

niece, who was poorly, for a lock of her hair, in order to consult a somnambulist. The niece, wishing to try the credulity of her aunt, gave her the hair of her maid instead of her own. A renowned somnambulist was consulted, and at once recognised, by the hair of the maid, all the symptoms presented by the niece, whose sufferings she minutely described, to the great edification of the lady. The latter was then informed of the trick that had been played. You would naturally have thought that she would have recognised the imposture of the somnambulist. Not at all; she preferred concluding that the maid servant had the same disease as her niece, and obliged her to submit to a regular treatment, as if she had been poorly, although at that time in the best possible health.

Thus, many causes contribute to throw uncertainty on the result of medical treatment, either rational or empirical. Sometimes it is the patient who will be deceived; sometimes it is the quack, who deceives knowingly; sometimes it is the conscientious physician, who, notwithstanding his honesty, allows himself to be led into error by an erroneous interpretation of the means employed.

In the presence of such difficulties, it is less desirable for us to endeavour to lay down some law, than to give to our studies a more serious direction. Instead of demonstrating to pupils theories already framed, and often very badly framed, it would be better to teach them rather to study facts, and to take as their guide experimental observation. We have seen the rise, and, in the course of a few years, the fall, of a system which rested entirely on a single undefined word—*inflammation*. This system, opposed to all physiological ideas, was erroneously called “physiological medicine;” and yet its author was neither devoid of talent nor of knowledge. Such, no doubt, will be the destiny of those pretended methods of treatment which are, in general, founded on visionary speculations, have fashion for support, and dupes for followers.

As for us, gentlemen, we shall continue, as we have hitherto done, to study phenomena in the organs in which they are accomplished. Although the part of the physician may not be always as efficacious or as active as we could wish, when disease requires our assistance, we may still, by well-judged intervention, assist Nature in overcoming the functional derangements which give rise to disease. We shall more especially, therefore, endeavour correctly to appreciate the physiological action of organs. How, in reality, can we have recourse to rational treatment, when we are ignorant of the normal conditions of the economy?”

ON THE PATHOLOGY, DIAGNOSIS, AND TREATMENT, OF VENEREAL DISEASES.

By W. ACTON, Esq., Surgeon to the Islington Dispensary, and formerly Externe to the Venereal Hospitals of Paris.

ON THE MODERN DOCTRINES AND TREATMENT OF SYPHILIS WITH MERCURY.

Necessity for continuing and keeping up the judicious effects of mercury; opinions of various authors on length of time required; Brodie's opinion that the constitution suffers less from one long course of mercury than repeated short ones; a recent prescription of Ricord's to prove that three months is not too long to be under the influence of mercury in some cases; author's opinions; case showing how a surgeon's views must be modified by circumstances; errors of the day, in giving mercury, pointed out; observations on patients unsuceptible to mercury; effects of mercury on the system, and hygienic rules for supporting the constitution; rapid effect of mercury in removing disease when the mineral is indicated; deplorable effects produced when mercury is persisted in, in cases unfitted for its use; considerations on Abernethy's term, “Diseases resembling Syphilis;” instance of such a case at the present day; observations on relapses; the mercurial and anti-mercurial plans of treatment considered, and advantages shown of steering a middle course.

WHEN the effects described in the last paper have been produced, they should not be allowed speedily to cease, but be maintained for some time after the disappearance of all the symptoms.* In the whole range of surgery I do not know a

* Brodie, in the Clinical Lecture reported in THE LANCET, and which I have so frequently quoted, says, page 676, “When the eruption has disappeared from the body, it (friction with blue ointment) must be used as a prophylactic to prevent the return of the disease, for, probably, another month.” On the score of economy to the constitution, Brodie is equally

