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ON
SYPHILITIC ERUPTIONS,
ULCERATIONS,

AND OTHER SECONDARY SYMPTOMS;

WITH ESPECIAL REFERENCE TO THE
USE AND ABUSE OF MERCURY

Illustrated by Cases.

BY

THOMAS HUNT, F.R.C.S.,

SURGEON TO THE WESTERN DISPENSARY
FOR DISEASES OF THE SKIN, ETC.

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PREFACE TO THE FIRST EDITION.

PERHAPS no greater service could be rendered to medical science than that of pointing out the precise conditions on which the therapeutic energies of mercury can be brought to bear safely, efficiently, and permanently, upon the various forms of secondary and tertiary syphilis. The author of the following observations is too well and too painfully acquainted with the difficulties of the subject, as well as with the mind of the profession (naturally and necessarily cautious in the admission and adoption of novel theories), to hope that he will live to see any important advances towards unity of opinion on the hackneyed subject of this essay. But it seems to him that the next generation will have less difficulty in discovering the truth. The

general failure of the non-mercurial treatment has already manifested itself in a fearful increase of hereditary syphilis in every rank of life, in both sexes, and at all ages. A very large proportion of the cutaneous affections met with, both in hospitals and private practice, are unquestionably syphilitic; and if the wide-spread existence of an hereditary taint is to be attributed to the non-mercurial treatment of the parents,—and if the disease has no certain tendency to wear itself out, but may be transmitted by the blood from generation to generation,—a heavy responsibility certainly rests upon the medical profession. The excessive and indiscriminate use of mercury in the last century, was as unnecessary as it was barbarous. It fell heavily on the culprit; sacrificed oftentimes his teeth, and sometimes his life; but it did not visit on the children the sins of their fathers. A surgeon of the highest eminence* has, within the last few years, declared an opinion, that of late mercury has been too sparingly used in these diseases. If the present generation of surgeons do not become convinced of the truth

* Sir B. C. Brodie.

of this opinion, and do not put it into practical operation as they have opportunity, it is much to be feared that posterity will re-echo the theory under accumulated evidence of its truth.

There is reason, however, to hope that some degree of reaction has already taken place in the practice of the profession. The author, with a view to obtain further information on this point, took a recent opportunity to propound his views before a numerous meeting of the Fellows of the Medical Society of London, not one of whom, on that occasion* present, advocated, as a general rule, the non-mercurial treatment of secondary symptoms. On the contrary, not only were most of the facts brought forward by the various speakers obviously in favour of the author's views, but a general impression of the soundness of those views was manifested in the tone of liberality and kindness with which they were listened to and discussed.

The mode of administering mercury, described in the following pages, may not be wholly new, but it is certainly uncommon ; and if upon trial

* November 16, 1850.

it shall be found effective, the more formidable objections to the use of mercury will be entirely obviated. If the mineral is capable of removing all traces of the disease, and all tendency to its recurrence, not only without salivating the patient, but without injuriously inflaming the gums,—and if its therapeutic action is that of a tonic, and not, as has been asserted, that of a poison,—then the unfounded prejudice, as well as the salutary fears, which have hovered over the exhibition of the remedy, may both be expected to die a natural death. Cases there yet will be in which the medicine cannot be borne with impunity ; but they will be so rare as to offer no objection to the general principles which must, within certain limitations, guide our treatment. And if it shall appear that the non-mercurial treatment of syphilitic eruptions is more fraught with danger both to the patient and his offspring than even the unsparing exhibition of mercury, given with a view to salivation, how much more shall a moderate and harmless, yet equally effective, use of the medicine commend itself to general attention ?

The divided state of medical opinion renders

it necessary to preface these observations on the use of mercury in these diseases, by a short review of the diagnostic marks of syphilitic eruptions, which are very often confounded with those idiopathic diseases of the skin, which they closely resemble in their primary forms. It has likewise been thought necessary to say a few words on the *prognosis* of these diseases, or the prospect which we are authorized to hold out to patients respecting their speedy or ultimate recovery.

March 1851.

PREFACE TO THE SECOND
EDITION.

IN presenting to the profession a second edition of this little treatise, the author begs to tender his thanks for the kind indulgence with which his suggestions have been received. Although but three years have elapsed since the publication of the first edition, the additional experience which that short period has afforded him, in the mode of administering mercury herein propounded, has not only confirmed his published opinions, but has added considerably to his convictions of the very great importance of these views; and he trusts the additional cases and illustrations now offered will tend more perfectly to elucidate the value of a practice which has, in so many cases, not only prevented much suffering from the morbid effects

of mercury, but completely destroyed all constitutional tendency to the future development of specific disease. While the author observes, with regret, that the too often injurious plan of persisting for a long time together in a mercurial course, is unhappily still generally sanctioned by the surgical literature of the day, he rejoices to know that the practice of the profession is, in this respect, rapidly changing for the better; and as it is impossible for any practitioner not to approve of the plan herein advocated when he has fully tried it, the author cannot doubt that it will ultimately become universally the practice of the profession.

In the preface to the first edition the author ventured to assert that "the general failure of the non-mercurial treatment has already manifested itself in a fearful increase of hereditary syphilis in every rank of life, in both sexes, and at all ages." At the suggestion of a friend, who is of opinion that such a startling assertion should not have been published without a reference to the evidence on which it is founded, the author begs to append the following testimony, extracted from the returns of the Regis-

trar-General, from which it appears that the deaths from syphilis, in London, have been increasing, during the last thirteen years, with a rapidity which too correctly confirms this representation.

In 1840, the deaths from syphilis, registered in the metropolitan districts, amounted to 20

In 1844 56

In 1849 100

In 1850 122

In 1851 129

In 1852 140

In 1853 165

It appears, therefore, that the number of persons who died from syphilis in 1840, was doubled in 1844, again doubled in 1849, and again doubled in 1853; the last named year registering eight times as many deaths as the year 1840.

That this mortality was chiefly caused by the hereditary transmission of the disease, is rendered extremely probable by the fact that, out of 565 deaths from syphilis which are returned for the whole of England in the year 1847, 255

occurred in infants within the first year, and 284, or rather more than one half of the whole number, in children under five years of age.

Syphilis is so far from being commonly fatal, that probably not one in two hundred fall victims to it; therefore, if in the year 1840 there were 20 *deaths* from syphilis, there might have been as many as 4,000 sufferers from the disease in the whole of London. And this is probably rather under than over the truth. But if the increase of disease is to be estimated by the registered number of deaths from syphilis, it will follow that in 1853 there were 33,000, or more than eight times as many,—an enormous increase in thirteen years, even if the odd three thousand, or ten per cent., be deducted for former neglect of registration, as compared with the attention to it of late. It was not then without good grounds that the author spoke of “a fearful increase of hereditary syphilis in every rank of life”. That this increase is chiefly due to the prevalence of non-mercurial treatment, may be safely deduced from the facts disclosed in the following pages, which, so far from being unusual, might have been indefi-

nately multiplied from the records of every hospital in which these cases are received.

In 1851 the author stated (see preface to the first edition) that "if the present generation of surgeons do not become convinced of the truth of this opinion, and do not put it into practical operation as they have opportunity, it is much to be feared that posterity will re-echo the theory under accumulated evidence of its truth." In the short period of two years, which followed the enunciation of this prediction, the sufferers from syphilis in the metropolis alone appear to have increased from 25,800 to 33,000, an increase of 3,600 per annum, or nearly ten per diem, an advance which may well awaken the attention of every conscientious surgeon, while it exonerates the author from any suspicion of exaggeration which might have rested upon his former statement. That this increase is still advancing, is shown by the reports of the Registrar-General for the first six months of the present year, during which period the deaths from syphilis are recorded as 104, which multiplied by 200 amount to 28,000 cases in the six months, the rate being 41,600 per

annum ; making an increase of 8,600, or of more than twenty-three per diem, being a ratio of increase more than double the annual increase of the last two years. So remarkable an addition has not escaped the notice of the Registrar - General, who has repeatedly remarked that in several weeks there have been respectively 5, 6, and 7, and in one week (ending May 27th) as many as 9 deaths from this disease.

If, as is the firm conviction of the author, this wide-spread and enormously increasing amount of disease may be, not only efficiently arrested, but to a great extent prevented in its hereditary and more fatal forms, by the adoption of the simple treatment detailed and exemplified in the following pages, he will have no ground of regret that he has been induced to bring to light facts which are calculated to strike a salutary alarm in thousands of families.

Alfred Place, Bedford Square,

August, 1854.

ON

SYPHILITIC ERUPTIONS.

DIAGNOSIS OF SYPHILITIC ERUPTIONS.

It is very important to ascertain whether an eruption be syphilitic or not. But this investigation has nothing to do with the distinction between papules and scales, pustules and tubercles; for the poison of syphilis is capable of producing almost every form of eruption. Neither is it wholly a question of *colour*. The copper-colour, so strikingly characteristic of venereal affections of the skin, is by no means invariably present; nor is every copper-coloured eruption syphilitic in its origin, the hue of the affected portions being materially modified by the natural complexion of the patient. The diagnostic signs of syphilis do not lie on the surface, although the first glance frequently excites well-grounded suspicion. We must appeal to the history, as well as to the hue, for evidence of the origin and nature of the disease.

Syphilis is well known to affect the tissues consecutively, and, for the most part, in a certain order ; and there is often, but not always, much regularity in the time occupied in the successive attack of each structure. Usually, there is first a primary sore, then a swollen absorbent gland, afterwards an eruption of maculæ, followed by an ulcer in the throat, affecting the tonsils or velum, or, in other cases, the tongue or lips. The periosteum then becomes inflamed, and a node appears ; subsequently the iris is affected ; then a secondary eruption on the skin appears, frequently scaly or tubercular, particularly in the palms and soles, in the form of lepra, and affecting the skin generally, in the form of ulceration. At length the cartilages and bones of the nose, face, skull, or other parts, become carious. In many cases, however, these escape.

Some surgeons divide these morbid affections into primary, secondary, and tertiary symptoms. But this multiplication of terms is not founded upon strict pathology, and is apt to lead to mistakes. I regard these symptoms from first to last (with the exception of the primary sore and bubo) as secondary or constitutional symptoms of lues.

When a patient has contracted syphilis originally, and appears before us with a suspicious eruption, we shall generally find upon inquiry,

that some or all of the above-mentioned parts have been affected, usually in the order here described. When, however, the disease is hereditary, the links of the chain cannot be so clearly traced, and the diagnosis may be difficult. Here, if we can gain any satisfactory knowledge of the health of either parent, it may materially assist our judgment. The eruption should awaken suspicion if it be copper-coloured, and if there be a tendency to ulceration ; particularly if the ulcers burrow under the skin, and are partially covered with dull copper-coloured bands of integument ; or penetrate deeply into the sub-cutaneous tissues, healing with deep scars, and then breaking out afresh in a neighbouring locality. In this way the whole surface of the body is sometimes covered with scars as from confluent small-pox. It may likewise be observed, that syphilitic eruptions rarely itch intensely, and as seldom assume a form of very active inflammation.

In investigating the nature of venereal eruptions, we may easily be led astray. Various in their form and hue, and not less so in their degrees of severity, they have been described by authors under different names. Hunter wrote of " diseases resembling syphilis" : Abernethy wrote of " pseudo-syphilitic diseases" : modern writers distinguish between syphilitic

and "syphiloid" diseases: Carmichael describes four kinds of syphilitic disease, both primary and secondary; and some of the French surgeons take similar views.

