disarticulation at the knee-joint with every prospect of a most satisfactory issue. It was in the case of a little girl of thirteen years old. Six months ago, acute periostitis and necrosis of the tibia took place, and a sequestrum, comprising half the shaft of the tibia, was afterwards removed. An interval of five months passed, and no new bone was deposited. The limb became greatly deformed, and was quite useless. Finding that there was no hope of preserving a member of any use to the patient, and finding that the knee-joint was becoming involved, that there was free lateral motion in it, and some grating between the head of the tibia and the femur, I considered amputation not only expedient but necessary. Her general health, too, was beginning to give way, and the wound made to remove the necrosed tibia had never healed. The little patient being chloroformed, I first made a posterior cutaneous flap, about three inches long, and dissected it up to the level of the articulation, including in it all the subcutaneous tissues down to the muscles. I then made an anterior flap somewhat longer, opened the joint, and cut the rest of the parts by a circular sweep of the knife. The flaps were carefully formed with a scalpel, cutting at right angles to the surface, and their edges were thus quite thick. The vessels and nerves were divided transversely. Catgut ligatures, and Mr. Lister's lac dressings were employed. Although the flaps were nearly of equal length, the anterior one folded completely round the end of the femur which was not interfered with, and met the retracted posterior one an inch and a half above the end of the condyles. The cartilage on the femur was sound, that on the tibia completely disorganised.

The total absence of shock after the operation was very evident when I visited the child in the evening. Her face was perfectly tranquil, she was not suffering pain, and her appearance betrayed not the slightest indication that a serious operation, or indeed any operation at all, had been performed upon her. Ten days have now passed, and the child has continued quite well. The wound is healing admirably, and there has been no sloughing or trouble of any kind.

ART. XII.—*Some Practical Remarks upon the Treatment of Syphilitic Disease.* By JOHN K. BARTON, M.D., (Dub.) F.R.C.S., &c. ; Surgeon to the Adelaide Hospital ; Lecturer on Surgery in the Ledwich School of Medicine, &c., &c.

THE principles upon which the treatment of syphilitic disease should be conducted, are sufficiently simple, yet, if I may judge

from cases which have come under my own observation, they are not as generally recognized, or as universally acted upon, as their importance demands. In these principles I do not include the use of any particular therapeutic agent, but simply the general rules which a knowledge of the natural course of the disease, and of the effects produced by certain medicines on the symptoms, have enabled us to arrive at; these form a safe groundwork upon which to determine the line of special treatment for adoption in any particular case. In the following pages I purpose drawing the readers' attention to these principles, and illustrating their practical utility by cases, in some of which the same remedy (mercury), will be seen to have produced, when given upon a *wrong* principle, aggravation of the symptoms, with great deterioration of the general health, and subsequently, when given upon *right* principles, marked improvement of the general health, and a disappearance of the symptoms.

Before entering upon this subject, I am compelled by some observations^a made in a recent communication in the pages of this Journal, briefly to refer to the well worn controversy concerning the distinction which exists between the three forms of venereal disease. The conclusion sought to be drawn from some of the cases referred to in this communication is such, as, if adopted, would throw us back into the uncertainty and confusion from which, thanks to the labours of many independent observers at home and abroad, we have recently emerged. The conclusion to which I refer is thus expressed—"On referring to the accompanying tabulations, it will be seen that, as a rule, all sores, whether soft or hard, were followed by constitutional signs."^b—Upon referring to the tables as directed we find a certain number of cases in which it is stated that characteristic soft sores existed at the time of admission, and in which subsequently syphilitic symptoms became developed.

Admitting the facts to be as stated, and admitting also, which is not, however, at all proved, that in some at least of these cases the syphilitic symptoms which appeared, were not the return of old symptoms, but the first sign of constitutional infection; still the question remains, what proof is there to show that these sores were the initial lesion of the syphilitic symptoms which followed? There is no proof, for there is no mention made of any examination with

^a Clinical Review of Cases under Treatment at the Westmoreland Lock Hospital. By John Morgan, F.R.C.S.I., &c. Dub. Quart. Jour., Nov., 1869.

^b Dub. Quart. Jour., Nov., 1869, page 508.

the speculum to ascertain the possible existence of other sores; nor is there even any careful account of the time which elapsed between the development of the sores, and that of the syphilitic symptoms.