more difficult or important subject than the question—How long should mercury be continued in the treatment of secondary symptoms? I cannot give any general rule; experience and the consideration of each particular case must decide the period. I may, however, remark, that when I commenced private practice, it was my determination to give very little mercury, and continue it for very short periods; but in carrying these my intentions into effect, I found the evil was as great in giving too little, as too much, of the mineral, and in spite of my early convictions, I now give mercury, not only in cases which formerly I thought required it, but continue it for periods longer than I did some three or four years ago. I should, however, be sorry to carry it to the extent some recommend; such treatment would be attended with the worst consequences; and even given with the greatest precautions, and in the most urgent cases, I am often obliged to leave it off, at the moment I am aware it ought to be continued for longer periods. I will here cite a case which has lately come under my notice, to show the practical difficulty surrounding this part of my subject. A gentleman contracted indurated chancre; frictions were employed, every precaution was taken by the patient and myself, but he did not and could not keep the house. The frictions failed in dispersing the induration, although continued for six weeks; the powers of my patient began to fail; the bowels became irritable; the digestion got out of order; the spirits low; the pulse feeble, and press of business prevented him leaving town. I was compelled to leave off mercury, and yet I was well aware that secondary symptoms might return. My patient at length left town, and his health recovered immediately; but with it a good crop of secondary symptoms appeared on the scalp. Under these circumstances, mercury internally was given, which, at first, the patient bore well, the symptoms rapidly disappearing; but diarrhoea coming on, partly owing to the mercury, and in part due to the copaiba he was taking, the mineral was obliged to be left off, and he came to town, and finding himself again with a relapse, had his confidence shaken in my treatment, and consulted a young surgeon, who told him that iodine was the remedy, and recommended it to be tried again, (for the patient had before taken it.) The symptoms, however, in spite of iodine, increased, and this gentleman again consulted me, and moderate doses of mercury, which he bore well, as he had recruited his powers in the country, cured him, although he took it for an insufficient time. This forms the sample of the cases we meet with occasionally in private practice, and shows the difficulty of treating cases by any rule a surgeon may lay down. It sometimes happens that our colleagues are not very charitable in the construction they put upon treatment, and my patient was told that mercury ought to have been given at the commencement of the chancre, and if it had been, these symptoms would not have relapsed. I shall have an opportunity of discussing the propriety of giving mercury in primary symptoms when I come to speak of that subject in a future paper. I should but distract my reader's attention were I to enter upon the subject at present.

explicit: “You may inquire if a long course of mercury will not injure the constitution more than a short one. Undoubtedly it will; but that is the very reason why you should give a long course at first. I will explain myself. If you exhibit a short course, the disease is sure to return; you administer a second course, and the disease returns again; and thus you have repeated courses. Not only is the system weakened by the disease, but whenever it returns it assumes a more formidable character. But if you put the patient through a long course in the first instance, the frequent recurrence to the use of mercury will be unnecessary. A patient who takes mercury for a month will probably never require it again; but if he takes it only for a fortnight, he has secondary symptoms, and then he will require to take it for four weeks, so that that which is a short course at first becomes a long one in the end.”

Lawrence says, “We must give the remedy several times, perhaps, in the course of the four and twenty hours, and we must persist in the use of it day after day, perhaps week after week, and even, sometimes, for months, before the effect will be produced.”—*Lectures in THE LANCET*, vol. i. 1829-30, p. 728.

Ricord, in a recent lecture, says, “Hitherto the difficulties have not been great, (he is speaking of the daily dose;) but what presents the greatest difficulty, and where every candid practitioner must acknowledge his almost complete inability to decide, is the determination of the absolute dose of mercury which can destroy the syphilitic diathesis. We have here but the dose proper for relieving the symptom; but the neutralizing dose, that which ought to constitute what is called a complete methodical treatment, what is it? How much mercury must be given? For how long must it be continued?”—*Gazette des Hôpitaux*, Sept. 16, 1845.

To show how long M. Ricord continues the use of mercury, I give here the copy of a prescription sent with a patient who has lately quitted Paris, “Chancre induré et adénite indolente il y a dix mois. Traitement incomplet a deux récesses répétitions d'accidents secondaires aujourd'hui engorgement des ganglions mastoïdiens, plaques muqueuses de la gorge. Syphilide papulo squameuse.” Fumigations and iodide of mercury are to be given, and the prescription goes on to say, “Le traitement devra être suivi pendant trois mois, seulement lorsque l'éruption aura disparu on suspendra l'usage des fumigations.”