There are, however, many reasons for the belief, that, in this country at least, there is but one syphilitic poison; and that the mischief which this poison may effect depends, in individual cases, not so much on the intrinsic virulence of the poison itself (for of this we can know nothing), as upon the susceptibility of the patient, and the condition of his constitution when he takes the disease. Some persons cannot be inoculated with it at all: in others it produces only a primary and superficial sore; in many it establishes a formidable disease; and a few are absolutely destroyed by it.

The most perplexing difficulties met with in modern practice, connected with the diagnosis of venereal affections, appear to me to arise from a too hasty adoption of the theory, that *mercury is capable of originating diseases similar in character to the secondary forms of syphilis*. Against this dogma, which, so long as it prevails, must necessarily involve the subject in a labyrinth of difficulties, from which there is no escape, I must beg most earnestly to protest, for the following reasons:

1. Symptoms resembling syphilis are never

observed to result from the use of mercury in cases in which syphilis has neither been previously contracted, nor inherited. No practice is now more common than the exhibition of mercury for various forms of visceral inflammation. Mercurial treatment has, in fact, to a great extent, taken the place of depletion, and is very frequently pushed to ptyalism; and yet, to whatever extent the gums, or the salivary glands, or the bowels, become affected, we never find eruptions or ulcerations resembling syphilis, produced by this treatment. The cheeks and the gums, the lips, the throat, and the tongue, may all become the seat of mercurial ulceration; but the ulcers do not resemble those of syphilis. They are more superficial, less persistent, usually healing when the mercurial irritation subsides, and they never resemble syphilis in affecting distant parts in a certain order. In these and other respects they bear no resemblance whatever to syphilitic affections; and when the system is really free from lues, the difference between these mercurial ulcerations and the sores of syphilis, must be as obvious to the most superficial observer, as is the distinction between the *eczema mercuriale* and the *lepra syphilitica*.

11. The morbid effects of mercury are peculiar, and well-defined; and, with the exception

of the ulcerations above described, do not even approach in character any form of syphilis; neither do they exhibit the slightest similarity to that disease. They are as follows: inflammation and swelling of the gums, superficial ulceration of the lining membrane of the mouth and sometimes of the tongue, salivation, loosening of the teeth, diarrhœa with griping, dysentery, extreme depression of the nervous system, accompanied with trembling of the limbs, infirmity of purpose, an undefined dread of evil or danger, with pusillanimity of mind, dyspepsia, rheumatism,* eczema mercuriale, etc. In infants and very young children soreness of the gums is seldom produced, and salivation yet more rarely; but the full action of mercury is manifested by a disorder in the bowels and a discharge of green mucous evacuations.

III. The occasional aggravation of syphilitic disorders, under the administration of mercury, may be rationally explained, and fully accounted for, without supposing it capable of originating a chain of symptoms, the character of which (if not the full developement) had been established in the system long before the administration of

* Rheumatism, induced by mercury, occasionally throws out nodosities in the neighbourhood of joints; but these are not easily confounded with the venereal node.

a grain of mercury. The mode in which mercury, when used in excess, aggravates the syphilitic action, will be hereafter explained, without adopting the lame and impotent conclusion, that the remedy is capable of producing a disease similar to that which it cures,—a conclusion which has always appeared to me to resemble more the visionary subtleties of homœopathy, than the sober realities of medical science.

PROGNOSIS OF SYPHILITIC
ERUPTIONS.

SYPHILITIC eruptions, like other forms of lues, generally discover, if left to themselves, a tendency to persist (with occasional intermission) through life ; and they may be transmitted from either parent to the children. In a few cases, a spontaneous recovery appears to take place ; and, in many, the eruption will disappear for a time under alterative treatment. But it will now be attempted to show that the spontaneous recoveries from syphilis are apparent only, not real.

There is no disease, the destruction of which it is so important to ascertain with certainty, as syphilis. An error here may not only spread unhappiness and desolation over the prospects of married life, but it may affect the health of the next generation. It is therefore impossible to exaggerate the value of well-considered and well-founded opinions on a subject which has been too much regarded as one of mere theory and speculation. The popular belief on the

subject is strong, and calls loudly for attention. So anxious, and so properly anxious, are young men to know if, having once suffered from syphilis, they may safely marry, that there are few cases of monomania more common than *imaginary* lues ; and the imaginary disease is far more difficult to cure than the real. One reason of this may be found in the unsettled state of medical opinion and the uncertainty of the prevailing mode of treatment.

The *vis medicatrix naturæ* is observed to relieve the system of certain morbid influences or agents, in one of three ways : by elimination, by decomposition, or by tolerance. Under the two former processes, the disease may possibly be cured ; but, under the latter, it is only tolerated, or latent. We have no proof that the act of elimination ever occurs spontaneously, or otherwise, in lues venerea ; we do not even observe an abortive effort to expel the poison, as occurs in primary syphilis, gonorrhœa, cholera, diarrhœa, diabetes, etc. Neither is there any reason to believe that the poison is ever spontaneously decomposed or neutralized.

The spontaneous recovery from secondary syphilis, when it does occur, appears to be nothing more than a recovery *by tolerance*, consisting merely in the temporary abeyance or suspension of the diseased action when the

system has at length become habituated and reconciled, for the time, to the presence of the poison. This theory of tolerance is in perfect harmony with all the analogies of physiology and pathology. The well-known fact that many mineral and vegetable poisons, such as antimony, mercury, tobacco, and opium, become comparatively harmless by long usage, losing their toxical powers as the system becomes habituated to their influence, would suggest the probability that certain *animal* poisons also might prove inert from the influence of time and habit: and so in fact we find it. An infected couple, both originally labouring under gonorrhœa, may cohabit until all symptoms of disease in both of them have vanished. Yet they are both capable of communicating the disease to a stranger. John Hunter relates several cases of this kind, showing that a woman, without any new infection, and without any symptoms of disease on her own person, may communicate gonorrhœa to one man, and not to another; and he was of opinion, that the capability of communicating the disease is sometimes the only criterion of a woman having it herself. The late Mr. Hay, of Leeds, was of opinion that a person may infect another with the lues venerea after all symptoms of the disease have disappeared.

And if a doubt may be entertained of the nature of the disease on which these opinions are founded, or of the mode or medium of transmission, there is abundant proof in the history of syphilis of its capability of existing in a latent form, as in the well-known circumstances attending the disease at Lisbon during the Peninsular war. At the time when our troops were stationed in that city, the disease existed among the inhabitants in so mild a form that no mercury was necessary for its cure ; and the dancing girls, from whom our soldiers were infected, were well enough to pursue their avocations on the stage without inconvenience. Yet the disease which they communicated to our officers and men proved to be so terrible a form of syphilis, that it was called the "black lion". It produced phagedenic or gangrenous ulceration of the genitals, and horrible mutilations. It was the opinion of some of the army surgeons that this was a new disease, or at least a form of syphilis of unusual malignity. It is, however, much more rational to look upon it simply as syphilis, so well tolerated by the inhabitants as to become almost latent, but malignant in its effects upon the soldiers from the exhausting influences of fatigue and excesses in a new and sultry climate. This is quite conformable with the fact, that syphilis generally proves a

severe disease upon its first breaking out in a country. In England it is generally much less formidable than it once was ; less mercury will cure it, and perhaps it occasionally wears itself out : but it is syphilis still, and its milder forms are often as treacherous as they are transient. A latent virulence lurks under the mask, which may burst out destructively when least expected ; for this power of tolerance has its limits. It is limited to certain persons, to habits of life, to conditions of health, to climate, and sometimes to a generation : thus, sometimes syphilis may be almost latent in the parent, but severe in the child. A mother may have no symptoms of syphilis in her own person, but may have a succession of still-born children, all poisoned *in utero*, or born alive, but soon after birth covered with maculæ, and sometimes falling early victims to the disease. A father, in whom lues has become tolerated and latent, may beget a diseased child, who shall, if weak or scrofulous, suffer more than the father. Spontaneous recovery from syphilis is, therefore, in many cases, perhaps in all, an appearance, not a reality.

TREATMENT OF SYPHILITIC
ERUPTIONS.

Alterative Treatment. The alterative cure of secondary syphilis, sanctioned as it is by the practice at some of the London hospitals, is probably of the same nature as the spontaneous recovery. Though the antisypilitic virtues of Plummer's pill, sarsaparilla, guaiacum, iodine, arsenic, and the mineral acids, are very questionable, these medicines evidently have the power of rendering certain subjects tolerant, for a time at least, of certain forms of secondary syphilis. These agents, or some of them, will bring about the healing of ulcers, the dissipation of eruptions, and the reduction of periosteal swellings; and under this treatment, combined with a regulated diet, scores of patients, perhaps hundreds, are annually dismissed from our hospitals, apparently free from every vestige of disease. The Plummer's pill, although it contains calomel, does not appear to act mercurially, the sulphuret of antimony modifying its action; indeed, the specific effects of mer-

cury are rarely apparent in the action of this medicine. This treatment, therefore, is non-mercurial; and yet patients appear to recover under it. But do they really recover? Do they not frequently return again and again to the same hospital, or to some other hospital, and, when again discharged, apparently cured, does it not frequently happen that the first exposure to the effects of intemperance, want, or cold, induces a relapse of the disease? Or if it be tolerated for life, so that it does not reappear in the person of the patient, is the wife safe; or, more especially, are the children of the patient safe? The question admits of great doubt. A large proportion of the cutaneous diseases met with in every station in life are syphilitic. That a man can, without infecting his wife, transmit to his children a syphilitic taint, is an established doctrine. Several cases of this nature are related by the older writers on surgery, and by some of modern date. Several, also, the validity of which no scrutiny can impeach, have occurred in my own practice. I have seen syphilis in infants and in children of all ages, whose fathers had married after the non-mercurial treatment of the disease had effected an apparent cure of the disease in their own persons. After marriage (in some cases several years after), secondary eruptions made

their appearance. These were treated mercurially, and the result was most instructive. The wife escaped, as did also the children begotten *after* the mercurial treatment of the father; but the children begotten *before* the mercurial treatment became infected. In one instance, the child suffered more than the father: the father had psoriasis plantaris in a mild form; the child, a girl of twelve years of age, had iritis, sores about the nostrils, and a scaly eruption on the scalp. All these diseases, together with that of the father, yielded to active mercurial treatment, and to no other; iodine, sarsaparilla, and other remedies of that class, having proved perfectly inert. Several children, begotten and born after the mercurial treatment of the father, were perfectly healthy; nor was any trace of disease to be found in the mother. In another striking instance, a married man contracted syphilis. The primary sore readily healed under simple treatment. Secondary symptoms appeared, which ultimately yielded to active mercurial treatment. In the interval between the healing of the primary sore and the subsequent mercurial treatment, a female child was begotten. This child was born apparently healthy, but, as she grew up towards womanhood, suffered from sore throat, scaly eruptions, sores about the nose, and other

unequivocal symptoms of syphilis. Subsequently to the mercurial treatment of the father, several children were begotten; but not one of these has been affected; and two elder children, born before the father contracted syphilis, have been also entirely free from the disease, together with the mother, who was fortunate enough to escape infection in the first instance.

Nothing is more common than for middle-aged men and women, who are afflicted with secondary syphilis, to deny that they were ever affected with a primary sore; sometimes admitting that they have deserved to contract the disease, but denying that such has actually occurred. Assuming that some of them report falsely, common sense claims a certain proportion of these cases as cases of hereditary syphilis, breaking out for the first time, in middle age, in the form of secondary symptoms.