In the absence of all such data there are three ways of explaining the facts recorded in the tables, and it will be admitted we are bound, in endeavouring to explain any phenomena, to adopt the most reasonable and likely, not the most unreasonable and unlikely solution of the difficulty. The *first* explanation which suggests itself at once is, that these "soft sores" had nothing whatever to say to the syphilitic symptoms, being another disease, which prostitutes in the constant habit of promiscuous intercourse, were, to say the least of it, not unlikely to contract, in addition to a syphilitic sore, which they either had not noticed, or, having noticed, considered of no consequence; but which trifling sore was really the initial lesion of the subsequent symptoms. If this explanation be objected to in any instance, the facts before us admit of a second explanation equally satisfactory and probable, and involving no difficulty, which is, that in some cases the "soft sores" were true syphilitic chancres, in which the sign of induration was wanting at the time of observation, for it is well known that *induration*, however valuable a sign when present, is not to be looked upon as absolutely necessary to the syphilitic chancre; and indeed for this reason the names of hard and soft as applied to the infecting and non-infecting sores are very objectionable; but in the tables in which these cases are given, the sores are simply described as "soft sores," or a "number of soft sores," the other signs of *surface, secretion, &c.*, being altogether omitted. It seems probable that in some of the cases the former and in others the latter explanation was the true one.

The author of these tables, however, adopts a very different explanation of the simple phenomena there stated, which is—that these "numerous soft sores" were examples of what is commonly called the local venereal sore or chancroid, which, indeed, is very likely; but—strange conclusion—that the secondary syphilitic symptoms followed from them. I have shown that there is not the slightest necessity for any such conclusion, as the cases admit of ready explanation without it; but if adopted we must at once pronounce all the careful and laborious researches which have been made upon this subject, since Bassereau, in 1835, began his observations, up to the present time, to be altogether wrong, and this rather than admit that a certain number of women in the nightly habit of prostitution might have two kinds of venereal disease at the same time.

I leave the reader to adopt whichever of these explanations he thinks most reasonable.

Syphilis in any of its stages may present difficulties of *diagnosis*, but more frequently in its later stages is this the case. The plan generally taken in such cases is to make a minute inquiry into the antecedents of the patient, and the diagnosis is formed very much upon the information thus acquired. This appears to me to be a grave mistake, and one which very often leads the surgeon into error. To found a diagnosis in any case upon the history of his symptoms, as given by the patient, is always dangerous, but much more so in syphilis than in other diseases, for so chronic is the disease and so various the symptoms it produces, that the patient may readily deceive himself and the surgeon consequently who trusts to what he tells him.

Under any circumstances of difficult diagnosis, I am convinced that our efforts should be directed almost exclusively to a careful, and, if necessary, a repeated examination of all the signs, which the skin, nails, hair, mucus-membrane of the mouth and fauces, &c., will present, rather than rest any weight upon the history given by the patients. For obvious reasons some patients will deny the possibility of their having contracted^a syphilis, while others will unintentionally mislead in the opposite direction. Several cases have come under my observation in which the patients have given a history of primary sores, followed by an eruption, which, upon closer investigation, turned out to be a rash produced by copaiba, or an ordinary

* A brewer's man, aged twenty-seven, married, and accustomed to drink freely of beer, presented himself at the Adelaide Hospital, upon the 25th of September, 1869. He had a sore upon the penis, partly upon the reflected prepuce, partly on the glands, red, smooth, excavated and indurated, glands in groin enlarged and hard, complained of weary pains in his bones, worse at night; post cervical glands enlarged, and hair commencing to fall; no eruption on skin, nor any sore throat. When asked as to when he contracted the sore he said he first perceived it about three or four weeks previously, but positively denied ever having had connexion with any woman but his wife, who was the mother of several healthy children. Totally disregarding these statements and relying upon the distinctive features of the disease, which were well marked, I made the diagnosis. "Syphilis in the stage of premonitory symptoms before the ushering in of secondary lesions," and to confirm this took the patient into the hospital, where he was kept in bed and given a diaphoretic mixture; within a week a well marked papular eruption began to make its appearance, accompanied by sore throat, and simultaneously the fever and pains were relieved. The future progress of the case, up to the present time, amply confirmed the original diagnosis; but to the last, although often questioned, the patient denied the possibility of his having any venereal disease; but when in his hearing, I urged upon the students the necessity of making a diagnosis in such cases, quite irrespective of the history given by the patient, he was observed to relapse into a broad grin.

skin affection (scabies, excema, or purpura). On account of this double source of error, I view with suspicion any diagnosis founded upon the previous history. *The signs which we ourselves have an opportunity of observing, are the only reliable grounds of a diagnosis in any difficult case,** and by carefully noticing them we will always be able to come to a definite conclusion, and either confidently enter upon treatment, or on the other hand dismiss the subject of syphilis from our patient's mind.

