinguished from the adulterations than when sliced; the tuber is heavy, compact, hard, brittle, with a shining, undulated fracture, exhibiting numerous resinous points, distinctly visible with the microscope; it is externally brown and wrinkled, internally of a greyish-colour, diversified by concentric darker circles, in which the matter is denser and harder than in the intervening spaces; the odour of the root when cut or broken is heavy, sweetish and rather nauseous; the taste is sweetish, somewhat acrid and disagreeable; it yields its active properties partly to water, partly to alcohol, and completely to diluted alcohol. For homœopathic purposes we must not use the light pieces, of a clear brown outside, whitish or pale-grey within, nor those which are not shiny, nor striated, spongy, worm-eaten, nor too friable. We prepare it the same as the other dry vegetable substances.

JATROPHA CURCAS; Fr., Médicinier, Gros pignon d'Inde, Figue infernale, Ricin d'Amerique; Ger., *Schwarze brechnuss, Grosse purgir-nuss, Höllenfeige;* Eng., Purging nuts, Barbadoes nuts, Infernal fig.—Euphorbiaceæ, Juss.—Monœcia monadelphia, L. Usual dose, 30.

268. The Jatropha grows in Africa, South America, New Andalusia, Island of Cuba, the Antilles, &c. It is a small tree with numerous glabrous branches; leaves petiolated,

obtuse, cordiform, glabrous, with 5 lobes; flowers white or of a yellowish-green, in multifloral corymbs; the fruit of this tree is the nut known under the name of *ficus infernalis*, (infernal fig,) or that of castor oil nut of America; they are seeds of a blackish-brown, striated, oval, about 8 lines long, flat on one side, convex on the other; the two sides present a slight longitudinal prominence; the kernel is white, oily, of a taste at first sweetish, then excessively acrid and corrosive; it is the tunic which envelopes the kernel which is the most acrid part; the oil is colourless, inodorous, and almost insoluble in alcohol. The *three* first attenuations should be prepared by *trituration*.

LACTUCA VIROSA; Fr., Laitue vireuse; Ger., *Giftlattig;* Eng., Strong scented lettuce.—Chicoraceæ, Juss.—Sygenesia polygamia equalis, L. Usual doses, 12, 30.

269. This perennial plant, which inhabits the south of Europe, grows on the hills, ramparts, waste places, herbaceous spots when abandoned, about hedges, and the base of walls; it is also cultivated in gardens; its stem is from 2 to 4 feet high, erect, prickly near the base, above smooth, and divided into branches; the lower leaves are large, oblong, obovate, undivided, toothed, commonly prickly on the under side of the midrib, sessile, and horizontal; the upper are smaller, clasping, and often lobed; the bractes are cordate and pointed; the flowers are numerous, of a sulphur-yellow colour, and disposed in a panicle; the plant is lactescent, and has a strong disagreeable smell like that of opium, and a bitterish acrid taste; fruit black. We take the *entire* plant, at the time of its flowering, (June to August,) to express the juice, which we treat the same as all other fresh plants.

LAMIUM ALBUM; Fr., Ortie blanche; Ger., *Weiss-bienensaug, Weisse taubnessel;* Eng., Dead nettle, Archangel.—Labiaceæ, Juss.—Didynamia gymnospernia, L. Usual doses, 0, 3, 30.

270. This plant grows in all parts of France and Germany, along hedges, highways, ditches, &c., and flowers almost all summer; root cylindric, ramose, hairy; stem straight, quadrangular, downy, simple; leaves petiolated, cordiform, sharp, serrated, veined below; flowers white, axillary, sessile; ver-

ticillæ of 10 to 20 flowers. We express the juice of the flowers and leaves, and treat it like that of all fresh plants.

LAUROCERASUS; *Prunus laurocerasus;* Fr., Laurier cerise; Ger., *Kirsch-lorbeer;* Eng., Cherry laurel.—Rosaceæ, Juss.—Hexandria monogynia, L. Usual doses, 3, 6, 30.

271. This bush grows in Persia, on the Caucasus, in Asia Minor, and in all the Levant; in France, as well as in the lower Rhine and Maine; it can be cultivated in the open ground, and in France it is nearly naturalized. It is a small evergreen tree, rising 15 or 20 feet in height, with long spreading branches, which, as well as the trunk, are covered with a smooth, blackish bark; the leaves, which stand alternately on short strong footstalks, are oval-oblong, from 5 to 7 inches in length, acute, finely serrated, firm, coriaceous, smooth, beautifully green and shining, with oblique nerves and yellowish glands at the base; the flowers are small, white, strongly odorous, and disposed in simple axillary racemes; the fruit consists of oval drupes, very similar to small black cherries, both in their shape and internal structure. The fresh leaves have an aromatic odour and taste, very like the bitter almond; they contain hydrocyanic acid. For homœopathic use, we gather the leaves in April and May, reduce them to a fine paste, in an iron mortar, mix this with equal parts of alcohol, express the juice and again mix this last with equal parts of alcohol; the mother tincture thus procured serves to make the attenuations. Perhaps we might also treat the leaves after the manner of dry substances, that is in making the *three* first attenuations by *trituration* with sugar of milk.

LEDUM PALUSTRE; Fr., Ledon des marais, Romarin sauvage; Ger., *Sumpfporst, Wilder rosmarin;* Eng., Wild rosemary, Marsh tea.—Rosaceæ, Juss.—Decandria monogynia, L. Usual doses, 15, 30.

271. This bush grows in moist, swampy, muddy places in the north of Europe, Silesia, Bohemia, &c., as well as in France, the Vosges, in Asia and America; it is also cultivated; evergreen, 6 to 9 decimetres high, branchy; leaves with short peduncles, lance-shaped, rolled on the edge, hard, glabrous above, yellowish down beneath, green and shining. In the fresh state, the leaves have a strong, resinous, stupefying

odour, and a bitter, astringent, and nauseous taste; flowers white, sometimes rosy, in spikes or terminal corymbs. We powder the whole plant, and sprinkle it with 20 parts of alcohol; the clear liquor, which we decant at the end of 8 days, is the *mother tincture*, and serves to prepare the attenuations.

LOBELIA INFLATA; Eng., Indian tobacco.—Lobeliaceæ, Juss.—Pentandria monogynia, L. Usual doses, ?

272. The Indian tobacco is an annual or biennial indigenous plant, usually a foot or more in height, with a fibrous root, and a solitary, erect, angular, very hairy stem, much branched about midway, but rising considerably above the summits of the highest branches; the leaves are scattered, sessile, oval, acute, serrate, and hairy; flowers numerous, disposed in leafy terminal racemes, and supported on short axillary footstalks; the segments of the calyx are linear and pointed; the corolla, which is of a delicate blue colour, has a labiate border, with the upper lip divided into two, the lower into three acute segments, the united anthers are curved, and enclose the stigma; the fruit is an oval, striated, inflated capsule, crowned with the persistent calyx, and containing, in two cells, numerous very small brown seeds. This species of lobelia is a very common weed, growing on the road sides, and in neglected fields, throughout the United States; its flowers begin to appear about the end of July, and continue to expand in succession till frost; the plant, when wounded, exudes a milky juice; all parts possess medicinal virtues, but probably the root and inflated capsules the most. The preparation is the same as for other vegetable substances, whether in the dry or fresh state.

LYCOPODIUM CLAVATUM, *Lycopodii pollen;* Fr., Lycopode, Pied de loup; Ger., *Bärlapp-samen, Streu-pulver, Hexenmehl;* Eng., Club-moss, Wolf's-claw.—Lycopodineæ, Juss.—Cryptogamia, L. Usual doses, 24, 30.

273. The plant which furnishes the powder known under the name of *lycopodium*, or vegetable sulphur, is a species of moss which grows in Europe, above all in Finland and Russia, in stony and hilly places covered with wood; we

gather the powder from the spike of the plant by roasting and beating it towards the end of summer; the stem of this plant is creeping, filiform, ramose, 6 to 10 decimetres long; the recumbent branches are sterile, the upright ones fertile; leaves rounded within, lance-shaped, entire, or toothed, nerveless, ending in a white point, filiform; spikes straight, cylindric, 5 to 6 centimetres long, formed of scales arranged like tiles; capsules reniform, yellow, axillary, unilocular, with two valves, containing seeds which form the lycopodium of commerce. It is a powder extremely fine, of a pale yellow, unctuous to the touch, inodorous, insipid, adhering to the finger, immiscible in water, on which it swims, inflammable and very light; it is often adulterated with the pollen of the pine, sawdust, fecula, powder of talc and lime, or other powders coloured yellow by gamboge. In this last case, the fraud may be detected by the red tint which a solution of potash gives to the lycopodium, and as to those with other powders, we recognise them, inasmuch as when put on water these powders become impregnated with it and sink, whilst the lycopodium swims; the powder of talc, and that of lime, sink at once, and betray themselves still more evidently by the effervescence which they produce with acids; the adulterations with the pollen of the pine, or that of the fir, are discovered by the resinous odour which these substances exhale when rubbed between the hands; the presence of fecula may be detected by iodine. We make the *three* first attenuations by *trituration.*

Menyanthes trifoliata, *Trifolium fibrinum;* Fr., Menyanthes, Trefle d'eau.—Ger., *Bitterklee, Fieberklee;* Eng., Buckbean, Marsh trefoil.—Lysimachiæ, Juss.—Pentandria monogynia, L. Usual doses, 3, 30.

274. This plant is a native both of Europe and North America, and grows on the borders of water, in ditches, wet prairies, swamps, &c.; it has a perennial, long, round, pointed, horizontal, branching, dark-coloured root, about as thick as the finger, and sending out numerous fibres from its under surface; the leaves are ternate and stand upon long stalks, which proceed from the end of the root, and are furnished at their base with sheathing stipules; the leaflets are obovate, entire or bluntly denticulate, very smooth, beautifully green on their upper surface and paler beneath; the scape or flower

stalk is erect, round, smooth, 6 to 12 inches high, longer than the leaves and terminated by a conical raceme of whitish, somewhat rose-coloured flowers; calyx five parted; corolla funnel-shaped, with a short tube, and a five-cleft, revolute border, covered on the upper side with numerous long, fleshy fibres; the anthers are red and sagittate; the germ ovate, supporting a slender style longer than the stamens, and terminating in a bifid stigma; the fruit is an ovate, two valved, one celled capsule containing numerous seeds. As the leaves of this plant have more bitterness in autumn than during their flowering, we had better gather the plant in autumn. We take the *whole* plant and prepare like other fresh plants.

MEZEREUM, *Daphne mezereum;* Fr., Bois de gentil (non sain-bois ni garou), Laureole femelle; Ger., *Seidelbast;* Eng., Mezereon.—Thymeleæ, Juss.—Octandria monogynia, L. Usual doses, 15, 30.

275. This is a very hardy shrub, 3 or 4 feet high, with a branching stem, and a smooth dark grey bark, easily separable from the wood. The leaves spring from the ends of the branches, are deciduous, sessile, obovate lanceolate, entire, smooth, of a pale-green colour, somewhat glaucous beneath, and about two inches long; they are preceded by the flowers, which appear very early in spring, and sometimes bloom even amidst the snow; these are of a pale rose colour, highly fragrant, and disposed in clusters, each consisting of 2 or 3 flowers, forming together a kind of spike at the upper part of the stem and branches; at the base of each cluster are deciduous floral leaves; the fruit is oval, shining, fleshy, of a bright-red colour, and contains a single round seed; another variety produces white flowers and yellow fruit; it is a native of Europe, in the northern parts of which it is very abundant. We may easily distinguish the mezereon from the *D. gnidium* (garou), inasmuch as the flowers of this come before the leaves; they are in bunches and not naked on the wood like the mezereon; they are linear lanceolate and not oval lanceolate, and its berries are much smaller than those of the mezereon. We gather the bark before the developement of the flowers and treat it like other fresh vegetable substances. The bark found in the shops is good for nothing for homœopathic use.

MILLEFOLIUM, *Achillæa millefolium;* Fr., Millefeuille, Herbe au charpentier; Ger., *Schafgarbe;* Eng., Milfoil, Yarrow.—Corymbiferæ, Juss.—Syngenesia polygamia superflua, L. Usual doses, ?

276. This plant grows in the prairies, on the borders of fields and roads, in pastures, &c. of all Europe, Western Asia and North America. Its perennial root is oblique, rampant, hairy; stems numerous, simple, straight, rounded, furrowed, tubulous, downy, 3 to 6 decimetres high; leaves downy, radical, pinnatifid, so finely and numerously divided that they are hidden one by the other. The herb of this plant has a balsamic odour and a bitter, acrid, heating taste; flowers are small and in corymbs. We gather the plant entire at the beginning of its flowering, (May and June,) express the juice and treat it like that of other fresh plants.

NUX MOSCHATA, *Myristica moschata;* Fr., Noix muscade, Muscadier; Ger., *Muskat-nuss;* Eng., Nutmeg.—Laurineæ (Myristiceæ), Juss.—Diœcia monadelphia, L. Usual dose, 30.

277. The nutmeg tree grows in the isles of Banda, Amboyna, the Moluccas, and is cultivated in many tropical climates; it bears much resemblance to the pear tree; it rises to the height of 6 to 10 metres; the bark is of a deep grey-green, glabrous; branches strong, hanging; leaves attenuate, oblong, lanceolate, entire, aromatic; fruit hanging, of the size of a hen's egg, coming to maturity nine months after the flowering; this fruit is of a blackish-brown and composed of three parts by order of superposition, to wit: 1st. the *pulp,* exterior coat, of a rosy-white, thready. 2nd. the *arillas* or *mace,* second coat, consisting of a sort of reticulated cupole, viscous, thin, of an aromatic odour and an acrid, balsamic taste. 3rd. the nut, which is formed of two parts, the *shell* and the *kernel;* the shell is smooth, greyish, hard, firm, furrowed, the kernel or *nutmeg* properly so, is ovoid, flattened at the two ends, of the size of a pigeon's egg, veined and marbled, of a woody consistence and oleaginous. The fruit is gathered three times a year; the gathering of March is the best; that of July the most abundant, and that of November the least abundant of all. For homœopathic use we choose the small nuts, obtuse on both sides, which are fresh, heavy,

oily, and which, when perforated by a hot needle, ooze out a yellow oil. We clean them in water of a kind of dust which covers them, and which is lime, and prepare them in three attenuations by *trituration*, or else we make the *mother tincture* with 20 parts of alcohol and use this last to make all the preparations.

NUX VOMICA, *Strychnos nux vomica;* Fr., Noix Vomique, Vomiquier; Ger., *Krähenaugen, Brechnuss;* Eng., Nux Vomica.—Apocyneæ, Juss.—Pentandria digynia, L. Usual doses, 15, 24, 30.

278. The nux grows in the East Indies, in the island of Ceylon, on the coasts of Coromandel, and Malabar, &c. The tree is of a moderate size with numerous strong branches, covered with a smooth, dark grey bark; the young branches are long, flexuous, very smooth, dark green, and furnished with oval, roundish, entire, smooth, and shining leaves, having three or four ribs, and placed opposite to each other on short footstalks; the flowers are small, white, funnel-shaped, and disposed in terminal corymbs; the fruit is a round berry, as large as an orange, covered with a smooth, yellow, or orange-coloured, hard, fragile rind, and containing numerous seeds embedded in a juicy pulp; these seeds are flat, circular, about three quarters of an inch in diameter, and two or three lines in thickness, generally somewhat curved, with a depression on one side, and a corresponding prominence on the other; they are thickly covered with fine, silky, shining, ash-coloured, or yellowish-grey hairs, attached to a thin fragile coating, which closely invests the interior nucleus, or kernel; this is very hard, horny, usually whitish, and semi-transparent, sometimes dark coloured, and opaque, and of very difficult pulverization; they are destitute of odour, but have an acrid, very bitter taste, which is much stronger in the kernel than in the investing membrane. The best preparation is that which consists in making the *three* first attenuations by *trituration*, after having previously powdered the nut in a heated mortar, the same as has been described for the St. Ignatius bean. But if, notwithstanding, we wish the *tincture*, we obtain it by digesting the powder as above with 20 parts of alcohol.

OLEANDER, *Nerium oleander;* Fr., Laurier rose; Ger., *Lor-*

beer rose; Eng., Oleander, Rose bay.—Apocyneæ, Juss.—Pentandria monogynia. Usual doses, 6, 30.

279. The oleander grows on the borders of rivers and lakes of southern Europe, Greece, Asia Minor, the East Indies, and Africa, as well as on the rocks of Corsica, and is cultivated in our gardens; roots ligneous, branchy; stems branchy, dull, 2 to 3 and more metres high, 5 to 10 centim. thick; leaves with short petioles, coriaceous, linear lanceolated, perennial, dull, having nerves above; flowers disposed in bouquets, numerous, opening in succession, rosy, or white. All the parts of the plant have an acrid and bitter taste. To prepare this plant for homœopathic purposes, we take the dry leaves of the *wild* oleander, powder them, and make the *three* first attenuations by *trituration*, or else make the tincture by digestion in 20 parts of alcohol, which then serves for the attenuations; should we be able to obtain the *fresh* leaves, which are preferable, we should gather them at the beginning of the flowering, cut them in minute pieces, and digest them eight days in an equal volume of alcohol; the clear liquid, which should be decanted, is the *mother tincture*.

OPIUM, *Papaver somniferum;* Fr., Opium, Pavot somnifère; Ger., *Opium, Mohnsaft;* Eng., Opium, White poppy.—Papaveraceæ, Juss.—Polyandria monogynia, L. Usual doses, 3, 6, 9, 30.

280. The white poppy is an annual plant, with a round, smooth, erect, glaucous, often branching stem, rising two or three feet in height, and sometimes attaining five or even six feet in favourable situations; the leaves are large, variously lobed and toothed, and alternately disposed upon the stem, which they closely embrace; flowers terminal, very large, and of a white or silver-grey colour, with a tinge of violet at the base; calyx smooth, two leaved, which fall when the petals expand; these are usually four in number; the germen, which is smooth and globular, supports a radiated stigma, and surrounded by numerous short and slender filaments, with erect, oblong, compressed anthers; the capsule is smooth and glaucous, of a rounded shape, from two to four inches in diameter, somewhat flattened at top and bottom, and crowned with the persistent stigma, the diverging segments of which are arranged in a circle upon the summit; it contains nume-

rous minute white seeds, which, when perfectly ripe, escape through small openings beneath the stigma; all parts of the poppy are said to contain a white, opaque, narcotic juice; it most abounds in the capsule, and there the virtues of the plant most reside. Opium is the dried juice of these capsules, and comes to us in brown cakes of a greasy, shining appearance and bitter taste, acrid and narcotic, and of a strong odour, which becomes weaker when older. We find in commerce five kinds: 1st. *Red opium,* from Constantinople, it is in flat cakes, weighing about 180 grammes and more, reddish without and within, of a rank odour, but not so strong as the *black opium;* 2nd. *Black opium,* from Smyrna; 3rd. *Brown opium,* from Egypt; 4th. *Indian opium,* a variety of the black; 5th. *Opium in tears,* from Persia; 6th. *Yellow opium,* from Greece. The strongest of these is the *black,* from Smyrna, and the kind we use for homœopathic preparations; it comes to us in large round cakes, of a black colour, of a strong, rank odour, enveloped in leaves of the poppy, and sprinkled with the seeds of the *Rumex patientia;* in the finer parcels the colour internally is of a light brown; in the inferior it is darker; a peculiarity of this kind is, that when cut into and then torn, numerous minute shining tears are observable, bearing some resemblance to small seeds, but readily distinguishable by pressure between the fingers; they are formed from the drops of juice. As to the other kinds they are much more rare, and but seldom found in commerce. The best preparation is that which consists in making the *three* first attenuations by *trituration;* however, should we wish to have the *tincture,* we may obtain it by dissolving it in 20 parts of brandy, or of alcohol, at 40°, after which we may carry out the attenuations.

Pæonia officinalis; Fr., Pivoine officinale; Ger., *Gichtrose;* Eng., Peony.—Ranunculaceæ, Juss.—Polyandria digynia, L. Usual doses, 3, 5.

281. This perennial plant grows in the forests and barren places of the south and middle of France and Germany; roots oblong, rounded, thick, like a turnip, united in a kind of bundle, yellowish, smooth outside, fragile, of a strong odour when fresh, white and fleshy within, of a nauseous and disagreeable taste; stem simple, 3 to 6 decimetres high; leaves alternate, petiolated, cut short, with oval leaflets, lobed,

biternate below, simply ternate above; flowers large, of a fine purple colour; calyx 5 persistent folioles; corolla 5 petals; stamens polyandrous; capsules downy, unilocular, red within, polyspermous. For homœopathic use, we take the *root*, gathered in April, express the juice, and treat it like that of other fresh plants.

PARIS QUADRIFOLIA; Fr., Parisette à quatre feuilles, Herbe à Paris, Raisin de renard, Etrange-loup; Ger., *Vierblättrige Einbeere;* Eng., True love.—Asparagi, Juss.—Octandria trigynia, L. Usual doses, 9, 30.

282. This plant grows in wet woods, thickets, all over Europe; root perennial, vertical, rampant, rounded, jointed, fleshy, whitish; stem upright, simple, rounded, unifloral, 3 decimetres high, herbaceous; leaves at the top, to the number of four, with short petioles, large, oval, acute, entire, glabrous, disposed as a cross, shining beneath, veined, three-nerved; calyx four-leaved; peduncle 3 to 6 centimetres long, channelled; flower of a yellowish-green; berry deep-blue, shining, quadrangular, with four polyspermous cells; the leaves and berries have, in the fresh state, a disagreeable and narcotic odour; that of the root is pungent, the taste nauseous. For homœopathic purposes, we gather the *entire* plant at the moment it runs to flower, express the juice, and treat it like that of other fresh plants.

PETROSELINUM, *Apium petroselinum*, *Petroselinum sativum;* Fr., Persil, Persil cultivé; Ger., *Petersilie, Gemeine Petersilie;* Eng., Parsley root.—Umbelliferæ, Juss.—Pentandria digynia, L. Usual doses, 0, 3, 30.

283. Parsley grows wild in the Levant, Greece, Sardinia, Provence, Sicily, and is cultivated in all our gardens; it has a biennial root, (perennial at Cayenne,) spindle-shaped, about as thick as the finger, externally white, and marked with close annular wrinkles, internally fleshy and white, with a yellowish central portion; stem annual, round, furrowed, jointed, erect, branching, rising about two feet high; the radical leaves are compound, pinnated internaries, with the leaflets smooth, divided into 3 lobes, and notched at the margin; in the cauline leaves, the segments of the leaflets are linear and entire; the flowers are small, pale-yellow, and dis-

posed in terminal compound umbels, with a one or two-leaved general involucre, and partial ones composed of 6 or 8 leaflets; petals are 5, roundish, and inflexed at the apex; seeds small, ovate, flat on one side, convex on the other, of a dark green colour, and marked with 5 longitudinal ridges; they have a strong terebinthinate odour, and a warm aromatic taste. It is sometimes confounded with the large and small hemlock, but easily distinguished by its large leaves, and the aroma very marked which it exhales when rubbed between the fingers. As to the large hemlock (conium maculatum) in particular, it is distinguishable by this latter having a thick stem, higher, full of purplish spots, folioles oval, oblong, or lanceolated, *deeply pinnatifid*, cut into segments, serrated, whilst those of parsley are oval, large, three lobed, cut off, toothed. For homœopathic use, we gather the plant when it is on the point of flowering, express the juice, and treat it like that of other fresh plants.

PHELLANDRIUM AQUATICUM; Fr., Phellandre aquatique, Ciguë aquatique, Fenouil d'eau; Ger., *Wassel fenchel;* Eng., Water hemlock.—Umbelliferæ, Juss.—Pentandria digynia, L. Usual doses 6, 30.

284. This biennial plant grows in all the swamps and aquatic spots all over Europe nearly; root horizontal, crooked, oblique, resembling a turnip; stem 6 to 12 decimetres high, fistulous, striated, thick, light, branchy, glabrous; leaves tripinnate, petiolated, glabrous, compound, with short peduncles and equal rays; involucre null or of one foliole; involucelle of 6 or 8 folioles; flowers white, with 5 cordiform petals; fruit ovoid, oblong, slightly compressed, flattened on one side and convex on the other, glabrous, resembling the seeds of anise, striated or furrowed, and turned over by the teeth of the calyx. When at maturity, these grains are larger, of a stronger odour, and greenish-yellow; the odour is pungent, disagreeable, and acrid; the taste aromatic and nauseous. We must not confound these seeds with those of the *Sium latifolium*, the grains of which are smaller, more striated, of a deeper colour, crooked, of an odour and taste altogether different. For homœopathic use, we gather the fruit in the month of September, and make the *three* first attenuations by *trituration*, or if we wish a tincture, we digest the fruit 8

days in 20 parts of alcohol, the tincture thus obtained then serves for the attenuations.

PINUS SYLVESTRIS; Fr., Pin sauvage, Pin vulgaire; Ger., *Gemeine kiefer;* Eng., Wild pine.—Coniferæ, Juss.—Monœcia monadelphia, L. Usual doses, 18, 30.

285. The wild pine is a tree very common in the large forests of the north of Europe, and the high mountains of France, where it sometimes attains the height of 80 feet, and is known by its pyramidal form, its leaves filiform, glaucous, firm, and always green, and its flowers in the form of a cone, known under the name of pine cones, (pomme de pin.) This tree is used very generally in the construction of buildings, &c. of all kinds; it also furnishes pitch, tar, and common turpentine. For homœopathic use, we take the young *shoots* or *buds* of the tree; we gather them in the spring, express the juice, and treat them with equal parts of alcohol. The *mother tincture* thus obtained, serves for farther attenuation.

PRUNUS SPINOSA; Fr., Prunellier, Epine noire; Ger., *Schleh dorn, Schwarz dorn;* Eng., Wild plum tree, Sloe tree.—Rosaceæ, Juss.—Icosandria monogynia, L. Usual doses, 3, 30.

286. This tree grows in the hedges and borders of forests all over Germany and France; it is from 1 to 3 metres high, bark of a blackish-grey; peduncles unifloral, solitary, ternate; flowers white, opening before the leaves; leaves oval lanceolated, serrated, downy below; fruit small, round, of a blackish-red, hoary at their maturity, of an acrid taste. For homœopathic purposes, we gather in the month of April the flowers yet in bud, reduce them to a fine mass by rubbing, add two thirds of their weight of alcohol, express the liquor through a linen cloth and continue as for the preparation of all the other fresh substances; the tincture thus obtained serves for the further attenuations. Some homœopaths also use the fruit.

PULSATILLA NIGRICANS S. PRATENSIS, *Anemone pratensis;* Fr., Pulsatille noiratre, Anémone des prés, Coquelourde; Ger., *Wiesen pulsatille, Küchenschelle;* Eng., Pulsatilla, Meadow anemone, Wind flower.—Ranunculaceæ, Juss.—Polyandria polygynia, L. Usual doses, 12, 30.

287. This perennial plant grows in sandy pasture grounds, on hills and declivities exposed to the sun, in Germany, France, Denmark, Sweden, Russia and Turkey. Root ligneous, deep, cylindric, thick; stems simple, straight, rounded, 8 to 13 centimetres high; leaves radical, bipinnatifid, downy; flowers solitary, terminal, hanging, of a deep violet and red, downy; folioles of calyx campanulate, bent at the point; the odour of the herb but slightly evident; taste acrid and pungent. The fresh plant contains an acrid and vesicating principle and furnishes a corrosive oil, as well as a kind of tannin which colours iron green; in the dry state it is entirely deprived of this acrid quality. We must be careful not to mistake this plant for the common pulsatilla *(anemone pulsatilla, L.)* This *last* plant, of *which homœopathy makes no use whatever*, only grows on dry and sterile hills and flowers in the spring alone, whilst the black-coloured pulsatilla flowers a second time again in the months of August and September. Besides the anemone pulsatilla is in all its parts much less downy than the black coloured pulsatilla; its stem 16 to 24 centimetres high; flowers of clear violet or pale red, straight, and not hanging like those of the black coloured pulsatilla; seeds surmounted by a long silky tail. For homœopathic purpose, we gather the plant in April, whilst in flower, express the juice and treat it like that of all other fresh plants.

Ranunculus bulbosus; Fr., Renoncule bulbeuse; Ger., *Knolliger Hahnenfuss;* Eng., Bulbous crow foot, Buttercups.—Ranunculaceæ, Juss.—Polyandria polygynia L. Usual doses, 6, 9, 12, 30.

288. This perennial plant grows in meadows, pasturages, borders of roads and in the woods all over Europe and North America; it has a bulbous, solid, fleshy root, which sends up annually several erect, round and branching stems, from 9 to 18 inches high; the radical leaves, which stand on long footstalks, are ternate or quinate, with lobed and dentate leaflets; the leaves of the stem are sessile and ternate, the upper more simple; each stem supports several solitary, bright yellow, glossy flowers, upon furrowed, angular peduncles; the leaves

of the calyx are reflexed, or bent downwards against the flower-stalk; the petals are obcordate and arranged so as to represent a small cup in shape; at the inside of the claw of each petal is a small cavity, which is covered with a minute wedge-shaped emarginate scale; the fruit consists of numerous naked seeds, collected in a spherical head; the stem, leaves, peduncles, and calyx are hairy. For homœopathic use, we gather the *entire* plant in June, during its flowering; we first separately express the juice of the herb, we then cut the root in pieces and express its juice in adding a little alcohol, because this part of the plant is too dry to be permitted to be treated without alcohol; the juice of these two parts thus obtained we mix with the two liquids, and add equal parts of alcohol, leave the whole in a cool place, during three days, shaking it from time to time; after which we decant the clear liquid, which is of a deep brown colour.

RANUNCULUS SCELERATUS, *Herba sardoa;* Fr., Renoncule scelerate, Herbe sardonique, Grenouillette d'eau; Ger., *Gift Hahnen-fuss, Wasser eppich*; Eng., Marsh crow-foot, Celery-leaved butter-cup.—Ranunculaceæ, Juss.—Polyandria polygynia, L. Usual doses, 6, 12, 30.

289. This plant grows in ditches, on the banks of rivers, wet meadows, marshy, swampy grounds, &c., over all Europe, Siberia, Egypt and in Canada. Root composed of many whitish fibres, pretty long; stem upright, of the thickness of the finger below, viscous, fistulous, ramose, panicled, multifloral, glabrous, shining, green, 6 to 9 decimetres high; leaves glabrous, succulent, with large petioles below, reniform, three-lobed; upper leaves digitated; peduncles downy, channelled; calyx bent backwards; flowers small, of a pale lemon-yellow; fruit many, small, ovoid, berry-shaped; flowering in May and June. We gather the entire plant during the flowering, and treat it like the ranunculus bulbosus.

RATANHIA, *Ratanhia peruviana, Krameria triandria;* Fr., Ratanhia, Ratanhia de Perou, Kramer à trois étamines; Ger., *Ratanhia;* Eng., Rhatany root.—Polygaleæ, Juss.—Pentandria monogynia, L. Usual dose, 30.