But to return to the length of time during which we should continue mercury, a month, six weeks, or even three months will be required, during which the mouth may be kept slightly affected, provided the health allows us to continue it so long, and no untoward accident happens, as occurred in the case just mentioned. The instances of failure depend, in the present day, upon practitioners giving their patients too powerful doses of mercury, salivating them too rapidly, and suspending the mineral too readily; a relapse occurs, and the same results follow, until the surgeon who may be consulted is unable to say if mercury, cachexia, (as the army surgeons call it,) or syphilis, is first to be treated.

There are a few patients who appear to resist the effect of mercury, just as there are some who are influenced by a few grains; the former may generally be salivated, when confined to a warm room, and not allowed to expose themselves to the air. Women, for these reasons, require less mercury than men, and infants at the breast are placed in the most favourable circumstances for the beneficial influence of mercury. If a patient will not confine himself to the house, at least he should clothe himself in flannel, avoid wet or cold feet, exposure to draughts, &c. Turning now to the effect of mercury on the system, it varies greatly. Some patients are not aware of any effect whatever; others, from the first dose, begin to feel lassitude and a general uneasiness; their appetite fails them; the tongue is moist and white, though not furred; there is some fever and heat of skin; this goes off in a few days, and the patient bears the remedy well during the remainder of the time. I generally recommend a glass or two of wine to patients who feel this uneasiness, or weak brandy and water; or brandy and soda-water seems to put the stomach in better humour than anything else. If, on the contrary, the patient habitually indulges in wine or spirits, his rations must not be cut off suddenly, but gradually diminished to a more moderate quantity. I have never found any advantage follow from keeping persons on low diet who are taking mercury.

Having discussed the effect of mercury upon the constitution and system, and described how far the mineral should be pushed, it remains for me now to speak of its influence in removing the present symptom, for which it may have been given, and its power in preventing relapses. The most experienced surgeon is often himself surprised at the almost marvellous rapidity with which symptoms disappear when mercury is properly given. A patient has been getting better and then worse under other treatment; he takes a few doses of the mineral, and his skin, before of an earthy, unhealthy colour, becomes clear, the eye resumes its brilliancy, the spots vanish, and the stains alone remain, in very old standing cases; the powers of the system rally, and the patient resumes his usual occupation with a vigour which he has been unused to for many a week. Cases, however, that are unfitted for mercury, instead of progressing thus favourably, take on a very different train of symptoms, lassitude, dyspepsia, and a chlorotic condition, sets in; the spots, instead of amending, begin to discharge, scabs form, which, on being removed, expose ulcers, circular in shape, with deficiency of, or presenting only, a few flabby granulations, attended with a serous or reddish offensive ichor: pain and restlessness attend the nights of these subjects, and the gums bleed on the slightest touch. We cannot say this is salivation, although many of the symptoms are present; but we have a cachectic state which proceeds from bad to worse. Did the Abernethian school call these varied and Protean complaints "*the diseases resembling syphilis*"? It is difficult, from the writings of that surgeon, to decide exactly what he may have meant by the term; but I am induced to believe that one form of that vague denomination consisted in the cases we are now discussing.*

I still meet with cases treated by some of that surgeon's former pupils presenting anomalies truly unusual. I have lately had one such under my care. A female, the mother of several children, presented herself with three circular sores of the size of a shilling on one leg, and five similar ones on the other lower extremity; they presented a foul surface covered with sloughs. She stated that a similar sore had existed on the

sternum; her mouth bore traces of salivation which had nearly passed away, and left the gums spongy, the teeth loose, and covered with tartar, and her whole system such as you might expect in scorbutic disease. If I might believe my patient, she had never had primary disease, or the usual secondary symptoms; but this disciple of the Abernethian school had given her large and repeated doses of mercury, and used black wash for six weeks. Instead of recovering, she had been getting progressively worse, and applied to me, as the gentleman said she had not taken mercury enough, and was about to increase the dose. This is one of the many cases I witness in London even in the present day, and I believe them peculiar to the English capital.

