

ARTICLE III.—Notes from Practice. By GEORGE W. BALFOUR,
M.D., Cramond.*On Scarlatina.*

Of its Prophylaxis.—The sole vestige of Hahnemannism,¹ which has ever insinuated itself into regular practice, is the question of the prophylactic powers of belladonna in scarlatina; and it becomes those who encourage its lingering amongst us to consider whereto it leads, for its basis, if it have any, is the so-called homœopathic law, and evidence of its curative powers is as easily obtained, and of the same character with that on which its prophylactic powers are founded.

In June 1851, an epidemic of scarlatina broke out in this neighbourhood. The first case was that of a boy who had been sent a message to an adjoining parish, where no case of the disease at that time existed. On his return he was seized with symptoms of British cholera, and the rash appeared the next day, the disease proving subsequently mild. The second case occurred in a house nearly a mile distant from the first one, on the day after the appearance of the rash on him. There had been no communication whatever between the houses, nor between either of them and any other case, so far as could be traced. Other cases, some of the most severe description, subsequently occurred, but not always in the persons of those who had been most exposed to contagion. At first I was disposed to refer this to the prophylactic virtues of the belladonna solution, which, with the view of testing its supposed powers, had been supplied to the families of those attacked; but on reversing the conditions, by withholding the belladonna, I found the same thing still occurring, viz., that the disease passed by those in daily communication with the sick, and seized others who maintained as complete an isolation as possible,—that at times the escape was final, for that epidemic at least; at others, at a subsequent and uncertain period, the disease returned, and seized the brothers, sisters, or other relatives, or co-habitants of those who had been sick, and this entirely without reference to whether they had taken or were taking the belladonna solution; some of the most severe cases having occurred in those who were taking it when seized, while others, who escaped entirely, though exposed to contagion, never got any.

Thoroughly convinced of its utter inadequacy to prevent the disease, I have never since prescribed it; yet recently I have had many single cases, occurring in families who had not previously had the disease, and in whom ordinary precautions, and indeed, often very

¹ Amongst the higher classes this so-called prophylactic goes under the name of "Sir James Clark's specific." I lately had one of those treasured memoranda, so headed, handed to me for the instruction of my rustic ignorance.

imperfectly carried out, sufficed to prevent the spread of the disease beyond the person of the individual first attacked. While thus denying all positive advantages to the belladonna, I believe it to have positive disadvantages; as a continuance of its use, even in the ordinary small doses, is sure to be followed by disordered digestion, foul tongue, etc.—not the most likely condition of body to ward off any epidemic—and from personal experience of an earlier date, I know that no dose short of a poisonous one, even when continued for some time, has any other effect.

Of its Treatment.—Scarlatina is a disease caused by the circulation in the blood of a depressing narcotic poison, which is thrown off by the skin, and, more or less, by the mucous membranes—the extent to which the latter are affected varying in different epidemics and in individual cases. The accompanying fever, or delirium, or stupor, are not inflammatory in character but are the effects of the circulating poison on the central organs of sensation and circulation, and are best combated by favouring its elimination. It tends to a death more or less sudden, by the poison being more or less in excess of the powers of the system. As death then occurs from a want of power in the system to throw off the poison at all, or completely, a stimulating treatment is obviously indicated. Accordingly, we find that in many cases we are forced to commence by the administration of alcoholic stimuli; but as reaction proceeds a milder stimulant is indicated, and one, too, which, while supporting the vital powers, should determine to the skin and mucous membranes, and such an one we have in carbonate of ammonia, long ago vaunted by Dr Peart as a specific in this disease. The wildest delirium is no contraindication of its use. On the contrary, the intervals between the doses may be advantageously lessened, as it acts in such cases as a calmative. Of course the skin must be determined to by means of the application of moist heat. The mode of doing so is of little importance; but a tub large enough to contain an adult not being a usual appendage of the houses of the poor, the modified vapour-bath is for them indispensable. Cold affusion, or the wet sheet, while an effectual mode of producing the same effect is not always a safe one. Warm poultices to the throat, and assiduous sponging or gargling with plain hot water, are the best means of combating the local affection,—the pain and swelling there depend on the situation and nature of the tissues, and are no more to be combated by stimulants and cauterants¹ than is the redness of the skin. As from the same cause this local congestion is apt to become chronic, mild astringents, as acidulated gargles, may be subsequently employed; slight ulcerations are best treated by attention to the *prima via*, which must always be unloaded of their depraved secretions; more severe

¹ I may add that since I discontinued the application of cauterants to the throat, swelling of the glands has been more rare than formerly. I am aware this fact is no argument, but it leaves the door open for future observations.

and foul ones are only aggravated by harsher *remedies*. Tonics, particularly iron, are generally required during convalescence, along with nutritious diet, warm clothing, and a careful prevention of exposure till desquamation is completed.