290. This shrub, originally from Peru, was discovered in 1779 by Ruiz, whence it also bears the name of *Ruiz* and *Pavon*; it has a long, much branched and spreading root, of

a blackish-red colour, with a round, procumbent, very dark coloured stem, divided into numerous branches, of which the younger are leafy and thickly covered with soft hairs, giving them a white, silky appearance; the leaves are few, sessile, oblong ovate, pointed, entire, presenting on both surfaces the same silky whiteness with the younger branches, on the sides of which they are placed; the flowers are lake-coloured, and stand singly on short peduncles at the axills of the upper leaves; there are only three stamens; the nectary consists of four leaflets, of which the two upper are spatulate, the lower roundish and much shorter; the fruit is globular, of the size of a pea, surrounded by stiff reddish-brown prickles, and furnished with one or two seeds. For homœopathic purposes, we prepare this root by making the *three* first attenuations by *trituration*; but should we wish to have the tincture, we may obtain it in infusing one part of the root with 20 parts of alcohol; in this last case, the tincture thus obtained serves for the future attenuations.

Rhabarbarum, *Rheum;* Fr., Rhubarbe; Ger., *Rhabarber;* Eng., Rhubarb.—Polygoneæ, Juss.—Enneandria trigynia, L. Usual doses, 9, 30.

291. This root is originally from the middle and north of Asia, and known in Europe since 1570. The best kind grows on the mountains of China and of the East Indies, above all on the Himalaya; it is chiefly referred to two kinds of Rheum, of which one, the *Palmatum*, has large palmated leaves and white flowers in panicles; whilst the other, *Rheum Emodi s. australe,* which is found 300 metres above the level of the sea, has large round leaves, downy, and flowers rosy, equally in panicles; other kinds less esteemed come from the *rhaponticum, compactum, undulatum,* which are all natives of Tartarian Russia. In commerce, we distinguish four kinds, viz: 1st. The rhubarb of *Russia,* of *Muscovy* or of *the Crown;* this is the kind that comes to us from Russia by the Baltic, and which the Russians exchange at Kiachta with the Chinese. 2nd. *Rhubarb* of *China* or India, brought from Canton, by French, Dutch, English and American vessels. 3rd. *Rhubarb* of *Persia* and *Turkey,* which is sent us from Persia by way of Turkey. 4th. *Rhubarb* which is *indigenous.* All these kinds have as a common character—they are annular, light, spongy, ligneous,

white-veined interiorly; they are cut in pieces of different sizes, deprived of their bark, worn on the outside by the rasp and rolled in their own dust; they present a rough fracture; when chewed, they crack under the teeth and tinge the saliva yellow; the odour is nauseous and purgative; their taste bitter and aromatic. The *Rhubarb* of *Russia* is in pieces flat or round, perforated with a large hole, *peeled*, of a lively yellow outside, of a pale rose, somewhat veined and compact inside. The *Rhubarb* of *China* is also in flat or round pieces, perforated with three holes, *unpeeled*, compact, less yellow than the preceding kind. The *Rhubarb* of Persia is in flat pieces, of a pale yellow exteriorly, reddish and mixed with white lines interiorly, neither *peeled nor pierced with holes.* Finally, the *indigenous* rhubarb, *a kind which we should never use in homœopathy,* is in smaller pieces than the exotic, less yellow outside, less odorous, redder within and less mixed with white lines. For homœopathic purposes, we use the *Rhubarb* of *China* or *India;* the best method of preparation consists in treating it like other dry substances, in making the *three* first attenuations by *trituration;* however, should we wish to have the tincture, we can obtain it by digesting, during eight days, one part of rhubarb in 20 parts of alcohol; in this last case, the tincture will serve for future attenuations.

RHODODENDRON CHRYSANTHUM, *Andromeda Gmelini;* Fr., Rosage à fleurs jaunes, Rose de Siberie, Rose de neige de Siberie; Ger., *Sibirische schneerose;* Eng., Yellow-flowered rhododendron.—Rosaceæ, Juss.—Decandria monogynia, L. Usual doses, 12, 18, 30.

292. The yellow-flowered rhododendron grows on the high mountains of Siberia, Kamtschatka, &c.; it is a beautiful evergreen shrub, about a foot high, with spreading branches, and oblong, obtuse, thick leaves, narrowed towards their footstalks, reflexed at the margin, much veined, rugged, and deep-green upon their upper surface, ferruginous or glaucous beneath, and surrounding the branches upon strong petioles; the flowers are large, yellow, on long peduncles, and arranged in terminal umbels; the corolla is wheel-shaped, with its border divided into five roundish, spreading segments; flower buds ferruginous, downy; seeds very small; odour of the leaves acrid and nauseous, resembling that of rhubarb; taste

is bitter and acrid. We receive in Europe the leaves, the buds of the flowers, and the peduncles of the plant in the dry state; the best way to prepare the attenuations is to make the *three* first by *trituration*; the tincture, should we wish to have it, may be obtained as that from all other dry vegetable substances, by infusing one part of the powdered leaves, &c. in 20 parts of alcohol.

RHUS TOXICODENDRON, *Sumac venenata*, L.; Fr., Arbre à poison, Sumac vénéneux; Ger., *Gift sumach;* Eng., Poison oak.—Terebinthinaceæ, Juss.—Pentandria trigynia, L. Usual dose, 30.

293. This shrub grows in fields, woods, and along fences all over North America, and has been introduced into Europe; one to three feet high, with leaflets angularly indented, and pubescent beneath; but this character probably not constant, and the stunted growth may be owing to situation; root reddish, branchy; stems upright, bark striated, of a grey-brown and full of numerous papillæ of a deep brown; leaves pinnated, long petioles, of a yellowish-green, veined; folioles 8 centimetres long, oval, *incised*, shining, and of a deep colour above, pale-green and *pubescent beneath*; flowers small, of a yellowish-green, in axillary spikes; fruit monosperm, oval, of a whitish-grey, marked with five furrows; the whole plant contains a yellowish-brown milky juice, which blackens on exposure, and which has a penetrating, nauseous odour; at certain times of the year there forms around the plant an atmosphere, which, according to some authors, extends to the distance of 6 metres, and which is poisonous during all the time the sun is not shining on the tree; the effects produced are erysipelatous inflammations and pustulous eruptions; affections which also arise when we rub the leaves or touch the branches recently cut or broken; we must, therefore, handle this plant with the greatest caution, when in the fresh state. Many authors agree in saying that the *Rhus radicans* has absolutely the same properties as the *Rhus toxicodendron;* but as this assertion, true as to the general facts, is not sufficiently proved as to the details which homœopathy requires, we must be careful not to mistake the two plants; the *Rhus radicans* is distinguished from *Rhus tox.* by its leaves being almost entire and glabrous, whilst those of the last are incised and pubescent beneath,

and by its stems being recumbent and *creeping*, and not upright as those of the *Rhus tox.* For homœopathic use, we gather in May the leaves of the *Rhus tox.*, express the juice, and treat it similarly to that of all fresh plants.

RHUS VERNIX, *Rhus venenata*, D. C., *Rhus vernicifera*, L. Fr., Sumac vernicifere, Vernis de l'Amerique du Nord, (Vernis de la Chine;) Ger., *Firnifs-sumach;* Eng., Swamp sumach.—Terebinthinaceæ, Juss.—Pentandria trigynia, L. Usual dose, 30.

294. This tree, originally from Japan and North America, is a beautiful shrub or small tree, usually ten or fifteen feet high, but sometimes rising 30 feet; the bark of the trunk is dark grey, of the branches lighter, of the extreme twigs and petioles beautifully red; the leaves are pinnate with 4 or 5 pairs of opposite leaflets, and an odd terminal one; these are oblong or oval, entire or slightly sinuated, acuminate, smooth, and, except the one at the end, nearly sessile; the flowers are diœcious, small, greenish, and arranged in loose axillary panicles; the berries are small, roundish, and greenish-white. When cut, there exudes a resinous juice which blackens in the air, and of which, in China and Japan, they make varnish. Many authors agree in saying that this same tree in North America does not afford varnish; others again regard that of China and that of North America as different species. However that may be, the species which we use is that of *North America*, *Rhus venenata* D. C., a tree, the atmosphere of which is yet more poisonous than that of *Rhus tox.*, since it can produce even chronic diseases, according to Barton, who experienced every year for five years in succession, the same eruptive disease, though he was not exposed any more to the atmosphere of this tree, and even living in Europe. For homœopathic purposes, we use the *leaves* of the *Rhus vernix* of *North America*, which we treat precisely as those of the *Rhus tox.*

RUTA GRAVEOLENS, *Ruta hortensis;* Fr., Rue fetide, Rue des jardins; Ger., *Stinkende-raute;* Eng., Rue.—Rutaceæ, Juss.—Decandria monogynia, L. Usual doses, 12, 30.

295. Common rue is a perennial plant, two or three feet high, with several shrubby, branching stems, which, near the

base, are woody, and covered with a rough bark, but in their ultimate ramifications are smooth, green, and herbaceous; the leaves are doubly pinnate, glaucous, with obovate, sessile, obscurely crenate, somewhat thick and fleshy leaflets; the flowers are yellow, and disposed in a terminal branched corymb upon subdividing peduncles; the calyx is persistent, with 4 or 5 acute segments; the corolla consists of 4 or 5 concave petals, somewhat sinuate at the margin; the stamens are usually ten, but sometimes only eight in number; the plant is a native of the south of Europe, but cultivated in gardens, and flowers from June to September; its odour is very strong and disagreeable; its taste very bitter, nauseous, hot, and acrid. For homœopathic use, we gather the herb of the plant before its flowers are developed, express the juice, and treat it like that of all fresh plants.

SABADILLA, *Veratrum sabadilla, Semen sabadillæ;* Fr., Cevadille, Sebadille; Ger., *Sabadille, Mexikanischer, Lause-samen;* Eng., Cevadilla, Indian caustic barley.—Colchicaceæ, Juss.—Hexandria trigynia, L. Usual dose, 30.

296. The cevadilla is found on the eastern sides of the highlands of Mexico. From the description which Retzius has given of this plant which no botanist ever saw, the root is an onion with brown coats, and membranous; stem herbaceous, simple, glabrous, linear, acute, entire, 10 centimetres long, 6 broad; flowers simple, in terminal bunches; capsules glabrous, 6 to 9 millimetres long, 3 broad, obtuse on the side of the peduncle, oblong, three-crested, three-horned, three-celled, each cell containing two seeds, elongated, black, a little wrinkled, pointed at the ends, flat on one side and convex on the other, somewhat curved, 2 or 3 lines long, whitish within, hard, inodorous, and of an exceedingly acrid, burning, and durable taste; the taste of the capsules is very bitter. For homœopathic use, we take the *seeds with their capsules,* powder them together, and make the *three* first attenuations by *trituration.* Should we desire to have the *tincture,* we may obtain it by digesting, during 8 days, one part of this powder in 20 parts of alcohol, afterwards decanting the clear liquid, &c.

SABINA, *Juniperus sabina;* Fr., Sabine; Ger., *Sadebaum;*

Eng., Savine.—Coniferæ, Juss.—Diœcia monadelphia, L. Usual doses, 24, 30.

297. This shrub grows on the dry mountains of the middle of Europe, in Provence, Spain, Italy, the ancient country of the Sabines, Greece, Russia, North America; it is also cultivated in gardens; it is an evergreen, rising from 3 or 4 to 15 feet high, with numerous erect, pliant branches, very much subdivided; the bark of the young branches is light green, that of the trunk rough, and reddish-brown; the leaves, which completely invest the younger branches, are numerous, small, erect, firm, smooth, pointed, of a dark green colour, glandular in the middle, opposite, and imbricated in 4 rows; the flowers are male and female on different trees; the fruit is a blackish-purple berry, of an ovoid shape, marked with tubercles, the remains of the calyx and petals, and containing three seeds. We distinguish two varieties of this plant, the *male* and *female* savine. That called *male* is the one which bears fruit, and which, of consequence, should be called *female;* it is smaller than the other; its leaves resemble those of the cypress, being less scattered than those of the female savine. There is reason to believe that the *Juniperus virginiana*, or common red cedar, is sometimes substituted in the shops for the savine, to which it bears a very close resemblance; the two species, however, differ in their taste and smell; in the *J. virginiana*, moreover, the leaves are sometimes ternate. The tops and leaves of savine have a strong, heavy, disagreeable odour, and a bitter, acrid taste. For homœopathic use, we take the *leaves* of the male savine, and also of the female savine indistinctly; we gather them in the month of May, reduce them to a paste by means of a small portion of alcohol in a mortar, then express the juice, and treat it like that of fresh plants.

SAMBUCUS NIGRA; Fr., Sureau; Ger., *Hollunder;* Eng., Common European elder.—Caprifolia, Juss.—Pentandria trigynia, L. Usual doses, 0, 3, 30.

298. This tree naturally inhabits the hedges of all France, and of a great part of Europe, near villages, &c.; it differs from the American most obviously in its size, approaching that of a small tree, 6 to 7 metres high; the stem is much branched towards the top, and has a rough, whitish bark, and

filled with a rather whitish pith, spongy, light, called *medulla;* leaves opposite, pinnate; folioles oval, pointed, dentated in two-thirds of their upper extremity; flowers disposed in cymes; calyx 5 celled; corolla wheel-shaped, with 5 obtuse and concave lobes; fruit elongated, umbilical, berry-shaped, black, pulp of a purplish colour. For homœopathic purposes, we make use of the second bark (alburnum) of the young branches, which is without smell, taste at first sweetish, afterwards slightly bitter, acrid, and nauseous; we reduce it to a paste by means of a little alcohol in a mortar, express the juice, and treat it the same as that of fresh plants. Many also use the united juices of the leaves and flowers, mixed with equal parts of alcohol, and then attenuated as usual.

Sanguinaria canadensis; Fr., Sanguinaire du Canada; Ger., *Blutkraut;* Eng., Blood-root.—Papaveraceæ, Juss. —Polyandria monogynia, L. Usual doses, 1, 3, 30.

299. It was a mistake that in the first part of our Manuel, page 577, the name of this plant was rendered into French by that of *Salicaire*, which is quite another plant. The *Sanguinaria* of Canada, or, as it is sometimes called, the *puccoon*, is an herbaceous, perennial plant; the root is horizontal, abrupt, often contorted, about as thick as the finger, two or three inches long, fleshy, of a reddish-brown colour on the outside, and brighter red within; it is furnished with numerous slender radicles and makes offsets from the sides, which succeed the old plant; from the end of the root arise the scape and leaf-stalks, surrounded by the large sheaths of the bud; these spring up together, the folded leaf enveloping the flower-bud, and rolling back as the latter expands; the leaf, which stands upon a long channelled petiole, is reniform, somewhat heart-shaped, deeply lobed, smooth, yellowish-green on the upper surface, paler or glaucous on the lower, and strongly marked by orange coloured veins; the scape is erect, round, and smooth, rising from 6 inches to a foot high, and terminating in a single flower; the calyx is two-leaved and deciduous; the petals, varying from 7 to 14, but usually about 8 in number, are spreading, ovate, obtuse, concave, mostly white, but sometimes slightly tinged with rose or purple; stamens numerous, with yellow filaments, shorter than the corolla, and orange, oblong anthers; the germ is oblong and compressed, and supports a sessile, persistent stigma; the capsule oblong, acute

at both ends, two-valved, and contains numerous oval, reddish-brown seeds; the whole plant is pervaded by an orange coloured sap, which flows from every part when broken, but is of the deepest colour in the root; it has a faint narcotic odour, and a very acrid, bitterish taste, the pungency of it remains a long time. For homœopathic purpose, we dig up the *root* before the developement of the flower, which takes place in March and April, and treat it like all other fresh plants.

SASSAPARILLA SEU SARSAPARILLA, *Smilax sassaparilla;* Fr., Salsapareille; Ger., *Sassaparille;* Eng., Sarsaparilla.—Asparagi, Juss.—Diœcia hexandria, L. Usual doses, 3, 12, 30.

300. The sarsaparilla is natural to South America, Mexico, &c., where it is found in the forests; it is a shrub, feeble, spiny, with quadrangular branches; leaves oval, pointed, entire, glabrous, five-nerved beneath, and of a pale bluish-green; flowers small, axillary, panicled, simple; fruit black, three-celled, two-seeded; root cylindric, simple, extremely long, of the thickness of a quill, voluble, a little wrinkled, epiderm of a clear brown, thin, brown bark; woody part somewhat spongy, white, pliable; generally without odour, and has a mucilaginous, slightly bitter taste. We have several varieties of this root, which almost all come from different kinds; that which is most commonly used in this country (United States) is brought from the bay of Honduras, by which name it is known in commerce; it comes in bundles 2 or 3 feet long, composed of the roots, folded lengthwise, and secured in a compact form by a few circular turns; these are packed in bales, imperfectly covered with skins; the roots are usually connected together at one extremity in large numbers in a common head, to which portions of the stems are also attached. This is the kind we should use for homœopathic purposes; as it is never very clear, we must take care to detach from it all impurities before we commence our operations; this done, we scrape off a sufficient quantity of the root, and make the *three* first attenuations by *trituration.* The alcoholic tincture should never be used, since alcohol does not dissolve all the active parts of this root.

SECALE CORNUTUM; Fr., Seigle ergoté, Ergot de seigle; Ger., *Mutter-korn;* Eng., Spurred rye, Ergot.—Gramineæ, Juss.—Triandria digynia, L. Usual doses, 3, 30.

301. The ergot is a solid and horny degenerescence of the grain of several of the gramineæ, observed chiefly in the rye, but often also in the wheat, oats, darnel, maize, &c. A moist spring, in combination with other telluric influences, seems to favour the developement of the ergot, and above all a variable weather, when, for several days, abundant rains are immediately followed by strong sunshine and considerable heat; the ergot abounds also more particularly in places near swamps and woods, where, in humid and rainy years, we have seen it multiply so as to form nearly the fourth of the harvest; almost always 4 or 5 are counted on the same spike; often 10 or 12, and sometimes, though rarely, even 20; a spike, however, is never totally ergoted. The nature of these vegetations are not yet well known; some take them for a simple degeneration of the natural grains, whilst Decandolle pretends that this disease is caused by a kind of parasitic fungus, which he designates under the name of *sclerote ergot* (sclerotium clavus). The ergoted rye consists of angular, oblong grains; having somewhat the form of those of rye, but 3 or 4 times more voluminous, 13 to 22 millimetres long, slightly bent, of a violet, blackish colour, marked with many furrows, and usually projecting out of the glume or husk beyond the ordinary outline of the spike or ear; fracture clear, like that of an almond; it has a disagreeable odour, similar enough to that of cooked crabs, especially when fresh and in large quantities, and more especially still when reduced to powder; the taste of the powder is slightly pricking. For homœopathic use we gather the ergot before the grain is harvested, and we make of it the *three* first attenuations by trituration. The tincture can be obtained in the same way as that of all dry vegetable substances, by means of 20 parts of alcohol.

SENEGA, *Polygala senega;* Fr., Polygala de Virginie, Sénéga; Ger., *Senega-wurzel;* Eng., Seneka snake-root.—Pediculareæ, Juss.—Diadelphia octandria, L. Usual doses, 9, 30.

302. This plant is a native of North America, Virginia, Pennsylvania, Maryland, and Canada. Its perennial root is

the only part used for homœopathic purposes; it is branching, from which several erect, simple, smooth, round, leafy stems annually rise, from 9 inches to a foot in height; the stems are occasionally tinged with red or purple in their lower portion, but are green near the top; the leaves are alternate or scattered, lanceolate, pointed, smooth, bright-green on the upper surface, paler beneath, and sessile or supported on very short footstalks; the flowers are small, white, and arranged in a close spike at the summit of the stem; the calyx is the most conspicuous part of the flower; it consists of 5 leaflets, two of which are wing-shaped, white, and larger than the others; the corolla is small and closed; the capsules are small, much compressed, obcordate, two valved, two celled, and contain two oblong, ovate, blackish seeds, pointed at one extremity. The root has a disagreeable, sweetish, peculiar odour, and a taste, at first between sweet and sour, then acrid and rank. The best way to prepare this root, consists in making the *three* first attenuations by *trituration;* the mother tincture by alcohol may be obtained as that from all dried vegetable substances.

SENNA, *Cassia senna, Senna* seu *Cassia acutifolia;* Fr., Séné; Ger., *Senes-blätter;* Eng., Senna.—Leguminosæ, Juss.—Decandria monogynia, L. Usual doses, 6, 30.

303. The leaves, known under this name, come from Egypt, derived from different kinds of *cassia*, to wit: 1st. *Cassia acutifolia*, Delile. 2nd. *C. elongata*, Lemaire. 3rd. *C. lanceolata*, Forck. 4th. *C. obovata*, Colladon. *5th. C. ovata*, Nobis. We distinguish in commerce many kinds of senna, of which the best is that of *de la Palthe* or *Alexandria*, derived from the *Cassia acutifolia;* the vegetable which furnishes it is a species of shrub, from 2 to 3 feet high, with a straight, woody, branching, whitish stem; the leaves are pinnate, alternately placed upon the stem, and have at their base two small, narrow, pointed stipules; the leaflets, of which from 4 to 6 pairs belong to each leaf, are almost sessile, oval lanceolate, acute, oblique at their base, nerved, from half an inch to an inch in length, and of a yellowish-green colour; the flowers are yellow and placed in axillary spikes; the fruit is a flat, elliptical, obtuse, membranous, smooth, grayish-brown, bivalvular legume, about an inch long and half an inch broad, scarcely if at all curved, and divided into 6 or 7 cells, each containing a

hard, heart-shaped, ash-coloured seed. The senna of commerce is often mixed with the leaves of the *coriaria myrtifolia*, and still more often with the oval, entire, whitish and downy leaves of the *cynanchum arghel* of Delile. For homœopathic use, we take the *senna* of *Alexandria* and make the *three* first attenuations by *trituration*, leaving to those who would prefer the alcoholic tincture, to prepare it, in the same way as with other dry vegetable substances, by means of 20 parts of alcohol.

Solanum mammosum; Fr., Solanum mammiforme, Pomme poison; Ger., *Zitzenförmiger nachtschatten;* Eng., Nipple nightshade.—Solaneæ, Juss.—Pentandria monogynia, L. Usual doses, 15, 30.

304. This herbaceous plant is natural to Virginia, Barbadoes, Carolinas, West Indies, and the Antilles, where it inhabits hedges and cultivated grounds; stem herbaceous, full of spines and hair, upright, branchy, 9 to 13 decimetres high; leaves large, more wide than long, cordiform, lobed, pubescent on both sides, yellow veins beneath, furnished with spines of a deep yellow on the median nerve; flowers diffuse, in panicle, of a pale grey; berry pyriform, yellowish. For homœopathic use we take the berries, from which we express the juice, and treat it like that of other fresh vegetable substances.

Solanum nigrum; Fr., Morelle noire; Ger., *Schwarzer nachtschatten;* Eng., Black or garden night-shade.—Solaneæ, Juss.—Pentandria monogynia, L. Usual doses, 15, 30.

305. This annual grows all over Europe, in cultivated grounds, also those not in immediate use, on the edges of ditches, at the base of walls, &c. Root thready, branchy, ligneous; stem herbaceous, upright, angular, 3 to 6 decimetres high; leaves alternate, petiolate, oval, toothed; flowers in bunches pedunculated, lateral, white; berries spherical, black; all the plant, but above all the berries, are considered poisonous; all the parts of this vegetable have, in the fresh state, an insipid taste and a narcotic, nauseous odour, which becomes musky when dried. We use in homœopathy the herb of the

plant, which we gather at the beginning of the flowering, and treat it like all other fresh plants.

Spigelia anthelmintica; Fr., Spigelie anthelmintique, Brinvilliers, Poudre aux vers; Ger., *Wurmtreibende spigelia;* Eng., Pink-root.—Gentianeæ, Juss.—Pentandria monogynia, L. Usual doses, 30.

306. This annual plant grows over almost the whole of South America, Brazil, Cayenne, the Antilles, &c. Root hairy, blackish on the outside, white within; stem herbaceous, rounded, upright, fistulous, 5 to 6 decimetres high; leaves terminal, to the number of four, disposed in form of a cross, oval or lanceolate, entire, glabrous; flowers simple, forming a thin and elongated spike, white; seeds small, black. When fresh, this plant has a poisonous, fetid odour, which, enclosed in a room, may even cause narcotism; the taste is nauseous and remains a long time on the tongue. It is on account of its deleterious qualities that, in French, this plant is called *Brinvilliers,* the name of the Marquis Brinvilliers, well known for his numerous acts of poisoning. We use in homœopathy the dry herb, powdered, of which we make the *three* first attenuations by *trituration.* The alcoholic tincture may be obtained as that of all other dry vegetable substances.

Squilla marina, *Scilla maritima;* Fr., Scille, Scille maritime, Squille; Ger., *Meerzwiebel;* Eng., Squill, Sea onion.—Asphodeli, Juss.—Hexandria monogynia, L. Usual doses, 18, 30.

307. This plant grows among the sand on the sea shore, above all those of the Mediterranean, as well as on those of the Atlantic Ocean, on the sea coasts of Asia and Africa; it is a perennial plant, with fibrous roots, proceeding from the bottom of a large bulb, which sends forth several long, lanceolate, pointed, somewhat undulated, shining, deep-green leaves; from the midst of the leaves, a round, smooth, succulent flower-stem rises, from one to three feet high, terminating in a long, close spike of whitish flowers; these are destitute of calyx, and stand on purplish peduncles, at the base of each of which is a linear, twisted, deciduous floral leaf; the onion is composed of many scaly tunics, of which the exterior ones are membranous, brown, whilst the interior ones

are fleshy and contain a thick, mucilaginous, volatile, acrid, inodorous juice, but of a bitter, nauseous taste. In the dry state the scales are close, yellowish or reddish-brown, semi-transparent. The flowers come out in summer, they are supported on a shaft, are numerous, white, in bunches and dry in autumn, the leaves only come the following spring. We must obtain the onion *as fresh as possible* for homœopathic purposes; we cut it in pieces and mash them in a mortar, in adding gradually an equal part of alcohol. When reduced to a homogeneous paste, we pour on this five parts of alcohol and leave the whole rest for some days, and then decant the clear brown tincture; with this we make the further attenuations.

STAPHYSAGRIA, *Delphinium staphysagria;* Fr., Staphysaigre, Herbe aux poux; Ger., *Stephans-körner, Läuse kraut;* Eng., Stavesacre.—Ranunculaceæ, Juss.—Polyandria trigynia, L. Usual dose, 30.

308. This plant grows in the south of France, Italy, Greece, and in all the south of Europe; it is one or two feet high, with a simple, erect, downy stem, and palmate, 5 or 7 lobed leaves, supported on hairy footstalks; the flowers are bluish or purple, in terminal racemes, with pedicels twice as long as the flower, and bracteoles inserted at the base of the pedicel; the nectary is four-leaved, and shorter than the petals, which are five in number, the uppermost projected backwards, so as to form a spur, which encloses two spurs of the upper leaflets of the nectary; the seeds are contained in straight, oblong capsules; root is cylindric, perennial, somewhat branchy and hairy below; seeds large, irregularly triangular, wrinkled, externally brown, internally whitish and oily, bitter, acrid, burning, full of little holes, of a blackish-grey; when mashed, it developes a disagreeable odour; taste bitter, and very acrid. For homœopathic purposes, we use the seeds to make the *three* first attenuations by *trituration;* the alcoholic tincture may be obtained as that of all dry substances by means of 20 parts of alcohol.

STRAMONIUM, *Datura stramonium;* Fr., Stramoine, Pomme epineuse; Ger., *Stechapfel;* Eng., Thorn-apple.—Solaneæ, Juss.—Pentandria monogynia, L. Usual doses, 9, 30.

309. The thorn-apple is an annual plant of rank and vigorous growth, usually about 3 feet high, but in a rich soil 6 feet or more; the large is large, whitish, and furnished with numerous fibres; the stem is erect, round, smooth, somewhat shining, simple below, dichotomous above, with numerous spreading branches; the leaves, which stand on short, round footstalks in the forks of the stem, are 5 or 6 inches long, of an ovate, triangular form, irregularly sinuated and toothed at the edges, unequal at the base, of a dark green colour on the upper surface, and pale beneath; the flowers are large, axillary, solitary, and peduncled, having a tubular, pentangular, five-toothed calyx, and a funnel-shaped corolla with a long tube; and a waived, plaited border, terminating in five acuminate teeth; the upper portion of the calyx falls with the deciduous parts of the flower, leaving its base, which becomes reflexed, and remains attached to the fruit, which is a large, fleshy, roundish, ovate, four-valved, four-celled capsule, thickly covered with sharp spines, and containing numerous seeds, attached to a longitudinal receptacle in the centre of each cell; it opens at the summit. It is doubtful to what country this plant originally belonged; many European botanists refer it to North America, while we in return trace it to the old Continent. Nuttall traces it to South America or Asia. In the United States it is found everywhere near cultivation, on dung-heaps, road-sides, and commons, &c. In homœopathy, we gather the herb of the plant before its flowers are developed, express the juice, and treat it the same as that of other fresh plants.

TABACUM, *Nicotiana tabacum;* Fr., Tabac, Nicotiane; Ger., *Taback;* Eng., Tobacco.—Solaneæ, Juss.—Pentandria monogynia, L. Usual doses, 6, 30.

310. This plant, originally from South America, is at present cultivated in most parts of Asia and Europe, as well as in the colonies, in Africa, &c.; it is an annual with a large fibrous root, and an erect, round, hairy, viscid stem, which branches near the top, and rises from 3 to 6 feet high; the leaves are numerous, alternate, sessile, and somewhat decurrent, very large, ovate lanceolate, pointed, entire, slightly viscid, and of a pale green colour; the lowest are often two feet long and four inches broad; the flowers are disposed in loose terminal panicles, and are furnished with long, linear,

pointed bractes at the divisions of the peduncle; the calyx is bell-shaped, hairy, somewhat viscid, and divided at its summit into five pointed segments; the tube of the corolla is twice as long as the calyx, of a greenish hue, swelling at top into an oblong cup, and ultimately expanding into a five-lobed, plaited, rose-coloured border; the whole corolla is very viscid; the filaments incline to one side, and support oblong anthers; the pistil consists of an oval germ, a slender style longer than the stamens, and a cleft stigma; the fruit is an ovate, two-valved, two-celled capsule, containing numerous reniform seeds, opening at the summit; the odour of the fresh plant is poisonous and fetid; taste is bitter, acrid, and nauseous. In homœopathy, we use the *fresh leaves* before the flowers are developed, express the juice, and treat the same as that of all fresh plants.

TANACETUM VULGARE; Fr., Tanaisie commune; Ger., *Gemeiner rainfarn;* Eng., Common tansy.—Corymbiferæ, Juss.—Syngenesia polygamia superflua, L. Usual doses, ?

311. This is a perennial, herbaceous plant, rising 2 or 3 feet in height; the stems are strong, erect, obscurely hexagonal, striated, often reddish, branched towards the summit, and furnished with alternate, doubly-pinnatifid leaves, the divisions of which are notched or deeply serrated; the flowers are yellow, and in dense terminal corymbs; each flower is composed of numerous florets, of which those constituting the disk are perfect and five-cleft, those of the ray very few, pistillate, and trifid; the calyx consists of small imbricated, lanceolate leaflets, having a dry scaly margin; the seeds are small, oblong, with 5 or 6 ribs, and crowned by a membranous pappus. Tansy is cultivated in our garden, and grows wild on the road-sides and old fields, but was introduced into the United States from Europe, where it grows in all parts; the whole plant has a disagreeable, camphrous odour; the taste is bitter and aromatic. For homœopathic purposes, we gather the herb of the plant and the flower-tops of the branches, from July to August, express the juice, and treat it the same as that of all other fresh plants.

TARAXACUM, *Leontodon taraxacum;* Fr., Dent de lion, Pissenlit; Ger., *Löwenzahn;* Eng., Dandelion.—Chicoraceæ, Juss.—Sygenesia equalis, L. Usual doses, 0, 3, 30.