Will your treatment prevent relapses? is a question I have often been asked both by practitioners and patients. To one and the other I must candidly say, no; but in by far the majority of cases, secondary symptoms will not recur. I believe that no treatment can guarantee the system; and experience has proved that moderate courses of mercury succeed more frequently than any other. I have already shown, in speaking on prognosis, that however long, or largely given, mercury will not, and cannot, prevent relapses. I have likewise collected the opinions of former absolute antimercurialists to show that secondary symptoms do not disappear; or, if they do, readily reappear when no mercury is given. I have attempted to prove that mercury given in appropriate doses in the present day does no harm. I have shown, I think, that if long continued, and in large doses, it produces much mischief. Is it not safest, then, to steer the middle course, to reject equally that plan which avowedly, by the confessions of its staunchest supporters, cannot cure the disease, as well as the opposite one, by which you destroy your patient's constitution by the large and long-continued course of the mineral. Insidiously, as I have shown, the disease creeps over the system; by equally slow and sure means should we employ the remedy. I am convinced, that however beneficial a rapid salivation may be in iritis, it is very objectionable in other secondary symptoms: it leaps over the disease; it depresses the powers of the constitution, but fails in eradicating the complaint; and I almost question if the old humoral pathologists were not right in believing that Nature attempts to throw off the disease, and that we are called upon only to assist her, by exciting the different emunctories, slowly, but continually. The plan above recommended, if it does not profess to prevent relapses in every case, avoids those dreadful consequences so often met with in the practice of the mercurial school, and though, like these gentlemen, we see secondary symptoms recurring, they are of a very mild description, and soon yield to trifling remedies. We labour at first under one disadvantage—namely, if, under our treatment, relapses occur, they do so in a short time, and mildly, whereas, after large courses of the mineral, many months, or a year, may elapse before secondary symptoms show themselves; but their severity makes the patient pay dearly for the immunity by a longer period of imperfect health. If the surgeon should still object that the treatment here recommended is attended with ill consequences, can he say that the longer and bolder practice is not fraught with danger? or can he deny that the anti-mercurial school has failed in proving, that in this country, or in private practice, their treatment has succeeded?

The question of relapses I consider so important, that I cannot dismiss it without some additional remarks. Having shown that surgeons who give mercury, as well as those who abstain from its employment, acknowledge that relapses do occur, though in different proportions, I come to consider if the preparation is the cause. To believe some writers, relapses in their practice do not occur; others would lead you to infer it from the silence they maintain on the subject; others, again, allude to the few and slight cases, and they attribute this immunity to the preparation they employ. In my last paper, I quoted a passage from Sir B. Brodie, in which he goes so far as to say that, "except in the very slightest cases, you really cannot depend upon any mercurial treatment effecting a cure, or even giving a good chance of it by any other means than inunction." This, coming from such a source, is the more extraordinary, as Sir B. Brodie must see cases every day where mercury, given internally, effectually in many cases relieves, and in other instances cures, secondary symptoms; and if we go no further than the able lecture given by Sir Benjamin himself, we have evidence that inunction will not prevent their occurrence. Let the reader turn to the case from Abernethy in this paper—let him look back to the cases cited in former papers, and he will find satisfactory evidence (even if he has not often witnessed cases) that no treatment, however long continued, with inunction

* The case I allude to is that of a sloughy sore, treated locally with irritating substances and internally with blue pill, which was discontinued on account of derangement of system. For two months the sore continued to extend; a sloughing sore broke out at the corner of the mouth, became as large as a shilling; next a small spot broke out on the ear. A consultation was called on the case, and the surgeons decided upon treating the case by mercurial inunction, and the patient rubbed in two drachms, by weight, every night and morning, for six weeks. The sore on the ear healed, but not the others. Mercury was left off, and the sores now slowly healed. The further result of the case is not given; but Abernethy adds he has met with many similar cases.—*Abernethy's Surgical Observations*, vol. i. p. 129.