In the instances which have fallen under my notice, I have generally found alterative treatment useless, and mercury all-sufficient; and the conviction has been more and more forced upon my mind, that the non-mercurial treatment of secondary syphilis may be generally regarded as an inefficient and ineligible practice; inefficient as regards the patient, and ineligible, as tending to infect large masses of the community with hereditary syphilis. The dis-

ease may be, and often is, mild in its hereditary forms, and it may possibly wear itself out in a generation or two; but this is mere conjecture,—certainly it by no means always happens. It aggravates the strumous habit when it comes in fellowship with it, and probably is at the foundation of many cutaneous and cachectic disorders, the character of which is undefined and unsuspected. One cannot, therefore, but deprecate a practice which allows the blood to remain vitiated and tainted, from generation to generation, with the presence of an animal poison, which we have, in most cases, the power of destroying at once and for ever.

Mercurial Treatment. The prevailing objections to the use of mercury in syphilitic diseases may be thus summed up: 1, That it occasionally produces lesions more formidable than the disease for which it is prescribed; 2, That its use is not generally necessary to their cure; 3, That besides being unnecessary and injurious, it often proves inefficient and inert.

That there is much of real truth in these objections, no practical man can deny; but there is likewise much fallacy. For as these diseases, in their secondary forms at least, rarely get soundly and permanently well without mercury, it may be said to be generally necessary to their cure; and, if rightly and vigilantly adminis-

tered, it is generally successful. But both its safety and its success will be found to depend very much on its *mode of administration*,—by which term it is intended to signify something more than its *mode of introduction* into the system ; for this, except in peculiar cases, appears to be of comparatively little consequence.

Our success in administering mercury may be very much limited by erroneous views of its mode of action. The mineral and the disease have been regarded as two antagonising poisons ; the poisonous influence of the mineral counter-acting that of the disorder, by setting up in the system a morbid action of a different kind, and incompatible with it. On this theory it would appear, that the more disastrous the effects of the medicine, short of the actual destruction of life, the more perfect would be the safety of the patient ; the more he is poisoned by the mineral, the less, on this theory, would he be poisoned with lues. And in the event of the disease becoming aggravated by the severity of the mercurial course, it would be necessary, for the truth of the theory, to hold that the original disease having been vanquished by so much mercury, the existing symptoms must be the symptoms of a *mercurial disease*.

And this conclusion is actually adopted by many believers in the theory. But is the theory

true? It is very doubtful whether any real advantage is derived, in any case, from the *morbid* effects of drugs. Disease may succumb in spite of such influence, but not in consequence of it. If a poisonous drug is allowed to do mischief, it has probably been given in excess. A smaller quantity would have accomplished our therapeutical purposes, not only as well, but probably better. It is in the right dose of a medicine that its real value consists; and too much study cannot be given to this all-important point. As a general rule, the doses in which we are accustomed to exhibit poisonous remedies are perhaps not only unnecessarily large, but injuriously excessive.

Mercury belongs to the class of mineral tonics,* which, in excessive doses, become irritants, and in very large doses, poisons. Its tonic action ceases when irritation is excited in the tissues. In order to avail ourselves of the full benefit of tonics, our attention must constantly be directed to their special properties and peculiarities of action. There is in the

* Some readers may demur to the use of the word "tonics" in this comprehensive sense. I am not anxious to defend it; but it appeared to me the most convenient term which could be used in order to make my meaning plain. The term is used in various senses by medical writers.

organic system an inherent tendency to health. Disease is generally an accident,—a breach in the economy, which nature is ever intent on repairing. But in this she sometimes fails; and the design of tonics is to supply what is wanting. There is sometimes a deficiency of pure, healthy blood, and the preparations of iron restore that fluid to a healthy condition. In other cases, the blood contains a poison, and some tonic must be selected which is capable either of eliminating or decomposing the poison. Mercury probably acts by producing some chemical change in the blood, which renders the poison inert for a time, and, under careful management, for life. But, as the salts of iron are liable to create disturbance in the functions, if given in excessive doses (under which circumstances their tonic effects cease), so mercury must be so administered as not to depress the powers of the system below the granulating point. So long as the general system does not suffer from the mercurial poison, it will remain capable of taking advantage of the special effects of the mineral as exerted on the morbid condition of the blood; but when the gums become sore, or the bowels disturbed, there is here a new source of irritation and debility. The animal poison may have been in part neutralized; but, if the strength of the system be sacrificed

to the action of the mineral poison, it will no longer be able to contend with the original disease, which, although less virulent in its nature, may become more destructive in its effects. It often happens that syphilitic symptoms will yield, under a course of mercury, up to a certain point; *the disease will then become stationary, and, if the medicine is persevered in, the symptoms will become aggravated*; sores which were healing will again ulcerate, dissipated eruptions will reappear, and the patient may even fall into a worse condition than before. And yet the disease is as purely syphilitic as ever it was, and as ready to yield to mercury, if rightly administered; but the system being for a time deranged by its excessive administration, the *vis medicatrix naturæ* is paralysed, and the disease is triumphant.

But, apart from theory, the case is practically this. A continued course of mercury generally exerts a salutary influence over syphilitic eruptions; but only for a time. It then does harm. Whatever be the reason of this, the practical conclusion is plain,—we must then desist, and, if necessary, renew the treatment when the system has recovered from the shock. It is much safer to administer an active remedy, under the guidance of the observable phenomena of its action, which present themselves to our notice,

than in obedience to any theory deduced from extraneous sources. That the latter method has been prevalent, both in the excessive and in the too sparing use of mercury, is but too apparent.

Every mineral used in medicine has some peculiarity of action, which can only be understood by long and attentive observation; and without a familiarity with these habitudes, we use the medicine at great disadvantage. Too much attention cannot be given to this subject. In order to show its important bearing, the action of mercury may be contrasted with that of arsenic. Thus:

ARSENIC

Produces its maximum of good by slow degrees, and by continued and prolonged exhibition.

Has a cumulative action, the system becoming more and more sensitive to its presence, and intolerant of its influence, in proportion to the quantity swallowed.

May be given until the patient will not bear the five-hundredth part of a grain.

Affects the nervous system more readily at first, and afterwards the vascular sys-

MERCURY

Effects its salutary purposes often suddenly; always within a limited period; and beyond that period, fails altogether.

Has no cumulative effects after the first few days; and the system becomes less and less sensible of its presence, and more tolerant of its influence, by its habitual use.

May be given until enormous quantities prove absolutely inert.

Affects the vascular system more readily at first, the nervous system suffering

ARSENIC.

tem, the nervous tissues recovering their tone.

Should therefore be added to the blood drop by drop, *cautè et gradatim*, in diminishing doses.

MERCURY.

severely after a lengthened course.

Should be poured in suddenly, until it produces some effect, then as suddenly withheld for a time, and resumed, if necessary, with greater energy.

That the vascular system may be gradually inured to the influence of mercury, so that doses which at first had the power of salivating, may at length be administered without producing any sensible effect; and that, in order to excite as ready an action by a second or third course of mercury as by the first, the dose must be increased, if not doubled, must be well known to every practitioner. It is also matter of common observation, that the salutary action of mercury on diseased structure, is nearly contemporaneous with the morbid action of the mineral on the gums or other tissues. Accordingly, the common practice has been, not only to make the gums sore, but to keep them sore for days or weeks together, with a view to the continued and protracted effects of the remedy on the disease. As it was once believed that copious ptyalism was necessary to insure the full benefit of the mercurial treatment, so of late it has been generally held that a continued

though moderate degree of soreness of the gums is a necessary condition. The latter opinion appears, however, to rest upon no better foundation than the former now long-exploded notion.

Both the one practice and the other appear to be founded on the belief that the morbid action of the mineral on the healthy tissues takes precedence of its salutary action on the diseased structure. Many years' close and anxious observation has established in my mind the opinion that this is an erroneous view. It is not easy to detect in an ulcer or an eruption the first appearances of healthy action; and it is clear that healthy action must exist for some little time before it becomes apparent. If, therefore, the gums first become tender, and the ulcer first presents an improved appearance, on one and the same day, it is fair to presume that the healthy action had been actually set up on the previous day, that is, antecedently to the morbid action on the gums; but further close observation will generally reveal the fact, that the very appearance of improvement in the diseased parts exists before the gums are in any degree affected. The mercury has effected the good before it has effected the evil. The soreness of the gums, therefore, is a sign, not merely that the mercury has been pushed far

enough, but that it has been pushed *farther than was necessary* for the establishment of healthy action in the diseased parts.* If a drachm of strong mercurial ointment has been used every night for five successive nights, and if, on the following day, healthy action is substituted for diseased ; and if, on the sixth night, the inunction is continued, the gums becoming slightly sore on the following day,—in such a case as this the mercury has been continued two nights longer than necessary. For the healthy action which became apparent after the fifth night, must have existed the day before, though unobserved ; consequently disease had been actually arrested by the fourth inunction ; and the healthy action thus set up, would doubtless have continued, for a time at least, if the mercury had been omitted on the fifth and following nights. The injury inflicted on the gums, therefore, though possibly unavoidable, was wholly unnecessary to the immediate restoration of health. The effect has been sudden, and probably instantaneous,—but will it be

* Occasional exceptions to this rule are met with in patients whose gums are remarkably susceptible of the influence of mercury ; and in such cases it is difficult to make any impression on the disease without, in some degree, affecting the gums. These instances are, however, rare, and do not make void the general rule.

lasting? Probably not. And the practical question is: Would the effect have been rendered in any degree more permanent or satisfactory by persevering in the mercury? It is now generally admitted that no advantage would have resulted from salivation; for sores which had become healthy at the commencement of a mercurial course, have been but too frequently observed to retrograde under a protracted ptyalism. And the same thing has been observed under a mild but long-continued course, affecting the gums but slightly.

Under the mercurial irritation, in any and every degree (whether from the consequent exhaustion of the *vis vitæ*, or from whatsoever cause), the latent virus, if any exists in the system, is liable to break out in an aggravated and destructive form. It is, therefore, not only useless, but in some degree dangerous, to persist in the use of mercury for a single day beyond the date of a visible improvement in the disease. It is, however, often necessary to have recourse to a second course, or even a third or a fourth, in order to effect the final destruction of the disease. Each succeeding course must be more energetic than its predecessor, otherwise little or no effect will be produced. The courses should also be short and distinct, and should be so managed as to arrest disease with-

out disturbing the general health. The case should be watched *day by day*, and an improvement in the disease, ever so slight, be it real and satisfactory, should be regarded as the signal for arresting the course. Then aperients and tonics should be substituted for the mercury; and the very first appearance of a return of the disease indicates the necessity of a renewed administration of mercury, in doses twice as large as the first. By this means disease may often be arrested in an incredibly short time; and, when the system is again purged from the mercury, a third or final course should be administered as a preventive, suspending the mineral as soon as fetor is observable in the breath, or a bitter metallic taste complained of by the patient.