312. The dandelion is an herbaceous plant, with a perennial fusiform root; the leaves, which spring immediately from the root, are long, pinnatifid, generally runcinate, with the divisions toothed, smooth, and of a fine green colour; the flower-stem rises from the midst of the leaves, six or more inches high; it is erect, simple, smooth, naked, hollow, fragile, and terminated by a large golden-coloured flower, which closes in the evening and expands with the returning light of the sun; calyx smooth and double, with the outer scales bent downwards; the florets are very numerous, ligulate, and toothed at their extremities; the receptacle is convex and punctured; the seed-down is stipitate, and at the period of maturity is disposed in a spherical form, and is so light and feathery, as to be easily borne away by the wind, with the seeds attached. It grows spontaneously in most parts of the world, in grass-plots and pasture-grounds, during the whole of summer; the whole plant contains a milky, soapy juice, of a saltish, bitter taste. We gather in autumn the *entire* plant, express the juice, and treat the same as that of all other fresh plants.

Taxus baccata; Fr., If; Ger., *Eibenbaum;* Eng., Yew.—Coniferæ, Juss.—Diœcia monadelphia, L. Usual doses, ?

313. This tree is found in the mountains of the North of Europe, as well as America, Scotland, Sweden, Prussia, &c.; it often becomes several hundred years old; its bark is thin, of a deep-brown; its wood of a brown-red, small grained, more or less veined, very hard and almost incorruptible; leaves linear, plane, of a blackish-green, perennial; flowers with short peduncles, axillary; fruit berriform, of a lively red, perforated at the top, enclosing a kind of nut, which contains a whitish, fleshy kernel, good to eat and oily. For homœopathic use, we take the *summits of the branches,* gathered when in flower in May, and treat them the same as other fresh plants.

Terebinthina, *Terebinthinæ oleum, Terebinthina veneta, seu laricina;* Fr., Terebinthine, Huile de terebinthine,

Terebinthine de venise; Ger., *Terpentinöl, Lerchen terpentin;* Eng., Turpentine.—Coniferæ, Juss.—Monœcia monadelphia, L. Usual doses, ?

314. Turpentine is the resinous volatile juice, which flows naturally or by incision from several plants of the family coniferæ; there are several kinds, and all have the common characters of being of a syrupy consistence, viscous, shining, more or less transparent, of a greenish-yellow colour, of a strong and penetrating odour and of a bitter acrid taste. For homœopathic purposes we employ the *Essence of turpentine;* to obtain this, we take the *Venice turpentine* of commerce, which comes from the *Pinus larix,* gathered in the Ukraine, in Hungary, Tyrol, Dauphiny, Jura, &c.; it is very transparent, white, of a weak, agreeable odour and a hot and bitter taste. We mix in a bottle 8 parts of it with one of alcohol at 80° centigrade, we shake the mixture, and then let it settle, after which the rectified turpentine immediately precipitates, leaving the alcohol, which contains the resinous parts, in the upper part of the bottle, so that it can be easily decanted. In repeating this process 3 or 4 times, we obtain the *essential oil* of turpentine perfectly washed of all resin, which, however, may contain a little alcohol, probably in the proportion sometimes of a fifth, but which may easily be dislodged by a little distilled water, with which it may be shaken a few times. This oil is clear, perfectly limpid, colourless, or of a very clear yellow, of a disagreeable odour, and of a hot bitter taste. The *three* first attenuations are made by *trituration.*

TEUCRIUM MARUM VERUM; Fr., Germandrée maritime; Ger., *Katzenkraut;* Eng., Cat-thyme.—Labiaceæ, Juss.—Didynamia gymnospermia, L. Usual doses, 3, 6, 9, 12, 30.

315. This shrub grows in the Levant, as well as all along the Mediterranean, chiefly in Spain, in Germany, and in France, it is also cultivated in gardens; stem straight, ligneous, branching, glabrous below, downy above; leaves opposite, petiolated, oval obtuse, of a clear green; flowers rosy, at the end of branches, in the axillæ of the leaves. The whole plant has an aromatic camphrous odour, which is peculiarly agreeable to cats; taste bitter, acrid, and hot. For homœopathic use we take the branches full of leaves and flowers,

gathered from June to August, express the juice and treat it the same as that of all the fresh plants.

THEA SINENSIS, *Thea viridis cæsarea;* Fr., Thé de Chine, Thé vert imperial; Ger., *Chinesicher Thee, Grüner oder Kaiserthee;* Eng., Imperial green tea.—Aurantia, Juss.—Polyandria monogynia, L. Usual doses, 9, 30.

316. This tree, which, in the natural state, attains a height of near 10 metres, grows in China, Japan, and in general all over the eastern portion of Asia; leaves perennial, coriaceous, thick, glabrous, shining, alternate, oval oblong, pointed, 6 centimetres long, 3 broad, serrated, short petioles; flowers white, large, short peduncles, axillary, calyx in five divisions; corolla 3 to 9 petals; capsules globular with 3 cells, containing each one or two seeds, round, bitter, oily, of the size of a little nut. For domestic use the *black teas* are the best; but for medical use we prefer the *green*; because their more energetic virtues are precisely those from which homœopathy can derive advantage. The *green* as well as the *black* teas are of different kinds; that which we use in homœopathy under the name of *thea cæsarea* is not the *veritable imperial tea,* but the green tea known under the name of *gunpowder tea*; the true *imperial* is never seen in Europe, though all the merchants pretend to sell it; it is reserved for the emperor exclusively or for the grandees of the celestial empire. Finally, to prepare the tea for homœopathic use, we powder it, and make the *three* first attenuations by *trituration*; the alcoholic tincture may be obtained the same as that of all dry vegetable substances, by means of 20 parts of alcohol.

THUYA OCCIDENTALIS, *Arbor vitæ;* Fr., Thuia du Canada; Ger., *Lebensbaum;* Eng., Tree of life.

317. This evergreen tree, originally of Canada, is much more cultivated in Germany than in France; it is a branchy tree from its root, rising, under favourable circumstances, 12 metres and more in height; branches flat, compressed and standing out on all sides; leaves short, evergreen, overlapping like tiles, with obtuse scales, disposed in four ranks; cones terminal, almost smooth, of a brown-yellow; seeds flattened. It is distinguished from the *thuya* of *China,* inasmuch as,

rubbed between the fingers, the leaves of this last developes no aromatic resinous odour, which the *thuya* of *Canada* does; moreover the branches of the *thuya* of *China* are ascendent and straight and not standing out on all sides as those of the other; its strobiles are rough and the scales of its leaves are pointed. For the purposes of homœopathy, we gather towards the end of June the young leaves of the *thuya* of *Canada*, we first mash them alone, after which we add two-thirds of their weight of alcohol and express the juice; the mother tincture thus obtained and clarified serves to prepare the attenuations.

TONGO, *Baryosma tongo, Dipterix odorata, Couma-rouma odorata;* Fr., Fêve-tonka, Caumarou des Galibis; Ger., *Tonka-bohne;* Eng., Tonka bean.—Leguminosæ, Juss.—Diadelphia decandria, L. Usual doses, ?

318. The Tonka bean grows in Cayenne, and generally in South America; it is a tree with a bark hard, smooth, white, and a very hard wood; it attains a height of 10 metres and more; leaves alternate, pinnated; folioles to the number of four, with petioles short, large, oval, entire, pointed; flowers axillary, in simple bunches; corolla of a purplish colour, with violet veins; nut oval oblong, druped, and downy externally, monospermous; seed like an almond, 2 or 3 centimetres long, of a shining black, internally of a clear brown, and soft; these almonds have an agreeable, aromatic odour, and contain considerable benzoic acid, which in the dry seeds may often be seen crystallized. We distinguish two kinds: 1st. The Tonka beans of *England,* which are smaller than the others, rounded, somewhat compressed, slightly bent and almost black; 2nd. The Tonka beans of *Holland,* which are larger, of a brownish colour, and a weaker odour and taste. For the purposes of homœopathy, we give the preference to those of *England,* which we prepare by making the *three* first attenuations by *trituration;* the alcoholic tincture may be obtained like that of all other dry vegetable substances, by means of 20 parts of alcohol.

URTICA URENS, *Urtica minor;* Fr., Ortie grièche, Petite ortie; Ger., *Brenn-nessel;* Eng., Dwarf, or Stinging nettle. —Urticeæ, Juss.—Monœcia tetrandria, L. Usual doses, ?

319. This annual is found everywhere, in cultivated places, gardens, &c.; stem 3 to 5 decimetres high, rounded, glabrous, pointed; leaves opposite, oval-elliptic, incised, dentated; flowers monœcious, in simple bunches; seeds flattened, oval, little, and straw-coloured. In homœopathy, we make use of the fresh juice of the leaves and flowers, which we prepare the same as that of all fresh plants.

UVA URSI, *Arbutus uva ursi, Arctostaphylos officinalis;* Fr., Raisin d'ours, Arbousier, Busserole; Ger., *Bärentraube;* Eng., Bearberry.—Ericæ, Juss.—Decandria monogynia, L. Usual doses, ?

320. This is a low evergeen shrub, with trailing stems, the young branches of which rise obliquely upwards for a few inches; the leaves are scattered upon short petioles, obovate, acute at the base, entire, with a rounded margin, thick, coriaceous, smooth, shining, and of a deep green colour on their upper surface, paler, and covered with a net-work of veins beneath; the flowers, which stand on short reflexed peduncles, are collected in small clusters at the ends of the branches; the calyx is small, five-parted, of a reddish colour, and persistent; the corolla is ovate or urceolate, reddish-white, or white with a red lip, transparent at the base, contracted at the mouth, and divided at the margin into five short reflexed segments; the stamens are ten, with short filaments and bifid anthers; the germ round, with a style longer than the stamens, and a simple stigma; the fruit is a small, round, depressed, smooth, glossy, red berry, containing an insipid mealy pulp and five cohering seeds. This shrub inhabits the northern latitudes of Europe, Asia, and America; it is found abundantly in New Jersey, whence the Philadelphia market is generally supplied; it prefers a barren soil, gravelly hills, and elevated sandy plains; the leaves are inodorous when fresh, but when dry and powdered acquire one not unlike that of hay; their taste is bitterish, strongly astringent, and ultimately sweetish. In homœopathy, we use the *leaves*, which we cut in very small pieces, then add alcohol in equal parts, then express the juice as has been directed for Thuya.

VALERIANA OFFICINALIS, *Valeriana minor;* Fr., Valeriane officinale, Valeriane sauvage, Petite valeriane; Ger., *Baldrian-wurzel;* Eng., Valerian.—Dipsaceæ, Juss.—Triandria monogynia, L. Usual doses, 12, 30.

321. The Valeriana minor, to which the epithet of *little* is only suitable in opposition to the *great valerian*, (Valeriana phu, L.,) grows everywhere, as well in woods, cleared or uncleared, as on high and airy hills; the perennial root of this plant has a cylindrical, white stock, whence go off fibrous, scaly branches, of a white colour within and brown without; stem 6 to 18 decimetres high, fistulous, simple, straight, hairy, rounded; leaves opposite, deeply pinnatifid; folioles lanceolate, serrated; flowers reddish (rose colour) or whitish, terminal or axillary, in panicle; calyx dentated; corolla of five irregular divisions; fruit monosperm, inferior; the root, dried with precaution, has an aromatic, camphorous odour, and a bitter, aromatic taste, which are very agreeable to cats, which roll in it with a kind of voluptuous fury. We use in homœopathy the root freshly dug up; but if we wish to obtain efficacious roots, we should gather them in the spring, of the age of 2 or 3 years, before the stem is developed; we must not collect them from too wet grounds, those which grow on heights and in places rather airy than humid, are possessed of the most virtues. We prepare the root recently dug up in the same way as all the other fresh plants.

Veratrum Album, *Helleborus albus;* Fr., Varaire, Veratre blanc; Ger., *Weisse Niesswurz;* Eng., White Hellebore. —Colchiaceæ, Juss.—Hexandria triandria, L. Usual doses, 12, 30.

322. The white hellebore grows in pasture lands of high mountains of Auvergne, the Vosges, Jura, Alps, &c.; it is an herbaceous plant with a perennial, fleshy, fusiform root, yellowish-white externally, pale yellowish-grey within, and beset with long cylindrical fibres of a greyish colour; the stem is 3 or four feet high, thick, round, erect, furnished with alternate leaves, which are oval, acute, entire, plaited longitudinally, about 10 inches long by 5 broad, of a yellowish-green colour, and embrace the stem at their base; the flowers are greenish, and arranged in a terminal panicle; fruit three-crested, three-celled, pubescent, oval-elongated; seeds many, smooth, winged. We gather the *root* of this plant at the

beginning of June, and treat it like all the other fresh plants.

Verbascum thapsus; Fr., Bouillon blanc, Molline, Bonhomme; Ger., *Königskere;* Eng., Mullein.—Solaneæ, Juss.—Pentandria monogynia, L. Usual doses, 0, 3, 30.

323. This is a biennial plant, with an erect, round, rigid, hairy stem, which rises from 3 to 6 feet high, and is irregularly beset with large, sessile, oblong or oval, somewhat pointed leaves, indented at the margin, woolly on both sides, and decurrent at the base; the flowers are yellow, and disposed in a long, close, cylindrical, terminal spike. The mullein is common throughout the United States and the north and middle of Europe, along road-sides, neglected fields, &c. We use the fresh herb in homœopathy, which we gather at the beginning of its flowering, and which we prepare after the manner of all fresh plants.

Vinca minor; Fr., Pervenche, Petite pervenche; Ger., *Wintergrün, Kleines sinngrün;* Eng., Lesser periwinkle.—Apocyneæ, Juss.—Pentandria monogynia, L. Usual doses, ?

324. This shrub inhabits all Europe, where it grows in hedges, forests, &c.; root rampant, beset below with hairs; stem round, climbing, thin, 2 or 3 decimetres long; leaves opposite, oval lanceolate, petiolate, entire, shining, coriaceous, perennial; flowers solitary, axillary, with long, blue peduncles. We use in homœopathy the *whole* plant, gathered at the commencement of its flowering, in April and May, and prepare it the same way as other fresh plants.

Viola odorata, *Viola martia;* Fr., Violette de Mars; Ger., *Veilchen, Marz-veilchen;* Eng., Sweet violet.—Violaceæ, Juss.—Syngenesia monogamia, L. Usual doses, 9, 12, 30.

325. This is a small, creeping plant, the runners of which are furnished with fibrous roots, and send up annually tufts of leaves and flowers; the leaves are heart-shaped, crenate, and supported on long petioles; the flowers are at the summit,

of delicate, quadrangular, channelled, radical peduncles; the leaves of the calyx are shorter than the petals, which are obovate, obtuse, unequal, and of a bluish-purple or deep violet colour, except at the claws, which are whitish; the two lateral petals are spreading and bearded towards the base, the inferior furnished with a large spur, and the two upper reflected; in the centre are the stamens with very short filaments, and anthers slightly cohering by an orange-coloured membranous expansion. It is a native of Europe, growing in woods, hedges, and other shady places, and is cultivated in gardens. We take the *entire* plant, which we gather during the flowering, in April and May, and treat it like other fresh plants.

VIOLA TRICOLOR, *Jacea;* Fr., Pensée, Fleur de la Trinité; Ger., *Freisam-veilchen, Stiefmütterchen;* Eng., Heart's-ease.—Violaceæ, Juss.—Syngenesia monogamia, L. Usual doses, 9, 12, 30.

326. This annual grows all over Europe, in the fields, along roads, forests and meadows, gardens, &c.; root branchy, hairy; stem triangular or quadrangular, recumbent, glabrous, with straight branches; leaves, having the odour of peach-kernels when rubbed, alternate, petiolate, pubescent, the inferior oval-oblong, the superior lanceolate, both crenated, serrated; peduncles axillary. In homœopathy we make use of the *yellow* and *white* flowered heart's-ease; we take the *entire* plant at the time of its flowering, and treat it like other fresh plants.

ZINGIBER OFFICINALE, *Amomum Zingiber;* Fr., Gingembre; Ger., *Ingwer;* Eng., Ginger.—Cannæ, Juss.—Pentandria monogynia, L. Usual doses, ?

327. The ginger plant has a perennial, creeping, tuberous root, and an annual stem, 2 or 3 feet high, solid, round, erect, and enclosed in an imbricated, membranous sheathing; leaves lanceolate, acute, smooth, 5 or 6 inches long by 1 broad, and stand alternately on the sheaths of the stem; the scape or flower-stalk rises by the side of the stem from 6 inches to one foot high, like it it is clothed with oval acuminate sheaths, but is without leaves, and terminates in an oval, obtuse, bracteal, imbricated spike; the flowers are of a dingy yellow colour,

and appear, 2 or 3 at a time, between the bracteal scales. The plant is a native of Hindostan, and is cultivated in all India and the West Indies; the flowers have an aromatic smell, and the stems, when bruised, are slightly fragrant; but the root is the part in which the virtues of the plant reside; this is fit to be dug up when a year old. In this country the best ginger is the *white* or *Jamaica* ginger; that used by homœopathic pharmaceutists in Europe comes from Malabar and Bengal; it should be hard, of a clear colour, heavy, strong odour, and hot taste. We prepare it by making the *three* first attenuations by *trituration;* we may obtain the *tincture* by the usual process, by means of 20 parts of alcohol.

3. *Vegetable Substances less used and almost entirely unknown.*

ABSINTHIUM, *Artemisia Absinthium;* Fr., Absinthe; Ger., *Wermuth, Bittrer beifuss;* Eng., Wormwood.—Corymbiferæ, Juss.—Sygenesia polygamia superflua, L.

328. This plant, originally from Greece, grows at present all over Europe, in dry, stony places, exposed to the sun, in open, dry spots, &c.; root oblique, hairy; stem upright, quadrangular, striated, somewhat downy, branchy, 6 to 12 decimetres high; leaves many, obtuse, of a geenish-grey above, downy, and of a silvery-grey beneath; flowers globular, tubular, yellow, hanging, axillary, in bunches. The whole plant has, in the fresh state, a strong aromatic, pungent, disagreeable odour, and a very bitter taste. We gather the *entire* plant, when in flower, (July or August,) and prepare it the same as all other fresh plants.

ALLIUM SATIVUM; Fr., Ail; Ger., *Knoblauch;* Eng., Garlic. —Liliaceæ, Juss.—Hexandria monogynia, L.

329. Garlic is originally from the Levant and middle of Europe, but is cultivated almost throughout Europe, either in the open field or in kitchen gardens; it grows also spontaneously. Every one knows the pungent, insupportable, and diffusible odour of the root of this plant; this root is round, and consists of many oblong bulbs, pointed, set one in

another, and covered by three envelopes; stem 6 to 9 decimetres high, round, furnished with leaves to the middle; leaves disposed in two ranks, linear, furrowed, pointed, oblong, of a blue-green, and glabrous. We gather the *whole* plant from June to August, and treat it like all fresh plants.

AMMONIACUM, *Gummi ammoniacum;* Fr., Gomme ammoniaque; Ger., *Ammoniak, Armenisches gummi;* Eng., Gum ammoniac.—Umbelliferæ, Juss.

330. Gum ammoniac is a green resinous substance, which flows from an umbelliferous tree, a native of Africa, and of some parts of the East Indies. According to the account of Fontanier, it flows in grains more or less large; it is collected about June, and sent to us. In commerce we distinguish two kinds: 1st. *Gum ammoniac pure* or *amygdaloid*, which is in small, round, agglomerated grains, of a dull reddish-yellow, shining and greasy in its fracture, not transparent, whitish within, odour strong, taste acrid, bitter, and disagreeable, partly soluble in water, with which it forms a milky mixture, half soluble in alcohol; 2nd. *Gum ammoniac impure*, in *lumps*, in masses more or less large, of a dirty yellow colour, mingled with the refuse of seeds, earths, sand, &c.; of an odour feeble, balsamic; of a taste bitter, resinous, and acrid, softening between the fingers, puffing up on coals, when it crepitates, blackens, and emits an alliaceous smell. It dissolves in ether, and only in small quantity in vinegar and alcohol. The *three* first attenuations are made by *trituration*.

AQUILEGIA VULGARIS; Fr., Ancolie vulgaire; Ger., *Ackelei.* Eng., Columbine.—Ranunculaceæ, Juss.—Polyandria pentagynia, L.

331. This plant is found over nearly the whole of Europe, where it grows in woods, woody low grounds, forests, and on the sides of mountains; root perennial, branchy, of a deep brown without, white within; stem 3 to 9 decimetres high, thin, branchy, somewhat downy, reddish; leaves bi-ternate, of a blue-green beneath, of a deeper colour above, incised, blunt; folioles petiolate, round, rhomboidal or ovoid; flowers at the summit of the stem and branches, pendant, blue or brown, rarely rosy, disposed in corymbs, provided with reflected cornets; seeds oval oblong, small, black, shining, of a taste at

first sweetish, then bitter. We gather the *entire* plant, and treat it like other fresh plants.

ARCHANGELICA, *Archangelica officinalis*, *Angelica archangelica*, L.; Fr., Angelique, Angelique archangelique; Ger., *Engelwurz;* Eng., Garden angelica.—Umbelliferæ, Juss.—Pentandria monogynia, L.

332. This plant inhabits the north of Europe and Asia, as well as the mountains of France and middle Germany; in the low countries of the north of Germany it is found near the rivers; root biennial, large, cylindric, wrinkled, hairy, and branchy, of a brown-grey or reddish without, white within, of a strong aromatic odour, agreeable enough, and of a taste at first sweetish and biting, and then bitter; stem herbaceous, rounded, striated, fistulous, branchy, 12 to 18 decimetres high; leaves alternate, amplexicaul, bipinnate, with lobed folioles, serrated; flowers terminal, in umbels, yellow, greenish, nearly ephemeral. We use the *root freshly dug up* of the *wild* plant, not that of the gardens. The preparation is the same as that of other fresh plants.

ARISTOLOCHIA CLEMATITIS; Fr., Aristoloche vulgaire; Ger., *Gemeine Osterluzei;* Eng., Common birthwort.—Aristolochia, Juss.—Gynandria hexandria, L.

333. This perennial is found in France, Germany, and Tartary; it grows in uncultivated fields, borders of rivers, &c.; root thin, rampant, jointed, contorted, of a yellowish-brown; stem generally simple, upright, somewhat contorted, and furrowed, pithy within, furnished below with oval-oblong brownish scales, 3 to 9 decimetres high; leaves with peduncles long, obtusely triangular, cordiform, of a deep green beneath, of a blue-green above; flowers axillary, of a dirty yellow; the whole plant has a strong and disagreeable odour, and an acrid, bitter, and balsamic taste. For homœopathic purposes we use the herb of the plant, gathered in June, and prepared like other fresh plants.

ARMORACIA, *Armoracia rusticana*, *Cochlearia armoracia;* Fr., Raifort, Raifort officinal, Grand Raifort, Cranson, Cran de Bretagne; Ger., *Meerrettig*, *Gemeiner Meerrettig*, *Kren;* Eng., Horse-radish.—Cruciferæ, Juss.—Tetradynamia siliculosa, L.

334. This herbaceous plant grows in wet places, on the sides of ditches and rivers, and above all in the west of France, as well as Germany, &c. Root cylindric, thick as the arm, long, branchy, vertical; yellowish without, whitish within, of an acrid and biting taste; stem upright, branchy on top, 3 to 9 decimetres high, angular, striated, glabrous, as well as the whole plant; radical leaves, petiolate, large, upright, green, oval-oblong, scolloped; those of the stem small, almost sessile, pinnatifid, lanceolate, linear; flowers small, white, in long terminal bunches; calyx has four ovate, deciduous leaves, and the corolla an equal number of obovate petals, twice as long as the calyx, and inserted by narrow claws; the pod is small, elliptical, crowned with the persistent stigma, and divided into two cells, each with 4 to 6 seeds. We use the *root* freshly dug up and prepared in the usual way of fresh plants.

Asparagus officinalis; Fr., Asperge vulgaire; Ger., *Gewöhnlicher spargel;* Eng., Asparagus.—Asparagi, Juss.—Hexandria monogynia, L.

335. This plant grows wild over a great part of Europe, chiefly in sandy places, near the sea-coast, in prairies, borders of forests, &c.; it is also much cultivated. Root formed of round fibres, yellow without, white within, inodorous, and of a sweetish taste; stems branchy, herbaceous, rounded, glabrous, near 9 decimetres high; leaves in fascicles, about 3 centimetres long, glabrous like the rest of the plant, and accompanied by exterior and interior stipules, among which are 3 or 4 or 5 linear leaves; flowers small, of a greenish-yellow, diœcious, polygamic, solitary and axillary; peduncles jointed, double, loose, unifloral; fruit bacciform, of a scarlet-red, three-celled, with 2 or 3 black seeds. In homœopathy we gather the young shoots (turiones asparagi), express the juice and treat it like that of all fresh plants.

Atriplex olida, *Chenopodium olidum* seu *vulvaria:* Fr., Arroche fetide, Anserine (patte d'oie) fetide, Vulvaire; Ger., *Stinkende Melde, Stinkender Gänsefuss*; Eng., Stinking goosefoot.—Atriplices, Juss.—Pentandria digynia, L.

336. This plant, which must not be confounded with *atriplex sativa*, grows in the north of Europe, in uncultivated spots, at the foot of walls, &c. Root annual; stem recumbent, branchy; leaves pedunculate, rhomboidal, entire, of a grey-green, full of a scaly powder; flowers glomerated, panicled; seeds like those of lentils, black, shining; the whole plant has a disagreeable, fetid odour, like that of fish, and a salt, nauseous taste. We gather the *entire* plant in the flowering season, and treat it like other fresh plants.

BOLETUS SATANAS; Fr., Bolet satan; Ger., *Satans Pilz;* Eng., Lurid Boletus, Juss.—Cryptogamia, L.

337. This fungus grows in the forests, where it is not rare in summer and autumn. Head large, tough, of a pale yellow; pores of a deep-red; stalk thick, of a deep-red, grated above. According to Phœbus, this fungus is only a variety of boletus luridus, Schæff. We prepare it like the bovista (q. v.)

CAHINCA SEU CAÏNCA, *Cahinca caïnana, Chiococca racemosa;* Fr., Caïnca, Racine de caïnca; Ger., *Kaïnka-Wurzel;* Eng., Cahinca root.—Rubiaceæ, Juss.—Pentandria monogynia, L.

338. This shrub grows in Brazil and the Antilles. Stem 2 or 3 metres high; leaves opposite, oval-pointed, entire; flowers pedunculated, whitish, axillary, in pendant bunches; fruit berry-form, whitish, monospermous; root branchy, of a reddish-brown, consisting of cylindric pieces, 6 to 9 decimetres long, and of the thickness of a goose-quill or the finger; it is fibrous, marked all along with furrows of a deep colour, covered with a brown bark, annular, thin, fleshy; epidermis of a dirty white. Beneath this fleshy part is found a white wood, which is the axis of the root. The epidermis of the bark is of a resinous aspect, of a disagreeable taste, bitter, a little acrid and slightly astringent, producing a roughness in the throat; the woody part has neither taste nor odour. The odour of the root is acrid, volatile, disagreeable, somewhat like to that of valerian. The *three* first attenuations should in preference be made by trituration. The mother tincture, should we wish it, may be obtained in the same manner as that of other dry vegetable substances by means of 20 parts of alcohol.

CALENDULA OFFICINALIS; Fr., Souci, Souci des jardins, Soleil; Ger., *Ringel-blume, Gemeine ringel-blume;* Eng., Common marygold.—Radiatæ, Juss.

339. This annual, originally from the South of Europe, is cultivated in all our gardens. Root, pale yellow, cylindric, hairy; stem upright, angular, pubescent, branchy, 2 to 4 decimetres high; leaves oval or lanceolate, of a spatula form, entire or slightly sinuous, alternate, sessile, somewhat fleshy and downy; flowers large, of a yellow-red, broad, solitary, terminal, of a disagreeable, bituminous odour, and a taste at first sweetish, mucilaginous, and then bitter. In very hot weather, sparks similar to electric sparks have been seen issuing from these flowers; seeds boat-shaped, muricated, reflexed. We gather the *whole* plant, when in flower, and prepare it like other fresh plants.

CHENOPODIUM GLAUCUM; Fr., Anserine glauque, Patte d'oie verdâtre; Ger., *Graue melde, Graugrüner gänsefuss;* Eng., Oak leaved goose foot.—Atriplices, Juss.—Pentandria digynia, L.

340. This plant grows generally in villages, outskirts of towns, on farms about dunghills and places where their drainage accumulates. Stem branchy, near 3 decimetres high, generally recumbent, and often marked with streaks of a beautiful red or a whitish-green; leaves oblong, obtuse, slightly dentated, of a green-grey or blue above, whitish beneath; flowers glomerated, in branchy spikes, in the axillæ of the leaves and at the end of the stems. We gather the *entire* plant, at the beginning of its flowering in July, and prepare it in the usual way.

GENISTA SCOPARIA, *Spartium scoparia;* Fr., Genêt à balai; Ger., *Genisle, Ginsler, Pfriemenkraut;* Eng., Common broom.—Leguminosæ, Juss.—Diadelphia decandria, L.

341. This shrub frequents the woods and sandy lands of nearly all France and Germany; stem branchy, spineless, supple, angular, used for cordage; leaves ternate and solitary; flowers campanulate; calyx tubular, monophyllous, five-toothed; stigma longitudinal, downy above. We use the

tender branches, express the juice and treat it like that of all fresh plants.

Gins-eng, *Panax quinquefolium;* Fr., Gins-eng, Panax à cinq feuilles; Ger., *Gins-eng, Fünfblättrige, Kraftwurzel;* Eng., Ginseng.—Araliaceæ, Juss.—Polygamia diœcia, L.

342. This plant is indigenous to America, growing in the hilly regions of the northern, middle and western states, and preferring the shelter of thick, shady woods; it is also a native of China, Tartary, &c., where it is highly esteemed. Root fleshy, somewhat spindle-shaped, from 1 to 3 inches long, about as thick as the little finger, terminated by several slender fibres; when dried it is yellowish-white and wrinkled externally; within is a hard central portion, surrounded by a soft whitish bark; a feeble odour and sweet taste, slightly aromatic, resembling liquorice-root; stem smooth, round, one foot high, divided at the summit into 3 leaf stalks, each of which supports a compound leaf, consisting of 5 or more rarely of 3 or 7 petioled, oblong, obovate, acuminate, serrate leaflets; the flowers are polygamous, small, greenish, and arranged in a simple umbel, supported by a peduncle; calyx 5 toothed; corolla 5 petalled; fruit, kidney-shaped scarlet berries, crowned with the styles and calyx, and containing 2 or 3 seeds. Besides the kind we have just described, and which should *alone* be used in homœopathy, there are many others, which are sold for the true ginseng, and which it will be necessary to distinguish. The best preparation consists in making the *three* first attenuations by trituration; the mother tincture can be obtained in the usual way.

Heraclium sphondylium, *Branca ursina germanica;* Fr., Berce, Fausse branc-ursine, Branc-ursine d'Allemagne; Ger., *Heilkraut, Falsche Barenklau, Deutsche Bärenklau;* Eng., Common cow-parsnep.—Umbelliferæ, Juss.—Pentandria digynia, L.