I have elsewhere^b stated my views of the *treatment* of syphilis; these views have been confirmed by more recent experience, while at the same time I am convinced that in order to make a change in the old method of giving mercury rapidly and in large quantities for syphilis, it is necessary to insist upon the principles which should guide us.

The first general rule or principle of treatment which I would suggest, is, that our *object* should be to remove all existing symptoms as completely as possible, *not* to drive out the virus from the system; the virus we only know by its effects, and there is no proof whatever that the virus is directly influenced by any treatment. There is, however, very good reason to believe that the virus is in a large number of cases really eliminated from the system, after the lapse of a considerable interval of time, during which its presence in lessening activity is seen, and there can be little doubt that by removing the symptoms we indirectly aid in this elimination, so that while we confine our treatment to the removal of existing symptoms, we are accomplishing, as far as treatment can, the purification of the system; but this must not be the object we propose to ourselves or our patients. When the symptoms have totally disappeared we have no further safe guide; but might, with the theoretic object of freeing the system from the virus, persevere indefinitely to the destruction of the patient's health, and after all be disappointed by finding a new batch of symptoms appearing when his cure was pronounced complete.

Experience, I think, however, shows that while our object must be simply the removal of the symptoms, yet that in order to do this satisfactorily, that is, to prevent, as far as possible, a *return* of the symptoms, we must persevere with treatment for some weeks after

* I find other surgeons have adopted a similar rule. Mr. C. Forster says—"For many years I have enjoined my reporters only to note down what they see."—Guy's Hospital Reports, 1870, p. 162.

^b Syphilis, &c., Chap. ix., page 200, &c.

all signs of the disease have disappeared; this is not necessary in all cases, but in the majority, especially such as are in the second stage, this is a wise and useful precaution.

The second general principle is, that whatever therapeutic means we employ should be used in a gradual and gentle manner, in contra-distinction to the active and energetic use of the same drugs. The reason of this is, that syphilis is essentially a chronic disease; its symptoms are gradually developed, and continue for a length of time, gradually disappear, and are followed after an interval by another set of symptoms which pursue a similar course. That a remedy which acts energetically and rapidly upon the system, cannot successfully combat such a disease, requires no argument, and yet such a method of treatment is, in fact, very generally adopted, with the result, as some of the following cases will show, of rendering the disease more intractable, while the health of the patients becomes much deteriorated. The rule that an acute disease requires an active remedy, while a chronic disease will only yield to a slow remedy, is generally accepted; there is no disease with which I am acquainted, in the treatment of which this rule should be more carefully borne in mind than in that of syphilis, not only from the essentially chronic character of the disease, but from the fact of the medicine, which possesses the greatest power over its symptoms, and is generally employed in its treatment, being *mercury*, which metal when introduced into the system in too energetic and rapid a manner is capable of doing as much harm, as on the other hand, when used in a cautious and discriminating manner, it is powerful for good. There can, I conceive, be no doubt that by means of mercury the effects of the syphilitic poison in the system may be counteracted to a very great extent, the duration and severity of the disease mitigated, and life saved when vital organs are attacked, and yet the non-mercurialist may boast that his cases on the whole get on quite as well, and some of them very much better than those under the care of practitioners who employ mercury. In an average of a large number of cases treated with and without mercury, I believe there would be found no great difference either in duration or severity of symptoms, and the reason I am convinced is, that on the mercurial side the cases which are improved and relieved by mercury judiciously administered are counteracted by those in which it has been used in too active and energetic a manner, so that if this second general principle is not attended to, it would be much better not to give mercury at all.