The whole of this practice, which has proved very generally successful, is founded upon the fact, that the action of mercury on the disease is sudden, and generally of short duration. It is that of a shock; and the impulse appears to be expended upon the organic nerves. In what way such an action on these nerves can permanently destroy a blood disease, it may not be easy to explain;* but that the final results are

* The rapidity with which diseased action is exchanged for healthy, under the influence of mercury, reminds one of the chemical changes produced by galvanism. We

not compromised by the limited duration of the mercurial action, is quite certain,—indeed, the radical cure of the disease never proves so difficult as where mercury has been administered in large doses for many consecutive months. The debility thus produced too often renders the patient, for a time at least, a helpless victim to the disease; whereas, by short and vigorous courses, the vital powers are roused and invigorated, the appetite is increased, the digestive organs become active, sleep is procured, and the disease appears to yield rather to the *vis medicatrix naturæ* than to any specific anti-syphilitic virtues inherent in the mineral.

These views may appear opposed to the experience of many practical men, who, failing to effect a radical cure of syphilis by a short course of mercury, have seen the disease annihilated at length by a persevering use of the remedy for many weeks together, to the severe injury of the gums. Such cases occurred in large numbers in the early part of my practice; and it was once my opinion that the benefit was due to the unremitting use of mercury. More recent experience, however, has made it evident that

know little as yet of animal chemistry; but if we look at the action of mercury as galvanic or electro-magnetic, we shall be able to account for many otherwise obscure phenomena.

the disease would have yielded quite as fully to two or three shorter and more energetic courses; and that the benefit derived from the continuous use of mercury was chiefly due to the shock produced at the commencement of the course.

A very powerful yet incidental illustration of the principles above enumerated, has been furnished by a recent publication from the pen of Mr. Langston Parker. This gentleman has found that, by a process of fumigation, the beneficial effects of mercury may sometimes be secured with more certainty and less inconvenience than by the usual methods. The advantage is evidently derived from the rapidity of absorption, and consequent suddenness of effect. Mr. Parker's practice must, of course, be limited by its attendant inconveniences; but the principle is capable of almost universal appliance. We have had long experience of its value in the use of mercurial inhalation. The fumes of the oxides of mercury received into the fauces have been found to produce the specific effects of the medicine when the system has been proof against inunction. But it is easy to apply the principle to any mode of introducing mercury into the system, which it may be found convenient to adopt.

It is most needful, however, to be aware of

the possibility of severely salivating the patient by an unguarded exhibition of a very few energetic doses. This danger will occur to the mind of every prudent practitioner, and will deter many from adopting the method of treatment above described. But the danger need only be foreseen to be avoided. If the patient has never taken mercury, we must make it our special business, before commencing the therapeutic course of mercury, to administer an experimental course, just to ascertain exactly the degree of mercurial susceptibility inherent in the constitution of the patient. This may be done in the most guarded way; and, if the patient is unusually susceptible, this first trial may prove therapeutical. If not, it will serve to indicate the dose which the patient will bear with impunity.

Neither must it be forgotten, that we now and then meet with a subject wholly and incorrigibly intolerant of mercury; and, even if we can coax the vascular system to bear it, we irritate the nervous tissues beyond endurance. These cases are rare exceptions to a very general rule. Strumous subjects also are apt to bear mercury ill; but by combining the mineral with the preparations of iron, and giving the patient the advantage of the coast, the open air, and a mild season, the difficulty is often

overcome, especial caution being requisite lest the gums or glands should suffer irritation. When pulmonary tubercles are discoverable, even in a latent form, mercury is to be avoided. Nothing is so likely to promote their development and maturation as a mercurial course. When syphilis and phthisis co-exist, the case is generally hopeless.

Much importance is attached by some practitioners to the selection of the medicinal preparations of mercury; some giving the preference to one form or mode of introduction, others to another. Without depreciating the real value of these preferences, it may be questioned whether any general rule can be laid down. Every preparation has its objections as well as its advantages; but both the one and the other are casual, not inherent. The chloride is active and energetic, and invaluable in cases of iritis, where there is no time to be lost; but it is apt to create undue irritation in the bowels. Inunction is a safe, and, generally, a sure mode of introduction. But it is a dirty and inconvenient practice; and now and then we meet with cases in which the absorbents of the skin refuse to perform their office: neither can we in any case ascertain how much mercury is actually absorbed. The blue pill is a mild

and convenient form for the first course ; yet it is liable to remain unchanged and inert in the bowels, or, on the other hand, to be converted into the chloride or bichloride. The latter preparation is often active and useful, when administered in its original form, in doses from the 1-32nd to the 1-16th or 1-8th of a grain ; but it fails, in safe doses, to create the salutary shock so generally necessary to the full effect of mercury on the system. Fumigation, either general or local, presents perhaps more advantages, when it can be conveniently had recourse to, than any other mode,—but it is a difficult and delicate question, how to regulate the dose. It is my usual practice to begin the course with two or three grains of blue pill every night for three nights, by way of experiment. If this produces no effect, an aperient is administered, and after it, five or seven grains of blue pill night and morning, until its salutary effect becomes visible. In the second course, the dose is increased, generally doubled ; in the third, inunction is preferred ; in the fourth, inunction, together with frequent doses of calomel, with or without opium. In strumous cases, the bichloride combined with the compound tincture of cinchona for adults, and the grey powder for children with some preparation of iron, have been found most useful.

In all cases, regard must be had, not only to the original constitution of the patient, but to his present condition. Both plethora and anæmia are conditions highly unfavourable to the advantageous exhibition of mercury. In the former case, depletion must precede the mercurial course: in the latter, the preparations of iron may be combined with mercury, or otherwise administered.

I cannot conclude these observations, without a brief reference to the practice now very generally adopted by the continental surgeons, and even in our own hospitals, of treating these diseases with the iodide of potassium; beginning with doses of two or three grains, increased daily up to twenty, thirty, or even sixty, until the toxical effects of the medicine become apparent. It is true that at this period the disease, in some of its forms, especially that of periostitis, commonly yields, in a greater or less degree, and not unfrequently appears to be entirely subdued. But the cure is seldom or never permanent. It almost invariably returns in a few weeks or months, and often in an aggravated form. When the periosteum is affected, the iodide is very useful in small doses, combined with mercury; and even alone it appears to have a specific action on the periosteum, of a temporary duration only. At all

events, if the periosteum remains sound, other tissues become affected by the disease. I therefore cannot think this practice will long prevail.

CASES.

THE preceding observations are offered to the consideration of the profession in as brief and condensed a manner as possible, in order that they may be tested by cases already recorded, as well as by those of daily occurrence in the practice of every surgeon. It would indeed have been presumptuous in the author, to have drawn general conclusions on so many important points from the scanty facts furnished by the practice of an individual ; and he has accordingly diligently inquired into the bearing of these views on the numerous cases already published by Hunter, Abernethy, Carmichael, and other distinguished surgeons ; and he has been interested in observing how much more satisfactorily his own theory appears to explain a large majority of these cases, than the views of the various authors respectively, which the cases were selected to illustrate. Let the unprejudiced reader examine, for instance, the

cases recorded by Mr. Abernethy in his *Surgical Observations on Diseases Resembling Syphilis*, the object of which especially is to prove that many diseases resembling syphilis so closely in their history and appearances that no surgeon can distinguish them, are nevertheless not syphilitic ; and it will be seen at once that these cases prove only that some syphilitic affections will apparently get well spontaneously ; that others are aggravated by a protracted mercurial course, and will recover on the cessation of the mercurial treatment, and that some will recover “suddenly” under the action of mercury, and relapse under its undue administration. It will be seen, in short, that by substituting the term “syphilitic” for “pseudo-syphilitic”, these cases may nearly all be adduced in support of the important propositions set forth in the preceding pages. A singular example of the ease with which great minds may slip into the error of reasoning from dogmatic rather than inductive data, is to be found in the tenacity with which both Hunter and Abernethy clung to the notion that the nature of a disease as well as its name may be determined, not by its history and appearances, nor by the phenomena which we uniformly acknowledge as constituting materials for diagnosis, but—*by the quantity of mercury re-*

quired to cure it. It is not enough that mercury has cured it: if the quantity required for its cure was small, or the effect short of ptyalism, the disease was determined to be non-syphilitic. In fact, the effect of salivation on the disease was regarded by these writers as the only satisfactory diagnostic mark of true syphilis. If the disease recovered in proportion to the disastrous effects of mercury, it was syphilis; if, as often happened, it was aggravated by the mineral, it was not syphilis. And this was the common belief only forty years ago!

The following cases are selected for the purpose, not of demonstrating, but of illustrating by examples, some of the more important views propounded in this essay. As more points than one are seen to be exemplified in almost every case, I have found it difficult so to arrange the cases as to bring them to bear prominently on each proposition *seriatim*. But I have endeavoured so to mark the headings of the cases as to indicate the particular point or points most distinctly taught in each: I have likewise divided them into groups, for the special purpose of drawing the attention of the reader to the different questions discussed in the preceding pages.

The *first* group will illustrate certain difficult

points in the diagnosis of syphilitic affections of the skin, showing, among other difficulties, the possibility and danger of mistaking a syphilitic for a mercurial disease.

The *second* group will consist of cases treated by mild, but energetic and preventive courses of mercury many years ago, the disease never having returned. These are intended to show the fallacy of the opinion of Ricord, that when the constitution is once tainted with syphilis, it must remain so for life under every kind of treatment. There can, in my opinion, be no greater error in medicine than this ; although, as I shall shew, the disease, if inefficiently treated, does very generally continue for life, affecting also, in some cases, the children of the patient. And this is particularly the case where no preventive course is administered after apparent recovery.

The *third* group shews the danger of pushing a mercurial course beyond the limit at which it is evidently acting in a salutary manner.

The *fourth* will present a few reasons for the author's belief that the disease, even when it appears for the first time in the adult, of either sex, at a mature age, is often hereditary.

The *fifth* group contains cases which show that a very long duration of disease presents no insurmountable difficulties in the cure.

FIRST GROUP.—DIFFICULTIES IN DIAGNOSIS.

CASE 1. *Extensive syphilitic ulceration of the left fore-arm in an aged female, mistaken for scrofula.*

A nurse, æt. 60, of respectable character, whose husband and family were healthy, consulted me in the year 1826 for an ulcerated condition of the integuments of the fore-arm, extending nearly round the wrist, and half way from thence to the elbow. The sores were foul and deep and burrowing. They occasionally healed and broke out afresh. She had suffered from them more than three years, and had tried a variety of treatment under different medical men, without any permanent benefit. She had never had syphilis, and the ulcers had much the appearance of sores left after the discharge of strumous abscesses in the cellular membrane. Her health was worn down by want of rest and constant pain. I had not then learned the true character of a secondary syphilitic sore, and not suspecting the patient, I treated her with tonics and alteratives and surgical appliances: but after many months' trial of various plans, I was obliged to abandon the case as hopeless. I afterwards learned that she had taken some medicine which had salivated her, and that her arm was quite well.

CASE 2. *Syphilitic Ulceration of the lips, mistaken for lupus.*

A widow, æt. 35, presented herself at the Western Dispensary for Diseases of the Skin, on the

19th of February 1852, who was suffering from two or three ulcers penetrating deeply into the substance of both the upper and lower lips, and extending round the angle of the mouth. There were deep scars in the neighbourhood of the wounds, the seat of former ulcers. The disease had existed two years, and was attended with severe burning pains. No relief had been derived from treatment. As no account could be given of the origin of the disease, and there were no suspicious antecedents in the case, it was pronounced to be *lupus exedens*, which it very much resembled. After five months of various treatment, during which one ulcer would heal and another break out, it was certainly worse rather than better; and under the suspicion that its origin might be syphilitic, an energetic trial of mercury was determined upon: five grains of calomel were given every night for about twelve nights. The calomel was begun on the 29th of June 1852, and by the 9th of July the gums became affected; and on the 13th the ulcers were all healed, and the patient has continued sound to the present time.