343. This is found over all Europe, in meadows and on the borders of woods. Root thick, fusiform, branchy, yellowish without, whitish within; stem 9 to 18 decimetres high, upright, furrowed, covered with stiff hairs, fistulous, branchy at the top; leaves pinnate and full of asperities; leaf-

lets divided. When young, this plant contains a juice sweetish to the taste, but after a time becomes acrid, of a bitter taste and biting; applied on the skin, it swells it and produces even inflammation and ulcerations. We gather the *herb* at the beginning of its flowering, in June and July, and treat it like all fresh plants.

HYPERICUM PERFORATUM, *Fuga demonum*, *Herba Sti. Joannis;* Fr., Millepertuis, Chasse diable, Herbe St. Jean; Ger., *Hartheu Johanniskraut;* Eng., St. John's-wort.

344. This is a common plant in fields, along hedges, &c. Stem very branchy, glabrous, somewhat quadrangular, or rather double faced, spotted black, 1 to 2 feet high; leaves sessile, oval, lanceolate, marked with lines and a great number of transparent points, appearing like perforations, and hence the distinctive name; edges rolled back; flowers in panicles, of a fine yellow; calyx 5 lobed, with 5 long, straight petals; stamens numerous, united in three fasces; fruit forming a capsule with 3 valves and 3 polyspermous cells; odour strong, balsamic; taste bitter, styptic, a little saltish; the seeds contain a little more resin than the stem. We gather the *entire* plant, in the flowering season, July and August, and treat it like all fresh plants.

JALAPPÆ MAGISTERIUM; Fr., Resine de Jalap, Magistere de jalap; Ger., *Jalappenharz;* Eng., Resin of Jalap.—Convolvulaceæ, Juss.—Dicotyledones monopetales, L.

345. Jalap root (see description) contains in its substance the tenth part of its weight of resin, which may be extracted by alcohol, in digesting the root in this liquid, mingling afterwards the tincture obtained by water and submitting the whole to distillation. The resin of jalap is of a dull and yellow-green colour without, fracture of a brown-yellow, shining but little, opaque, friable, of an acrid, bitter taste. When warmed or rubbed, it exhales the odour of the root; in alcohol it dissolves easily; this resin is frequently adulterated with charcoal or powdered jalap, with the resin of the pine, of guaiacum, of white agaric, &c.; the adulteration with these resins are easily detected, inasmuch as oil of turpentine dissolves them, whilst it leaves the resin of jalap undissolved.

Several homœopaths appear to have wished to substitute the resin of jalap for our ordinary preparation of the root of this plant; for otherwise it is impossible to guess to what end they have introduced it in the homœopathic *pharmacopœia*, since our common jalap contains as well the virtues of the resin as the resin itself does, and the creation of a new medicine alongside of the old one can have, in consequence, no other advantage than that of uselessly multiplying the number. In every case, supposing that we had not even studied the effects of jalap itself, the study of its resin would be of far less importance than that of a great many other substances.

Juglans regia; Fr., Noyer commun ou royal, Noix commune; Ger., *Nuss-Baum, Welsche nuss;* Eng., English walnut.—Terebinthinaceæ, Juss.—Monœcia polyandria, L.

346. The walnut comes from Persia, and is now cultivated over all the mild portion of Europe; extreme heat is as hurtful to it as cold; it is a splendid tree, garnished with magnificent foliage. For homœopathic purposes, we use the *entire nut*, before its perfect maturity; we cut it in pieces, and treat it like all fresh vegetable substances.

Juncus pilosus, *Lucula pilosa;* Fr., Jonc poilu; Ger., *Haarige Binse;* Eng., Hairy-rush.—Junci, Juss.—Hexandria monogynia, L.

347. This grows over all Europe; root oblique, hairy; stems gramineous, upright, simple, thick, and smooth; leaves radical, lanceolate, sharp; flowers in corymbs. We use the root of the plant, which we gather in the flowering season, in May; we mash it in a mortar, adding a little alcohol, after which we express the juice, and treat it as that of all fresh plants.

Lolium temulentum; Fr., Ivraie des blés; Ger., *Taumellolch;* Bearded darnel.—Gramineæ, Juss.—Triandria digynia, L.

348. The darnel grows among wheat, and chiefly among oats and barley; it is a weed, which, in rainy seasons, is

found in thin harvests, the seeds of which are often mingled with those of the grain. The root of this annual is thready, without leaves; its stem is straight, strong, stiff, glabrous; leaves linear, with sharp edges; spike large, bearded; the seeds are poisonous, and have an intoxicating odour, and acrid taste. We use the *whole* plant, gathered when in flower, and treated as all fresh plants.

LUPULUS, *Humulus lupulus;* Fr., Houblon; Ger., *Hopfen;* Eng., Hops.—Urticeæ, Juss.—Diœcia pentandria, L.

349. This well-known plant grows in hedges, where it forms a perennial root, sending up numerous annual, angular, rough, flexible stems, which twine around neighbouring objects in a spiral direction, from left to right, and climb to a great height; leaves opposite, and stand upon long footstalks; smaller sometimes cordate, larger 3 or 4 lobes; all are serrate, of a deep green colour on the upper surface, and, together with the petioles, extremely rough, with minute prickles; at the base of the footstalks are 2 or 4 smooth, ovate, reflexed stipules; flowers numerous, axillary, and furnished with bractes; male flowers yellowish-white, arranged in panicles; the females, which grow on a separate plant, are pale green, and disposed in solitary, peduncled aments, composed of membranous scales, ovate, acute, and tubular at the base; each scale bears near its base, on its inner surface, two flowers, consisting of a roundish, compressed germ, and two styles, with long filiform stigmas; the aments are converted into ovate, membranous cones or strobiles, the scales of which contain each, at their base, two small seeds, surrounded by a yellow, granular, resinous powder. For homœopathic purposes, we use the female flowers of the plant, gathered at the beginning of September; we cut them in small pieces, mingle them with alcohol in equal parts, and decant, at the end of fifteen days, the clear liquid; the mother tincture, thus obtained, afterwards serves for the attenuations.

NIGELLA SATIVA; Fr., Nigelle cultivée; Ger., *Schwarzkümmel;* Eng., Small fennel-flower.—Helleboraceæ, Juss. —Polygynia pentandria, L.

350. This plant comes from the east, but is cultivated in

Egypt, Persia, &c.; leaves hairy, once or twice pinnated, linear; flowers terminal, surrounded by an involucrum of 5 pieces, in form of a multifid calyx; calyx null; 5 petals; 5 triphyllous nectaries between the corolla; pistils quinate; capsules muricated as if round. We use the seeds of the plant, of which we make the *three* first attenuations by *trituration;* the tincture may be obtained like that of all dry vegetable substances.

ŒNANTHE CROCATA; Fr., Œnanthe Safrané; Ger., *Safrandolde;* Eng., Hemlock water dropwort.—Umbelliferæ, Juss.—Pentandria digynia, L.

351. This plant is natural to France, Sweden, Spain, where it grows in marshes, watery meadows and along rivulets. Stem upright, 6 to 9 metres high, cylindric, fistulous, containing a yellow juice; leaves twice or thrice pinnated, large, of a deep green, with folioles oval-cuneiform; umbels of pretty long rays, from 12 to 30 in number; flowers white; seeds oval, oblong, terminated by persistent styles. The root of this plant, the only part we use in homœopathy, consists of many hinge-like branches, of the size of a beet, containing a white milky juice, becoming yellow on exposure; the taste is sweetish, which is the reason of the frequent poisonings by this plant; it is the most dangerous vegetable we know; a bit of the root, about the size of a cherry, causes death in a few hours. We use the *root*, which we prepare either by *trituration* or by *expression*, according as we procure it dry or fresh.

ONONIS SPINOSA; Fr., Bugrane, Arrête-bœuf; Ger., *Dornige Hauhechel;* Eng., Common rest harrow.—Leguminosæ, Juss.—Diadelphia decandria, L.

352. This perennial vegetable is found all over Europe, where it grows in uncultivated fields, dry pasturages, on the edges of fields, along roads, &c. Root as thick as the finger, branchy, dipping into the ground 6 decimetres or more, of a reddish-brown without, whitish within; of a taste sweetish, mucilaginous, somewhat acrid and bitter; stem recumbent below, upright above, round, ligneous, branchy, spiny, of a brown-red; leaves petiolate, solitary, ovoid, serrated, hairy on both sides, the upper ones ternated; flowers solitary, with short peduncles, axillary, of a pale purpurine colour or

with rosy veins. We use the whole plant, gathered at the beginning of the flowering from June to August, and treat it like all fresh plants.

PADUS AVIUM, *Prunus padus;* Fr., Putier, Merisier en grappe; Ger., *Ahlkirsche, Elsenbeere;* Eng., Bird-cherry. —Rosaceæ, Juss.—Icosandria monogynia, L.

353. The bird-cherry is native to the north of Europe and Asia, where it grows in moist woods, on the borders of forests, in vallies, &c.; it is 3 to 10 metres high; leaves oval, elliptic, serrated, somewhat wrinkled, nerved; flowers white, odorous, lateral, in long hanging bunches; berries globular, black, of the size of a little pea and of a disagreeable odour. We use the leaves, which we gather at the beginning of its flowering and which we treat the same as all fresh vegetable substances. According to some homœopaths, it is the inner bark of the young branches which should be preferred.

PHYSALIS ALKEKENGI, *Solanum vesicatorium;* Fr., Alkékenge commun, Coqueret; Ger., *Schlotte, Gemeine judenkirsche;* Eng., Common winter cherry.—Solaneæ, Juss.—Pentandria monogynia, L.

354. This annual grows in almost all countries, in cultivated places, along roads and hedges, &c. Stems 3 decimetres high, diffuse, branchy, somewhat downy; leaves oval, petiolate, alternate, entire, glabrous; flowers white, small, extra-axillary, borne on filiform peduncles; berries of the size of a cherry, round, soft, red, having as an envelope a five angled membrane. We use the recently expressed juice of the berries, treated like that of all fresh vegetable substances.

PICHURIM, *Laurus pichurim;* Fr. Laurier Pichurim, Noix de Para; Ger., *Pichurimbohne;* Eng., Pichurim bean laurel. —Laurineæ, Juss.—Enneandria monogynia, L.

355. This vegetable grows in South America. In commerce we find two kinds. 1st. The larger kind (fabæ pichurim majores). 2nd. The smaller (fabæ pichurim minores). The first are the best; these are composed of two lobes, of a very marked aromatic odour, convex on one side, flat on the other, oblong-oval, 2 to 5 centimetres long by 1 to 2 broad,

obtuse at both ends, of an acrid and slightly peppery taste; the concave side of the bean is a little cracked, of a blackish-brown; the other side is smooth, of a clearer colour, marked by a longitudinal furrow; the inside is reddish-yellow, full of darker points. We prepare the fruit in making the *three* first attenuations by *trituration;* the mother tincture may be obtained like that from all dry vegetable substances.

Rosmarinus officinalis; Fr., Romarin officinal; Ger., *Gemeiner rosmarin;* Eng., Rosemary.—Labiaceæ, Juss.—Diandria monogynia, L.

356. Rosemary is an evergreen shrub, 3 or 4 feet high, with an erect stem, with many long, slender ash-coloured branches; leaves numerous, sessile, opposite, more than an inch long, one-sixth broad, linear, entire, obtuse at the summit, turned backwards at the edges, firm, smooth and green on the upper surface, whitish and somewhat downy beneath; the flowers are pale blue or white, large, in opposite groups at the axills of the leaves, towards the ends of the branches; seeds 4, oblong, naked: the plant grows spontaneously along the Mediterranean and is cultivated in all our gardens. The fresh leaves, treated by alcohol, give a tincture of a yellowish-green, of a particular odour of rosemary, and of a balsamic, acrid, bitter taste.

Sassafras, *Laurus sassafras;* Fr., Sassafras, Laurier-sassafras; Ger., *Sassafras-baum;* Eng., Sassafras.—Laurineæ; Juss.—Enneandria monogynia, L.

357. This tree grows in America, 30 to 50 feet high, and a trunk about one foot in diameter; bark of trunk rough, deeply furrowed, and greyish; that of the extreme branches and twigs smooth, and beautifully green; leaves alternate, petiolate, downy when young, variable in form and size; some oval, entire, others lobed, generally three-lobed; flowers frequently diœcious, small, pale yellowish-green colour, disposed in racemes, springing from the branches below the leaves, with linear bractes at their base; corolla divided into 6 oblong segments; male flowers have 9 stamens; the hermaphrodite, on a different plant, have only 6, with a simple style; fruit an oval drupe, of the size of a pea, deep blue when

ripe, on a red pedicel, enlarged at the extremity, like a cup, for its reception. Treated by nitric acid, the wood of sassafras turns red, which may distinguish from its adulterations; the infusion and decoction are equally red. For homœopathic purposes, we take a piece of the wood, with all its bark, reduce it to a fine powder, and let it digest 6 days with 20 parts of alcohol.

Sedum acre; Fr., Sedon acre, Poivre de muraille, Vermiculaire brûlante, Petite joubarbe; Ger., *Mauerpfeffer, Schwarzer-mauerpfeffer;* Eng., Biting stone-crop, Small houseleek.—Sempervivæ, Juss.—Decandria pentagynia, L.

358. This small plant grows throughout France and Germany, on old walls, dry places, on rocks, dry hills, &c.; roots weak, hairy, perennial; stem thick, upright, glabrous; leaves fleshy, thick, oval, short, thick-set, imbricated in 6 ranks, inodorous, but of a peppery, almost caustic taste. We use the *whole* plant, which we prepare like other fresh vegetables.

Serpentaria virginiana, *Aristolochia serpentaria;* Fr., Serpentaire de Virginie, Aristoloche serpentaire; Ger., *Virginische schlangen wurzel, Virginische osterluzei;* Eng., Virginia snake-root.—Aristolochiæ, Juss.—Dicotyledones apetales, L.

359. This is an herbaceous plant, with a perennial root, consisting of numerous slender fibres, proceeding from a short, horizontal caudex; several stems often rise from the same root, 8 or 10 inches high, slender, round, flexuose, jointed at irregular distances, and frequently of a reddish or purple colour at the base; the leaves are oblong, cordate, acuminate, entire, of a pale yellowish-green colour, and supported on short pedicels at the joints of the stem; the flowers proceed from the joints near the root, and stand singly on long, slender, round, jointed peduncles, which are sometimes furnished with one or two small scales, and bend downwards so as nearly to bury the flower in the earth or decayed leaves; no calyx; corolla purple, monopelatous, tubular, swelling at the base, contracted and curved in the middle, and terminating in a labiate border with lanceolate lips; anthers, 6 or 12, sessile,

attached to the under part of the stigma, which is roundish, divided into 6 parts, and supported by a short fleshy style upon an oblong, angular, hairy, inferior germ; the fruit is an hexangular, six-celled capsule, containing several small flat seeds. It grows in rich, shady woods, throughout the middle, southern, and western states; it flowers in May and June. We use the *root*, and we make the preparations by *trituration;* the tincture may be obtained by means of 20 parts of alcohol.

SERPYLLUM, *Thymus serpyllum;* Fr., Serpolet; Ger., *Quendel, Feldthymian;* Eng., Wild Thyme.—Labiaceæ, Juss. —Didynamia gymnospermia, L.

360. This is very common in France and Germany, along roads and ditches, hills, pasture-grounds, &c.; root ligneous, branchy; stems, some upright, others creeping, downy, reddish, thin, ligneous, square; leaves oblong, glabrous or pubescent, very entire, oval, obtuse, of a deep green above, of a paler green, veined, and spotted beneath. For homœopathic purposes, we use the *entire* plant, reduced to a paste with alcohol, and expressing the juice, &c.

ULMUS CAMPESTRIS; Fr., Orme des champs, Ormeau; Ger., *Gemeine ulme, Rüster;* Eng., Common elm-tree.—Amintaceæ, Juss.—Pentandria digynia, L.

361. This high tree is found in France and Germany, in forests, in villages, towns, along roads, in parks, before castles, &c.; the leaves are oval, thick, rough, unequal base, serrated; flowers lateral, almost sessile, glomerated, appearing in spring before the leaves; fruit thin, membranous. For homœopathic use we take the inner bark of *two years old branches,* and prepare it after the usual way.

VERBENA OFFICINALIS; Fr., Verveine commune; Ger., *Eisenkraut;* Eng., Common vervain.—Verbenaceæ, Juss.—Decandria monogynia, L.

362. Root deep, fusiform, hairy, ligneous; stem upright, quadrangular, furrowed, branchy, 3 to 6 decimetres high; leaves opposite, sessile, wrinkled, pinnatifid, incised, crested;

flowers sessile, alternate, of a whitish-red, tubular, in long terminal spikes, filiform, panicled. The whole plant is inodorous, and of a feebly astringent taste.

VINCETOXICUM, *Asclepias vincetoxicum;* Fr., Dompte-venin; Ger., *Gift-wurzel, Gemeine schwalbenwurzel, Gemeiner Hundswürger;* Eng., Tame poison swallow-wort.—Apocineæ, Juss.—Pentandria digynia, L.

363. This is found all over Europe; root size of finger, branchy, whitish without, white or yellow within, of a strong odour and disagreeable, bitter, acrid taste. We prepare the root recently dug up the same as all other fresh plants.

CHAPTER IV.

OF THE PREPARATION OF ANIMAL SUBSTANCES.

1. *Animal substances generally used.*

AMBRA GRISEA SEU AMBROSIACA, *Ambra vera* seu *maritima;* Fr., Ambre gris; Ger., *Graue ambra;* Eng., Ambergris. Usual doses, 6, 30.

364. This substance, which Cartheusen and Neumann looked upon as bitumen, and Bergmann as a gum-resin, was a long time considered by others as a sort of camphor, a submarine fungus, an altered mixture of wax and honey, an excremental product of the crocodile or of certain birds, &c. At present, almost all the savans agree that it is the product of the intestines of certain whales, and consider it a biliary concretion. This product is gathered floating on the waves or cast on the coasts of India, Africa, and even of

France. The most esteemed is that from Sumatra and Madagascar. Ambergris, such as it comes to us, is usually in balls more or less large, opaque, rough to the touch, formed of concentric layers, friable, lighter than water, spongy, of a greyish-brown without, traversed within by black or yellowish-red veins, and full of whitish specks, strongly odorous; often it comes in shapeless masses, very large, in which are found the jaw bones of the *sepia octop.* and of the *sepia moscata* L., and which are frequently covered with a black crust of a bituminous odour; the taste of it is flat; when rubbed or heated, it emits a strong, agreeable, persistent odour; its consistence is that of wax; it softens under the fingers, is fusible and almost completely volatile in the fire; when approached by a candle, it promptly inflames, and burns with a vivid light. The more alcohol is diluted, the less amber enters in solution; ether dissolves it completely, and if this solution be treated with alcohol, a white precipitate takes place, resembling wax, which is *ambrine.* The amber called *black* is an artificial production, which merits no confidence, though it is said to be found at the isles of Nicobar; the name of *black amber* is also frequently given to jet or ladanum. The *yellow amber*, as well as *ambra citrina* and *ambra gialla* of the Italians, are different names of *succinum.* The *white amber* is but a variety of ambergris, taking care that this name be not sometimes given to *spermaceti* or even *succinum.* The *true amber*, therefore, is the *ambergris.* The clearness of this product often causes it to be adulterated, either with meal or with the excrements of certain birds, or else it is artificially fabricated with benzoin, storax and ladanum; but in all these cases there is not the same fusibility and volatility as when pure. Those who would make new experiments on the pathogenesy of this substance, may prepare it in solution in ether; but such as wish to base their practice on the experiments of Hahnemann, must in every case make the *three* first attenuations by *trituration*, the fourth by equal parts of alcohol and water, and the rest with alcohol.

CANTHARIS, *Cantharis vesicatoria, Meloë vesicatorius, Lytta vesicatoria;* Fr., Cantharide, Cantharide des boutiques; Ger., *Kantharide, Spanische fliege;* Eng., Cantharides, Spanish Fly. Usual dose, 30.

365. This fly of the middle and south of Europe, appears in the months of May and June, especially on the white poplar, privet, ash, elder and lilac, &c. It is a coleopterous insect, 12 to 16 millemetres long, of a golden yellow-green; head inclined, almost cordiform; antennæ filiform, of twelve joints, black; antennulæ equally filiform, the posterior swollen at the extremity; eyes large, of a deep brown; mouth with an upper lip and two bifid jaws; body elongated, almost round and cylindric; two wings; elytræ soft, demicylindric, marked with longitudinal streaks; head and feet full of whitish hairs; the odour is sweetish, nauseous; taste very acrid, almost caustic; the larvæ of these insects have the body of a yellowish-white, formed of three rings, six short feet, rounded head, two short filiform antennæ, two jaws and four feelers. They live in the ground, are nourished on roots, there undergo their metamorphosis, and do not come out till they are perfect insects. The best preparation for homœopathic purposes, consists in powdering the *large female flies* and making the *three* first attenuations by *trituration;* the mother tincture may be prepared by means of 20 parts of alcohol, in which we may digest eight days the powder of cantharides. Before powdering these insects we must assure ourselves that they are neither worm-eaten nor pulverulent, but fresh, very dry, whole and smooth; the small ones are not near so good as the larger.

CASTOREUM; Fr., Castoreum; Ger., *Bibergeil;* Eng., Castor. Usual dose, 30.

366. The castor *(castor fiber)* lives in the north of Asia and America, as well as in several countries of Europe, such as Poland, Russia, &c. It is very rare at present in Germany and France. The castor is the secreted product of the preputial glands of the animal, placed longitudinally under the skin of the abdomen, of both male and female, between the root of the tail and the posterior parts of the thighs, behind the basin. It is a soft substance, of syrupy consistence, of a dirty yellow, of a strong odour which sometimes seems agreeable enough to certain hysterical women, of an acrid, biting taste; it easily mingles with the saliva and adheres to the teeth. In its natural state the castor is constantly found traversed by membranous partitions; in the dry state it is brown and easily friable; the pouches which contain it are

two, one above the other; the uppermost is the smallest; they are united by a common excretory duct, and both adhere to the kind of pouch in which they are placed, and which is common to the genital parts and the anus of the animal. It is these two pouches still united by their excretory duct, that we find in commerce under the name of *castor,* though, rigorously speaking, this name is only due to the resinous substance which they contain. We distinguish in commerce two kinds. 1st. *Siberian castor,* the most used of all. 2nd. *English* or *Canadian castor,* less esteemed; *Siberian castor,* generally dried in the smoke, after putting it in pigs' bladders, comes to us in little bags, heavy, round below, pointed at the top, almost conical, gibbous, of a deep brown, surrounded on the outside with a kind of membranous envelope, traversed within by more dense membranes, between the layers of which the castor, properly so called, is found; the odour of this kind is strong enough, slightly bitter, biting, aromatic. The *English* or *Canadian castor* comes to us in small pyriform or elliptical bags, membranous and very black; it is drier, stiffer, more friable and of a clearer colour than the *Siberian;* its odour and taste are less pronounced and less disagreeable, sometimes even with the odour of ammoniac; castor is one of those substances which the industry of these days adulterates the most frequently; we often find sand, lead, or other metallic matters, so as to augment the weight; in other cases we have galbanum, gum ammoniac and even wax. In England, they even manufacture it out and out, which consists frequently of a mixture of dried blood, gum and honey, put into bile bladders of the sheep or calf, but which is always of a finer appearance than the true castor. These adulterations and imitations are easily detected, inasmuch as this kind of castor is of a more feeble odour, without partitions in the interior, of a resinous hue, strong and entirely soluble in alcohol. The good and true castor should be dry, of a very evident odour, and enclosed in bags which have never been opened. Heat, humidity and the air easily alters this substance, so that we must preserve it with care. For homœopathic use, we prepare the castor, in mingling one part of this substance with ten of alcohol, digesting it 8 days, taking care to shake it occasionally. At the end of this time, we decant the clear liquid and preserve it under the name of *mother tincture of castor.*

COCCIONELLA SEU COCCINELLA SEPTEMPUNCTATA, *Chrysomela septempunctata*, L.; Fr., Coccinelle, Bête à dieu; Bête du bon dieu; Ger., *Sonnenkäfer*, *Johanniskäfer*, *Frauenkäfer*, *Himmelskuh*, *Sommerkalbchen*; Eng., Lady-bird, Lady-cow. Usual doses, 0, 3, 30.

367. This hemispherical scarabæus lives in the hedges, on wheat, in the meadows, and on umbelliferous plants. It is a small coleopterous insect of the size of a pea, black body, elytræ red, and marked with seven black points; the head is small and in a hollow; antennæ short, in solid mass, composed of 12 joints; mouth composed of two lips, the superior of which is round and coriaceous, the lower one advanced, with two short mandibles, horny, and with four feelers; hemispherical body, flat beneath; corslet and elytræ bordered, three joints in the tarsus, the two first heart-shaped and full of lumps; the larvæ of these insects have six feet, the body elongated, and divided in 12 rings, sometimes spiny. They live on trees and plants of all kinds, where, like the perfect insect, they are nourished with very small insects. During life, this insect contains a juice, acrid, volatile, of the odour of opium, which is lost when dried, so that it is important to crush them while still living, after which we pour on them 20 parts of alcohol, and decant the liquid at the end of 8 days.

CONCHÆ, TESTÆ OSTREÆ; Fr., Coquilles, Coquilles d'huitres; Ger., *Austerschaalen*; Ger., Oyster-shell. Usual dose, 30.

368. The common oyster *(Ostrea edulis)* is a shell, bivalve, almost round, imbricated by layers, having one of its valves flattened and entire; hinge without teeth, with an oblong hollow, furrowed crosswise, giving an attachment to a ligament; a single muscular impression in each valve; acephalous having neither tube nor muscular foot; borders of the mantle fringed. Oysters exist in all the seas of Europe, as well as in those of Africa, and America, and Asia, and in gulf, &c., where they are fixed to rocks, roots, &c., or quite free. The shells are composed of a calcareous substance. According to Roger, they contain in 100 parts 95.18 of carbonate of lime, 1.88 of phosphate of lime, 0.40 of silex, 0.45 of animal matter. When calcined, they are changed almost entirely into carbonate of lime or quick lime, according to

the degree of heat. In homœopathy we do not use the whole shell, but only the white part enclosed between the lamellæ. The medicine which is formed from this is called *Calcarea carbonica.* (See No. 109.)

CORALLIUM RUBRUM, *Isis nobilis;* Fr., Corail rouge; Ger., *Rothe koralle;* Eng., Red coral. Usual dose, 30.

369. Red coral (Corallia rubra) is the calcareous covering of certain polypes which inhabit the Mediterranean, especially on the coast of Africa and in the Greek Archipelago, where they stick fast, by a broad foot, to the submarine rocks. The form and the structure of this polypus is such that it resembles a bush deprived of its leaves, or else it forms, by the agglomeration of a great many individuals, a kind of rock of great extent. The trunk is rounded, or a little compressed, of the thickness of 3 centimetres at its base, furnished irregularly with lateral branches, each one of which terminates in a rounded knot; this knot is the true living part of the polype; it is covered by a soft and marrowy pellicle, and serves as the habitation of a great number of worms, which all belong to the order of Zoophytes, and which are united by a substance common to them all; in taking off this pellicle which covers the knot, we find the stony, cellular axis, consisting of concentric layers, deposited one after the other by these animals; this axis is the officinal part of the coral. Besides the *red* coral, we have the *white* and the *black;* the first comes from the *Madrepora oculata*, L.; the second from the *Gorgona antipathes*, Genel. The black coral resembles the branches of a dead tree, black, and thick as a quill. It consists, says Vogel, of carbonate of lime, coloured by a small quantity of oxide of iron, mingled with gelatinous matter. For homœopathic use we take the small pieces, which are striated without, branchy, and often covered with a white calcareous substance. The *three* first attenuations are made by *trituration.*

DIADEMA, *Aranea diadema, Epeira diadema;* Fr., Araignée porte-croix, Araignée diademe, Araignée à croix papule; Ger., *Kreuzspinne;* Eng., Diadem spider. Usual dose, 30.

370. This spider is found all over Europe; it is distinguished by its ovoid body, often as large as a small nut, and

a longitudinal line on the back, composed of yellow and white points, and traversed by three other similar lines. In order to prepare this spider for homœopathic use, Dr. Gross recommends a puncture to be made in the belly of the living insect, and to collect on 100 grains of sugar of milk the serosity that flows out, and to make the *three* first attenuations by *trituration.* According to Dr. Hering, however, the preferable way is to macerate the whole insect in alcohol, and at the end of some months to make the attenuations with alcohol.

LACHESIS, *Trigonocephalus lachesis;* Fr., Trigonocephale à losanges, (venin dentaire du;) Ger., *Lachesis schlangengift;* Eng., Lance-headed viper.

371. Snake poison is procured from the poison-bags which are found in the upper jaw of these reptiles. In the Homœopathic Archives, published by Dr. Stapf, as also in the Bibliotheque de Geneve, we find the account made by Dr. Hering of the means which he employed in America to obtain from a living trigonocephalus a drop of its poison; this consisted in pressing with the finger the poison-bag, and collecting a drop of the poison from the extremity of the tooth on sugar of milk, and preparing the *three* first attenuations by *trituration.* Thus far we only use the poisons of the lachesis and of crotalus horridus, the last of which is obtained and prepared in the same way as the other. The lachesis or trigonocephalus inhabits the hot countries of South America; it attains a length of near two metres, and its poison-fangs have nearly two centimetres in length; the skin is a reddish brown, marked along the back with large rhomboidal spots of a blackish-brown, each of which encloses two spots of the colour of the body. The poison looks like saliva, only it is less viscous, but limpid, inodorous, and without any marked taste, the colour being somewhat greenish; at the extremity of the fang, it easily forms into drops, and falls without threading; but on the tongue it produces a slight sensation of astriction; exposed to the air, it soon concretes into a dry yellow mass, which, for a long time, preserves its poisonous qualities. As to the *crotalus horridus,* or rattle-snake, it is a reptile that inhabits chiefly South America, but which is also found in the United States, and which also arrives at a length of two metres. It is distinguished, as all the genus crotalus,

by its fetid odour, to which is attributed a stupefying power, and by the rattling noise which they make when they shake the horny appendage with which their tails are furnished. In general, they are the most dangerous of all serpents, and the crotalus horridus the most dangerous of all; its back is full of black spots, speckled with yellow; the extremity of the tail is black; the teeth are bent backwards; the poison is of a greenish hue. The poison of all these serpents has this in particular, that it may be swallowed without inconvenience, whilst, introduced into a wound, or injected in a vein, it produces the most dreadful accidents, and generally death.

MEPHITIS PUTORIUS, *Viverra putorius;* Fr., Putois mofette, Putois ou mofette d'Amerique, Conepate; Ger., *Nord Amerikanisches stinkthier;* Eng., Skunk, Polecat. Usual dose, 30.

372. The polecat is a quadruped of the family of martins, inhabiting the United States; it is of the size of a martin, round head, snout elongated, three-rowed moustachios on the upper jaw, nose dry, neck a little marked. Its coat is black, but it has a white streak along the back from the head to the tail, and two others on each side parallel to the first; the posterior part of its body is larger than that of the martin; its tail is as if cropped, and furnished with long hairs, and nearly all white; the under part of the body is whitish; feet elongated before and fortified with 5 vigorous nails; near to the anus, there is, as in all the genus viverra, a pouch where follicular glands deposit an unctuous matter of such an infectious and insupportable odour that at the approach of the animal, at the moment when he squirts his liquor, the respiration is stifled and asphyxia seems near at hand. This liquor is nearly puriform, of a deep yellow colour and of an alliaceous smell. We prepare the liquor, in making the *three* first attenuations, by *trituration.*

MOSCHUS, *Moschus moschiferus;* Fr., Musc; Ger., *Moschus, Bisam;* Eng., Musk. Usual dose, 30.