will guarantee the patient from a relapse of the disease in certain constitutions. It will be no answer to the plan I have recommended in the course of this and former papers to say, that had I used the various preparation, relapses would not have occurred. I could give extracts from nearly all writers to show that they do occur; and I have elsewhere shown that a relapse is a natural consequence of syphilis in certain constitutions, do what you will in our northern climates; but I can easily understand, and have occasional evidence of, the effect of climate, food, and temperature, in producing secondary symptoms; and because relapses are not frequent in the south, it does not follow they are present in the north, because there we give mercury. The day is, however, passed for the discussion of the non-mercurial doctrines: the surgeon now discusses how we may give the mineral with the greatest economy of the constitutional powers, and yet with the most probable means of guaranteeing the system from relapse. It is upon these two points that I have wished particularly to dwell, believing them to be of paramount importance; and if, in doing so, I have fatigued the attention of my readers, I must plead the importance of the subject, which has not lately been brought before the profession.

Queen-Anne-street, Cavendish-square.

A FEW OBSERVATIONS ON THE USE OF PROFESSOR SEUTIN'S STARCH BANDAGE IN THE TREATMENT OF FRACTURES.

By ALFRED MARKWICK, Esq., Surgeon, London.

IN the treatment of fractures, any apparatus capable of fulfilling the chief indication—namely, that of maintaining the extremities of the fractured bones in exact apposition, and which, at the same time, permits of progression—must undoubtedly be a very valuable one to the surgeon. Numerous apparatus have been invented for this purpose, since the time of Hippocrates; the principal ones now had recourse to are, the common apparatus, with splints, Dessault's long splint, with Boyer's modification of it, for fractures of the thigh; the double-inclined planes of Mac Intyre, Liston, and Amesbury; Greenhow's apparatus; the fracture-box; the *appareils inamovibles* of Larrey, and Emile Lacroix, the former consisting of—1stly, a linen cloth several times double; 2ndly, two cylinders or junks, formed of straw bound tightly together with twine, each an inch and a half in diameter, and rather shorter than the cloth; 3rdly, one or two bags or cushions, stuffed with chaff, of sufficient thickness, and of the same length as the junks; 4thly, a conical pad, stuffed with tow, six inches long, three wide, and two thick at its base; 5thly, three six-tailed compresses; 6thly, a long compress, called the stirrup; 7thly, the "tibiale," a large piece of linen cut to the shape of the apparatus; 8thly, ligatures five or six in number; 9thly, the resolvent liquid, a mixture of camphorated spirit, Goulard water, and white of egg, beaten together in water; and the latter, which is frequently employed by Dieffenbach, of a solid case of plaster of Paris, procured by pouring into a convenient sized wooden box, containing the fractured limb covered with oil or cerate, a sufficient quantity of the semi-fluid gypsum: the *appareil hyponarthécique*, or "a suspension," proposed by Sauter, of Constance, in 1812, and adopted, with certain modifications, by Mayor, of Lausanne, and Chelius, of Heidelberg. It consists of a flat piece of board, a chaff cushion, and ligatures for fixing the limb; the whole is suspended by attaching a cord, passed through a hole in each corner of the board, to a pulley, fixed either to the ceiling, or the top of the bed: the moulding tablets of Mr. Smee, prepared by copiously brushing over one side of a piece of coarse sheeting with a thick solution of gum, and afterwards covering it "with a composition made by rubbing whiting with mucilage, continually adding the powder, until the whole" is "of the consistence of a thick paste; a second piece of sheeting" is then "rubbed over on one side with the solution of gum, and the moistened side applied upon the composition with which the piece of sheeting" has "been covered;"* the apparatus invented by Jobert, of the Hôpital St. Louis, Paris, which consists of a leather sock or bracelet fastened to the foot of the bed, for making extension, a long cloth folded and passed over the opposite side of the body, and fixed to the head of the bed, for producing counter-extension, and another, if required, placed across the limb, for counteracting the action of the muscles on the upper extremity of the fractured bone; and lastly, the *appareil amidonné*, or starch bandage, which forms the subject of the present paper.