It much more frequently happens that *lupus*, when it attacks the nose, is mistaken for syphilis, than syphilis for *lupus*. And this error is by far the more serious of the two, as nothing more aggravates the severity of *lupus* than a severe course of mercury: and yet the mistake is unhappily very common. In two thirds of the cases of *lupus* which have come under my

notice, mercury has been at some period or other unsparingly administered.

CASE 3. *Syphilitic psoriasis mistaken for idiopathic psoriasis.*

A surgeon requested my opinion concerning a scaly disease of the skin in the person of a young female of respectable station and connexions, in which arsenic had been administered without benefit. The eruption was not copper-coloured, but it wore a dull and suspicious appearance, as contrasted with the fair skin and rosy lips of the patient. I inquired if she had suffered from chronic sore throat. She replied in the affirmative. Upon examining the fauces, one of the tonsils was observed to be deeply scarred. Upon my inquiring if a swelling in the groin had ever been observed, she hesitated; and indignantly denied ever having had intercourse with the other sex: an impropriety with which I had not charged her. But after a little circumlocution it was with difficulty brought to her recollection that she once had a sore place on the genitals which she could by no means account for. Examination discovered, upon the right nympha, the deep cicatrix characteristically described by John Hunter as the result of the genuine syphilitic sore. The scaly disease yielded readily to a short course of mercury.

CASE 4. *Syphilitic ulceration of the leg, of hereditary origin, unsuspected by the patient, who was himself a surgeon.*

A medical practitioner in Newfoundland, aged 33,

of sanguine temperament and excellent general health, came over to England, in the summer of 1849, for advice respecting an ulcerated leg. He had had from birth a scaly eruption in various parts, and the legs for the last six years had been the seat of extensive ulceration. The sores broke out first in the right leg, which healed spontaneously; but it was no sooner skinned over than an ulcerative process commenced in the left leg.

Aug. 10th, 1849. The whole of the anterior surface of the left leg is covered with deep, sloughy, ragged sores, varying in size from that of a sixpence to that of a halfcrown piece. Some of them are burrowing ulcers covered by copper-coloured bands of integument; and the whole limb is edematous, the greater part of the surface exhibiting a dull brown, or livid erythematous appearance. The veins are not varicose. The sores are ten or twelve in number, and they are frequently healing and breaking out afresh. Since they have discharged freely, the scaly eruption, which was general, has disappeared. The patient reports that he has a brother similarly affected. His father is an army surgeon. Every kind of treatment has been tried except mercury. Although aware of Mr. Abernethy's opinion that burrowing sores are not syphilitic, I was at once convinced that this was a case for mercurial treatment; and in this opinion my friend Mr. Tobias Browne, of Camberwell, who introduced the patient to me, fully concurred. Five grains of blue pill night and morning, and a cerate composed of equal

bulks of the ung. hydrarg. fort. and extract. papaveris as an application to the wounds, was the treatment decided upon.

15th. He has taken eight pills: the ulcers are already granulating, but there is no soreness in the gums, nor any proof, except the state of the sores, that the system is under the influence of mercury. The night dose to be doubled.

22nd. He has taken twenty pills. The gums are not yet sore, nor the bowels affected: but he has an unpleasant taste in the mouth when he wakes in the morning. The leg is less swollen, and the ulcers are all filling up and healing rapidly. Continue the pills.

29th. Gums not yet sore, ulcers healing, but more languidly. Rub in a drachm of the stronger mercurial ointment every night, and continue the pills, ten grains at night and five in the morning.

Under this treatment the gums became slightly sore, and the ulcers all healed rapidly. He left England with a sound skin, and has recently written from Newfoundland reporting that he remains sound and well, except that the limb is still in some degree swollen.

I have already stated my reasons for believing that symptoms closely resembling syphilis never arise from mercury, although they may be aggravated by its undue administration. The following case will show how serious an error it is to mistake syphilis for a mercurial disease.

CASE 5. *Hereditary syphilitic lepra, ulcerations, iritis, nodes, and other symptoms, mistaken for a mercurial disease.*

A middle aged gentleman, who had been many years married, but without children, requested my attention to his eyes, which he said were very weak. I observed the iris of the left eye to be triangular, and that of the right eye had lost its circularity. I prescribed five grains of blue pill night and morning, which he took for a week, by which time his eyes had become less painful, and the vision was improved. His gums were not affected. He then, of his own accord, discontinued the pills, and the eyes got quite well in less than a month. A fortnight afterward, a scaly eruption appeared in various parts of the body. For this he was directed to resume the blue pill. He did so, and the skin recovered, without the gums becoming affected. Soon afterwards a node appeared on the ulna: the eruption also returned, and showed a disposition to ulcerate. He consulted two surgeons, *who both pronounced the disease mercurial*, and prescribed sarsaparilla.

Under this treatment his symptoms became aggravated; and when he came under my care, about nine months afterwards, the whole body was found covered with burrowing ulcers; there were two or three nodes; he had restlessness and delirium at night; he was weak and emaciated, and became feverish at the close of the day. His appetite had failed altogether, the tongue was coated, the pulse

rapid, and the whole case wore a very discouraging aspect. Although this gentleman denied, in a most emphatic manner, having ever contracted syphilis, and although his wife, though sterile, was free from disease, yet it appeared that he had previously been subject to obstinate sore-throats, and to copper-coloured eruptions. I concluded, therefore, that his present symptoms were simply the result of the syphilitic poison; and as he had borne mercury very well, and had taken none for nearly twelve months, I ventured to prescribe three grains of calomel, with a grain of opium, to be taken every night. In forty-eight hours there was a marked improvement. He had had two quiet nights, the ulcers were all granulating, and a rapid process of healing commenced, which was completed in little more than a fortnight. About this time the gums became slightly tender, and the mercury was discontinued. But he took a short course afterwards as a preventive. This was in the year 1835; and up to the present time he has not had any return of the disease in any form; his health continuing robust, the pits and scars with which the face and whole body are covered, resembling those left by confluent small-pox, showing the severity of by-gone disease. Here then is a case in which syphilis probably existed in an hereditary form,* checked rapidly on two occasions by small doses of mercury, cured at length by an active but short course, and probably prevented from reappearing by

* He had reason to believe that his father suffered severely from syphilis.

a final and preventive course administered after the disappearance of the disease.

The case is, however, here introduced as showing the grave importance of mistaking syphilis for a mercurial affection. The patient had been told by one of his medical advisers, that he would not answer for his life if he took another grain of mercury, and that he was already indebted to that mineral for all his present sufferings. This so alarmed the patient that he would not consent to a mercurial course until a second practitioner could be found to sanction it. I am sorry to say I could not without great difficulty find a practitioner who would sanction the use of mercury in the case: at length I met with a surgeon who consented to mild alterative doses. The dose of three grains of calomel, combined with a grain of opium every night, was not mild, but it acted on the local disease and the general health in a manner perfectly marvellous. Indeed, there is no one circumstance more creditable to the science of therapeutics than the sudden and salutary effect of mercury in secondary syphilis, when administered seasonably and *in the right dose*.

CASE 6. *Syphilitic disease of the hip-joint mistaken for morbus coxarius.*

A tradesman, of middle age, requested me, in the

year 1835, to cup him in the right hip, complaining of great pain in the joint. His left hip was already crippled, being flexed and ankylosed. He was pale and sallow, and had a deep scar on the forehead, with a deficiency of bone. His disease had been treated as a scrofulous affection; but I found on inquiry, that, although he had never had a primary sore, his father had died of syphilis, and he had, as a child, been subject to "scurvy", "brownish spots", and "sores"; likewise to sore throats, pains in the bones, etc. I declined to take blood from the limb, but prescribed five grains of blue pill night and morning. In less than a week the pain in the hip was gone. He took the mercury one month, and discontinued it when the gums became tender. His health then rapidly improved; he became fair and ruddy, regained a degree of strength in the diseased limb, threw away his crutches, and has been, from that time to the present, a hale and healthy man.

CASE 7. *Syphilitic lepra, ulcer on the tongue, sore in the nostril, and nodes on both shins, mistaken for the symptoms of a mercurial disease.*

Mr. —, æt. 63, a widower, reports that he contracted syphilis in the year 1842. He was immediately salivated with blue pill, and the primary sore healed. Four or five months afterwards he got very wet, and "bumps" appeared all over the surface of the body, some of them containing matter. He consulted a surgeon, who prescribed little or no medicine. He then struck his shin, and a foul ulcer

resulted; and, wherever he happened to have the cutis denuded by accident, an ulcer followed. At this time red fiery bumps appeared in the forehead. In November 1849, a scaly, copper-coloured eruption appeared in the face, and the throat and tongue became ulcerated.

April 2nd, 1850. He has now dusky, copper-coloured patches on his face, rather inclined to scale, and a similar appearance on the scrotum, nodes on both shins, an ulcer on the tongue, and a scab in the right nostril. He has taken no mercury for more than seven years; *all the symptoms having been imputed to the mercury he had previously taken.* A few months since, he took arsenic for a fortnight, under which treatment the eruption increased; and this medicine was therefore abandoned. I resolved to try such a course of mercury as should not materially affect the gums; and, at his own wish, I allowed him to take the compound decoction of sarsaparilla and the iodide of potassium at the same time. Five grains of blue pill were ordered to be taken night and morning.

11th. He has taken the mercury one week; the gums are sore, and the bowels relaxed. The dose of mercury was reduced.

18th. Gums quite well; face much better. Resume the full dose of blue pill.

20th. Griped, purged, and sick. Omit the mercury.

25th. Gums sore; *skin nearly well*; bowels costive. Take a dose of castor oil, and continue the sarsaparilla and iodine.

May 9th. *The disease is quite well*; the skin of the face is healed, the disease having left only a temporary stain; the scrotum is well; the nodes have totally disappeared; the ulcer on the tongue, and the sore in the nostril, are both perfectly healed; and he feels in better health and vigour than he has done for seven years. He afterwards took a preventive course of mercury.

July 5th. Health established. He has taken no medicine lately, except aperients.

CASE 8. *Syphilitic disease of the tongue, and psoriasis of the scalp, mistaken for a mercurial disease.*

A gentleman, aged 43, consulted me in the year 1853, and gave the following report of his case. About twelve years previously he had a primary sore, followed by an inguinal tumour, which did not suppurate. The sore healed under a course of mercury. Afterwards a rash appeared on the forehead and chest, then a sore on the tongue, then ulcers on the tonsils, and psoriasis palmaris; afterwards, an ulcer on the palate, and twinging pains in the shin bones. These symptoms all disappeared under a second course of mercury, and he remained well for a whole year. Some years afterwards the tongue became again affected.

October 22nd, 1853. The tongue is swollen, tender, and painful, deeply fissured, and covered with a whitish-looking scaly eruption. His articulation is difficult, his health is broken, and there are scaly spots on the scalp. His tongue has been thus

affected more or less for seven years. He has consulted four or five different surgeons, who have treated the disease variously, *all of them pronouncing it a mercurial disease*. He had taken iodine, sarsaparilla, the mineral acids, quinine, etc., with no marked or permanent benefit. Five grains of blue pill were prescribed to be taken night and morning, a nourishing diet, and exercise in the open air.

26th. Tongue better; no sensible effect from the pills, except an improvement in the appetite, which had been previously defective; bowels rather constipated. Continue the pills, and take a dose of compound rhubarb pills at bed-time.