373. The odorous substance, known as musk, comes from a mammiferous ruminating animal of the deer kind, and inhabits the high mountains of the East. The part which contains the musk, consists of a hairy bag, 6 to 12 centi-

metres long, placed under the belly of the male, near the sexual parts, behind the navel; this membranous bag, thin and dry, contains a fat and black humour, of a slightly bitterish taste, of a peculiar, strong, penetrating odour, and which is the true musk; these bags of musk come to us in leaden boxes, or in cases of wood, lined with lead. We have 3 kinds. 1st. *Tonquin* or *eastern* musk (the Thibet musk of the Germans) coming from the kingdom of Tonquin or Thibet and brought by the English; it is the best, and is in bags of the size of a pigeon's egg, more or less rounded, covered with reddish hairs, never worm-eaten, moderately filled and containing 15 to 20 grammes of musk; it looks like coagulated blood, and consists of small lumps of a deep brown, soft and unctuous to the touch, slightly moist, and often mingled with hairs and membranous shreds. 2nd. The second sort is the *Siberian* or *Kabardin musk*, coming only from Siberia; it is in elongated bags, pointed at one end, sometimes worm-eaten, covered with a thick skin, long hairs, whitish, silvery, traversed by membranes, and of a weak odour, very disagreeable, having some analogy with that of the sweat of the horse. 3rd. The third sort is Bengal musk, probably a variety of the second; it is in rounded bags, never worm-eaten, with reddish hairs; its odour is weak and resembles considerably Kabardin musk. We frequently find it adulterated with sand, lead, iron and other heavy substances; some bags are opened and other matters introduced and even altogether filled with artificial musk; this may be discovered by the section of the bags and their closure by stitching and present places deprived of hair. The true and veritable musk, when rubbed on paper with water, should not present to the touch sandy points, and should have a colour of a yellowish tinge. Musk out of the bag is almost always adulterated, and is not proper for medicinal use. For homœopathic purposes, we take the Tonquin musk, of which we make the *three* first attenuations by *trituration*. Should we wish the tincture of this substance, we take 20 parts of alcohol and make it like that of all other dry substances.

Oleum animale æthereum, *Oleum Dippelii*, *Oleum animale Dippelii*, *Oleum pyro-animale depuratum*, *Oleum cornu rectificatum*, *Oleum cornu cervi rectificatum;* Fr., Huile animale ætherée, Huile de Dippel; Ger., *Ætherisches* *thieröl, Thieröl æther, Hirschhorn-geist;* Eng., Ætherial animal oil, Dippel's animal oil. Usual dose, 30.

374. We obtain this oil in distilling dry stag's horn bone, ivory or any other animal matter, even hair, silk, wool, &c.; and in separating afterwards the fetid oil, which has passed into the recipient, from the alkaline products with which it will be found mixed. The oil, which first passes, is liquid, yellowish and less fetid than the succeeding, and which becomes thicker and thicker, brown and afterwards quite black; the oil, thus obtained, is heavier than water, of a black-brown, thick, of an excessively fetid odour, and of a disagreeable, acrid, almost alkaline taste; that is what is called *empyreumatic* animal oil, in order to distinguish it from *etherial* or *rectified* animal oil, which is obtained from the rectification of the first and bears the name of *Dippel's Animal Oil,* &c. The rectification is obtained by a second distillation; to effect this, we put in the oil with four times its volume of water, in a new receiver, and carry on the distillation till we obtain a perfectly colourless oil. In this state Dippel's animal oil is limpid, very liquid, of a specific gravity of 0.75, inflammable, of a disagreeable, penetrating odour, and a taste, at first acrid, then bitter and fresh. It is very volatile and usually white; but exposed to the light, it becomes yellow, then brownish, at last of a blackish-brown, and at the same time, more thick; it is miscible with alcohol and ether in every proportion; in water, in a small quantity. To be assured that this oil is not adulterated, it suffices to let fall a drop on white paper and then exposed to the air; if the oil is pure, not a spot remains. To test the presence of any vegetable essential oil, as turpentine, &c., we mix it with double its volume of alcohol, shaking well, and then throw it on a filter imbibed with spirits of wine; the animal oil remains on the filter, whilst the alcohol passes through, carrying with it the vegetable oil. Finally, to preserve this oil from the influence of the air and light, which changes the colour and consistence, it is necessary to keep it in black bottles, stopt with ground glass stoppers and covered with prepared bladder, tied tight. The *three* first attenuations are made by trituration.

Oleum jecoris morrhuæ seu aselli; Fr., Huile de foie de poisson, Huile de morue; Ger., *Leberthran, Stockfisch-Leberthran;* Eng., Cod liver-oil.

375. Cod liver-oil is a greasy, liquid substance, extracted from the liver of several kinds of *gadus,* such as the *gadus morrhua, carbonasius et molua,* L., obtained chiefly on the coasts of France, England, and Norway, by exposing the livers of the fish to the sun, or else by putrefaction. Hence, in commerce, we find two kinds, the *first* obtained by exposure to the sun, called *white,* is thick, of a fine golden-yellow, of a sweet odour, of a sweet, oily taste, and of the specific gravity of 0.921. This kind comes from Norway. The *second* sort, obtained by putrefaction and decoction, called *brown,* is more turbid, of a deep brown, of a disagreeable, nauseous odour, and of an acrid, slightly bitter taste. It dissolves in ether, as also in absolute alcohol; shaken with distilled water, it colours it yellow; exposed to the air, it becomes dry. For homœopathic purposes we must use the *white cod liver-oil.* We make the *three* first attenuations by *trituration,* which is preferable to the tincture.

Oniscus asellus, *Millepeda;* Fr., Cloporte ordinaire, Porcellion, Millepied; Ger., *Kellerassel, Kellerwurm, Tausendbein;* Eng., Common wood-louse.

376. This is a small animal of the genus crustaceæ, common enough in cellars; its length 13 to 22 millemetres; antennæ 4, of which 2 are short, and almost entirely concealed, the others cetaceous, bent, having 5 or 6 joints; it has several pairs of jaws, no salient feelers; body oval, covered with many crustaceous pieces, transverse, sub-imbricated, and provided at the extremity with two short and very simple appendages. The colour is grey, more or less deep, verging on the blue or brown, with yellowish streaks or spots; it is found in cellars, under stones, in humid places, and seems to shun the light; when touched, it rolls up in a heap; the taste is sweetish, nauseous; the odour disagreeable, ammoniacal; it contains nitrate of potash. In homœopathy we prepare the *three* first attenuations by *trituration;* the tincture by 20 parts of alcohol.

Sepia officinalis, *Sepiæ succus;* Fr., Seiche ordinaire, Encre de seiche; Ger., *Tintenfisch, Sepiensaft;* Eng., Inky juice of the cuttle-fish. Usual dose, 30.

377. The part of this mollusc which we use in homœopathy, is not, as pretend some authors of the old school, the internal shell, known under the name of OSSA SEPIÆ, but the excretory liquor contained in the abdomen of this animal, and known under the name of *cuttle-fish ink*, or *drawing sepia.* This liquor, enclosed in a bag peculiar to these animals, is a juice blackish-brown, which serves them to darken the water when they wish to catch their prey, or escape from their pursuers. The animal is a cephalopodous mollusc, deprived of external shell, 3 to 6 decimetres long, of a brown colour, verging on the red, and spotted black; its body is united, elliptical, rounded, fleshy, and contained in a sac winged its whole length, enclosing near the back a moveable bone, oval-oblong, somewhat convex, cretaceous, and spongy; head separated from the body by a neck, salient, round, provided with salient eyes, of a lively red; mouth terminal, elongated jaws, surrounded by 10 arms, pedunculated, very large, and furnished with suckers. The ink-bag is found separate from the liver, and deeper in the cavity of the belly; its external duct ends in a kind of funnel, and opens near that part of the neck where is also situated the anus of the animal. It comes to us from the Mediterranean, and in its pure state is found still enclosed in the bag, and in which it has been dried. An *artificial sepia* is sold to drawers, which we must be careful to distinguish; it contains gum and other substances. We make the *three* first attenuations by *trituration.*

SPONGIA MARINA TOSTA; Fr., Eponge maritime torrifiée; Ger., *Gebrannter meerschwamm;* Eng., Burnt sponge. Usual doses, 2, 3, 30.

378. The animal substance sufficiently known under the name of sponge (spongia officinalis), is, according to many naturalists, the skeleton of a polymorphous polypus, whilst others look upon it as an entirely vegetable substance and which only is the habitation of certain polypi. However that may be, we have never known the animal which inhabits the sponge, or of which it is the pretended skeleton, so that those who rank the sponge with animals, are obliged to construct the body out of a kind of jelly which dries with-

out leaving a trace; it is found in the Red sea, as also in the Mediterranean, clinging to rocks; they are informal masses, more or less large, light, porous, tenacious, elastic, sometimes branchy, composed of thin fibres, anastomosing with each other; generally brownish or yellowish, rounded, flat below, convex above, soft, and covered with a gelatinous mucus. Another kind, from America, is finer, of a yellowish white, soft, more porous than the preceding, concave mass, scooped out. The most esteemed are called *male sponges*, and come by way of Venice; they are finer and younger; the *fine toilet sponges*, have been submitted to washings of hot and cold water, and then water acidulated with weak muriatic and sulphuric acids, and then perfumed in various ways; they must never be used in homœopathy. We must use the ordinary sponge, of common size, such as the druggists sell. To prepare it, we cut it in pieces, put it into a roaster and roast it on burning coals, shaking it constantly until the pieces have acquired a brown colour, and may easily be re-reduced to powder; this powder is of a deep brown, of an empyreumatic odour, of a disagreeable, salt taste; it easily attracts the humidity of the air, and gives, when boiled in water, a yellow decoction, the odour of which bears some resemblance to sulphuric acid. *Burnt sponge*, as often found in the Pharmacies, is void of all energy, whilst the sponge, which has been burnt as above, preserves considerable odour and communicates to alcohol all its medicinal virtue. To obtain the mother tincture, we mingle one part of powdered burnt sponge with 20 parts of alcohol; but it is far preferable to make the *three* first attenuations by *trituration*.

THERIDION CURASSAVICUM; Fr., Araignée noire de Curaçoa; Ger., *Feuerspinnchen;* Eng., Black spider of Curaçoa. Usual dose, 30.

379. This little black spider, known by its terrible poison, is often found at Curaçoa, where the negroes call it *aranya;* its body is of the size of a cherry-stone, chest black, feet black and covered with short and stiff hairs, and distinguished by 3 points of a lively red, placed at the back part of the body, and of which the largest, found above the anus, is about the size of a pin's head. The youngest are of a beautiful black, marked with several white lines, composed of points like drops, from before backward; their feet are demi-

transparent, brownish. The females are marked with similar stripes, but larger and disposed in cross form, of a yellow colour; males, females, and young ones have all on their bellies a spot, square, yellow, notched on the edges, and which occupies nearly the whole extent of the belly. We put the whole spider in 20 parts of alcohol, and let it macerate several weeks or even months, when we decant the clear liquor, which we preserve under the name of mother tincture, which serves for future attenuations.

2nd. *Substances, as yet but little used, and for the most part, as yet altogether unknown.*

ALBUMEN, *Album ovi;* Fr., Albumine, Blanc d'œuf; Ger., *Eiweiss;* Eng., Albumen, White of egg.

380. The white of egg is a viscous matter, of a gelatinous appearance, white, demi-transparent, enclosed in the shell of bird's eggs, and enclosing the yolk, surrounded and traversed by a thin, fibrous membrane and furnished with numerous vessels; it is inodorous, of a dull taste, miscible with water, coagulable by heat, alcohol, ether, strong acids and tannin. In 100 parts, the white of eggs contains 80 water; 4.5 non-coagulable matter; 15.5 albumen, and some slight traces of soda, sulphur, sulphate and muriate of soda, phosphate of lime and benzoic acid. When dried, it has a gummy appearance and loses four-fifths of its weight; put into alcohol, it loses almost all its water and coagulates, yielding also to alcohol the mucus and the soda which it contains. In its ordinary state, and when dried, it is perfectly soluble in water; but coagulated by heat, it is no longer soluble, without, nevertheless, its essential part, albumen, having undergone the least alteration of composition. This essential part of the white of the egg, albumen, is found, not only in eggs, but likewise in a great many juices, and natural animal matters, such as blood, muscles, cartilage, synovia, &c., as well as in several morbid fluids, in the urine of some patients, in the serosity of dropsy, blisters, &c. An analogous principle indeed is found in the vegetable kingdom, where it contributes to the juice of many plants; pure albumen is composed of hydrogen, oxygen, carbon and nitrogen. For homœopathic purposes, we use the white of the egg, such as found in

chicken's egg *(ova gallinacea)*. We make the *three* first attenuations by *trituration*.

BARBUS, *Ciprinus barbus*; Fr., Barbeau; Ger., *Barbe;* Eng., Barbel.

381. This fish, of a form resembling the pike, lives in the clear running waters of Asia and the south of Europe; and is frequently caught in those of France. Its characteristics are: four feelers on the upper jaw, which considerably advances beyond the lower; two ranks of 5 teeth in each jaw; body round, elongated, of an olive cast or bluish colour above, whitish beneath; fins reddish, that of the tail forked; they are of all sizes, even to 9 decimetres in length; they live on insects, small fish, and all animal substances which they can procure; the body is commonly covered with a viscous mucus; its flesh is white, tender, and of a taste so much the more agreeable as the fish is older, but of a difficult digestion to weak stomachs; the eggs are considered poisonous, and contain a substance that is acrid and bitter. For the purposes of homœopathy we take the *fresh eggs* of a large adult barbel, and prepare them in making the *three* first attenuations by *trituration*.

CANCER FLUVIATILIS, *Cancer astacus*, *Astacus fluviatilis;* Fr., Ecrevisse commune; Ger., *Flusskrebs;* Eng., River-crab.

382. The common crab is a decapodous crustacea with a long tail, and which inhabits, in Europe, the borders of streams, of small rivers, and even of lakes and ponds, where it keeps in holes and under stones. Its characters are, four unequal antennæ, the anterior shorter, little-jointed, divided in two, but not to the root; body cylindrically oblong; the fore part terminated by a short point, jutting out between the eyes; tail broad, large, covered with transverse scales, and furnished with swimming scales, lateral and terminal, turning in under themselves; ten claws, the two anterior of which are terminated in strong and dentated pinchers. These animals have another peculiarity, that any member, when destroyed or mutilated, is easily regenerated; every year they change their calcareous coat, and at that time are found in their stomach two hard, calcareous bodies, called crab's-eyes, *(oculi cancrorum,)* and which are intended to furnish the proper ma-

terial towards the reproduction of the new coat. The female carries under her reverted tail, first her eggs, then her young, until they attain a certain size. We mash them, alive, in a mortar, to a fine paste, pour on it the double of its volume of alcohol, express the juice, and preserve the liquor to make the attenuations.

Cancrorum oculi, *Lapides cancrorum;* Fr., Yeux d'ecrevisse; Ger., *Krebsaugen;* Eng., Crab's-eyes.

383. The commonly called crab's-eyes are, as we have just mentioned, natural calcareous concretions, which, at the time of changing its coat, are found in the stomach of this animal, and which, soft at first, soon become hardened. They are circular bodies, convex on one side, flat on the other, concave towards the centre, smooth, hard, rose-coloured or white, formed by layers, inodorous, and of an earthy taste. In 100 parts there is, according to Dulk, 63.16 carbonate of lime; 17.30 phosphate of lime; 11.43 animal matter, soluble in water, with some traces of sodium and chlorure of sodium; 4.33 of animal matter insoluble in water; 1.33 of phosphate of magnesia; 1.41 of soda. We obtain them from Astrakan, Moldavia, Poland. *Artificial* crab's-eyes are composed of chalk, glue, ichthyocolla, and may be distinguished from the natural, inasmuch as they are not formed by layers; dissolved in nitric acid they leave no membranous, gelatinous residue; adhere strongly to the tongue; and placed in hot water, they fall to powder. For homœopathic purposes we prepare the *natural crab's-eyes*, by making the *three* first attenuations by *trituration.*

Formica, *Formica rufa;* Fr., Fourmi, Fourmi rouge; Ger., *Ameise, Roth or Waldameise;* Eng., Ant, Red ant.

384. The ants are hymenopterous insects of the family of heterogynes, having for characters, antennæ of 12 joints, filiform, broken, the first joint very long; antennulæ of unequal size, the anterior very long; mandibles strong; tongue truncated, concave, short; abdomen big, oval, and attached to the corslet by a pedicle, which bears a small scale or vertical knot; head black; chest flattened; there are males, females, and neuters, the two first of which are winged, and in small numbers, whilst the workers, or neuters, which are not wing-

ed, compose nearly the whole community; the females and the neuters have, moreover, at the extremity of their abdomen, two glands, by means of which they secrete a peculiar liquor, which is acid, and which, on a fine delicate skin, will create itching and eruptions. This is what, in chemistry, is called *formic acid.* The red ant lives in very numerous society; it is the one which, in our pine forests, constructs those ant-hills having a dome formed out of small straws, dead leaves, and seeds. The male and female ants, when fully developed, leave the hills, fly in the air, and there couple; the males immediately die, the females return to the hills, where, however, but few are received. Those which are admitted lay eggs, of which the neuters take care. For homœopathic purposes we gather the ants by placing a stick covered with honey near the hill, or else in pushing in a bottle with a narrow neck, and honey at the bottom; when this bottle is full enough of the ants, we take it out, pour them into a new bottle, pour on them 3 parts of alcohol, and then, at the end of 6 or 8 days, we decant the liquid, and preserve it under the name of *spirit of ants*, (formicarum spiritus;) from this we make the further attenuations.

LACERTA AGILIS; Fr., Lezard gris; Ger., *Graue eidechse;* Eng., Grey lizard.

385. The grey lizard is a saurian reptile, of the lizard family, having for characters—five unequal and free toes; tongue retracted and bifurcated; transverse scales under the belly; tail long, formed by joints, which separate almost without effort. The *Lacerta agilis* of Linnæus comprises three varieties, which only differ by their colour. 1st. The *green lizard* (*Lacerta ocellata*, Daud.), the largest of all, and which inhabits southern Europe, Africa, Sweden, Kamtschatka, but which in France is seen in the hedges and woods, though only in the excessive heats; all the upper part of its body is green and bluish, marked with little black and white points; yellowish beneath; sometimes as long as 5 decimetres; it defends itself against dogs, snakes and other reptiles, and bites with tenacity, so that often, to make it let go its hold it is necessary to kill it; it seems to be friendly to man, and pleased at his presence; it is said to be edible in Africa. 2nd. The *stump lizard* (Lacerta stirpium, Daud.), common enough in the woods of France and Germany, dis-

tinguishable by its body being bluish or whitish beneath; less than the preceding kind. 3rd. The *grey lizard of walls* (Lacerta *agilis*, Daud.) has the body ash-coloured, spotted black, marked with lines and 12 to 18 centimetres long; it is found every where, on the walls of gardens and houses, and among rubbish, &c.; it is almost a domestic animal, delivering us from an infinity of troublesome insects. For homœopathic purposes, we make use of the 3rd or last kind, the *grey lizard of walls*, which we prepare in the same way as we have mentioned in the crabs, (No. 382.)

MELOE MAJALIS ET PROSCARABÆUS; Fr., Ver de maiet proscarabée; Ger., *Rother und schwarzblauer maiwurm;* Eng., Oil-beetle.

386. These two insects belong to the genus meloe, and have for characters—antennæ moniliform, irregular in the male; four unequal antennulæ; jaws bifid; corselet rounded; elytræ soft, short, internal border arched; no wings; five joints in the tarsus of the two first pair of feet and four in the last; head large, flattened anteriorly, almost perpendicular. The *meloe majalis* or *May-worm* is the smaller of the two; its body is bronze-black or coppery-red. The *proscarabæus* is about 2 centimetres long, of a pointed shining black, with the sides of the head, the corselet, the antennæ and the feet verging on the green. The two kinds have a disagreeable odour, and emit, when seized, an acrid, yellowish humour, staining the fingers, and smelling something like the violet, of a sweetish taste at first, then very acrid and caustic, and causing itching and eruptions on the skin. These insects are found all over Europe in the spring, on the grass, low plants, where they eat the leaves, especially those of the ranunculaceæ and melancthaceæ. They deposit their eggs in the ground, where they are hatched in the course of a month; the larvæ are of an ochre-yellow, provided with six feet and two antennæ, terminated by a hair. For the purposes of homœopathy, we use both of these insects, and make our preparation of each one in the same way as mentioned for crabs, (No. 382.)

MELOLONTHA VULGARIS, *Scarabœus vulgaris;* Fr., Hanneton vulgaire; Ger., *Gemeiner maikäfer;* Eng., Cock-chaffer.

387. This coleopterous insect, well known in our woods and gardens, has the following characters—antennæ in mass, composed of several joints of unequal size, terminated by 3 or 7 edges; an upper lip not projecting beyond the helmet; eyes round, somewhat salient; mandibles horny; jaws strong, horny, armed with three teeth; body oblong, gibbous; helmet rounded, notched; elytræ somewhat shorter than the abdomen; feet not long; tarsus of 5 joints, ended by two pretty strong nails; *elytræ, feet and corselet testaceous; abdomen black, spotted white; anus prolonged and reverted.* The larvæ live under ground, and remain, it is said, in this state two years. They devour roots of all plants and injure them very much. The perfect is not less devastating, but its life is very short; as soon as it emerges from the ground, it couples and dies soon after; the female survives a few days, re-enters the ground, lays her eggs and dies. For homœopathic use, we prepare them the same way as crabs, (No. 382).

OVI MEMBRANA; Fr., Membrane d'œuf; Ger., *Eihäutchen;* Eng., Egg membrane.

388. The white membrane (chorion) found between the shell and the white of the egg, is dried and prepared by trituration to the third attenuation; other homœopaths advise to macerate it, together with the shell, in alcohol. We may also use this membrane to protect excoriations and ulcerations from the contact of the air; to effect this, the part next the white of the egg must be applied to the skin, and when dried, will adhere without a bandage.

RANA BUFO; Fr., Crapaud commun; Ger., *Gemeine krote;* Eng., Common toad.

389. This disgusting animal, of a brown-grey, livid, deformed and repulsive, is very common everywhere, above all in dark, humid, retired places. It has a hideous figure, big head, salient and fiery eyes; jaws teethless, but strong; 4 feet, the fore ones terminated by four separate toes, the hinder ones by six, connected together by a thin membrane; skin covered by a slippery covering, difficult to pierce, full of disgusting tubercles, which sweat out a milky juice; no tail. They are dirty and repulsive animals; when irritated, they squirt out of their anus a peculiar fetid humour, which many

naturalists have pronounced poisonous: what is certain, is, that the yellowish and oily humour which sweats out of its tubercles, is acrid, very bitter, and even caustic. Toads are oviparous, and lay, like the frogs, a mass of eggs, strung one after the other; should the laying be laborious, the male gives his assistance as accoucheur; these eggs soon arrive at the state of tadpoles, and remain in this state but a few days; the toad lives a long time, and can exist, without eating, a great many years, buried in the ground, hollow trees, and even stones. The African negroes eat them, and at Paris there is substituted very often a species near allied to this, the *rana bufo Roselii*, of which, in our markets, they sell the thighs; in other countries, again, they eat the tadpole of the brown toad (bufo fuscus) like fish. For the purposes of homœopathy, we prepare the *common toad* after the same manner as crabs. (No. 379.)

CHAPTER V.

NECESSARY INFORMATION ON SOME IMPONDERABLE MATTERS AND ON CERTAIN ACCESSORY SUBSTANCES.

1. *On some Imponderable Matters.*

Electricitas; Fr., Electricité; Ger., *Electricitæt;* Eng., Electricity.

390. This fluid is spread throughout all nature, and can be developed by every thing that produces light and heat—by friction, commotion, change of density, heating, as well as by the contact and the influence which two chemically heterogeneous bodies exercise upon each other. The most simple and most striking phenomena of electricity are attraction and repulsion. The property of conducting this fluid is not enjoyed alike by all bodies; hence we distinguish *conductors*

and *non-conductors.* *Conductors* are those bodies in which we cannot, on an isolated point, excite electricity, without its being communicated to all bodies and all conductors in contact with it, unless this conduction be interrupted by non-conductors. *Non-conductors* are those bodies which do not acquire electricity, except at the point rubbed, without conducting it to other non-conductors, and from which even conductors do not take away electricity, except at the point of contact. To the conductors belong acids, salts, metals, particularly silver, gold, and copper, which form the most powerful conductors; zinc holds a middle station; silver becomes the most heated; iron the least. To the class of non-conductors belong glass, resin, silk, wool, hair, leather, wax, &c. We generally distinguish two kinds of electricity, one called *positive,* or *vitreous,* elicited by friction of glass and vitreous substances; the other called *negative*, or *resinous*, elicited by the friction of resin, sulphur, silk, &c. These two electricities exercise opposite actions, so that two bodies, charged with the same kind of electricity, either *vitreous* or *resinous*, repulse each other, whilst two other bodies, charged with different kinds, the one with the vitreous, and the other with the resinous, mutually attract each other. Generally, it is said, that the positive electricity excites the most the muscular and vascular systems; and that in uniting the influence of both poles, we excite more opposition between the irritability and the sensibility, that is, the polarization of these two spheres of organic life is rendered stronger. The application of electricity may be made in three ways: the first of which, the mildest, is the electric *bath*, (Balneum electricum.) To accomplish this, the subject is placed on an *isolated* stool, and put in communication with the machine, by means of a chain, never for a longer time than ten minutes for homœopathic purposes. The second method of applying electricity is the spark, (scintilla,) which consists in drawing, by means of a conductor, sparks from the isolated subject, or in communicating them to him, should he not be isolated; this method often excites considerably the electrified organs, which does not take place when we use the point, *(aura electrica;)* this is done by fine metallic points; the finer they are, the milder is their action. Another method still, is by electrical *friction;* this consists in passing the ball of an electrical conductor very near the part we wish to act on, previously covered with flannel. The most violent method, which should never be used for homœopathic purposes, is the *shock*, which consists in giving repeated shocks to the patients by means of the Leyden jar. In general, the cases in which homœopathy should have recourse to electricity are very rare. Hahnemann, in the first edition of his *Chronic Diseases*, has counselled us never to use it but as a palliative, and then in the smallest possible doses; but in his second edition, he gives up that idea, and retracts the advice given in the first; in its place, he prefers, as in paralysis, for example, the use, by aspersion, douche, &c., of cold water, at the temperature of 10 degrees and under. See his Chronic diseases.

GALVANISMUS; Fr., Galvanisme; Ger., *Galvanismus;* Eng., Galvanism.

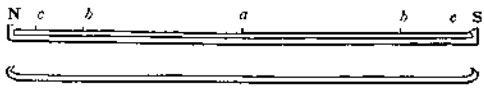
391. Galvanism *(electricitas metallica)* is a modification of electricity, produced by the superposition of different metallic bodies, and of which the phenomena are identical to those of ordinary electricity, and produced by the same fluids as this last. In order that the electrical current may be established in the superposed metallic bodies, it is necessary that each pair of plates be placed in contact with a moist conductor, which, in conducting the electric fluid, becomes itself electric, in proving a chemical decomposition of its parts; the original polarization of metals is reproduced in this way each moment. Such a combination of heterogenous conductors, is called the *voltaic* or *galvanic pile*, and the electricity produced by it constitutes *galvanism*. To procure a pile proper for homœopathic purposes, we have made 20 or 30 plates, each one consisting of copper and zinc alternately, connected together, being 4 to 6 millimetres broad and 0.4 thick. These discs being finished, we begin to build the pile on a small block of wood with glass feet, and supporting in its turn three bars of glass, placed vertically, sufficiently apart to give room to the pile of discs, and high enough to hold all; the first disc laid down should be a simple one of zinc, above which we place a round of cloth moistened with an exciting fluid, generally of sal ammoniac, or common salt; above this cloth we then place the first of the double discs, with copper beneath and the zinc above; above this double disc, we again place a round of moistened cloth, and immediately on this another double disc, in the same way as the first, and so on to the last, and to crown all, on the last

piece of cloth, we place a simple disc of *copper*, and press down the pile by means of a vice. The two simple discs at the extremities of the pile, that is the zinc below and the copper above, should have a small hook of the same metal, or else a little hole, in which to place the conducting wire. The unpleasant feeling caused by galvanism is stronger than that from electricity; on the eye it produces light; on the ear, humming; on the tongue a peculiar taste; on the organ of smell, a kind of ammoniacal odour. Respecting the administration of galvanism, we observe two principal forms. 1st. The *galvanic current*, which takes place when the galvanic chain is continuous and when the diseased part put in connection with the pile, remains thus exposed to the uninterrupted influence of this fluid. 2nd. The interrupted influence or *galvanic shocks*, produced when the chain is from time to time disconnected, thus ceasing the connection between the diseased and the pile, and re-establishing it immediately after. The chain is *continuous*, when the extremities of the conducting chains, the one passing from the copper disc, the other from the zinc one, are put in contact, either immediately, or mediately by an intermediate body. When we administer the galvanic *current*, the diseased part or the whole body becomes the intermediate body between the two ends of the conducting wires. The *zinc* disc is called the *positive* pole, and the *copper* disc the *negative* pole. Finally, we may use galvanism in various ways, of which the *chief* is the *galvanic bath*, which consists in placing the diseased part in a vessel filled with salt water, in which we plunge the conducting wire of one pole, whilst we apply, by means of a fixed casing, the wire of the opposite pole to the part of the diseased member, which is out of the water—or else we place, separately, each hand or each foot, in a vessel filled with salt water, and then plunge into each vessel one of the conducting wires. Another method is the *fixed casings*, consisting of plates or rings of metal, corresponding exactly with the parts on which we wish to apply them—we secure them by ligatures and put each one in connection with one of the poles of the pile; to effect this each plate should have a small hook, on which to fix the conducting wires. We have yet to mention the *galvanic brush* and the *moistened sponge;* the first, effected by a plate full of points and resembling a brush, which is approached to the diseased part; the second, consists in fixing a sponge, moistened with water, on the wire, and touching from time to time the diseased part with it. The above are the various ways of making use of galvanism, *none of which, however, are used in homœopathy, and perhaps never will be,* unless we discover the way of studying its effects, in the same way we have those of the artificial magnet, and thus knowing the cases in which the *moderate* application of this agent might really be of service. Dr. Caspari has made some studies, but what he has yet acquired is too unsatisfactory to enable us to give practical indications. Perhaps, however, in submitting one's self several days in continuance, for 10 or 15 minutes at a time, to a galvanic *current,* and afterwards observing the effects, we might gather a series of symptoms sufficient to found indications upon. In every case, the only way of studying its effects, is that of the *current,* which should be established, in the *simplest* way possible, by taking the ends of the two wires, one by each hand. This also is the only way in which this fluid should be administered homœopathically to the sick, provided we succeed in making a perfectly rational use of it.

MAGNES ARTIFICIALIS, *Magnetismus mineralis;* Fr., Aimant artificiel, Magnetisme mineral; Ger., *Küntstlicher magnet, Mineralischer magnetismus;* Eng., Artificial magnet, Mineral magnetism.