Salivation should never be induced in the treatment of syphilis; all the good effects of the drug can be obtained without this, the poisonous effect of the metal upon the system. Not only is the patient injured by the depressing effects of mercury when pushed rapidly on to salivation, but the syphilitic symptoms remain unaffected by this active use of the drug. So that it is always a most unfortunate circumstance should a patient become salivated, and one which we should guard against by, in the first place, using mercury, especially at first, very cautiously, and in small quantities, and also by examining our patients frequently, for some are very susceptible. The best means of giving mercury so as to fulfil the indication of introducing it gradually into the system, and avoiding salivation, is, I believe, by means of inunction; ten or fifteen grains of mercurial ointment carefully rubbed in daily will do more for the relief of the symptoms, than could be credited by those who are accustomed to give it freely by the mouth. Inunction is much the best means to employ in the early stages of the disease, but in the later stages, very often it is necessary to give mercury in combination with iodide of potassium, and then either the biniodide or bichloride may be given in doses of the twelfth of a grain, and the metal will then act in the gradual manner required. The following cases prove the importance of due attention being given to this principle of the gradual introduction of the remedy by which we propose to influence the symptoms of syphilis.

CASE I.—Syphilis in its Second Stage, treated at first by the rapid introduction of Mercury into the system, which, while injuring the patient's health, failed to remove the symptoms—Subsequent gradual treatment, followed by complete removal of the symptoms and restoration of the patient's health.

J. R., a clerk, came under my observation upon the 3rd of December, 1869. He was then profusely salivated; bloody saliva flowed constantly from his mouth night and day; he could with difficulty swallow even drinks. He was bathed constantly in a cold sweat, his pulse being rapid and weak. The syphilitic symptoms were a papular eruption, well marked on the face, arms, and neck, enlarged cervical glands, pains along both tibiæ, which were worse at night.

He had contracted the disease in August, and the eruption had appeared, he stated, during the following month. He was at this time in the country. The surgeon whom he first consulted gave

him "potash," and he thinks a little mercury, when the eruption and other symptoms became somewhat better. He came to Dublin about business, and then consulted a medical man, who prescribed pills for him, one to be taken three times a day, and after a few days fearing one of his eyes was becoming inflamed, gave one every four hours. At the end of the week salivation was established, with all its attendant evils, while the eruption and other symptoms remained the same as they were before this active treatment was commenced.

When this patient came under my care, the treatment was necessarily entirely directed to the relief of the salivation. Four grains of quinine was given every four hours, while a chlorate of potash gargle was constantly used to wash the mouth; fluid nourishment was given every four hours. In about a fortnight he was recovered, so far as to eat solid food; he then left for the country. I saw him again early in January; he had then quite recovered from the debilitating effects of the salivation, and appeared in good general health. *The syphilitic symptoms remained as well marked as before.* I now considered him in a suitable state for treatment, and commenced at once with the inunction of half a drachm of mercurial ointment once daily, a mixture containing three grains of sulphate of quinine in each dose being given twice a day. After a fortnight's steady perseverance in this treatment the eruption was manifestly decreasing; the inunction was then reduced to fifteen grains daily. Upon the 8th of February, after a month's treatment, the following note was taken:—"Papules scarcely perceptible on the forehead, where they had been very marked; eruption on arms and back nearly disappeared; the papules which remains are scaly; slight enlargement of cervical glands still on one side; no pains or other symptoms; general health very good; has not been a day from business since he returned to town; no symptoms of salivation." By the end of March all the symptoms had completely disappeared, and the treatment was discontinued.

CASE II. (Reported by Mr. Arthur Ringland).—*Syphilis in its Tertiary Stage—Salivation produced upon five different occasions without relief to symptoms—Complete removal of symptoms and restoration of general health by gradual treatment.*

A. P., a widow, about thirty years of age, was admitted under the care of Dr. Barton, into the Adelaide Hospital, upon the 12th November, 1869; her condition was then as follows:—An eruption

of both dry and ulcerating tubercles was scattered over the body and limbs; one ulcerating patch upon the back and another near the left wrist-joint, were each as large as a five shilling piece; the surfaces of these ulcers were covered with a dirty semipurulent discharge, their edges red and everted. Several large white cicatrices marked the situations where similar ulcers had healed. Severe pains were felt in both arms, legs, and head; in the latter the intensity was such as to resemble that of severe neuralgia; all these pains were worse at night; the pains along the tibiæ and about the ankles and knees were much increased by standing, so that the patient could scarcely bear to put her feet to the ground. Her hair had fallen to a great extent, and was still falling.