29th. Tongue improving; gums not sore. Take a mercurial pill three times a day.

31st. Mouth slightly sore. Continue the pills.

Nov. 6th. Improving. Ten grains of blue pill twice a day.

13th. Tongue nearly well; scalp free from scales; gums moderately sore. Discontinue the mercury; dose of purgative pills, and a black draught.

18th. Gums better. Resume the mercurial pills; take five grains of iodide of potassium thrice a day.

30th. Tongue nearly well; gums sore. Discontinue the mercurial pills; ten grains of compound rhubarb pill every alternate night.

12th. Tongue less swollen; health improved; bowels sluggish. Nitrate of silver applied to the fissures of the tongue; compound colocynth pills.

Jan. 30th, 1854. Quite well; health and strength better than for several years.

These cases are adduced, not to exhibit the author's diagnostic skill in contrast with that of his brethren (for in two out of the eight cases he was himself mistaken), but to show how easily a mistake may be made. Some of those practitioners who were consulted were men of the highest eminence ; and the cases might be multiplied in which the too common error of pronouncing these diseases to be the result of the administration of mercury, has suggested treatment under which the disease was indefinitely protracted.

SECOND GROUP.—NECESSITY AND PERMANENT EFFECTS OF A PREVENTIVE COURSE OF MERCURY.

The evidence afforded by the following cases is of two kinds, positive and negative. The negative evidence shows that repeated courses of mercury, each of which is barely sufficient to destroy the existing diseased action, are often incompetent to eradicate the virus, which, consequently, breaks out again and again. The positive evidence shows that an energetic course of mercury, administered after the apparent recovery of the patient, will place him in a state of permanent freedom from all trace of the syphilitic taint. If it be said that the evidence of a permanent and perfect cure is not absolute,

even in cases where many years have elapsed without any relapse, I may yet be permitted to state that I never have seen the disease return after a prophylactic course of short duration, and consisting of larger or more frequent doses than had previously been administered for the existing disease.

CASE 9. *Syphilitic ulcers, nodes, and other symptoms, recurring at intervals for thirty-three years, yielding readily, for a time, to mild courses of mercury.*

A mechanic, æt. 56, of healthy constitution, contracted a syphilitic sore at the age of 23, which was followed by a bubo. The sore healed, and the bubo was resolved, under a moderate administration of mercury, and he remained free from disease for eleven years. At this time he had an eruption of pustules on the face, and ulcers broke out in the legs, burrowing under the integuments, which became copper-coloured. He had also pains in the legs, affecting both the muscles and the bones, which deprived him of rest. All these symptoms yielded to a brisk course of blue pill. This was in the year 1835, and he remained well for seven years. In 1842 he had a return of the ulcers in the legs, less severe than before; and an ulcer also broke out in the arm. These were easily healed under a third course of mercury, and he remained well for twelve years. He has recently (1854) had a return of the ulcer in the arm; likewise a node has appeared in the left clavicle, another on the eighth rib, and he was con-

fined to his bed with a pain in the ribs and loins, which had partly paralyzed the muscles of the trunk. He has now (July) taken the blue pill in rapidly increasing doses, for about three weeks, together with small doses of the iodide of potassium. His mouth is sore, the ulcer in the arm has healed, the nodes have disappeared, the pain on the loins has left him, *he is up and at work*, and feels better and stronger than he has been for the last six months. He is advised to discontinue the mercury, to take some purgative medicines for a fortnight, and then to resume the mercury, in double doses, until the gums are slightly touched; and this, I cannot doubt, will effectually prevent any recurrence of the disease.

CASE 10. *Syphilitic blotches and ulcers, covering the face and scalp, cured, and remaining well, after an energetic course of mercury, first for treatment, and afterwards for prevention.*

A gentleman, æt. 33, presented himself to me in the year 1846, the face and scalp being completely covered with a deep copper-coloured eruption, which had, in various parts of the scalp, degenerated into ulcers. His general health was good; but he had suffered, for some years, from a train of symptoms evidently syphilitic, the origin of which was not very satisfactorily explained. He had taken Plummer's pill and sarsaparilla, together with the iodide of potassium and other remedies, without benefit; but it did not appear that he had ever taken mercury to any extent. A short but energetic course

of mercury, which rapidly, but not severely, affected the gums, sufficed to restore healthy action in less than ten days; and in six weeks the ulcers were all healed, and the skin was rapidly recovering. The mercury was then suspended, a course of purgatives exhibited, and, after a fortnight, the mercury was resumed in double doses, until the gums were slightly affected. He has remained perfectly well to the present time, his general health having much improved since the mercurial treatment.

CASE 11. *Syphilis relapsing after repeated courses of mercury.*

A gentleman, æt. 48, who consulted me in 1851, related that, about five years previously, he had contracted a chancre, which healed without mercury, and without any glandular enlargement. About two months afterwards he had an erythematous eruption, with sore throat and swelling of the cervical and inguinal glands. He then took five grains of blue pill, night and morning, for a week, and the mouth then became very sore; but the erythema and sore throat got well, and the glandular system recovered. In six weeks the throat again became sore, and maculæ appeared on the legs and scrotum. These symptoms yielded, in six weeks, to a course of mercury, which again affected the gums. In three or four months the same symptoms returned, and yielded readily enough to the same treatment; so again and again, up to the present time, a return of the disease about ten or twelve times in four years, has

yielded each time to a short course of mercury, which has always readily affected the gums. Although this gentleman had suffered so much inconvenience from mercury, I considered it doubtful whether it had done him, as yet, any real or lasting good; and for this reason, that the disease was allowed to return without any means being taken to prevent it. He was going abroad when I saw him, and I have heard nothing further of the case; but I advised a short course of mercury to cure the existing symptoms, then a short respite, and after it, a short but energetic prophylactic course.

The above cases, together with the *fifth* case related under the first group, as well as the *eighth*, show that repeated courses of mercury, even though protracted and effective, so far as present symptoms are concerned, will often fail in rendering the system secure from future attacks, unless one course is administered as a preventive, after the disappearance of the palpable symptoms.

THIRD GROUP.—DANGERS OF PUSHING A MERCURIAL COURSE BEYOND THE PERIOD AT WHICH IT HAS ARRESTED EXISTING DISEASE.

CASE 12. *Syphilitic ulcers in the scalp and extremities, nodes, and much impaired health, rapidly improving under an energetic course of mercury, but becoming much worse under its protracted use,—death.*

About twenty-three years ago, a widow, in most

delicate health, sent for me merely to request that I would prescribe for the racking pains in her limbs, which prevented her sleep. She was upwards of sixty years of age, and had suffered from syphilis from an early age. She had many ulcers (few of them of less diameter than a half-crown piece) on her head, arms, thighs, and legs. They were foul and deep, and surrounded by a dull, copper-coloured margin. She had likewise nodes, which were painful; her gums had been severely injured by mercury, which she said had always aggravated her disease. Her pulse was weak and rapid, her strength failing, and she was extremely emaciated; but her appetite was tolerably good. The bowels were irritable. I directed one drachm of the stronger mercurial ointment to be rubbed in every night; her strength to be supported by bark, sarsaparilla, wine, and opium; and the ulcers to be dressed with a cerate composed of mercurial ointment, rubbed down with an equal bulk of extract of poppies. Her rest was soon restored, and at the end of a week the ulcers were all healing, and some were already reduced to one half the original size; and, as she did not complain of her gums, the mercury was ordered to be continued. For the next three days she continued to mend; her appetite improved, her spirits and strength both increased rapidly; she drank bottled stout, took exercise in the open air, and gave every promise of returning health; but, unfortunately, the mercury, which should now have been suspended, was continued another week. The gums then became sore,

and the ulcers rapidly assumed a more unhealthy aspect, and soon degenerated into a condition worse than at first. The mercury was now abandoned. I saw no more of her, but heard of her death two months afterwards. In this case the mercury might have restored her to health had it been suspended in time; but I followed the usual plan, pushing it after it had begun to exert an injurious effect on the gums.

The following melancholy case affords another example of the same prevalent error.

CASE 13. *Syphilitic ulcers, nodes, destruction of the nose, caries of the ossa nasi and os frontis, much benefited by mercury for a short time, but proving fatal under its protracted use.*

Mr. —, æt. 40, had suffered severely for about nine years from syphilis. There were, when he came under my care several years ago, ulcers over his face, head, arms, and other parts; one especially on the os frontis, from which a foul, sanious, and copious discharge issued, the bone being carious. There was a node on the shin; the nose had been destroyed, the cartilage and bones having exfoliated. The breath was intolerably fetid, and he complained of restless nights. He had taken mercury occasionally, and always with benefit; but had been cautioned against its dangers of late. Six grains of the blue pill were directed to be taken night and morn-

ing, and a bark mixture, with iodide of potassium, twice in the day. In eleven days his medical attendant reported that his mouth was sore, that the ulcers were all healing, and that he had lost the nocturnal pains; but complained of severe pain in the head, which he attributed to the iodine. The iodine was ordered to be discontinued, and the mercury to be persevered with. In three weeks from this time the pains in the head were reported to be more severe; he had rigors, a rapid pulse, a hot skin, and sickness. The mercury was now withheld, but the symptoms rapidly increased, delirium and high fever supervened, and he died comatose in forty-eight hours. A week before his death, the discharge from the ulcer on the frontal bone had ceased. The cause of his death is not very obvious; but the mercury was certainly pushed unadvisedly and unnecessarily. Long before its discontinuance, it appeared to have arrested all existing disease in the soft parts; and, from the head-symptoms supervening on the sudden arrest of the copious discharge from the frontal ulcer, I am inclined to attribute his death to syphilitic inflammation of the dura mater, aggravated probably by local congestion, resulting from the arrest of the discharge. No *post mortem* examination was permitted; but, from the examination of a parallel case, in which the dura mater was found thickened and inflamed, and from other cases, in which a maddening pain in the head, with giddiness and tinnitus aurium, accompanied syphilitic eruptions, and yielded to mercury, I suspect that syphi-

litic meningitis is not an uncommon complication in fatal cases.

CASE 14. *Primary and secondary symptoms followed by deep ulcers on the scalp, left auricle, and other parts, arrested frequently by mercury, but relapsing under its continued action.*

On the 23rd of April, 1852, I was consulted by a surgeon on the propriety of administering mercury in a case of which the following is an outline. Mr. N., æt. 26, had contracted a superficial chancre six years previously, which healed under mercurial treatment, but was followed by a bubo. Two years afterwards, the uvula, soft palate, and one tonsil, became ulcerated; the uvula was nearly eaten away. One year subsequently, maculæ and superficial ulcers appeared on the skin; after a while, psoriasis palmaris appeared, followed by deep ulcers breaking out successively in the forehead, cheek, scalp, left ear, right angle of the mouth and lips, and left arm. He had taken five or six courses of mercury, which had always arrested the disease for a time; but it had uniformly relapsed on *continuing* the course. As I consider this a very instructive case, I shall give it in detail.

April 23rd, 1852. There are now several deep ulcers dispersed about the scalp, cheek, lip, and arm. The left choncha has a deep notch, left by a former ulcer. He looks pale, is weak, and is thought to bear mercury ill. I do not consider that this latter circumstance contra-indicates the use of mer-

cury, but it certainly interdicts its protracted use. In this case it was obvious that whatever benefit would attend the use of mercury, would result only from a short but energetic course. Five grains of the blue pill were ordered to be taken night and morning, and a drachm-and-a-half of the stronger mercurial ointment to be rubbed in every night.