392. Mineral magnetism is the mass of phenomena which is produced by the magnetic condition, either natural or artificial, of certain metals. We call *magnetic condition,* the faculty, which these metals acquire, naturally or artificially, to attract iron, steel, nickel and cobalt, and we give the name of *natural magnet* to mineral iron, which especially is in this condition. What is understood by *artificial* magnet, is any piece of metal which acquires the faculty of attracting iron and has its poles directed towards those of the earth. All bodies, without distinction of their conducting property for electrity and heat, are capable of propagating afar the magnetic polarization; but iron enjoys this peculiarity in a higher degree than any other. Any piece of iron may be rendered as magnetic as a natural magnet, and it is of this metal or rather of steel, that we generally make use to fabricate *artificial magnets.* The best steel for this purpose is the *English;* next the *German.* To make these magnets,

friction is employed, which consists in rubbing with a sufficiently large magnet, a piece of steel, placed in the direction of the axis of the earth, until it has acquired magnetic properties. But if we have not a magnet to render the steel magnetic, we can still bestow that property on it, by fixing transversely bars of steel bent suitably to form horse-shoe magnets, around the electrical conductors which serve for lightning rods on large edifices. The form given to large artificial magnets, which are used to prepare other magnets, is usually that of a horse-shoe, and often many magnets are united so as to form only one. In every magnet, the magnetic virtue shows itself in preference at the two extremities, called the magnetic *poles*. When we suspend a magnetic bar of steel by a thread, we find one of those poles turn towards the North, the other South, thus distinguished into *North* and *South pole*. In approaching two magnets, one to the other, we find the poles of the same name repulse each other, whilst those of different names attract each other; and so it is that when we magnetize a bar of steel by friction, the end that has been rubbed with the North pole, will represent the South pole, and vice versâ. When the magnet remains a long time inactive, it easily loses its power; hence there is generally given to it a casing, which consists in a bar of iron, attached to its two poles, and by which is suspended a weight proportional to the strength of the magnet, thus obliging it to exert constantly its whole attractive property. To prepare small artificial magnets, such as are used in homœopathy, we take a small rod of English steel, about 2 decimetres long, and 4 or 6 centimetres broad and 2 centimetres thick; this rod should be tempered, until it becomes elastic and not frangible like glass. In order afterwards to communicate, the most promptly and the most easily possible, to this rod, the greatest magnetic force it is susceptible of acquiring, we must take especial care not to snatch away violently the pole of the magnet with which we have just rubbed it, because, by such a procedure, we should take away, each time, a great part of the force, which the rod has received. Hence it is proper to cause the magnet to slip gently on a very thin plate of iron, when it has arrived at the end of the rod, so that its passage from the steel to the plate may be easy and almost imperceptible. But it is still necessary that the plate which covers the two ends of the rod be continued under it, in order to keep up constantly the magnetic current between the two poles. We must then take a small band of thin plate, of the same length as the steel rod we wish to magnetize, and a few millemetres longer; we place the steel rod on the plate, and raise the two ends of it, in the form of a hook, above the two extremities of the rod, so that they do not cover it but by about a millimetre; each of these ends being thus turned up and marked, the one with the letter N (north), the other with the letter S (south), we place horizontally the plate of iron, the extremity N turned towards the north, until the magnetic property of the rod is obtained. As to the rod of steel, we mark it exactly in its middle with chalk or ink; each of these halves is then marked in two places, the first of which is placed at two-thirds of each half, in counting from the middle towards the extremity, and the second at two-thirds, in counting from the first towards the extremity, as exhibited below.



The rod thus divided and placed in the plate, as related, we communicate to it the magnetic virtues by means of an artificial horse-shoe magnet, strong enough to attract 5 to 6 kilogrammes. To effect this, we place perpendicularly the *south* pole on the middle of the rod, at the point *a*, and we slide it over all the *north* half to the extremity N, whence we bring it back, in describing a considerable arch in the air, to the point *b* on the same side; there we place it anew perpendicularly, and slide it, as in the first manœuvre, to the extremity N; we bring it back, in a similar manner, by describing an arch in the air to the point *c*, on the same side, whence we slide it the last time to the extremity N. When that is accomplished, we take the steel rod out of its plate, which rests immoveable in the same place, and mark with the letter N the extremity of the half, which we have just rendered magnetic by the *south* pole of the magnet; it has become the *north* pole. Returning now the rod into its plate, so that its extremity N is under the crotchet S, and its other extremity, which has not yet been magnetized, is under the crotchet N of the plate. The magnetization of this extremity is then made equally in the northern direction of the heavens; only this time it is with the *north* pole of the magnet that we operate, and that we place it successively, and always vertically, on the points *a*, *b*, and *c*, in gliding it each time, beyond the crotchet N, and bringing it back each time, by describing an arch in the air; in this way we produce the *south* pole, which we mark S. By this process, indicated by Hahnemann, the rod has acquired as much power as can be communicated to it by six passes. To preserve this power, we surround it with strong thread in screw form, or else we put in a case two magnetic rods of the same form, placed in such a manner that they mutually touch by their opposite poles, and so encased that they cannot move. For a dose, it is sufficient that the patient touch the suitable pole with the end of the finger, one or two minutes, according to circumstances, and for that it is not at all necessary to take the magnet out of its case.

ZOOMAGNETISMUS, *Magnetismus animalis*, *Mesmerismus;* Fr., Zoomagnetisme, Magnetisme animale, Mesmerisme; Ger., *Thierischer magnetismus*, *Mesmerismus;* Eng., Animal magnetism, Mesmerism.

393. Animal magnetism is the aggregate of phenomena produced by the influence of an invisible action of one individual on another, and which consists in placing the nervous system in a condition which, in itself, is not morbid, but on the contrary, exalts the vital forces, and can thus contribute to the cure of diseases. The action of this agent has as yet been principally observed on the human subject, although it is proved that the animals also, and even individuals of the vegetable kingdom experience its effects. The zoo-magnetic influence of one individual upon another is known under the name of *magnetic manipulation*, because it is generally performed by the imposition of hands, or by easy and slow passes, made with the hands, from the head to the body and extremities, in the course of the nerves. Mesmer was the first who called the attention to this agent, which seems to have been known to the ancients; it was lost, however, and revived about 30 years ago, and since has been cultivated at times with much zeal; but so long as superstition was mingled with it, and charlatans took it up, it was abandoned anew, the good with the bad. We generally begin the magnetic manipulations by putting ourselves in communication with the patient, either by the contact of hands, or by the imposition

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of the hands on the vertex, or simply by inspection, or else by slow passes, directed from the vertex to the knees of the patient, in such a way, that the palm of the hand is directed towards the patient in the descending pass, and the back of the hand in the ascending movement which succeeds, and to accomplish this last movement, the operator should remove his hands to a distance from the patient whom he is magnetizing. The manipulations may afterwards undergo many modifications, according whether we make the passes with the thumb only, or with the fingers closed or separated, &c. &c. Animal magnetism, applied in moderation, is made use of in homœopathy, but is never employed to put the patient in the state called *somnambulism,* nor for rendering them clairvoyant, so as to indicate themselves the medicines that should be given them. Those are errors which homœopathy rejects, as they merit; and if here and there homœopaths may be found who use animal magnetism in the sense just mentioned, they do so after their own views and opinions, and not according to the principles of our doctrine, which is equally removed from *somnambulism* and the teachings by the *clairvoyant,* as it is from the therapeutic principles of the old school. The only advantage which homœopathy counsels us to draw from the therapeutic agent which constitutes magnetism, is the faculty which it possesses of strengthening the vital forces, or else to calm the patient, to appease the over excitement of the nervous system, and often thus to arrest the most severe pains, when wisely and suitably administered. (See Hahnemann's Organon, on this article.) The intention to do his patient good should predominate in the mind of the operator, who should himself enjoy the best health possible, so that, instead of appeasing the sufferings of the patient, he may not communicate his own. The hands of the operator should have the natural heat of the body; cold hands act but little, or even not at all. As to the manipulation itself, it should be in a retired place, calm, tranquil, and not exposed to the noise of every comer; he should, moreover, be endowed with a vital force superior to that of the patient; for otherwise, instead of imparting it to him, he will subtract it; hence the reason why young persons are more appropriate than the aged, and debilitated persons should never undertake to magnetize any one. As to sex, a woman can as well magnetize a man, as a man can a woman, provided she has a stronger vital force than the man. The time most favourable is the morning, or after mid-day; the most unfavourable is the evening, because at that part of the day patients are generally more excited and more irritable than during any other part. The imposition of hands and ventilation are the weakest degrees in which mesmerism can be applied; after these comes the application of flannel magnetized, which the patient puts on the pit of the stomach, if to combat wakefulness, or on the suffering part, if to calm pain, &c. Water can also be magnetized, and then drank by the patient; and it can even be sent to a distance, provided it be well secured in a bottle, and wrapped in magnetized cotton. All these, however, can only be accomplished by perfectly healthy physicians; for, otherwise, as above related, we should run the risk of increasing instead of appeasing the pains and ailments of the patient.

2. *On certain accessory substances.*

Note.—The substances, which we have thrown together in this article, are not medicines; they are, on the contrary, substances, of which we only make a dietetic use in homœopathy, or are used externally, as accessories, but of which we should have a knowledge, in order to be able to procure them of as good a quality as possible.

ACETUM VINI, *Acidum acetosum;* Fr., Vinaigre, Vinaigre de vin, Acide acéteux; Ger., *Essig*, *Weinessig;* Eng., Vinegar, Wine vinegar, Acetous acid.

394. Vinegar is used in homœopathy, as well for antidote to several substances, as for the chemical preparation of the acetates. It is an acid liquor, resulting from the secondary fermentation of wine and of a number of other vegetable substances. When we expose, in a vessel, wine or any other alcoholic liquid, to air and heat, this liquid soon becomes troubled and attains a temperature higher than that of the surrounding air, while at the same time its surface becomes covered with a sort of efflorescence, and in the liquid itself there forms a filiform, mucilaginous matter, which gradually subsides to the bottom of the vessel. It then takes on a sourish odour, which becomes stronger and stronger; its temperature lessens a little and it finally ends by the liquid becoming perfectly clear and limpid. This liquid has neither

the odour nor taste of wine or alcohol, but it is acid, agreeable enough to the taste, and produces by distillation, not alcohol, but acetic acid mingled with water. It is this acid which forms the base of all vinegars. We make vinegar principally out of wine, beer, cider, or perry, or even beet roots; but every liquor, which contains the elements of alcoholic fermentation, will equally produce it. We also derive much from the distillation of vegetable substances, and particularly of wood. But the vinegar of wood, if not rectified, can never be made subservient to homœopathic purposes, and may even be dangerous, on account of the empyreumatic oil with which it is in combination in its crude state, and of which even rectification, as it is found in commerce, but rarely deprives it. The best kind is wine vinegar *(acetum vini)*. When good, it has a sweet, acid, and spirituous odour, a more or less sour taste, a colour more or less deep, according to the kind of wine we have obtained it from; it evaporates entirely in the open air, and mingles with water without producing cold, or heat, or effervescence; exposed to the air and a mild degree of heat, it alters in time, depositing a large quantity of viscous flocculi, and taking on a putrid odour and taste. Vinegar is a composition of water, acetic and tartaric acids, alcohol, extractive matter and tartar; it differs in a striking manner from all acids diluted with water, without even excepting acetic acid; the substance which it seems to resemble the most, though in many respects far unlike, is ether; submitted to distillation, vinegar furnishes a mixture of acetic acid and alcohol, which is called *distilled vinegar.* The vinegar of wood does not at all resemble that of wine, and should never be employed in cookery. For homœopathic purposes, whether to prepare the acetates, or to administer it as antidote, we should always make use of wine vinegar, which we must use, according to circumstances, either crude *(acetum vini commune seu crudum)*, or distilled *(acetum vini distillatum)*. To obtain distilled vinegar, we mingle crude vinegar with $\frac{1}{16}$th of its weight of charcoal pulverized, put this mixture into a retort and continue the distillation until the liquid which passes over into the recipient is perfectly clear and inodorous.

ADEPS, *Adeps suilla, Axungia porci;* Fr., Graisse, Graisse de porc, Axonge ou sain-doux; Ger., *Fett, Schweinefett;* Eng., Hog's lard, Axonge.

395. The use which homœopathy makes of the soft fat of animals is very restricted. The majority of homœopaths never make the least use of it in any case, and those who do use it, do so only with the fat of the pig *(axungia porci, adeps suilla)*, united with wax, to preserve denuded surfaces from the contact of the air, or else alone, to put on the hands in cases of delivery of women. Even for these purposes, others prefer olive oil. However that may be, axonge should always be preferred to almond oil, or goose grease, which some physicians are in the habit of employing; above all it should be fresh and good. In all animal fats, but especially in that of the pig, there is developed, when spoiled, a strong poison, which frequently produces by absorption the most lamentable effects. Good axonge, purified and suitably prepared, should be white, solid, clotted, very fusible, and of a feeble but peculiar odour, and of a sweetish, agreeable, fatty taste, neither bitter, nor acrid, nor empyreumatic. We obtain this fat from the pig (sus scrofa, L.) which contains it in masses about the kidneys, epiploon, &c.; when taken from these parts it must be washed from the blood, fibres, &c. which it contains, by fusion and filtration. In 100 parts in the pure state, there are 62 elaine and 38 stearine, proportions, however, which are susceptible of variations. Finally, pork fat, like most other fat, is soluble in ether, but very little in alcohol, and not at all in water; it divides or extinguishes mercury, and dissolves sulphur as well as phosphorus. When strongly heated, in contact with air, it decomposes, emits white and pungent smoke, takes on a colour more or less deep and inflames. Submitted to distillation, it gives a little water, carbonic acid gas, acetic and sebacic acid, much carburetted hydrogen gas, a great quantity of fat matter becomes more soft and fluid, and at last a very little spongy charcoal, easily incinerated. In treating it with an alkali or a metallic oxyde, we obtain, besides the sebacic acid which distillation produces, yet two others, one of which is margaric acid, the other oleic acid, and both of which are equally found in all kinds of fat. Finally, the qualities which pork fat has yet in common with the other kinds of fat, are such that hydrogen, boron, nitrogen, charcoal exercise no action upon it; exposed to the air it becomes rancid, by absorbing oxygen and at times by developing sebacic acid.

ÆTHER SULFURICUS, *Naptha vitrioli*, *Spiritus sulfurico-æthereus*, *Spiritus æthereus vitriolatus seu ætheris vitriolici;* Fr., Ether sulfurique; Ger., *Schwefelæther;* Eng., Sulphuric ether.

(For this substance, which serves for the first preparation of several homœopathic medicines, see page 21.)

ALCOHOL, *Spiritus vini alcoholisatus;* Fr., Alcool, Esprit-du-vin alcoolisé; Ger., *Alcohol, Alcoholisirter Weingeist;* Eng., Alcohol, Rectified spirits of wine.

(For this substance, which serves for the preparation of homœopathic tinctures and attenuations, see page 13.)

AQUA, *Aqua destillata;* Fr., Eau, Eau distillée; Ger., *Wasser, Destillirtes wasser;* Eng. Water, Distilled water.

(See page 20.)

CACAO, *Theobroma Cacao;* Fr., Cacao, Cacaotier; Ger., *Kakao, Kakaobaum;* Eng., Cocoa, Cocoanut-tree.—SUCCOLATA, *Choccolata;* Fr., Chocolat; Ger. *Chokolade;* Eng., Chocolate.—BUTYRUM CACAO; Fr., Beurre de Cacao; Ger., *Kakaobutter;* Eng., Cocoa-butter.

396. The fruit of the cocoanut tree is frequently employed in homœopathy: 1st. The grains, known under the name of cacao, is substituted for coffee, which is prohibited to patients. 2nd. The paste, prepared from these grains, known under the name of *chocolate*, used the same way. 3rd. Oil extracted from these grains, known under the name of *butter of cacao*, used to protect denuded parts. The tree which furnishes this fruit is the cacao tree, (*Theobroma cacao*, L.,) of the family Malvaceæ, Juss., and Polyadelphia pentandria, L. It grows in the warm and humid vallies of Central America, above all in the basin of the Amazons, on the eastern declivity of the Andes. It is a tree of a delicate nature, about 10 or 12 metres high, full of large oval leaves, oblong, when young, of a fine red, and afterwards green; flowers small, scattered, in bunches on the branches; peduncles unifloral; calyx of 5 leaflets, 5 petals, two-horned; nectary of 5 regular leaflets; stamens adherent to the nectary, each of 5 anthers; capsule large, coria-

ceous, ligneous, oval, five-angled, and often rough, with 5 cells; seeds in form of an almond, many, bedded in a pulp and attached to a columned receptacle. The seeds are obtained from the ripe fruit by a kind of fermentation for one month, which detaches them from the pulp, and takes away an acrid taste which they naturally possess; the kernels are then dried, and sent to be sold. These kernels, generally ovoid, are in the fresh state somewhat violet, and of the size of a filbert; they enclose, under a smooth and very bitter envelope, two equal cotyledons, smooth and violet, which envelopes and protects the germ. It is the most oily fruit in nature, and the only one, perhaps, which never turns rancid; when these seeds are dry, they are esteemed the more as their envelope is the more brown and even; the kernels themselves have the size of a large kidney-bean, of a dull colour, dull reddish, rather violet within, inodorous, bitter to the taste, flat at both ends, compressed. Good cacao should be fresh, clear, heavy, neither worm-eaten nor mouldy. In commerce we distinguish several kinds, the *first* and *best* of which is the *Caracas cacao*, from the province of Caracas, in New Spain; it is heavy, long, somewhat flattened, and less oily than the others; its kernel is of a reddish-brown, somewhat shining, friable, of an agreeable bitterness, and surrounded by an envelope, easily broken, and full of little white and shining points. The second kind is the *cacao of Brazil*, also known under the name of *Maragnan* or *Para;* it is long, narrow, flattened, of a deep brown, and dry; it is the kind most generally used. The least esteemed sort is that of the *islands*, also called *Martinico, St. Domingo*, or *Gaudaloupe cacao;* it is sharp to the taste, and covered with a thick coating, its kernel is flattened, and of a clear brown. Besides these three kinds, which are the most generally found in commerce, we find the cacao of the *Trinity*, like the *Caracas;* that of *Guyaquil*, like the *Maragnan*, as also those of Cayenne, Maracaibo, Berbice, &c., so called from the places whence they come. To prepare the cacao kernels as a substitute for *coffee*, we *gently* roast them, take off their skin, reduce them to powder in a coffee-mill, and boil them, adding to two table-spoonsful of this powder three cups of water, and then taken with sugar and cream, like coffee. To abstract the grease from this preparation, let it cool, when the grease will congeal on the surface; take it off and boil up the liquid, which takes nothing from its agreeable taste. We must be careful not to roast the beans too much, else they become empyreumatic. Some persons make use of the skins of the kernels, which they use like tea, but this should not be, since these skins are rather exciting, and do not deserve to be recommended for domestic purposes. As to *chocolate*, or cocoa in blocks, *(Succolata, Cacao tabulata,)* it is the paste known well enough, which is prepared with the kernels of cocoa previously roasted; to prepare it, the kernels are deprived of their skins by roasting, put in a hot mortar and mashed, and equal parts of sugar added, mixing the whole well together; then it is put on a polished and heated stone, where it is rolled with an iron roller until the paste becomes perfectly homogeneous, and has attained the degree of fineness necessary. Many substances, such as vanilla, canella, storax, &c., are occasionally added, and rolled for some time, and then poured into moulds, where it solidifies and dries. Homœopathy can scarcely recommend the chocolate found in commerce, on account of the aromatic substances added so frequently to it. Starch, corn-meal, rice, beans, &c., are also occasionally added; the oil is also abstracted by some manufacturers from the kernels, and replaced by the fat of the beef, sheep, &c. Some put an inferior sugar in it, or else take an inferior quality of cocoa and make it up into the best chocolate, &c. Homœopathic physicians should therefore be careful and have it fabricated expressly for their patients by persons upon whom reliance can be placed; this has been confided by the homœopaths of Paris to Mr. Catelan, pharmaceutist, and at Lyons, to Messrs. Pelletier, who furnish the *homœopathic* chocolate, in which full confidence can be placed. Finally, as to the *butter* of cocoa, (Butyrum cocoa,) which some homœopaths use to protect denuded parts from the air, it is obtained, by expression, from the nuts previously roasted, and reduced to a fine paste, and in afterwards purifying and filtering the product; it is of the consistence of lard, having the odour and taste of roasted cacao, of a clear yellow, becoming white by age, rancid by degrees, and abounding in stearine. It is adulterated with oil of almonds, wax, beef-marrow, lard, &c. When pure, the butter of cacao dissolves entirely in ether, but if adulterated with lard, it no longer has that quality; it becomes rancid so much the quicker, has a less agreeable taste; its fracture is by no means uniform. The cacao of the islands furnishes the most butter, $\frac{4}{10}$ths of its weight.

CASTANEA VULGARIS seu *vesca;* Fr., Chataignier cultivé; Ger., *Zahmer kastanienbaum;* Eng., Common chestnut-tree.—CASTANEA, Fr., Chataigne, Marron; Ger., *Zahme kastanie, Marrone;* Eng., Chestnut.

397. The fruit of this tree is made use of in homœopathy as a substitute for coffee, after roasting; it is suitable for this purpose, having somewhat the taste of that beverage after torrefaction. The vegetable which bears this fruit *(Fagus castanea,* L.*)* is a large and beautiful tree, growing on the mountains, and elevated and sandy plains; it sometimes attains a height of 20 metres and more, and is enormously thick; that of Ætna being 50 metres in circumference, and one at Torwood, in England, nearly 20 metres in diameter, which makes 60 metres in circumference. It is of the family of Amentaceæ, Juss., and of Monœcia polyandria, L., having leaves elongated, strong texture, serrated, with a great many parallel nerves, incomplete flowers, unisexual and monœcious; the males disposed in a cylindrical and axillary manner, with a calyx of 6 parts, 5 to 20 stamens; the females generally beneath, surrounded by a spherical and persistent involucrum, and composed of a calyx of 5 or 6 teeth; capsule rounded, beset with prickles, unilocular, 2 to 4 valves, enclosing as many seeds as the involucrum, enveloped flowers; its bark is rich in tannin, and when carbonized, gives a fine black. Finally, as to the fruit, known under the name of chestnuts; they are oval-rounded, flat on one side, convex on the other, somewhat pointed at top, broad at the base, and covered with a brown, smooth, and coriaceous skin, which encases a white and firm substance, containing a large amount of starch, of gluten, analogous to that of the cerealia, and of a sugary substance. In the trees which have been cultivated and grafted, the capsule usually only encloses one nut, which is larger and less flat. This kind, known under the name of *Marrons,* has a sweetish, very agreeable taste, and is in much greater estimation than the smaller kind. In whatever way eaten, they form a healthy, digestible aliment; in some countries they are made into bread and cakes; and in some provinces, as Limousin, Auvergne and Vivarais, they constitute the principal nourishment; and almost exclusively so for the greater part of the year. They are eaten either roasted or boiled, or cooked with sugar, or finally, in a kind of coffee, which, when taken with milk, is very agreeable to the taste.

Chocolate may be made of them, and fecula, and sugar, and even alcohol extracted from them.

CERA; Fr., Cire; Ger., *Wachs;* Eng., Wax.—CERATUM; Fr., Cerat; Ger., *Wachs-salbe;* Eng., Cerate.—CEREOLI; Fr., Bougies; Ger., *Kerzchen;* Eng., Bougies.—CHARTA CÈRATA; Fr., Papier ciré; Ger., *Wachspapier;* Eng., Wax paper.

398. Wax is used in homœopathy, to seal hermetically, bottles which contain very volatile substances, as also to prepare an ointment, to make bougies, and a kind of wax paper to envelope bottles when sent to a distance. It is a substance drawn by the bees from the sugary material of plants, and which, secreted by the ring of their bellies, they make their combs of, for the purpose of putting in them their larvæ and the honey for the winter season. It holds a middle rank between vegetable and animal products. We obtain it by expression, thus separating the honey, and then by fusion in hot water, we purify it still more; it is then called *crude wax*; it is yellow, and of an aromatic honey-smell and taste, ductile, variable in quality; in commerce, it is sometimes adulterated with lard, the fecula of potatoes, or artificially coloured; in the first case, it is greasy to the touch, and in the second, there is a residue when dissolved in spirits of turpentine; honey gives it its yellow colour; its natural colour is white, and when yellow it is purified by the prolonged action of water, air and light, and when run into moulds, we find it in commerce under the name of *white wax* or wax in cakes *(cera alba seu in tabulis)*. In this state wax is an insipid substance, of an odour agreeable enough but weak, dry, friable, insoluble in water, soluble when cold in the fixed oils, and when hot in the essential oils, as also, but in small proportions, in alcohol and ether; its gravity is 0.960 to 0.966, fusible at a heat of 60 to 68°, inflammable and volatilizable. Like all the fat substances, it is formed of two different principles, *cerine and myricine*, and contains a little free margaric acid. With the fixed oils it forms cerates; potash and soda convert it into soap. Submitted to distillation, it gives out water, acetic acid, a large amount of odorous oil, and a concrete oil, to which we give the name of *butter of wax*, and which, when rectified, furnishes what was formerly called *oil of wax*. Wax, or at any rate an analogous

matter, is found in the vegetable kingdom, exuding from various trees in different parts of the world; it is also to be seen, in a pulverized state, on fruit, as raisins, prunes, oranges, &c., as also on the bark of the root of ipecacuanha; on the leaves of trees, forming a sort of varnish; in lac; in the green fecula of many plants, especially in that of the cabbage. In homœopathy, we use the wax of bees, well cleaned and blanched and purified. We first make an ointment with it, to dress ulcers and even denuded surfaces. For this, we dissolve the wax in hot water, then mix it with equal parts of olive oil, letting it cool; we preserve it under the name of *pure cerate (ceratum Galeni);* that found in the shops is always aromatized with rose water and should never be used by the homœopathic physician; that having *opium* or sugar of lead, &c. in it, should also be discarded. As to *bougies (cercoli)* homœopathy cannot set them aside altogether, though it never need make so free a use of them as those who know no method of treating strictures of the urethra except cauterization. We prepare them by rolling linen cloth impregnated with wax into small cylindrical forms; but it is more advantageous to make them out of cat-gut. For this, we take a cord and stretch it between two pieces of wood and rub it with pumice-stone, in order to cleanse it of all the small filaments which adhere to it. We then warm, over a spirit of wine lamp, a mixture of 6 parts of yellow wax and one part of olive oil, of which we pour a part on a piece of cloth, with which we rub the cord gently, taking care to rub it sufficiently to prevent the wax from getting cold and the cloth from becoming stiff; by this means we obtain bougies sufficiently large and even. Finally, to procure *cerated paper (charta cerata)*, which serves to envelope the medicines sent to a distance, we prepare it by pouring the wax on a piece of paper, placed on a warm stone, and by spreading it in a uniform manner by means of a dry sponge.

GUMMI ARABICUM; Fr., Gomme Arabique; Ger., *Arabisches gummi;* Eng., Gum Arabic, Gum Acacia.

399. This substance is tolerated in homœopathy, as an inert and slightly nourishing substance, and serves, mixed with water and sugar, to make a pretty agreeable drink. It flows naturally from some trees, the greater part of which

belong to the Acacia tribe, and which grow chiefly in Africa, India, New Holland and Chili. It was called arabic, because formerly it was obtained through the Arabians; at present it comes direct from Gambia and Senegal; the best, however, comes from Egypt; this is in small round lumps, frequently hollow on one side, transparent, inodorous, generally white or slightly yellow, frangible, dry and easy to powder; it swells when heated, whitens in the air, its fracture is full of white streaks and it dissolves entirely in water. The *Senegal* gum is much inferior and comes in round lumps as large as a nut, rough on the surface, of a shining fracture, of a rusty or red colour, of a taste slightly bitter, softening somewhat by heat and in part insoluble in water. Dealers generally separate the parcels into three sorts—the *white*, *rusty* and *red*—the *white* is the best. In using this substance homœopathically, we should not use the *powdered gum* found in the shops, nor *syrup of gum;* they are both frequently made of the worst sort, and also mingled with common gums of various kinds; besides which the syrup has generally some aromatic mixed with it. The same may be said respecting the *paste*, the balls, &c. of gum, and all pharmaceutical preparations of this article. In giving it, therefore, to our sick, we must select the lumps as they come to us from nature; and to prepare a potion, we take, according to the wished for consistence, 8 to 30 grammes of gum, which we dissolve in a pint of water, to which we add a sufficient quantity of sugar to make it palatable.

HORDEUM SATIVUM; Fr., Orge cultivée; Ger., *Gerste;* Eng., Barley.

400. Barley is admitted in homœopathy on the same footing as gum arabic, to make a refreshing and slightly nourishing beverage; the plant which furnishes it is one of the cerealia, Gramineæ, Juss. and Triandria digynia, L.; the seeds contain much starchy fecula, with a quantity of mucilage. We have the *hulled, ground and pearl barley;* the 1st. is the grain deprived of its first coat, which is very thick; the 2nd. is obtained by breaking the grain into coarse powder; the 3rd. is obtained by reducing it to small round and smooth grains, after depriving it of its two coats. For ptisan or barley water, we make use of the hulled barley, of which we take 15 to 20 grammes for a pint of water, which we

simmer some hours over a slow fire; but before this we should wash it of a powdery substance, which is rather acrid, and which is found on the surface, called *hordeine;* this is effected by washing it first in cold water, then in boiling water, after which it is fit to make the decoction. To render this drink less insipid, we may add either sugar or pure syrup of gum (see *gummi arabicum*), or a decoction of liquorice root (see *liquisitia*). It is also recommended by some homœopaths as a substitute for coffee, when torrefied.

Ichthyocolla, *Colla piscium;* Fr., Ichthyocolle, Colle de poisson; Ger., *Hausenblase;* Eng., Ichthyocolla, Fish glue.

401. Ichthyocolla serves the purpose, in homœopathy, as in the old school, of making *adhesive cloth,* to keep together skin wounds; it comes generally from the swimming bladder of several fish of the genus *Gadus* and *Accipenser,* the last of which are found in the European seas, as well as in the Wolga, Nile, &c. We obtain it, either in submitting the bladders to decoction, or in taking out the internal membrane, rolling it up and drying it. It generally comes to us in tablets, or else in cylinders of the thickness of the finger, white or whitish-yellow, more or less transparent, dry, coriaceous, inodorous, and of a dull, mucous taste. The best kind comes from Moscow; it is whitish, translucid like dry horn, perfectly inodorous, and consists of thin membranes. That of Hungary is in larger masses, thicker, but of a yellowish colour and not at all transparent. Water dissolves it and forms a solid, tenacious, transparent jelly, and insoluble in absolute alcohol. Ichthyocolla is dearer and more esteemed than any of the gelatinous substances; it is sufficient to steep it in hot water and separate it from its membranes by filtration to procure a gelatine almost perfectly pure. It is used for various purposes, to give lustre to silk, to clarify wine, to make the English court-plaster, and by the old school, to make jelly when united with wine and given to the sick and convalescents.

Liquisitia, *Glycyrrhiza glabra;* Fr., Reglisse, Boisdoux; Ger., *Süssholz;* Eng., Liquorice.