Previous History.—Two years before, her husband had sores on his lip, and she got a similar sore on her upper lip from him; this sore ulcerated, and was followed by a cutaneous eruption, which, commencing on the face and head, spread over the entire body. The throat became very sore about the same time; this was followed by inflammation of both eyes, from the effects of which her sight remains impaired to the present time. When the eruption first appeared she was placed under the influence of mercury, and salivated. She was again salivated, when her eyes became inflamed; when these got better the eruption, pains, sore throat, &c., remained; for these she was given mercury again, and subsequently, in the hands of other medical men, she was salivated twice, so that altogether she has been salivated, during the past two years, five times, and yet she states the symptoms of the disease are as bad now as ever. The patient was emaciated, and had all the appearance of one worn out with loss of sleep, pain, and depraved digestion, and expressed herself as almost despairing of relief.

As the periosteal pains were the most distressing symptoms, and those which deprived her of rest and kept up the irritative fever, her treatment at first consisted in eight grain doses of iodide of potassium, four times in the twenty-four hours, with Dover's powder at bedtime. In about three days there was a decided relief from pain; the mixture was then changed to one containing the twelfth of a grain of biniodide of mercury, and five grains of iodide of potassium in each ounce of decoction of cinchona bark; of this she took one ounce three times a day. She was placed on meat diet with some wine; ordered to take a hot air bath twice a week, and to have the ulcers fumigated with calomel.

Under this treatment the patient steadily improved in every

respect, her general health being restored *pari-passu* with the disappearance of all the syphilitic symptoms. The ulcers soon put on a healthy appearance, but their cicatrization was very slow. After all other symptoms had quite disappeared the ulcer on the back and that on the left wrist still remained. After about five weeks of treatment the patient's improvement was so decided as to attract the attention of all who had seen her when first admitted, and to elicit from herself the remark that she never expected to be so well. About the middle of December, this patient was attacked with shivering and pain in the right side, which proved to be due to diaphragmatic pleuritis, which soon spread to the lungs, and her life was in imminent danger. The right lung becoming solid without at the same time any expectoration, with the assistance of my colleague, Dr. Little, this serious complication was, however, overcome, and the patient made a good recovery. She left for the Convalescent Home, Stillorgan, upon the 21st of January, the syphilitic symptoms having entirely disappeared, and her general health being better than it had been since she contracted the sore upon her lip two years previously.*

CASE III. (Reported by Mr. Arthur Ringland).—*Tertiary Signs two years and a half after Infection—Salivation without removal of Symptoms—Great General Cachexia—Symptoms removed, and General Health restored by Treatment without Salivation.*

William De C., nineteen years of age, was admitted into hospital upon the 18th December, 1869. He presented the following group of symptoms:—Tonsils and palate bore the cicatrices of former ulceration, and were still red and inflamed looking. Spots of a dark coppery colour were scattered over the face; several cicatrices of rupia existed over the shoulders and back.

Upon the upper and inner part of both legs, near the knees, existed two large ulcers, the one upon the right leg being the largest, and being about the size of a five shilling piece; the edges of these ulcers were not undermined, but the skin around them was of a dark coppery hue; the surfaces were covered with a dirty looking greyish exudation. He complained of nocturnal pains in his

* This patient presented herself again at the Hospital in March last, and exhibited two ulcers about the size of a shilling each upon the scalp. Her health was failing; she had been leading a drunken and irregular life. She was admitted, but when she came to the Hospital in the evening she was so drunk as to make it necessary to cancel her admission.

head and legs, so severe as to deprive him altogether of sleep. Upon the top of the glans penis existed the cicatrix of an old sore; the glands in both groins were enlarged and indurated; his tongue was white; there was complete loss of appetite; he was emaciated, and his skin had a yellowish dry look.

Previous History.—About two years and a half before his admission to hospital, he first noticed a single sore upon the glans penis, the mark of which still exists; this was followed shortly by an eruption upon the forehead. He then sought for medical advice; the surgeon whom he consulted cauterized the sore, and subsequently, the eruption having spread all over his body, placed him under the influence of mercury. He became severely salivated, but states that the eruption continued without much change for four months. He now began to drink rather freely, and became infected with gonorrhea; this was followed by his present symptoms of great general debility, and by the appearance of the syphilitic symptoms which he presented upon admission.