May 9th. Gums sore, no appetite, tongue loaded, ulcers all healing. To take active purgatives for three days, to intermit the mercury, and in about ten days to resume it in increased doses.

June 11th. Reports that he is nearly well; ulcers for the most part healed. I did not prescribe for him, as I did not see him.

July 9th. Gums sore; has taken mercury until the last week, when it purged him, and was discontinued; appetite moderate; feels better than he did three months ago; all the ulcers have healed, except one at the corner of the mouth, which is healing. Acid. nitric. dil. mxx ter in die; pil. col. comp. gr. viii bis heptom. Discontinue mercury.

August 3rd. Has resumed the mercury for the last fortnight; gums very sore; ulcer not improved. Discontinue the mercury; substitute cathartic pills twice a week, and take three grains of iodide of potassium twice a day.

24th. An ulcer has broken out in the forehead. Continue the iodide.

From this time to the present (two years), the case has been treated by short and vigorous courses of mercury, with various conditions of alternate im-

provement and relapse ; but, as I have seen him but rarely, I am unable to detail further particulars. He is now much stronger, and is able to resume his commercial engagements. His relapses have been less serious, and less frequent than formerly ; and he appears to have been much less injured by the very many courses of mercury he has recently taken than he was by the protracted courses with which he commenced, and to which I am disposed to attribute all the difficulties of the case. It is but fair to state that he has acted too frequently on his own judgment, neglecting to consult his medical attendant often, when advice was much needed. His health, which was miserably broken down by the first long courses of mercury, has very considerably improved under the larger doses and short courses recently administered. I see nothing to hinder his recovery but his own inattention.

It is needless to multiply cases to prove that great injury has been done to the gums and the general health, as also great aggravation of the syphilitic symptoms induced, by a protracted course of mercury ; for these cases, unhappily, are too familiar to every practitioner. The point I urge is, that a pound of mercury given in a continuous and lengthy course, may, in a given case, aggravate a disease most fearfully, which disease would yield to an ounce of mercury distributed in short and divided courses, and would be wholly expelled by a supplementary

or preventive course, given soon after any course which appears, for the time, to have destroyed all existing disease.

FOURTH GROUP.—SHOWING THAT SYPHILIS IS
OFTEN HEREDITARY, NOT ONLY IN CHILDREN,
BUT IN ADULTS.

There are practitioners who, bearing in mind the moral infirmities of human nature, cannot be brought to believe that the disease is hereditary in any case in which it could possibly have been contracted by sexual intercourse. This opinion has been strengthened by the fact that, when a child has become tainted *in utero*, the disease commonly appears within a few days or weeks of its birth. The well known and very general occurrence of this early outbreak of the disease, has led to the incautious opinion that it is universal, and that, consequently, when the disease appears for the first time in after life, it must have been contracted in some way by contagion. I am prepared, however, to prove that this is a fallacy. And first, let it be observed, that all other hereditary diseases are often observed to occur for the first time at mature age, or even in advanced years. This is true of scrofula, phthisis, gout, certain cutaneous diseases, epilepsy, and cancer; and, I

ask, what is there in the poison of lues which should make it impossible, or even improbable, that it should occasionally observe this very general law? Again, we know that when the system has become tainted by the poison from a primary sore, and the disease appears to have been cured, it will break out subsequently, under any circumstances which may have deteriorated the general health, after having been latent in the blood for several years. Why should not hereditary syphilis, in its milder, or even in its severer degrees, become thus latent during infancy and childhood, and appear for the first time in after years? And lastly, I would ask, what construction can be put upon the following cases, if they are not cases of hereditary syphilis?

CASE 15. *Hereditary syphilis appearing for the first time in a girl of seven years of age.*

In the year 1840, my advice was sought for a little girl of seven years of age, who had very recently complained of her toes; upon examination I found some copper-coloured blotches on the sides and plantar aspects of two or three of the toes; in one of them a superficial ulceration had begun, and the soles of both feet presented the scaly appearance of syphilitic lepra. A very short course of mercury sufficed to heal the sore and dissipate the squamous disease. Two months afterwards a

sore appeared in the left nostril, and the scalp presented copper-coloured blotches covered with fine scales. These symptoms also yielded to mercury. Afterwards the throat and the tongue presented the usual appearance of superficial syphilis, and the disease returned in the toes. These symptoms were treated energetically by mercury, and she remained free from disease for some years. At length a scaly eruption appeared in each axilla, and a suspicious-looking sore broke out in the ear. These also yielded to mercury, and although the disease has never become severe, the decidedly copper-coloured appearance, the readiness with which it yielded to mercury, and its obstinacy under alterative treatment (for arsenic, the mineral acids, and other alteratives were frequently tried), left no doubt on my mind that this young lady was suffering under a mild form of syphilis. Every inquiry was made with a view of discovering its origin. She was born apparently healthy, and had remained so to this time. The sexual organs had never been affected. She had sisters older than herself and brothers younger. They were all healthy. The mother was healthy likewise, and had never had a symptom, primary or secondary:—but the father had contracted a chancre about two years before the birth of this girl, and had suffered severely from secondary symptoms, which had yielded to mercury, and had nearly disappeared before the birth of the remaining children. He assured me that he never exposed the mother to the possibility of taking the primary disease, and that she never presented any secondary symptoms.

CASE 16. *Hereditary syphilis appearing for the first time in a girl of twelve years of age.*

Lieut. C., R.N., of middle age, consulted me in the year 1842 for a scaly eruption, of a reddish-brown hue, on the soles of both feet, which had annoyed him for some months. Upon inquiry, I found that he had previously suffered for several years from syphilitic affections, both primary and secondary. The eruption speedily disappeared on the exhibition of mercury. Soon afterwards I was requested to prescribe for his daughter, a girl of twelve years of age, who had recently left the continent, where she had been at school. Her eyes were both affected with iritis, and she had a sore in the nostril. The tip of the nose was swollen and presented a copper-coloured appearance. No account could be given of the cause of the disease, which had resisted various treatment for several months, in France. The eyes speedily recovered under treatment by calomel, and the sore in the nostril healed. But the disease afterwards returned, both in the father and daughter, two or three times, always yielding to mercury and to no other treatment. They both left the neighbourhood before they had entirely recovered. No trace of any similar disease could be detected in the mother or in other members of the family, nor had the daughter suffered from any disease of the genitals at any time. I could not doubt that she inherited the disease from her father.

CASE 17. *Syphilitic maculæ and meningitis of*

hereditary origin in a lady of thirty, without primary symptoms.

A married lady, aged 30, without children, applied for my advice, Jan. 25th, 1854. She had been annoyed for eleven weeks by an eruption of copper-coloured maculæ in the face, bosom, and thighs. Her hair had fallen off in large quantities. She had taken a short course of mercury with benefit, under the advice of a hospital physician of high repute, who afterwards requested her to consult me. This gentleman had felt so sure that she must have had a primary sore, that, as she denied it, he had carefully examined the genitals and even the uterus with the speculum, but could find no abrasion, nor the slightest appearance of a cicatrix. The mercury she had taken under his enlightened guidance had exerted a temporary, but very decided effect on the disease; but her health had since given way, and she now complained of being heavy and dull, getting no rest at night from what she described as a maddening pain in the head, which I attributed to incipient syphilitic meningitis (a form of the disease seldom described, but often met with). Her hearing was much impaired of late, she had no appetite, had lost flesh, and her tongue was loaded. The catamenia were irregular, and there was a slight leucorrhœal discharge, but no strangury or soreness. I first prescribed some aperient pills, with a gentian mixture containing nitro-muriatic acid. This benefited her digestive organs, and she was then treated by three brisk courses of mercury. The first course fully relieved the pain in the head,

restored the hearing, and procured rest. The second course cured the maculæ, and entirely restored her health and strength. The third course, which was administered in May last, was intended as a preventive. To the best of her knowledge her husband was and had been free from disease, and upon being closely questioned as to the origin of her disorder, she said that her father died when she was seven years of age, and that she had heard that he was a very gay man, and that his death was understood to be attributable to his immoral habits. This was the first outbreak of disease which she had herself any recollection of. In other respects she had been a healthy and hearty woman. I might perhaps have doubted the truth of her statements, had they not been confirmed by the above related cases, and several others of the same kind.

In addition to these cases, I beg to refer the reader to cases 4, 5, and 6, above related. If the account given by each patient is to be believed, hereditary syphilis has broken out in individuals for the first time at various ages from infancy to middle age.

It is so generally an excellent rule to pay little or no regard to moral evidence as to the origin of syphilitic disease, and to trust chiefly to the symptoms actually present, that I am fully aware of the danger of being led to fallacious conclusions in departing from the rule. But cases 15

and 16, in which the disease was actually seen at the respective ages of seven and twelve for the first time, are so perfectly conclusive as to the possibility of hereditary syphilis breaking out long after infancy, that I see no reason to discredit the evidence in the other cases. The admission of the probability of this source of disease in mature years, will often furnish a correct diagnosis in those numerous cases in which, rather than suspect the patient of incontinence and falsehood, we may be tempted, *in spite of appearances*, to consider the case non-syphilitic. That this error has often led to mala-praxis, and pernicious results, my experience but too truly testifies. Syphilitic patients have been subjected to non-mercurial treatment for years simply on moral grounds. But this, I submit, is an abuse of medical ethics. We should recognize syphilis when we see it, and treat it accordingly; but it is doubtful whether we are necessarily called upon in every case to sit in judgment on the very delicate question as to *how the patient came by it*. Our business is to diagnose and cure disease, and not to constitute ourselves our patients' confessors. Physical science would cut a sorry figure, if it were built exclusively on so slender a foundation as moral probability.

FIFTH GROUP. SHEWING THAT THE PROTRACTED
DURATION OF THE DISEASE PRESENTS NO IMPEDI-
MENT TO ITS RADICAL AND PERMANENT CURE.

In proof of this proposition, it may be necessary to remind the reader that the disease had existed, in case 4, above related, for upwards of thirty years; in case 6, for about forty years; in case 7, for eight years; in case 8, for twelve years; in case 9, for twelve years; and in case 10, for several years; and yet they all recovered. The following cases are at least equally encouraging.

CASE 18. *Syphilitic symptoms of forty-three years' duration, cured in a fortnight by an active mercurial course.*

A. B., aged 62, applied at the Western Dispensary for Diseases of the Skin, with two kinds of eruption, appearing in the trunk and legs, viz., well-marked syphilitic rupia and idiopathic lepra. He had been suffering from various syphilitic symptoms ever since his nineteenth year. Five grains of blue pill and ten minims of the liquor arsenici chloridi, were ordered to be taken three times a-day. In one week the gums were sore; at the end of the second week the rupia was well, and the mercury was then discontinued. By persevering in the arsenic for ten weeks the leprous eruption was also cured. But on this disease the mercury had appeared to take little

or no effect. This patient had suffered from an occasional discharge of blood from the rectum, in which he believed there existed a sore of some kind. The soreness and the discharge both ceased after the mercury had been exhibited. It is now two years since I saw this patient. I have no reason to doubt that he has continued well.