402. Liquorice is admitted in homœopathy, as well for the

preparation of an innocent beverage as for colouring powders; in this last case, it is mixed with sugar of milk and employed simply as a vehicle. It is the root of a shrub of the family Leguminosæ, Juss., and Diadelphia decandria, L. a native of the South of Europe; it has the leaves pinnate, unpaired; stipules distinct from the petioles; flowers in head or axillary and terminal spikes; calyx tubular, two lipped, the superior of 4 unequal parts, the inferior simple or linear; the root, the only part used, is very long, cylindric, of the thickness of the finger, greyish or rusty coloured outside, yellow within, somewhat succulent, inodorous, of a well pronounced sugary taste, mucilaginous, and a little sharp. Boiled in water, it gives the drink spoken of above, and which, acidulated with lemon, forms the beverage *coco*, sold in the streets of Paris in hot weather. In Spain, the juice of this plant is formed into an extract called liquorice-paste *(succus liquisitiæ)*, which comes to us in cylindrical pieces; this paste can by no means be used in homœopathy, since it contains many impurities and foreign matters, and often even bits of copper, which are detached from the vessels in which it is prepared; neither can we make use of the *refined* sort which we find in the shops, as there is generally incorporated with it some aromatic, and hence improper for our patients. To obtain a suitable drink, we should very gently boil the root, for otherwise the decoction will become charged with medicinal matters; even when used too fresh or without having been previously scraped, it is liable to impart acrid qualities. According to chemical analysis, this root contains, besides *glycyrrhizine* and *agedoite*, starch, albumen, a resinous oil, phosphate of lime, malate of lime, and malate of magnesia. Glycyrrhizine is a soluble, uncrystallizable substance, of a dirty yellow, of a resinoid hue, little soluble in cold water, soluble in alcohol, and very soluble in boiling water, of a sugary taste, but giving none of the products of sugar, when treated by nitric acid. As to the other peculiar principle, agedoite, it is regarded by some chemists as identical with asparagine.

OLEUM AMYGDALARUM DULCIUM; Fr., Huile d'amandes douces; *Ger. Mandelöl, Süsses mandelöl;* Eng., Oil of sweet-almonds.

403. In homœopathy, as in the old school, this substance

serves as an antidote in some cases of poisoning by strong doses of different acids. The vegetable which furnishes the almonds is of the family Rosaceæ, Juss., Icosandria monogynia, L., growing naturally in the Mauritius, and cultivated in Europe. It is more lofty than any fruit-tree; its leaves are long, alternate, narrow, pointed at the two extremities, dentated finely at the edges, borne on short petioles; fruit enveloped by a dry pulp, and consisting of a pointed, downy, furrowed nut, with small holes or irregular furrows, and containing one or two kernels. We distinguish two kinds of almond-trees, of which one furnishes the *sweet* and the other the *bitter* almond; the last are not at all eatable, but very dangerous, on account of the prussic acid which they contain. As to the sweet almond, we make an emulsion, a syrup, and milk of them. Finally, respecting the *oil* of sweet-almonds, it is very fluid, of a sweet and agreeable taste; it easily becomes rancid, and only concretes in a cold of 13° R. It is obtained by expression from the whole almond, with the pellicle on.

OLEUM OLIVARUM; Fr., Huile d'olive; Ger., *Baumöl;* Eng., Olive-oil.

404. This oil, like the preceding, is used in homœopathy as an antidote in some cases of poisoning, as also for the preparation of a cerate. (See *Cera.*) We obtain it by expression from the fruit of the olive-tree, (Olea Europea, L.,) of the family Jasmineæ, Juss., and Decandria monogynia, L., originally from Africa, but at present growing spontaneously in France, Spain, Italy, &c. It is an evergreen, leaves opposed, very rarely alternate, green above, shining and silvery beneath, bitter, aromatic, and somewhat tartish to the taste; it grows slowly, lives for ages, and sometimes attains the diameter of 2 metres; its wood is heavy, hard, granulated, veined, yellowish; its bark is greyish, split, wrinkled, inodorous, and bitter; the little white flowers are axillary in bunches; its fruit, the *olive,* is oval oblong, of a deep green, or blackish, and contains, in a tartish flesh, a seed very hard; it is from this fruit that we extract the *olive-oil;* the best is obtained from fruit scarcely ripe; there is then but little bitterness, but when too ripe this is the case. Olive oil is of a whitish or straw-yellow colour or greenish, according to the degree of maturity of the fruit from which it has been ex-

tracted; the good quality is whitish, unctuous, but little soluble in alcohol, very soluble in ether, of a feeble odour, of a sweetish and agreeable taste, concreting in a cold of 8° to 10° above zero, inflammable with a clear flame. In commerce it is often adulterated with the oil of poppy, linseed, rapeseed, &c.; a fraud which may be detected by its greater weight, and by its less easy concretion in the cold, or shaken in a bottle half full, it becomes frothy or filled with bubbles. Exposed to the air, it easily becomes rancid; but properly secured, it may be kept pure for years.

SACCHARUM, *Saccharum sacchari;* Fr., Sucre, Sucre de canne; Ger., *Zucker, Rohr-zucker;* Eng., Sugar, Cane sugar.

405. We use sugar, in homœopathy, as well for the preparation of sugar globules, *(Globuli saccharini,)* as for many dietetic purposes. This substance is found in a great many vegetables, where it may easily be detected by their sugary taste. It is obtained in the greatest quantity, and of the best quality, from the sugar cane, (Saccharum officinarum,) of the family Gramineæ, Juss., Triandria digynia, L., originally from India, flourishing in Persia, Abyssinia, Egypt, &c., and at present cultivated in all the tropical countries, chiefly in the East and West Indies. It is a fine large evergreen plant, with many simple stalks, upright, 2 to 4 and sometimes even 7 to 10 metres high, and 9 to 15 centimetres in circumference, jointed, yellow, violet, shining, and full of an abundant sugar medulla; leaves alternate, pretty large, flat, terminated in an elongated point, serrated, striated, 10 to 13 centimetres long; flowers small, numerous, in panicles 3 to 6 centimetres long; the small spikes are very fertile, double, one sessile, the other pedunculate, full of silky hairs at their base; the cotton which envelopes the two calicinal unifloral valves detaches itself easily at maturity, and is very abundant. Besides the sugar-cane, the beet-root, *(Beta vulgaris,)* and the sugar-maple tree, (*Acer saccharinum,*) afford crystallizable sugar; that extracted from other vegetables generally remains liquid and uncrystallizable. No matter, however, from whatever plant it is obtained, pure and crystallized sugar presents the same physical characters, white, granular, solid, frangible, crystals transparent, in quadrilateral prisms, insoluble in alcohol and ether, soluble in an equal weight of cold water, and in all

proportions in boiling water, taste sweet and agreeable. Exposed to the fire, it burns with a violet flame, bubbles up, becomes black, and emits a peculiar odour; exposed to the air it attracts moisture and softens. Some physicians attribute to i a hurtful effect on the animal economy, which might be the case were it made the only article of nourishment, but taken in moderation and as a condiment, it justly deserves the reputation given to it in the regimen which homœpathy prescribes. It is the condiment, par excellence, and the only one, besides common salt, which homœopathy permits without restriction.

Saccharum lactis; Fr., Sucre de lait; Ger., *Milchzucker;* Eng., Sugar of milk.

(For this substance, which serves for the preparations and triturations, see page 17.)

Vinum; Fr., Vin; Ger., *Wein;* Eng., Wine.

406. This alcoholic liquor, though excluded the homœopathic regimen, except its dilution in 4 or 5 times its volume of water, is, however, used as antidote to several medicines, such as phosphorus, aconite, nux vomica, &c. Wine is, as every body knows, the liquor which results from the first degree of fermentation of the juice of sugary fruits, and more especially of that of grapes, fruit of the vine, *(Vitis vinifera.)* This vegetable, equally well known, and which gives its name to the family Vites, Juss., is a climbing shrub, which would elevate itself above many lofty trees were it not restrained. Its buds are covered with two barks, the external one with longitudinal fibres, coming off very easily, and falling itself after a year old; the other green and adhering to the wood; these buds have projecting knots, of which each carries a leaf on one side, and on the other a grape or a tendril, or nothing; the leaves are generally five-lobed, and borne on strong, large, long, and cylindrical petioles, each petiole concealing two eyes, one small, developing itself after the leaf comes to maturity, and producing a bastard bud which makes little progress; the other larger, covered by a very fine envelope, compact, covered with scales, opening in the spring, and producing the buds on which the cultivator places all his hopes. The juice of the grape, obtained by expression and

fermentation, produces wine, which, when pure, is composed of a large quantity of water, and alcohol, the proportion of which varies from 0.06 to 0.14, of extractive matter, which diminishes with time, of an essential oil, probably dissolved in the alcohol, and which gives the peculiar bouquet, of a colouring matter, furnished by the skin of the grape, and of one or two free acids united with several alkaline or earthy bases. Tartaric acid predominates in all wines, but we also find a small quantity of malic acid, and in some also carbonic acid, as, for example, in Champagne wine. Weak wines are liable to deteriorate and to become sour; strong wines sometimes become bitter. In commerce wine is generally adulterated, and, perhaps, among the dealers in Paris, not one drop of pure wine could be found. In most cases they baptize it with water, or mix it with perry, cider, &c.; often, also, they colour red the weak white wines, so as to pass them off as better kinds, or else they make it out of a great many things besides the grape. To colour it, frequent use is made of elder, privet, mulberries, tournesol, sage, India-wood, ivy, &c., substances which, if they are not positive poisons, at least possess, with very few exceptions, well pronounced medical properties; so that the use of wine, even diluted with water, presents many inconveniences during a homœopathic treatment, should the patient not be exceedingly careful of what kind of wine he makes use. But what is worse than all is, that traders, from the love of money, are incited to put into it true poisons, in order to sweeten those which are sour—such, for instance, as the poison *lead*, which, in truth, no doubt possesses the property of correcting deteriorated wines.

THIRD PART.

OF THE ADMINISTRATION OF HOMŒOPATHIC MEDICINES.

CHAPTER I.

Of Homœopathic Medication in general.

407. The principle, on which homœopathy prescribes the choice of medicines, being diametrically opposed to that of the old school, it is evident that the rules, as to the administration of doses, cannot be the same in both. The old school, in relying on the axiom, *contraria contrariis curantur*, proposes to obtain a change in the functions by the *primitive* action of medicines; whilst homœopathy, relying on the principle, *similia similibus curantur*, endeavours to obtain the change by the reaction of the organism against these same effects. According to experience, the living organism possesses the faculty of reacting in opposition to every impression received from an external agent, so that, in giving strong doses of a drug, which, by its primitive action, causes constipation, the organism, by reaction, brings on the contrary state, which may even produce a severe diarrhœa, should the doses given be strong enough. It is upon this faculty of the organism, that Hahnemann, piloted by experience, has based his system of *similia similibus*, according to which, he

proposes to provoke the reaction of the organism by *small doses* of a medicine, which, employed in strong doses, would have the faculty of producing, by its primitive action, effects similar to those of the disease itself. In the chapter which treats of attenuations, we have seen to what degree these doses have been reduced, and though we may have demonstrated that they are far from being as small as, at first sight, it would appear, the strongest homœopathic dose must necessarily be much below the smallest which the old school administers.

408. Accustomed as we have been, up to this period, in medicine, to obtain the surest results by the strongest doses, the theory of small doses has frequently cast ridicule on the doctrine of Hahnemann, and even at this day, there are homœopaths, who, though well convinced of the efficacy of the attenuations, cannot, nevertheless, completely divest themselves of the principle, that if a little does good, a greater will do still more good. Under the point of view of the old school, this principle is, in truth, very just, for the end which she always proposes is to produce *positive* medicinal effects, either by acting on a healthy part, to turn away the disease of the affected organ (the *derivative*, *revulsive*, *allopathic* method), or, by producing in the affected part effects *contrary* to those of the disease (the *antipathic* method). Agreeably to the first of these methods, the old school administers its *purgatives*, *emetics*, *diuretics*, sudorifics, &c., and it is clear that the greater the dose, in which these medicines shall be given, the more certain we shall be to obtain the wished for results. Frequently the doses, generally employed by the old school, are still too small to procure these results, since the more intense the disease is, the more difficult it is to make an impression on the healthy part by medicines, and if, in a patient predisposed to vomiting, the tartar emetic, given in the dose of one grain only, may produce dangerous effects, it is not the less certain, that in maniacal patients even twenty grains are administered, without producing vomiting. Hence then the precepts of the old school naturally tend to give the medicines in doses large enough to appreciate easily their action, and to increase them gradually, until very perceptible effects are produced.

409. What we have just said in relation to *derivative*, *revulsive*, &c. medicines, still more particularly applies to those which are given agreeably to the *antipathic* method. In

order that *opium* may subdue sleeplessness, the too great sensibility to pain, diarrhœa, &c., it must be given in large doses, since the affected organs, being placed in a diametrically opposite position to the action of the medicine, need a strong impulse to be forced immediately to pass from such a state to the opposite one. The same holds good respecting antiphlogistics in inflammatory affections, purgatives in constipation, pretended corroborants in debility, pretended anodynes in over-excitement, excitants in apathy, &c. On all these occasions, it is necessary that the medicine should be administered in a sufficiently powerful dose, so that its action may prevail over that of the complaint. Still more, the living organism, having a tendency to produce, in its reaction against the drug, a state opposed to that which it impresses on it by its primitive action, it frequently happens that, when this action is exhausted, the old complaint returns with redoubled force, so that to subdue it anew, we are obliged to administer, for the second time, a dose much stronger than the first, and thus to increase it more and more, should we wish to render ourselves master of the disease for some time yet. This especially happens in chronic diseases, where we are often obliged to increase, to an alarming degree, the dose of most energetic medicines, without, however, the patient obtaining the desired results.

410. Should then homœopathy administer medicines on the same principles as the old school, should it give the tartar emetic or ipecacuanha to produce vomiting, rhubarb or senna to purge, opium to produce insensibility, &c., nothing indeed would be more insane than these small doses. But, as in the homœopatic medication, we do not seek to produce positive effects, but only to provoke the reaction of the affected organ, by giving it a slight impulse analogous to that which the disease has given, it is easy to perceive that, in the majority of cases, the smallest dose of a drug will be always strong enough to fulfil the indication. Often even, the cure will be so much the more prompt and easy as the dose shall be weak—for, by the impulse of a strong dose, the diseased organ would be the more prevented from reacting against the medicine—and if the homœopathic dose be too strong, it may even happen that reaction may not take place at all, and the disease be aggravated. The same would be to fear, if, when the organism is reacting against the drug, we should disturb this salutary movement by new impres-

sions, in continuing to administer the medicine, either in stronger doses, or even in doses equal to the first. This is the reason why, contrary to the generally received ideas in medicine, homœopathy has fixed in principle *never to make use but of the smallest doses, nor ever to administer a second dose, until the reaction of the organism against the first dose shall have ceased.*

411. This principle, simple as it may be in itself, is not, however, always easy to apply in practice, considering that remedies are not of the same energy among themselves, and that even should we have discovered the most appropriate dose for one, it would not be so appropriate to another. But even were it otherwise, the nature of the disease, constitution, age, temperament, &c., of the patient, and a host of other circumstances, so modify the receptivity of certain organisms, that the same dose, which would be by far too powerful in one case, might be infinitely too weak in another. The same holds good respecting the number of doses to be given. Many medicines exhaust their action in a few hours, whilst others provoke a reaction which may last many weeks; often, also, we see, in active diseases, the medicines which have the longest action, exhaust their efforts in a few hours, or even in a few minutes; so that each case calls for peculiar and individual considerations, as well as regards the dose as the choice of the medicine. In the Materia Medica and other homœopathic writings, Hahnemann and his disciples have, it is true, given instructions as well for the dose, which seems to be the most suitable for each substance, as for the duration of action of these last; but howsoever valuable these instructions may be, the individual circumstances which oblige us so frequently to modify the rules, prevent us from considering them as any thing more than general hints. What we do know is, that no matter what the strength of the dose may be which some peculiar cases may demand, the homœopathic physician will never have need to resort to those of the old school; he will invariably find, in the several *attenuations*, the suitable dose, and will rarely find it necessary to go as high as the mother tincture.

412. The same difference which exists as to the *degree of concentration*, in which these two schools employ their medicines, also exists respecting the *quantity* in which they are administered. Whatever may be the intensity of the disease, the urgency and the danger of the case, a homœo-

pathic dose should never go, like that of the old school, to the ounce, drachm, scruple, &c.; the largest quantity which a homœopath need administer of these attenuations, will never exceed one drop, and in the majority of cases, we shall find that 2 or 3 globules, 200 of which may be saturated by one single drop, will be more than sufficient in the worst cases. What is also a distinction in homœopathic medication is, that the more dangerous the case is, the disease violent, and the succour urgent, the more necessary it is to have recourse to weak doses, so as not to retard the salutary reaction of the organism. In some cases, to obtain the most instantaneously salutary effects, no dose is so suitable as the simple olfaction of the exhalation from a solution of 2 or 3 globules of a pretty high attenuation. It is thus that the homœopathic medication is in almost all its points in diametrical opposition to that of the old school; in this last the dose of one drop of the mother tincture may be regarded as the lowest of the scale, which the physicians increase just so much the more as the disease is violent and the succour urgent; whilst, in homœopathy, this drop forms the last degree of the scale, which the physicians attenuate just so much the more as prompt succour is called for. True, this rule often admits of exceptions, but these exceptions themselves are, by ultimate analysis, conformable to the principle, and may be deduced from it. This we shall endeavour to exhibit in the following chapters, in treating successively of the *difference of the attenuations, magnitude of doses, their repetition, duration of action of medicines, and finally, of their combinations.*

CHAPTER II.

Difference of Attenuations.

413. In the commencement of his medical career, Hahnemann, as we have already mentioned on several occasions, made use of attenuations only for the purpose of diminishing

the energy of his doses. However, he did not remain long before he perceived that their action did not diminish in the same degree as their volume, but that many substances, on the contrary, which in their natural state exhibited very little or no action, gave evidence of a very strong one, when carried to the second or third attenuation. This fact led him to lay down the principle, that the process of attenuation, far from weakening the intensity of drugs, rather developed the virtues of them, and that the last attenuations were, in all respects, much more suitable than the first to excite, in the smallest possible dose, the reaction of the organism. That is the reason why he counselled, at a later day, to carry all the medicines even to the 30th attenuation, not to render them weaker, but in truth, on the contrary, the more to develope their virtues. This opinion is also advocated by a great number of homœopathic physicians, and there are some who never use any but the 30th attenuation, whilst others rather reserve the highest for chronic diseases, and in acute diseases make use of the lowest, or even, in case of need, of the mother tincture. Others again look upon the attenuations as absolutely weaker, and scarcely ever use them, having recourse to the three, or at the furthest to the six first only. Great numbers, finally, consider all the attenuations as equally powerful, and admissible in every case, persuaded as they are that the important question is the choice of the specific medicine, and not that of the attenuation.

414. This great difference in opinions arises from the shades between the several attenuations of a medicine being in reality so imperceptible, that, in the majority of cases, we succeed as well with the 30th as with the 3rd, provided the medicine be well chosen. At one time, we ourselves employed all the medicines in the attenuations prescribed in the Pharmacopœias and in the Materia Medica of Hahnemann, and at another time we made use of the 30th exclusively, without, however, it being possible for us at present to say, with certainty, at which of these two epochs we obtained the most happy or least favourable results. The only thing which we think we did prove, was, that with nervous subjects, those who were irritable, sensitive, or else in those cases of nervous super-excitement, as well as in some acute cases, it easily happened that the *higher* attenuations, administered in too large doses, produced a considerable agitation in the patient, and, in consequence, a well pronounced aggravation, especially so

were the medicine badly chosen, whilst administered in the smallest possible dose, and the medicine well chosen, under the same circumstances, they have seemed to us much more proper than the *lower* to develope a prompt and salutary reaction, without causing scarcely any aggravation. Moreover, we have thought we also proved, that if we want to excite, by a single dose, a long and continued action, the *higher* attenuations are by far the most appropriate to obtain such an object; we have never, at any rate, seen the action of one drop of the mother tincture, or of the three first attenuations, prolonged during a space of time as long as that of a few globules of the 30th, or even of the 15th attenuation.

415. There are cases, however, in which we have not obtained, by means of the last attenuations, any results, or at least inferior to those which the first gave, (from the 1st to the 6th.) This fact has been frequently observed in cases of acute disease with organic lesions, and characterized by considerable activity, such as chancres and other primitive syphilitic complaints, acute gonorrhœa, croup, small-pox, &c. In all cases of this kind, the higher attenuations have only fatigued the patient and aggravated his condition by medicinal symptoms, whilst the lower frequently brought about a much more prompt result, and without any inconvenience to the patient. It does not remain the less proved, however, that, in the most acute diseases, but without a tendency to the destruction or resolution of the organic matter, as well as in *chronic* lesions and organic destructions, such, among others, as carcinomatous affections, engorgements, scrofulous suppurations and ulcerations, inflammations, ulcerations, and other maladies, &c., the higher attenuations render just as much and even sometimes more service than the lower. This may help to prove that the rule, which many homœpaths have wished to establish, only to use the lower attenuations in acute diseases, and the higher in chronic cases, is not without numerous exceptions; and that that rule, moreover, which would restrict to dynamic diseases the last, and to material diseases the first attenuations, is far from being so general as we might be led to suppose. There are even physicians who, contrary to the observations we have just related, have cured recent chancres, acute gonorrhœas, croups, and, indeed, all kinds of diseases without exception, by the higher attenuations, in only taking the precaution to augment the doses in

those cases where others would have made use of the lower attenuations.

416. From the preceding remarks as well as from what we have said respecting the theory of the attenuations (No. 50 to 60), it results that it is yet impossible to give any fixed and generally applicable rules for the use of the different attenuations. All that we can possibly say on the subject is contained in the following axioms. 1st. The difference between the attenuations of a medicine is, in general, so small, that it is almost impossible to perceive it, unless we compare two attenuations very remote from each other, such as the 1st and 30th, &c. 2nd. Between two very near attenuations, such as the 3rd and 6th, the 12th and 15th, or even 18th, there is absolutely no sensible difference. 3rd. The difference becomes so much the more insensible as the attenuations approach the 30th, so that the difference between the 1st and 3rd, which is frequently evident enough, becomes almost null between all the attenuations from the 15th or even the 12th up to the 30th. The small difference, remarked between the first (1 to 6) and the last (15 to 30) attenuations of a medicine, seems to consist in this, that the last have a more sustained action, that they excite the nervous system more, and that they are susceptible of manifesting their action on this system in the smallest doses, without, however, always being sufficient for the cure of material affections of great morbid activity. 5th. The first attenuations, on the other hand, appear less irritating, but more proper to excite the reaction of the organism against material lesions—only these reactions seem less durable than those which follow the last attenuations. 6th. The aggravations which the last excite, do not ordinarily consist but in superexcitements of the nervous system, or in the increase of the morbid activity already existing, and disappear usually, either of themselves, or under the influence of an antidote. 7th. The first, should they be hurtful, are more calculated to produce real material affections, and to give rise to morbid activity, which did not previously exist at all, and which are more difficult to contend with than those, which might be provoked by the last attenuations. 8th. Administered in too large doses and of too long continuance, the last attenuations may, however, also give rise to all the accidents which ordinarily only follow in the wake of strong doses of the first.

417. In applying to cases of diseases what we have just

remarked on the properties of the several attenuations, we collect the following. 1. In the treatment of *predispositions to disease*, as well as in that of *periodical diseases*, the most suitable attenuations are the *higher*, on account of the long reaction which they produce. 2nd. In the majority of *chronic* diseases the higher attenuations also are more appropriate than the lower—only in those, which are characterized by a great tendency to destruction or alteration of the organic matter, the lower attenuations may sometimes be equally as salutary—but in all chronic *dynamic* affections, the higher should be preferred. 3rd. In almost all the evidently *acute* diseases, the *first* attenuations are the most suitable—only in those, which consist but in lesions of function or sensation, the last are often preferable—but in all those, with tendency to destruction of the organic matter, the *first* are indispensable. 4th. In all affections, either chronic or acute, the more the disease is developed and violent, the nervous and vascular systems irritated, the progress rapid, &c., so much the more are the *first* attenuations generally indicated—whilst the slower the progress, the less the disease is developed, the nervous system but little susceptible, &c., the more we shall find that the last attenuations will be needed. None of these rules, however, are exempt from exceptions—they are modified, not only from a host of circumstances, which can only be appreciated in practice, but also according to the dose in which we employ the attenuations, and the number of times we repeat it. Hence, before closing this chapter, we shall again repeat, what we have mentioned so many times; viz: *that the choice of the attenuation is altogether a secondary consideration compared to that of the doses, and especially their repetition.*

CHAPTER III.

Of the magnitude of the doses.

418. In speaking of homœopathic medication in general, we have already observed, that it is not by the immediate action of a medicine, but by the reaction of the organism against the medicinal effects, that homœopathy proposes to herself to affect the cure. In consequence, the larger the dose, the greater the fear that the reaction will take place, either too slowly, or not at all. Hence, Hahnemann, who, at the beginning, had administered his attenuations in the dose of one drop, soon arrived at the point of administering only little *globules*, by means of which he gave himself the power of administering only the 200th part of a drop of an attenuation, and of which he afterwards never gave more than 2 or 3 for a dose. This is the method also adopted by the majority of homœopaths, though there are a few, who have not yet been able to familiarize themselves with the globules, and who, for fear that the dose of 2 or 3 globules might be too feeble, never administer any thing but *entire drops*—whilst others, fearing that even these 2 or 3 globules might exert too energetic an action, dissolve them in 6, 8, 10, 15 spoonsful, and even many tumblers of water, of which they give to the patient one only or several spoonsful —or else they make use of the simple olfaction of the solution, very rarely permitting their patient to take substantial doses. These different methods of administering the medicines are good in themselves, and each of them, employed at a proper time and in suitable cases, may be of special benefit, though in many cases also, the results, which these different methods furnish, present no difference among them.

419. The most usual method of all, that of administering 2 or 3 globules for a dose, merits the preference, inasmuch as we have demonstrated above, (No. 55,) these globules will always possess sufficient virtues, by the influence which they exert on the suffering organs, to excite reaction, and especially so when they are dissolved in a small quantity of water, a pro-

cess which renders them more suitable at once to exert a more considerable energy, without, however, exerting too much at one time. Moreover, should we wish to regulate this action, we give the globules dry, either alone or mixed with a few grains of sugar of milk. If, in this last method, we mash them before mixing them with the sugar of milk, and leave them in contact with it some length of time, the dose becomes equally capable of at once exerting almost as much action as if they had been dissolved in a small spoonful of water. The globules, taken dry, and without being mixed with sugar of milk, constitute the feeblest dose of this mode of administration, because their resources are exerted more gradually than those of the other modes. As to the *number of globules*, that is a point which, after all the experiments we have made on this subject, is much less important than the form under which they are given, provided this number does not exceed the limits of homœopathic prescriptions. Ten globules, administered dry, and without mixture with sugar of milk, will not act with much more energy than 2, 3, 4, mixed with 10, 15 grammes of sugar of milk, or dissolved in a small spoonful of water, since the resources which, under this form, the 2, 3, 4 globules immediately present to the contact of the organs, are more considerable than those which *ten* globules present when taken dry and alone. Even given under the same extension as these 2, 3, 4 globules, the *ten* will not *at once* exert a stronger action, since the surface which they present to the organs is the same as with the others.

420. What we have just said of the number of globules, is equally applicable to *drops*, so that we shall rarely remark a great difference of energy between the dose of an entire drop, and that of 2, 3, 4 globules dissolved in a small spoonful of water, or intimately mixed with 10 or 15 centigrammes of sugar of milk. That is the reason why we see them generally act with much less energy than we ought to expect, taking into view the enormous difference which there is between 2 globules and one drop, (the drop being at least one hundred times stronger;) and the pretended accidents which some have thought they perceived, after the administration of an entire drop, can also be as well brought about by 2, 3, 4 globules, administered at an unfavourable moment, or in a case where the medicine shall have been badly chosen. What causes dangerous aggravations is not always the magnitude of

the homœopathic dose, taken *at one time*, but the more or less great *number* of these doses, that is to say their *repetition*. Under this point of view the homœopathic physician can do injury as well with doses of 2, 3, 4 globules as with those of one drop, and on the contrary, he can also succeed in the cure, by means of one and the other, in all cases where the repetition is indispensable. The only difference which there exists between the doses of 2, 3, 4 globules and those of *ten*, or even one entire drop, consists in these last having more resources to act, in all cases, during a longer time than would the 2, 3, 4 globules, and that even without being dissolved in water, or mixed with sugar of milk, they would exert *at once* more action than 2, 3, 4 globules, taken dry and alone. Finally, what is also certain, is, that when we dissolve the globules in a *very large* quantity of water, the difference is soon perceptible, and a spoonful of a solution which shall contain a whole drop, or only 10, 20 globules, will *at once* act with much more energy than if it contained only 2 or 3 globules.

421. Many homœopathic physicians, as we have already mentioned, seeing that a single globule, dissolved in a small quantity of water, often affected very sensitive patients in too energetic a manner, still have imagined to dissolve this globule in a fourth, a half, or even a whole tumbler of water, so as to administer this solution spoonful by spoonful. If it is agreed to administer but a single spoonful of it, the end proposed, to diminish the energy, can be perfectly attained; but to do that, we must still be careful that the dose dissolved be not above one globule, that the quantity of water be large enough, (one tumblerful at least,) and, moreover, that we give but one teaspoonful of it. For, in dissolving in a small quantity of water 10 or even only 6 or 4 globules, so that the whole solution be impregnated with medicinal particles, and in administering a tablespoonful of such solution, the dose, instead of being weaker, will be stronger than if we had given the globule alone and dry. Even a single teaspoonful of a solution of one globule in 8 spoonfuls of water, will frequently develope *at once* a more energetic action than the globule alone; so that the usual solutions are not, as generally considered by some, the means of rendering the doses more feeble, but, in truth, the means of increasing their action. Hence we often see very sensitive patients much more affected whilst they take their medicines after this manner; and

as to the mode of administration, which consists in taking, not a single spoonful, but the whole solution by spoonfuls in succession, that is, a veritable repetition of doses, the effects of which are not often less than if we had administered as many drops, or as many doses of 5, 6, 10 globules, as there are spoonsful in the solution.

422. Finally, respecting the *olfaction*, we may say, that it is, undoubtedly, the most appropriate mode of administration to produce prompt effects, and at the same time, rather mild—only, in order that the action may be really milder than that of the other modes, we must take care that the patient does not inspire too much. The mildest olfaction is that which consists in inspiring from 2, 3, 4 globules, placed in a small tube—as to that, which consists in dissolving these globules in a mixture of alcohol and water, of the volume of about 150 drops, and to inspire from this solution, it is equal to inspiring from an entire attenuation, and may produce, on very sensitive individuals, effects much less mild than those which 2, 3, 4 globules would produce taken in the dry state. Nevertheless, however that may be, the effects, produced by olfaction, will always be much more prompt than those which are obtained by other methods, and how strong soever may be the action, which a too high dose shall exert on individuals of great irritability, administered in this way, the symptoms elicited will be but temporary, and will never be long in disappearing, and in making room for a favourable reaction.