The *treatment* adopted was, internally, eight grain doses of iodide of potassium, with the one-sixteenth of a grain of biniodide of mercury, in an ounce of decoction of cinchona bark, three times a day, a mercurial vapour bath every second day, ten grains of calomel being used each time, the ulcers dressed with charpie soaked in black wash; full diet. For several nights after his admission scarcely any sleep was obtained, but he expressed himself always relieved by the baths, and the ulcers began at once to show a more healthy edge and surface. A steady perseverance in the treatment was, however, soon followed by a gradual improvement in all his symptoms; the eruption disappeared; the ulcers healed; the nocturnal pains subsided; and at the same time natural sleep and appetite returned; not the slightest symptoms of salivation appeared. The treatment was continued with but slight alteration until the beginning of February, when being free from all signs of disease, and feeling well, he left the hospital. He has been seen occasionally since that time, and he stated he was free from any symptom such as he had suffered from when admitted.

CASE IV. (Reported by Mr. Samuel Knaggs).—*Tertiary Stage—Cerebral Symptoms—Acute Head-ache—Loss of Sight—Loss of Memory—Complete Recovery.*

J. C., a respectable married woman, forty-one years of age, applied at the Adelaide Hospital in October, 1868. She then had

a gumatous tumor on the thigh; four years previously she had contracted syphilis from her husband, and had ever since been suffering from various symptoms of the disease. She had been for several months in Dr. Stevens' Hospital; when better she went out, but subsequently, when the symptoms returned, she placed herself under Mr. Hamilton's care, who salivated her; still her symptoms continued with short intervals of apparent health. She did not come into hospital at this time, but was treated as an out-patient. Upon January the 4th, 1869, she presented herself with a fresh train of symptoms, and was then admitted. She now complained of intense pain of the head, like a tight band; she compared it herself to a feeling as if a red-hot iron circle was tight round her head; both eye-balls were the seat of acute pain; the sight was very defective; flashes of light and *muscæ volitantes* were constantly before her; light could not be endured. Her memory appears to have been defective previously, but it was at this time much worse; recent occurrences seemed to her to have happened "centuries ago;" cannot remember anything; and says she has "spiritual and temporal delusions." The intense pain continued for more than a week after she was admitted, although every expedient, including large doses of iodide of potassium, was used to relieve her; any effort of mind, such even as the attempt to answer a question, increased the pain. Blisters were applied at the back of the neck, and behind the ears, and the twelfth of a grain of biniodide of mercury, with eight grains of iodide of potassium was taken four times daily.

A slow but steady improvement began after this treatment had been in force about two days—first, the pain began to abate in intensity, then the dread of light diminished, then the flashes and *muscæ* disappeared, and slowly the memory and capacity of mind returned. She remained about two months in hospital, during the whole of which time she continued taking the medicine. She then went to the Convalescent Home for about six weeks, and took the same medicine at intervals, a week being allowed to pass between each repetition of the bottle; all tendency to a return of her symptoms seeming then to have disappeared, at the end of about three months she discontinued the medicine. I have seen her within the last few weeks, and she tells me she has remained perfectly free from any symptoms of her disease whatever, and is able to support herself, filling the situation of housekeeper, but her memory is treacherous and defective.

Those who oppose all mercurial treatment, would find in the early history of each of these cases, ample grounds for the support of their views. We can, I think, hardly doubt that had these patients been treated upon a non-mercurial plan, or not treated at all except by hygienic rules, that they would have suffered less, and that the disease would have run a milder course than was the case under the treatment to which they were subjected. The conclusion, however, which the non-mercurialist would draw, viz.:—that mercury should not be given at all in such cases—does not necessarily follow, for I contend that the evident failure of mercury in these cases, was due, *not* to the wrong remedy being employed, *but* to the right remedy being wrongly employed, and the proof of this is furnished by the subsequent course which each of these same cases ran, where mercury was properly employed.

In the first case, the papular eruption which had continued, in spite of an active salivation, steadily declined, and disappeared under the inunction of fifteen grains of mercurial ointment daily, while the health remained perfect. In the second, an improvement such as caused the patient to say that “she never believed she would be so well,” followed the use of the one-sixteenth of a grain of biniodide of mercury, with iodide of potassium, when five salivations and abundance of iodide of potassium alone had entirely failed to give relief.