CASE 19. *Syphilitic lepra (twenty-two years), syphilis (forty years), cured by mercury in seven months.*

This patient, who was sixty-one years of age, came under my care in July 1850. He was then suffering severely from syphilitic lepra in its worst form. He was literally covered with thick dark-looking scales, simulating psoriasis inveterata, from the crown to the sole. It was difficult to trace the syphilitic character of the eruption. He had suffered from gonorrhœa forty years previously, which was followed by bubo and other doubtful symptoms of syphilis, but had never had a sore. Under these circumstances I was disposed to consider the disease non-syphilitic, and treated it with Plummer's pill, tar, arsenic, iodine, diuretics, and purgatives, with great perseverance and little benefit for about twenty months. I then determined to prescribe mercury; and in April 1852 he took the first course. In the following October he was discharged from the dispensary cured, the skin being perfectly smooth and healthy. The treatment consisted chiefly of blue pill and iodine internally, and the free appli-

cation of calomel ointment, alternated with diluted glycerine, externally. No benefit appeared to be derived until the gums became sore, when the mercury was withheld, and afterwards resumed. I have recently heard that he has continued well.

CASE 20. *Syphilitic disease of twenty-seven years' duration perfectly cured by mercury in one month.*

Captain —, R.N., æt. 43, states that he had a primary sore twenty-seven years ago, for which he took mercury until his mouth was sore.

Oct. 7th, 1853. He has now a deep sloughing sore on the back, just below the scapula, and another on the elbow, which is very irritable. These sores have existed for seven years, occasionally healing and breaking out again. They are surrounded by copper-coloured integument. He has consulted several surgeons, who prescribed iodine. Five grains of blue pill were ordered to be taken three times a-day, and the sores were dressed with a cerate composed of an equal bulk of strong mercurial ointment and extract of poppies. The gums became sore in a fortnight, and the mercury was discontinued for a few days, then resumed for a week in double doses.

Nov. 5th. Sores perfectly healed, gums sore. Discontinue the mercury and take a black draught.

Nov. 15th. He continues perfectly well. But a preventive course of mercury was administered for about a fortnight, which was discontinued, when the gums became tender.

The following case, although proving that the duration of the disease is no impediment to its cure, and therefore rightly occupying a place in this group, is so highly instructive and satisfactory on various other practical points that I shall give it in detail, and must request particular attention to it on the part of the reader.

CASE 21. *Syphilitic disease of fourteen years' duration, pronounced mercurial, but cured in three months by enormous doses of mercury.*

A gentleman, æt. 33, of athletic habits and extraordinary muscular strength, residing in a mountainous district, contracted a primary sore fourteen years ago, which healed under mercury. He had no bubo, but a sore throat appeared in a few weeks, followed by a papular eruption on the head and a sore in the nostril. Four or five years afterwards, "lumps" appeared in the arms and legs, and ulcers broke out in the legs.

Dec. 18, 1851. The left leg has twenty ulcers, which are painful when he walks, some of them deep and foul, others burrowing and fistulous. They have been breaking out and healing alternately for nine years. The integuments are copper-coloured, connecting the sores in some places by shallow bands. The limb has numerous and large cicatrices left by previous sores. The right arm has swellings among the muscles, which yield for a time to iodine oint-

ment. There is a node on the right parietal bone, and he complains of pain in that region, and occasional giddiness and a sense of fulness, especially if he lives well. He is very abstemious and takes meat sparingly. He has taken much mercury formerly, but he has never been salivated, although his gums have been sore. He has consulted two eminent surgeons recently, who *both pronounce the disease mercurial, and strongly interdict the further use of mercury*. Ten grains of blue pill every night, and five grains every morning were prescribed.

24th. Gums not sore. Wounds looking more healthy. Pain in the right parietal region, and giddiness. Pulse 85, weak: bowels costive. Suspecting the head symptoms to arise from some slight degree of syphilitic inflammation of the dura mater, I thought that I should best consult the safety of the patient by persevering with the mercury;—I also prescribed an aperient, iodine ointment to the head, and three glasses of sherry per diem, with animal food and quiet exercise in the open air.

27th. Gums not sore: no metallic taste. The node is smaller and the head in less pain. Five grains of calomel and six of blue pill to be taken every night, and the wounds dressed with the mercurial and poppy cerate.

30th. Bitter taste in the mouth; no appetite. *Head quite well*; node disappearing; all the ulcers healing rapidly. Continue the pills and ointment.

Jan. 9th. Gums not sore; quite well in health; leg much better. The tumour in the parietal bone is

larger; the head feels rather full. Resume the iodine ointment (which has been neglected); take a cathartic draught; and afterwards take calomel and blue pill, of each six grains, every night, and rub in four scruples of the ung. hydr. fort. every night.

15th. Gums not sore; bitter taste in mouth; bowels slightly purged; feels sick. Head better; leg mending; several of the wounds healed.

17th. No change. Take a cathartic draught; continue the ointment; take every night calomel and blue pill, of each six grains, and every morning three grains of each.

20th. Feels sick and ill; gums not sore. Leg still mending. Discontinue the mercury: take a dose of compound colocynth pills; then nitric acid with sarsaparilla.

22nd. Health better; leg healing; continue the sarsaparilla and acid.

27th. Leg mending. Slight giddiness and pain in the head. Take four grains of iodide of potassium twice a-day. No mercury.

29th. Leg nearly well. Mending every way. Continue the iodine.

Feb. 3rd. The iodine disagrees with him. Discontinue all medicine.

5th. Wounds all healed. Health excellent.

21st. The disease has reappeared. There is a node on the right humerus, and two ulcers have again broken out in the leg. Resume the mercurial treatment.—Calomel and blue pill, of each nine grains, every twenty-four hours, and four scruples

of strong mercurial ointment to be rubbed in every night.

24th. No effects from the mercury. Continue the ointment, and take calomel and blue pill, of each six grains, night and morning.

25th. Diarrhœa with griping. Discontinue the pills. Continue the ointment.

27th. Bowels quiet; resume the calomel and blue pill at night only; continue the ointment.

March 1st. Bowels quiet. Feels sick and giddy and inclined to spit: omitted the ointment and pills last night. Wounds granulating; node better.

3rd. Has escaped from all sensible effects of the mercury. Wounds healing, arm much better. Continue the ointment every night, and pills night and morning.

8th. Appetite failing; teeth tender; wounds healing; arm mending: continue the mercury in full doses.

10th. Mending; has restless nights; appetite improved. Continue the mercury, and take a grain and a half of solid opium at bed time.

12th. Mending rapidly; teeth tender; feels sick and giddy. Continue the ointment without the pills.

14th. Mending, but ill at ease; teeth tender; breath fetid; no appetite; nausea: discontinue the mercury.

16th. Same symptoms: leg nearly well. A gentian draught twice a-day, with nitro-muriatic acid.

29th. Quite well every way. To take a trip into the country, and return in a fortnight for a preventive course.

April 23rd. Quite well and hearty: no trace of disease. Resume the calomel, blue pill and blue ointment in full doses, commencing with a dose of colocynth pills and a black draught, to quicken the absorbent system.

May 1. Effects doubtful: continue.

4th. Gums sore; feels sick and depressed: continue.

7th. Gums sore; tongue sore; bowels pinched; feels ill. Discontinue.

9th. Quite well every way. He has recovered his appetite and feels stronger.

Up to the present time this gentleman has remained free from disease. He has recovered his health and strength, and appears not to have suffered the slightest injury from the mercury: although in the course of four months he took about 500 grains of calomel, 600 grains of blue pill, and rubbed in nearly eight ounces of the strong mercurial ointment!

The points of interest in this case are, the primary error in diagnosis, into which, I grieve to say, several highly respectable practitioners were betrayed; the enormous quantity of mercury required to subdue the disease within a given time, which far exceeds anything I have ever experienced; the inefficacy of even these doses to prevent the recurrence of the disease, except when administered *morbo absente*; and the vastly improved health which the patient

experienced, after all this mercury, in consequence of getting rid of the animal poison.

It may appear questionable whether the mercury was not exhibited, in this case, in larger doses than was necessary; and also, whether the treatment was in accordance with the practice (advocated in these pages) of arresting the mercurial course as soon as its salutary effects become obvious. It is fully granted that a smaller quantity of mercury would have cured the disease as effectually; and also, that the treatment was pushed, in each course, far beyond the point necessary to accomplish the desired end. I even admit that it would have been *safer* to have subjected the patient to five or six shorter and more moderate courses, than to have thus loaded the system with mercury to the severe, though, as it proved, temporary injury to the health. The practice pursued was therefore not in strict accordance with the principles laid down, nor is it set forth as commendable or worthy of imitation as a general rule. I relate the case, not as a model, but as presenting instructive and extraordinary facts. In justification of the practice actually pursued I may now mention, that circumstances rendered it necessary that a complete and prophylactic cure should be effected within a given time; and this, I do believe, could not have

been accomplished in any other way than by the course pursued ; in which, *although the mercury was persisted in longer than usually necessary, it was not continued until the sores presented a retrograde action.* I should have regarded any unhealthy appearance of the sores as a decided indication that the medicine had been pushed too far.

CONCLUSION.

NOTWITHSTANDING the happy and harmless results which have usually attended the above-described method of administering mercury, cases do occur occasionally in which difficulties present themselves not easily overcome, though they rarely prove insurmountable. Two or three cases of well-marked syphilitic rupia are now under my care, in which the patients cannot bear a quantity of mercury sufficient for their cure, simply because they are half-starved and insufficiently clothed ; but I believe they would all do well under mercurial treatment,

in a well-ventilated ward, with full hospital diet, and wine, if necessary. In another case, where the diet was not deficient, the health of the patient (a female of fifty years of age) appeared to be suffering for want of pure air, to which she had been accustomed in early life. The country air, and especially the air of the coast, is in some cases essential to the success of the mercurial treatment. In short, except in cases of organic disease, there is rarely any difficulty whatever in the mercurial treatment of syphilitic eruptions, when the patient has at his command every accessory necessary for the promotion or improvement of his general health. Now and then it happens that mercury ill-agrees with a patient in a state of seclusion. The open air appears absolutely requisite ; so that it is necessary to choose the summer season for the administration of the mercurial course, the patient almost living in the open air. Warm baths are also excellent auxiliaries ; but the temperature of the water should be sustained, or rather increased, by the addition of hot water every few minutes.

In cases where the bowels are exceedingly irritable, we must trust to inunction, or to mercurial fumigation or inhalation, in preference to deglutition. Sometimes the absorption of mercury by any medium produces symptoms

resembling dysentery. Opium, combined with a moderate quantity of brandy, is the best antidote in this case : and the abdomen should be well covered with a broad flannel bandage.

When the gums are too readily affected, it is generally found that the whole system is also particularly susceptible of the action of the mineral. Here the doses must be very small and the courses short, until the patient's constitution becomes habituated to its influence.

A rheumatic tendency is unfavourable to the salutary action of mercury ; but by combining it with guaiacum and the iodide of potassium, with or without Dover's powder, this objection may in some measure be removed, especially if a warm season be selected, and the patient be clothed with flannel.

When, in spite of every precaution, mercury acts as a poison, affecting the gums rapidly and severely, small doses of the potassio-tartrate of antimony will be found to have a sort of specific influence in modifying or neutralizing the toxic action of the mineral : but care should be taken that excessive nausea is not excited ; and this may be best provided for by beginning with very small doses, which may be augmented day by day as the stomach will bear it.

In the rare cases in which mercury is altogether ineligible from some peculiarity of con-

stitution, the disease may generally be kept at bay by iodine, Plummer's pill, sarsaparilla, or the mineral acids ; but all these are incomparably less important than change of air, a sea voyage, or a residence in a climate which happens to be found, on trial, best adapted to promote the health and vigour of the patient.

THE END.

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