423. In recapitulating what we have just said of the different doses, we shall now state what we believe to be the sum total of their whole theory. 1st. The magnitude of the dose is, within certain limits, much less important than the form, under which it is administered. 2nd. The more extended the surface under which we administer a dose, the more powerful will be the action, which it immediately exerts. 3rd. Every homœopathic dose, whatever may be the absolute size, exerts, in general, an equal immediate action, whilst it is administered under the same extent of surface. 4th. A small dose, administered under a large extent of surface, will exert an immediate action, greater than a larger dose, administered under a less extent of surface. 5th. Though the absolute magnitude of the dose is but of little importance, relative to the immediate action of the medicine, it is not, however, so relative to the duration of the action, which will last so much the longer, as the absolute volume of the dose shall be the

more considerable. 6th. It is in the course of this longer action, that the largest doses may also develope more symptoms than the smaller ones, and these symptoms shall, in general, be more pronounced, more intense, and more tenacious. 7th. The mildest dose, is that of olfaction—then comes that of a few globules taken alone and dry—next that of a mixture of these same globules with sugar of milk, or their solution in a small spoonful of water, and last, that of a drop. These three last kinds of doses are, however, generally so little different one from the other, that it is almost impossible to say which one exerts the most powerful or the most feeble immediate action. We should not, however, forget, that all that we have just written on the difference of the doses, and on their form, applies rigorously to *homœopathic* doses, within the limits of one globule to two drops of any *attenuation* whatsoever. As to the substances in their primitive state or the mother tinctures, there are other laws of proportion, or, rather, certain modifications of these same laws, which, however, would be altogether out of our province to discuss here.

424. If then, in the administration of medicines, we rely on the incontestable principle, that the stronger the dose, the longer the commencement of the reaction of the organism shall be delayed after the ingestion of a *homœopathic* medicine, we can easily discover that in acute diseases, consisting in lesions of functions or of sensations, neuralgias, spasms, &c., as well as in irritable subjects, superexcitement, &c., the smallest doses, such as *olfaction or a few globules, taken dry*, or a small teaspoonful of a solution of a single globule in a large quantity of water, will be the most suitable. For chronic diseases of the same nature, the doses should rarely be stronger—but as it is necessary, in such diseases, to keep up a sufficiently prolonged action, the most suitable doses appear to be 2, 3, 4 globules, dissolved in a small spoonful of water—rarely a whole drop. In chronic diseases, with organic lesions and material symptoms, such as suppurations, catarrhal fluxes, disorganizations, &c., whole drops are often of considerable service, though it has often happened to us to obtain all that could be hoped for from doses of 2, 3, 4 globules, dissolved in a small spoonful of water. Finally, as to acute diseases, with tendency to destruction of the organic matter, especially if these diseases be dependent on the action of some virus, such as syphilis, small pox, &c., the strong

doses are often indispensable. As to the rest, the same may be said respecting the doses as of the attenuations—whatever may be the magnitude, in which they are administered at a time, the thing of chief importance to be attended to, is their *repetition.*

CHAPTER IV.

Of the Repetition of the Dose.

425. The principal point of the whole doctrine of the administration of the doses is the REPETITION. In the preface to the first part of our *New Manual,* we have already said, *that if, during a certain time, we made a rule to administer to all patients, without exception,* 10, 12, 15 *globules, and even an entire drop of the* FIRST *attenuation,* WITHOUT, HOWEVER, REPEATING THESE DOSES, UNLESS A POSITIVE INDICATION SHOULD ARISE, *we should not experience more dangerous aggravations than if we had only administered a few globules of the last attenuations, and that, in every case, the difference between the results obtained would be in no manner of proportion with the increase of the doses.* We are still of the same opinion, and we think that, provided we knew well how to discover the indications for the administration of a new dose, or, what amounts to the same thing, for the *repetition,* we might, in the majority of cases, and *with a* VERY FEW *exceptions, perhaps,* make use of whatever attenuation we wished, and administer it in whatever dose we thought proper, from that of one globule up to one drop, without ever having to repent of our proceeding. So, also, Hahnemann, Hering, Ægidi, and all who have written on the administration of homœopathic medicines, have occupied their thoughts more on the *repetition* than on the magnitude and strength of the dose, an evident proof that, how little soever we reflect on the principles of this doctrine, and

compare the different results which practice furnishes, we come to consider the question under its true point of view. Hence, also, in the preface to our Manual, we have reduced the whole matter of the administration of doses to a question of repetition, and this chapter having been treated fully in detail, we might, strictly so, refer our readers to that work, if we were not aware that it is more agreeable to such to find here a collection of the whole doctrine.

426. The fundamental principle of all repetition is always, *never to repeat the dose so long as reaction exists, excited by the first, and so long as benefit continues,* NO MATTER IN HOW SLIGHT A DEGREE. It is on this principle that, in the majority of mild indispositions, in many acute affections without inflammation, spasms, neuralgias, &c., one single dose will do away the malady; and that in chronic affections without organic alterations, one single dose will frequently prolong its beneficial action for 4, 6, 8 weeks. In cases of such a nature, repetition is scarcely ever called for, though it may become necessary, whilst, after a time more or less prolonged, the reaction which the first dose had excited becomes stationary, or that the disease has relapsed; and even in these two cases, it can only become necessary, whilst the group of symptoms still indicates the same remedy; whereas, should the condition of the disease be changed, another medicine, more suitable to the state at the time, would be preferable to the repetition of a dose of the first. But what is of primary importance is, to be assured that that state is really such as to call for either a repetition or a new remedy. Frequently the aggravation which the excited amelioration produces, is due to the medicine alone, and will soon be dissipated, should we have the courage to wait a little. Hence we have always counselled never to be in a hurry, even should we think the repetition indicated, and well to observe the changes which might take place after the repetition, should we resort to it, so as to secure ourselves at least against a too prolonged repetition.

427. We have often been asked, precisely what time we should wait to know what benefit we may expect from a given dose. That is a thing absolutely impossible, since this time varies, not only according to the magnitude of the dose administered, but also according to the drug, the nature of the disease, constitution, temperament, and a thousand other circumstances, which it is impossible to foresee. Neverthe-

less, to afford to beginners all the instruction possible, we shall endeavour again to give here some general rules. It is unnecessary to say, that the more acute the disease is and its progress rapid, the shorter the time to come to a determination, insomuch that, if in chronic affections, we are permitted to watch an aggravation, or a stationary condition, for 4, 8, 10 days, before coming to a resolution, it is far otherwise in very acute diseases, in which the repetition may be necessary from hour to hour, and even at intervals much shorter still, as in apoplexies, cholera, &c. In general, we may lay down the principle, that the intervals, which the physician judges necessary to see his patient, are the best periods to observe for the investigation of the action of his remedies. These intervals are, in acute diseases, usually from 6 to 12 or 24 hours—in chronic diseases, 4 to 5 or 10 days. During this period of time, there will constantly happen one of two things, either the condition *will remain absolutely the same*, or, *it will change, no matter how little*, and will thus indicate to the attentive observer what he will have to do.

428. The case, in which the condition will remain absolutely the same in one of these intervals, is exceedingly rare, and probably may never happen to an experienced observer. For, in the majority of cases, even though we shall remark no visible change in the pathognomonic symptoms, we shall almost constantly find, either in the accessory symptoms, or in the general condition of the patient, some slight indications, which may point out the action of the medicine, and the course it is going to take. If, however, at the first visit we pay the patient after the administration of the remedy, the condition remains absolutely the same, we should wait until the second, and if then there was still no change, and we were well assured as to the choice of the medicine, we should repeat the dose, still watching the effects it might produce. In very acute, inflammatory diseases, we shall always find, at the second visit, some change, either for the better or worse—in acute diseases of slow progress, the second dose will invariably produce sufficient change, to be evident at the visit which will follow the repetition; only in some chronic affections, and chiefly when local, it may happen, that the first time we see the patient, after the taking of the second dose, there may not yet be any change. In this case, we should wait until the following visit, and if then, *we*

should still observe no trace of the action of the medicine, we should repeat the dose again, and should continue the repetition of it until some change takes place, taking care, however, to stop as soon as we perceive the least indications, *no matter how small they may be.* For, often nothing is more pernicious than to repeat without necessity, which happens to many beginners, who, in fault of observing well, scarcely ever see their medicines act, except when the effects are so evident that it is necessary to resort to antidotes; and there are those, also, who, in such cases, attribute all to the rebellious nature of the disease, and continue boldly to repeat without flinching the least. Such are the surest means to render the least rebellious diseases the most absolutely incurable.

429. Thus then, if, after having administered one dose, we should observe the slightest indications of its action, we must wait tranquilly, in order to view the supervened changes. Should they denote an *amelioration,* we leave it go on so long as it progresses, and as soon as it becomes stationary, we must yet watch this condition during the space of two visits, before doing any thing, and if, during this time, the amelioration recommences, we must let it proceed as before, without administering any new dose. Should it vary during this time, at one period continuing and at another not at all, we should still wait, until there was evident, either a positive amelioration, or a well pronounced aggravation. Should the amelioration be positive at the end of this time, we must wait, as before, without doing any thing, were it even to the tenth week after the administration of the medicine. But, on the other hand, should the amelioration, which was established, remain definitively stationary during the intervals of more than two visits, that is to say that there has been neither variation nor evident aggravation, we should try a repetition of the first dose, although in such a case it would rarely be the first medicine that would be indicated. The cases, where, after an amelioration of long duration, the repetition of the same remedy appears appropriate, are rather those in which the symptoms of the old malady are aggravated afresh, but not those in which a part of the disease is definitively ameliorated and the other remain simply such as it has always been.

430. But if, on the contrary, after the administration of one dose, there happens, either immediately or after a short

amelioration, any grade of aggravation, we should, first of all, examine whether this aggravation is *due to the remedy* or to *the disease*, that is to say, whether it is *artificial or natural.* The first of these cases is discovered to the attentive observer, inasmuch as the aggravation usually takes place in rather a sudden manner, having a bearing only on isolated symptoms, whilst the general condition of the patient improves, in that it is always intermingled with symptoms characteristic of the remedy administered, and that, in its phenomena, it exhibits a less permanent character, often disappearing as suddenly as it appeared, and not lasting, in general, but a short time, (in very acute diseases, 10, 15, 30 minutes, in ordinary acute diseases 2, 4, 6 hours at the furthest, and in chronic diseases 3, 4, 6 days.) But if, on the other hand, the aggravation is due to the disease, that is to say, that this breaks out afresh, the experienced observer will recognise it, inasmuch as the aggravation will take place after an amelioration more or less long, in that it will not be so sudden as in the preceding case, manifesting itself little by little, and having a bearing at the same time on the general condition of the patient, that it will not be in the least intermingled with symptoms characteristic of the remedy, but that it will be composed purely of pathognomonic symptoms, and that, instead of disappearing at the end of a time rather short, it will continue to increase from hour to hour, and from day to day. In the first of these cases, that is to say, in the artificial aggravation, we must wait for the effects, without doing anything until we see supervene an amelioration, which we should afterwards treat as above mentioned. In the second case, that is to say, when the aggravation is natural, we should repeat the dose, if the same medicine is still indicated, or else we should administer another.

431. Besides these two cases of aggravation, there is yet another, as when, *by an ill chosen medicine*, and administered in too large a dose, there arises medicinal symptoms at the same time that those of the disease become aggravated. This kind of aggravation may be distinguished from the two preceding, in that it will almost always take place, without being preceded by any moment of amelioration, in that it will be mingled with symptoms characteristic of the medicine, and of pathognomonic symptoms, marking the progressive march of the disease; that it will increase, either rapidly or slowly, but always in a constant and progressive manner; and, finally,

in that, above all, the general condition of the patient will get worse. Similar phenomena may manifest themselves after the exhibition of too strong a dose, or one too often repeated, of a medicine in other respects perfectly suitable to the disease, but what will distinguish this last from the preceding is, that though the aggravation may take place, as much in the pathognomonic symptoms as in those which are proper to the medicine, it will, nevertheless, manifest less stability in these phenomena, having a bearing at one time on this, and at another time on that symptom, now on the pathognomonic symptoms, and then again on those proper to the remedy, sometimes on the general condition, and at other times on the local complaints, &c.; and it is rare that an experienced eye cannot distinguish, amidst all this disorder, a tendency towards improvement. In both these cases, the repetition of the dose given would be the worst practice; and in the first case, there is nothing more to do than to administer at once another medicine better chosen, whilst in the last case, should the sufferings not dissipate of themselves, the administration of an antidote will often be of great benefit.

432. All that we have just said applies, however, rather to *chronic* diseases than to those which are acute, and more particularly is it in chronic diseases characterized by a morbid action of *little* activity, that these rules will the most frequently find a strict application. In chronic complaints, characterized by a morbid action of *great* activity, such as ulcerations, fluxes, disorganizations, &c., in fine, in all cases where it is important to check as soon as possible the destructive process, we shall frequently succeed perfectly in administering, from the first, the medicine in repeated doses, and, in many cases, this method will be even indispensable. For the morbid activity and the great disorder which are developed in the suffering organs, are often such that it is necessary to excite anew the reaction of the organism by fresh doses, and in all these cases it is by far most suitable to administer frequently a very small dose than to give but one very large dose. Hence we see, in almost all chronic diseases of this kind, the solutions of one globule of a sufficiently high attenuation, in 6, 10, 15 spoonfuls of water, and taken by spoonfuls, (every 24 hours one,) succeed better than any other mode of administration, excepting that when the active symptoms of the disease are subdued, and the disease itself has become latent, this method is no longer at all appropriate, and should be re-

placed by the administration of a single dose during a sufficient length of time.

433. The same is the case with acute inflammatory diseases; so long as they are violent, the fever high, and the inflammation intense, the use of very small doses, frequently repeated, is preferable to any other mode of administration, and the more violent the disease, its progress rapid, and the inflammation developed, the more necessary it is to make the doses more frequent. Thus, for example, in the first stages of croup, the most successful mode consists in giving every half hour a teaspoonful of a solution of one or two globules in a tumbler of water; in pleurisies, in acute rheumatisms, &c., a tablespoonful of a similar solution every 2 or 3 hours, &c., according to the degree and nature of the disease. In acute affections, due to the action of a destructive virus, such as syphilis, variola, &c., as well as those accidents produced by the action of a poison, the repetition is equally indispensable, and in some very severe cases, we may even administer whole drops, and repeat the dose, according to circumstances, every 12, 24 hours, until the reaction of the organsim has exceeded that of the virus or poison. But, as in chronic diseases of great activity, the repetition is no longer suitable when the disease has become latent, so it is not usually indicated in acute affections, until the cessation of the fever and inflammatory symptoms, the remaining symptoms, in the majority of cases, are subdued much more surely by the prolonged action of a single dose.

434. In resuming all that we have said on the use of the different attenuations, the size of the dose and repetition, we may establish the following general rules, which, however, will not be without exceptions: 1st. In the treatment of predispositions to certain diseases, constitutional affections, chronic complaints which are not, properly speaking, diseases; in one word, in all cases where there is rather a tendency to disease, or weakness, or susceptibility to disease of an organ, without positive disease, the LAST attenuations, administered WITHOUT REPETITION, in the dose of 2 or 3 globules (either dry, or dissolved in a small spoonful of water) are the most appropriate, without a single exception. 2nd. The same holds good for the majority of chronic local affections of little activity, and which are rather symptoms of a morbid constitution than independent diseases, only when such affections assume a certain intensity and activity, the repetition may then be necessary, as well as the employment of the first at-

tenuations. 3rd. In all acute, inflammatory diseases, with fever, the most suitable dose is 2, 3, 4 globules of the FIRST attenuations, dissolved in a TUMBLER OF WATER, and taken by the spoonful (either tea or table) from hour to hour, or else every 2 or 3 hours, according to circumstances. 4th. The same may be said for all the affections due to the action of a virus, and the accidents produced by poisonous substances, as long as those affections and those accidents possess a certain violence. 5th. In all affections purely dynamic, such as lesions of functions, spasms, neuralgias, &c., either acute or chronic, as well as in all the accidents and indispositions without fever or severity, the best dose is 2 or 3 globules of the LAST attenuations, administered AT ONE TIME AND WITHOUT REPETITION, or else, in certain individuals, olfaction.

CHAPTER V.

Of the Combination of Medicines.

435. In the introduction to this work we have already said that one of the principles of homœopathy is, never to administer but one medicine at a time, and never to make use of medicines compounded of several medicinal substances. This is one of the principles against which the adversaries of this doctrine have set themselves the most, pretending that in diseases rich with symptoms, a single medicine will never suffice for all the indications, or that the medicinal compounds often exhibit altogether new virtues, and thus afford what no single medicine which enters into the compound could effect alone. As to the first of these assertions, the objection which it contains falls of itself, when we call to mind that, after all, each medicinal compound forms a new pathogonetic unity, which may be regarded as a simple new medicine, which of consequence, will develope neither more nor less curative effects than every other simple medicinal substance, but, in no

manner the whole sum of the effects of substances which enter into its composition. In this view, it is time that every compound, forming a new medicine, will exhibit virtues, which no one of the component parts would exhibit by itself. But as it is impossible to know, in advance, what will be the virtues which the compound will exhibit, it would be necessary, should we wish to make use of it rationally, to study it in its effects the same as any other simple medicine.

436. It is under this point of view, that recently even some homœopathic physicians have proposed to introduce also into our pharmaceutic code compound medicines, but first to study them in their effects. Respecting ourselves, it may easily be gathered from what we have just said, that we are far from looking on this proposition as impracticable in itself—but what prevents us from founding any great hopes on it for practice, is that we believe that these compounds, even well studied, will be found to be neither more nor less appropriate than simple medicines, in answering to a great number of indications. Hence nothing could be gained by the study of compound rather than simple substances. Besides, before occupying the homœopaths in the study of these substances, we ought to be able to point out to them the principle on which we should unite the medicines into compounds—for should we make them by hazard, the hundred medicines, of which we know almost all the effects, would give us already near *ten thousand* compounds to study, while we should restrict ourselves to the union of only two medicines, but we should be obliged, in duty bound, to make, at the same time, all the binary combinations, which these hundred medicines would permit us to make. The composition of medicines cannot then yet be erected into a *principle*, nor rendered obligatory on any one, especially, so long as we have not studied all the simple medicines worthy of fixing our attention.*

* Some partisans of compound medicines have often remarked to us, that thus far we have always used in homœopathy, compound substances, such as hepar sulphuris, soap, salts, &c., and that our materia medica was far from containing only absolutely simple substances. To this we remark, that we have never pretended that we used only substances absolutely simple or *elementary*, but that there is an enormous difference between medicinal *compounds* which unite two or many substances absolutely foreign to each other, and chemical *compounds*, which always form chemical *individualities*, with determinate properties. All bodies of this last kind are *simple medicines*, though, as to their elements, they may be *compound substances*. The chemical combinations ought necessarily to have invariable properties, because

437. Other homœopaths again, without pretending to erect in principle the composition of medicines, think, however, that often the administration simultaneously of two medicines indicated, the one for such, the other for such other portion of the symptoms, would much more accelerate the cure than the consecutive administration of these two same medicines. There may be truth in this idea, and in some cases, where different parts of the organism are affected in a different manner, it is very possible that two medicines, administered together, may exert each one an effect, which we had a right to expect—but as we can never know, in advance, to what point one might shackle the action of the other, this way of acting can never be erected into a principle neither. In the majority of cases, even the medicinal olfactions, which we make use of occasionally against accidents that arise during the action of a pretended antipsoric remedy, always shackles more or less the effects of this last. In fine, as to the method of combination, which some still have proposed to make, and which consists in administering simultaneously two medicines, which appear to unite within themselves all the symptoms of the same malady, this kind of medication is yet too barren of all fixed rules, and of every condition of a sure method, to merit in this place a serious attention.

438. Though we may object to combinations of all kinds, the *true principle*, the *fundamental rule*, will then always remain, the administration of a SINGLE MEDICINE AT ONE TIME; and every combination, whatever it may be, will never form but one EXCEPTION to the rule, exception which the practitioner may make when he pleases, but which the DOCTRINE as such can never lay down as a principle nor teach. The only medication, in any sort compound, that the doctrine can recommend, and does really recommend, is, the *alternation* of two medicines equally well indicated. It has recourse to this *alternation* every time that a medicine, after its action being finished, leaves the aggregate of the symptoms in a state such that, afterwards, the other is indicated—but in practice, we shall rarely meet with cases, where each one of two remedies, which we are alternating, will really be indicated more than twice. It

they cannot be obtained but in definite proportions—the *mixtures* will constantly vary, according to the proportions in which they may be made, and of which nothing will guarantee the exactitude in the various preparations.

more frequently happens that after the action of the second, we should again have recourse to the first, but after the second administration of it, the remainder of the symptoms will generally be so changed as to call for another kind of medicine. A case, however, which perhaps, is frequently presented to us, and perhaps, oftener than any other, is, that, where a medicine being almost specific for a disease, without, however, fully answering the purpose alone, it will often be found indicated anew, but in alternation each time with another medicine. It is thus, for example, that we shall rarely find indicated—*Lach.*, *Hep.*, *Lach.*, *Hep.*, *Lach*, &c., but often perhaps—*Lach.*, *Hep.*, *Lach.*, *Caust.*, *Lach.*, *Phos. ac.*, *Lach.*, &c.

439. We have now finished what we had to say on the administration of medicines. All the rules, which we have given, are, we are well persuaded, exceedingly vague. The fault must not be imputed to us, but, on the contrary, to the state of infancy in which the present time finds as yet our science. And even then, when it shall be more advanced, it will be constantly impossible to lay down rules so precise, that a beginner shall have no doubts. The best advice we can give to beginners is, to guide themselves constantly by this principle, that *it is not the immediate action of a medicine, which cures, but the reaction of the vital force, excited by this action*—a truth, to which we will yet join the following aphorisms:—

1st. In all doubtful cases, it is better to administer a too feeble than a too strong dose, and never to repeat it than to repeat it too often.

2nd. Every time that there is not a sufficient indication for the repetition or the administration of another medicine, it is better to do nothing, and wait until such indications are exhibited.

3rd. In chronic diseases, the good observer often obtains with two medicines in three months, what another would not obtain with sixty in three years.

4th. There is nothing more injurious than impatience on the part of the physican, and the too frequent change of remedies.

5th. After the administration of a medicine, should the disease make no progress, we shall lose nothing by waiting.

6th. The salutary reaction of the vital force against a medicine never resumes itself in so favourable a manner, after it has once been inopportunely disturbed.

7th. So long as nature reacts favourably, the physician has absolutely nothing to do, since all that he could do at such a time, would change it for the worse.

8th. A real, progressive, but slow amelioration is worth more than the empty hope of a more prompt amelioration by uncertain means.

9th. Faults committed by giving too feeble doses can easily be repaired—but sometimes those from too large doses can never be repaired.

10th. It is better sometimes to abandon certain diseases to themselves, than to treat them by too strong and too often repeated doses.

11th. The less we are sure of having chosen the suitable medicine, the more we are bound to proceed with caution, as well for the dose in which it may be administered as for its repetition.

APPENDIX.

The following is a List of Remedies now under Experimentation in Europe, the majority of which have been admitted into the Materia Medica.

Abelmoschus.
Acid. borac.
Acid. molybd.
Acid. mur. oxyg.
Acid. oxalic.
Acid. succin.
Alism. plantag.
Alsine med.
Ammon. nitr.
Ammon. oxalic.
Ammon. phosph.
Ammon. succin.
Ammon. sulph.
Anagall. arv.
Anemon. nemor.
Aqu. marin.
Ballot. lanat.
Baryt. nitr.
Belladonn. sem.
Bignon. rad. min.
Bismuth. mur.
Brucium nitr.
Bucco fol.
Calcar. fluor.
Carannae.
Caryophill. arom.
Chaerophyll. tem.
Chromoxyd.
Cimophyll. mac.
Cuprum oxyd.
Cuprum nitr.
Cuprum sulph. am.
Datura Metel.
Diosm. cyparr.
Equiset. arv.
Erica vulg.
Eupator. cannab.
Eupion.
Fel. taur.
Galbanum.
Glecom. heder.
Guaco.
Helminthochort.
Hepar. sulph. sal.
Hyoscyam. scopol.
Hyoscyam. sem.
Iridium.
Kadm. carb.
Kadm. met.
Kadm. oxyd.
Kali acet.
Kali chrom.
Kali hydrobrom.
Kali hydrocyan.
Kali mur. oxyg.
Kali oxalic.
Lapath. acut.
Lepidolite.
Lichen island.
Lithantrax.
Lithantracokali.
Lithantraco. sulph.
Mercurial. perenn.
Mercur. nitr.
Mercur. sulph.
Mercur. zootic.
Mikonia guac.
Momord. elat.
Morphium acet.
Morphium sulph.
Natrum acet.
Natrum carb. acid.
Natrum hydrobr.
Natrum hydroiod.
Natrum oxymur.
Natrum phosph.
Natrum succ.
Natrum zootic.
Niccol. met.
Nicotian. virg.
Oleum cajeput.

Osmiridium.
Ova barb.
Paraffin.
Paragoux roux.
Petrosel. sem.
Phellandr. sem.
Plantag. lanc.
Plantag. maj.
Plumbum mur.
Plumbum nitr.
Polygon. fagop.
Potaget. nat.
Potentill. aur.
Potentill. rept.
Rhodod. ferrug.
Rosa canin.
Sal marin.
Sal seignett.
Sal stann.
Scirrh. pin. pic.
Scirrh. popul.
Scirrh. prun. dom.
Scirrh. pyr. mal.
Scirrh. sorb. auc.
Solan. lycopers.
Solan. pseudocaps.
Spir. calc. caust.
Stibium pur.
Storacis.
Stramon. sem.
Stront. mur.
Stront. nitr.
Tarantulin.
Tabac. sem.
Tela aran. diad.
Tellurium.
Therm. Gasteiens.
Tinct. hepar. sul.
Tinct. silic.
Titan. oxyd.
Turpeth. min.
Tussilag. farfar.
Uran. oxyd.
Urtic. ur. sem.
Veratr. hb. rec.
Veratr. rad. rec.
Zincum carb.

In addition to the above, we may refer our readers to the Cimicifuga racemosa, which has been successfully used in this country in spasmodic affections, especially the St. Vitus's dance; to the Phytolacca decandria, in obstinate rheumatic complaints; as also to the various preparations of Iodine, and particularly its combination with Mercury, as very efficient in syphilitic affections, and particularly those attended with secondary symptoms; and that with Arsenic, in obstinate skin affections, especially those of a dry, scaly nature.

LETTER FROM MR. POUDRA.

To put in a clearer point of view the interesting question of infinitesimal doses, we shall publish a letter on this subject, received from Mr. Poudra, a man distinguished in the physical and mathematical sciences, and Professor in the High School at Paris. He writes as follows:—

Paris, June 8th, 1841.

The following is my view of the medical power of matter. To simplify, I shall call this power *medicality.*

The medicality of a substance will then be the power, by virtue of which, matter, placed in contact with the organism, modifies it differently. This action of matter on the organism takes place when this substance is infinitely divided, and approaches to what I shall call the *atomistic state*, that is to say, when the molecules, or rather the atoms, shall be separated, held at a distance, and no more neutralized in a body by their reciprocal actions; this is conformable to all the experiments.

It is evident, then, that *medicality* and affinity are powers of the same nature, residing in the last molecules, or atoms of bodies; and I believe I shall not depart far from the truth in advancing that medicality and affinity are but two different effects of a same cause—are but two different manners of exerting a same power.

All modern discoveries, at present, tend to prove that affinity is a power due to the electricity of matter in the atomistic state.

Now it is well known, that in the smallest portion of matter there exists an immense quantity of electricity. Mr. Becquerel, in one of the sittings of the Academy, lately confirmed this fact. It follows, then, that if electricity be the primary cause of affinity and medicality, there should exist, in the smallest portion of matter, an immense quantity of affinity and medicality. As it is necessary to produce chemical phenomena of combination and affinity, to divide matter and bring it to the atomistic state, so, in like manner, to produce the phenomena due to medicality, it would be essential to arrive at the same state.

We may thence conclude that the sphere of action, whether of affinity, or of medicality, augments in a proportion as yet unknown, whilst the matter diminishes in volume and approaches the atomic state.

Will it be attempted to deny affinity, because it does not produce effects between a milligramme of two substances, and even between millionths of these milligrammes, which we may procure by mechanical trituration? Will it be attempted to deny that affinity will produce no effect between millionths of these millionths, that new division produced by heat or solution?

When two substances, having a reciprocal energetic action, are divided by solution, or when the atoms are held by heat at such distances that action will no longer take place, then we may conceive the possible limit of this power of affinity and medicality. Now, as the number of atoms contained in the smallest grain of matter is immense; that, reduced to this state, the sphere of action of each atom ought to be very great, proportionally to its distance, it follows that this limit is very narrow.

Affinity and medicality proceed, we say, from electricity; but we know that affinity is modified by heat, and by the electric state of bodies in solution. Then it is easy to explain naturally the augmentation of *medicality* that matter acquires when we produce its division by repeated shocks; it is clear that these shocks produce friction, and that these frictions should modify the electric condition of the molecules and atoms, and consequently augment their affinity and medicality. In admitting, then, that medicality and affinity are powers of the same nature, we shall have no further difficulty in conceiving the developement of this first power by division, by friction; and why a large portion of matter, placed in contact with the organism, remains inert, whilst the smallest portion of the same substance, reduced to the atomistic state, and whose power has been augmented by friction, will produce remarkable effects. But, it may be asked, how it is that the action of a finite quantity of matter, placed in contact with the organism, is not the amount of actions of all the atoms?

Here the problem becomes complicated. I conceive the solution of it as follows, in pursuing my similitude between affinity and medicality:

1st. A substance taken into the stomach, under a certain volume, sometimes does not dissolve at all, and consequently is without action; sometimes it dissolves a little, and the effects will be due solely to the portion dissolved. But suppose that we speak of a substance in solution, before taken into the stomach, the result in this case should be as in chemical combinations. When two substances, reduced to the atomistic state, combine, an atom of one unites with 1, 2, 3, &c. atoms of the other, or reciprocally, and that in very limited proportions. If, then, one of these substances is in excess, it remains excluded from the combination, and may, under certain conditions, be separated from it; but, generally, if the excess of this substance is too considerable, we shall, on the contrary, have difficulty in finding the combination.

Let us apply these ideas to *medicality*. This action residing in the atoms, we must have a certain number to produce a modification of the organism; and as there are many degrees of combination, so there will be many important and different modifications, but the whole in small number; beyond that, all the rest of the atoms, or of the substance, will be superfluous, and will be rejected, and may become hurtful, in completely dissembling the obtained modification.

Here we shall have, we must confess, a great work to undertake, on the basis of what I have just established—a work which cannot be better done than by you, sir, who so well understand the action of medicines. This work will consist in determining, 1st. If the same substance can produce one or many modifications of the organism, and the nature of these modifications, or, to use a clearer expression, if there are many combinations between the organism and the same substance reduced to the atomistic state. 2nd. What is the smallest quantity of matter reduced to this state, and whose power has been augmented by friction that is necessary to cover entirely the organism, that is to say, to produce the first modification? 3rd. What becomes of the substance in excess?

This work will require time; but it must happen that sooner or later, medicine, however it may be called, must occupy itself with it, if it would know all the modifications which the organism may experience by the action of all the substances which surround us.

I have the honour to be, sir,

Your very affectionate servant,

POUDRA.

INDICES

OF THE LATIN AND ENGLISH NAMES OF THE DIFFERENT SUBSTANCES TREATED OF IN THIS WORK.

☞ In this Index, the words printed in italics are the Latin names which we prefer using in *homœopathy*.

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INDEX OF ENGLISH NAMES.

Note.—By means of this Index, those who cannot recollect the Latin name of any substance will be enabled to find it upon referring to the preceding Index. It was not thought necessary to annex the pages.

Errata.—For Liquisitia read Liquiritia, pages 253 and 254.