In the third case, six weeks of the same treatment with mercurial fumigations to the ulcers, sent the patient out of hospital quite free from any symptoms; and in the fourth, in which serious head symptoms existed, similar treatment with counter irritation succeeded, not only in restoring the patient, but having been persevered on for three months, relieved her so much that she remains well after a year has elapsed, having previously been a constant sufferer, although more than once treated by mercury pushed to salivation. I do *not* claim for the mild or gradual method of mercurial treatment which I advocate, the power of eliminating the poison so completely from the system, that no future symptoms will appear, for I have found that patients treated according to the plan I recommend, will frequently show slight symptoms for a year or more. What I do claim for the plan is, that if employed in the early stage of infection, it will remove the symptoms completely, while the patient's health will at the same time improve, and that it will, if pursued for a sufficient length of time, render the future symptoms much milder and of shorter duration than they would otherwise have been.

If the disease is allowed to run its own course, or even if the patient is treated with active mercurialization, the mild mercurial plan cannot be so successfully employed subsequently, but still it remains the best treatment that can be adopted; it will still be able, in most cases, to restore the patient for a time at least to health, and to render the future recurrence of symptoms milder in their character. The methods which I have found the best in carrying out the mild mercurial treatment are—in the early stages, the daily inunction of from fifteen to thirty grains of mercurial ointment, and, in the later stage, either the inunction of ten grains of the ointment, or the mixture of the biniodide of mercury and iodide of potassium, as employed in the cases I have related; with either I occasionally use fumigation, either general or local, according to the nature of the case.

In a certain class of cases, of which the following is an example, fumigation is of much service:—

CASE V.—Tertiary Syphilis—Extensive Ulcers of Integument with Sarcocoele—Treatment by Mercurial Vapour Bath.

W. C., forty years of age, a servant, was admitted into hospital, on the 14th December, 1869. About nine years previously he had contracted a sore which was followed by an eruption on his skin, since which he had been almost constantly suffering from some symptoms of syphilis. His general health was much deteriorated. The left arm from the elbow to the wrist was the seat of several jagged ulcers, oval in shape, about the size of a five shilling piece each, their surfaces were covered with a fetid unhealthy pus, their edges raised and livid. Over the skin upon other parts of the body were scattered the indelible cicatrices of ulcerated tubercles. The right testicle was swollen to about six times its natural size, being heavy, firm, and painless; the left was atrophied.

Pains along the long bones were felt at night. A few indurated glands were to be found in the groin and in the neck.

The treatment which in this case was successful in relieving the pains, healing the ulcers, and restoring the general health in five weeks, was the calomel bath every second day, assisted by eight grain doses of iodide of potassium, in cinchona bark three times a day. No impression was, however, made upon the sarcocoele, which remained the same, when the patient left the hospital well in all other respects.

In concluding these remarks, I would ask—How are the conflicting statements of those who advocate, and of those who denounce the use of mercury in syphilis to be accounted for? unless we admit that this medicine may be either useful or injurious according to the manner in which it is used. And again—Why has the external use of mercury been advocated by the most practical and able surgeons as the safest and surest method of treating syphilis in preference to the easier and readier method of internal administration? unless that it was found by experience that the symptoms yielded more completely and satisfactorily, while the general health remained unaffected by the remedy, when employed in this manner. The gentle and gradual action of mercury was thus gained, while its energetic and poisonous effects were avoided.

ART. XIII.—*On Extraction of Cataract by von Graefe's Peripheral Linear Section.* By HENRY WILSON, F.R.C.S., M.R.I.A.; Assistant Surgeon to St. Mark's Ophthalmic Hospital; late Teacher of Ophthalmoscopy at the Richmond Hospital, &c., &c.

THE subject of cataract has attracted a very large amount of attention from the earliest times, and if we consider how frequently this disease is the cause of blindness, and reflect on the difficulties encountered in its removal, we need not wonder at the very great interest attaching to it; nor at the largely increased amount of consideration and research devoted of late years to the means of its cure. Notwithstanding the ignorance or uncertainty of the ancients as to the true nature and seat of the disease, as is amply testified to both by their writings and nomenclature, many valuable instruments and operations were devised by them for its cure, some of which are retained even still. The needle was employed probably before the Christian era, and in its various modified forms still holds its ground, and is largely made use of; so long ago as the eighth or ninth century a hollow needle for the removal of cataract by suction was in use in Persia, and has been described and figured by Jesu Hali (Isa Ben Ali), a Christian oculist of great repute, living in Bagdad, in the ninth century.

Although we can thus trace back the needle to remote antiquity, the period when the knife, and with it the operation of extraction, was first employed is involved in obscurity. A passage in Pliny