* Medical Gazette, vol. xxiii. p. 782.

The principal advantages of this bandage, which—from the facility with which it is split, thus constituting, at will, a moveable and immoveable apparatus—has been termed also by its inventor, the *appareil amovo-inamovible*, are, 1st, that of effectually preventing any motion between the fractured extremities of the bones; this is evidently of the utmost importance in the treatment of all solutions of continuity in the osseous tissue, as, unless coaptation be maintained, not only will irritation and inflammation be excited, and the pain and suffering of the patient greatly prolonged, but also the formation of the callus considerably retarded, if not entirely prevented; for children and infants, also, whose restless nature is a source of considerable anxiety to the surgeon, in consequence of the difficulty thereby experienced in maintaining perfect immobility of the fractured bones, the starch bandage is an invaluable apparatus. All others, independent of their total inability to maintain perfect coaptation, become, in cases of fracture of the lower extremity, constantly saturated by the alvine and urinary excretions. They therefore require to be frequently changed, in order to prevent the irritation, excoriation, and fœtor, which would otherwise be occasioned. But this frequent changing must evidently cause considerable pain to the patient, as well as greatly retard the formation of the callus, by allowing the fractured ends of the bones to rub against each other. Thus, it will be perceived, that by remedying one evil the surgeon creates another. In the delirium occurring in cases of compound fracture from extensive laceration of the soft parts, injury of the nervous filaments, &c., no apparatus will so effectually prevent the fragments producing that disturbance upon which the delirium in many cases depends. It forms, with the fractured limb, a whole, which cannot move without the concurrence of its constituent parts. Hence the impossibility of any partial movement taking place, or the occurrence of any displacement of the broken bones, the whole limb being obliged to move in the direction of any impulse given. "Neither can there be free motion in any articulation; for supposing a bone was solicited to move on another, it will be prevented from doing so by two diametrically opposite surfaces of the bandage; hence it is easy to conclude that the muscular contractions themselves will be unable to produce any change in the relation between the fractured surfaces, since, on the one hand, the contraction, requiring a certain lateral space for the development of the fibres, can but imperfectly take place, and on the other, although it might be freely effected, the displacement would be rendered impossible by the contentive means."* The compression, also, which this bandage exercises, considerably suppresses the suppuration occurring in compound fractures, which, from its frequently being very excessive, greatly reduces the strength of the patient, and consequently protracts his recovery. It likewise secludes the purulent matter from the free contact of air, and thus renders its absorption much less dangerous. In gun-shot fractures of the articulating extremities of bones, in which, when amputation has not been immediately performed, a cure can only be obtained by ankylosis, the starch bandage affords an excellent means for securing this desirable termination, by preventing all motion of the joint; 2ndly, that of adapting itself, when properly applied, to all elevations and depressions, consequently it exercises an equal degree of pressure on all parts, and is therefore not liable to produce congestion or mortification; on the contrary, it acts antiphlogistically by giving tone to the vessels, relieving the inflammation, and by preventing any unnecessary afflux of the fluids towards the fractured limb, allows this to receive only sufficient for the repair of the solution of continuity; 3rdly, that it does not become deranged, but remains in the same position as when applied; 4thly, that it admits of progression, and enables the patient to be removed to any part without danger; thus, the adult patient who has been accustomed to a life of activity, is no longer under the painful necessity of remaining in bed during the formation and consolidation of the callus, there to become exhausted and cachectic by a long-continued decubitus, and a prey to his bitter reflections, but is able to change his position, get up, and even walk about on crutches, and by this means recruit his strength, relieve his mind, and facilitate and hasten his recovery. Those severe and distressing cases of ulceration and gangrene which are so commonly met with, especially in old people, and which are consequent on remaining long in the recumbent posture, are of very rare occurrence, if not entirely unknown to those who employ the "appareil amovo-inamovible;" 5thly, that of the materials of which it is composed being economical and easily procured; 6thly, that it is equally applicable to all kinds of fractures; 7thly, that it

* Seutin du Bandage Amidonné, p. 71.