Of the Urine during its course.—Dr J. W. Begbie has recently called the attention of the profession to the state of the urine in scarlatina, declaring the presence of albumen in it to be “as essential a symptom of the disease as is desquamation of the cuticle,” and propounding that, so soon as the stage of temporary albuminaria was passed, the danger of dropsy was over, although desquamation might not be complete. Conceiving that this, if confirmed, would be a great advantage, thus permitting the earlier relaxation of the confinement, always irksome and often inconvenient, I took four cases as they occurred, the first a boy of twelve, the second a youth of about twenty, the other two adults, a male and a female about thirty. I tested the whole amount of urine passed during each twenty-four hours, during the whole course of the disease from its commencement to the completion of the desquamative process, which took place in each case, yet I never found albumen. The treatment—that mentioned above—may have prevented its appearance. If so, it but proved its suitability; at all events, its absence shows that albuminaria is not an “essential symptom” of the disease, neither is it a constant concomitant of desquamation; hence, when we do find it we must be doubly careful in our after-treatment.

On Erysipelas.

Of its treatment with iron.—In consequence of having witnessed the cure of a case of erysipelas treated with iron, under the joint care of Dr Charles Bell and myself, and also in consequence of Dr Bell's assurance of its great and unfailing success, I was induced to give this method a trial, and this the more readily that opinions were very much divided regarding the proper treatment of this disease, and I myself had no great confidence in any. Since that time I have treated all my cases, upwards of twenty, with iron, and have had no cause to regret my doing so. On the contrary, erysipelas is one of the few diseases for which I now believe we have a certain and unfailing remedy, and this whether it be infantile or adult, idiopathic or traumatic.

The first case so treated was a highly scrofulous woman, with erysipelas of the scalp, arising from irritation of two large sores on it. She was cured in three days. The second was a man with erysipelas of the foot and ankle, cured in two days. The third was a case of traumatic erysipelas of the scalp in a woman; she was ill for a day or two before being seen, but was cured in about five days' treatment. The wound, a deep cut about three inches long, was healed within a week. In short, all the cases, many of them very severe, and accompanied with high delirium, some of them phleg-

onous, others vesicular, and several occurring in children, were cured in less than a week on the average. Suppuration took place in none but two, in both of whom the treatment was not commenced till after effusion had taken place. Their convalescence was, of course, more tedious. The ninth day was that on which convalescence commenced even in the most severe cases, and *probably* the course of the disease would have been shorter even in them had the medicine been given more regularly; for so sure is it in its effects, that I can, with I may almost say absolute certainty, predict the state of the patient on ascertaining the quantity of the drug taken, and a glance at the bottle is fully as informing as to the state of the disease as a look at the affected parts themselves.

The tincture of the muriate is that preparation of iron I have hitherto employed, the dose varying with the age of the patient; the great object being to saturate the system with iron as speedily as possible, and to keep it so till the disease is abated. A few doses suffice to remove the pain, and lessen the heart's action; it acts also as a diuretic, and to some extent corrects the secretions, often cleaning the tongue as well as any purgative. It never produced headache nor other unpleasant symptom, and was continued with advantage throughout the highest delirium. The only other remedy employed was an occasional purgative, and the local application sometimes of a warm poultice, and at others of simple flour or starch powder and cotton wadding, the poultice being preferred, perhaps without much reason, when the situation or extent of the part affected did not throw difficulties in the way of its application.

Its principal curative action seems, as Mr G. Hamilton Bell supposes, to be exerted on the capillary vessels; and for this reason, that while its diuretic action is equally well maintained by smaller doses, less frequently repeated, its curative action is not obtained unless the system be saturated with it, and kept so for some time. Further, without denying that it may act as a renal purgative in disease, I may add that, from some experiments on myself, it does not seem to do so in health. The quantity of the urine was much increased by fully a half, yet the quantity of urea was increased relatively and absolutely only to so small an amount, a grain or two in twenty-four hours, as to be far within the usual limits of aberration, and much too insignificant, supposing it to be real, to account for the wonderful curative agency of the drug. On taking twenty minims of the tincture every two hours, the second and third doses produced some slight degree of tension in the head, a symptom which subsequently ceased, and did not return. At this period, too, the pulse was slightly accelerated, possibly from nervousness, it afterwards came down from 80, my usual average, to 64. The iron was taken at intervals for four days, regularly every two hours for the last twelve hours. Its diuretic action was always established within an hour after taking each dose, no iron could be detected in the urine, nor in the serum of the blood; but as this may depend on my want of

refinement in chemistry, I am willing to give any chemist who may be anxious another opportunity by repeating the experiment; for I know no method of treating any disease more worthy of investigation, and none more deserving of adoption by the profession than the treatment of erysipelas with iron. Some have supposed its efficacy to be owing to its *stimulant* action, that this is not the case was well shown in a case I had recently under my care,—a young man labouring under scarlatina, who had a patch of erysipelas vesicular over the sacrum, and one over the right armpit. Neither of these were at all influenced by the carbonate of ammonia, employed in the treatment of the co-existing scarlatina, but yielded at once to twenty-four hours' treatment with the muriate of iron. I append a few cases as samples:—

CASE I.—J. A., a male, aged 20, was seized six days ago with pain, redness and swelling about the right angle of the jaw. He has done nothing but dust it with flour. To-day, Dec. 24th, 1851, the swelling and redness extend over right cheek and right side of the scalp to the vertex, the right eye being completely closed; tongue foul; bowels constipated; pulse 108. B Calomel, gr. x.; Pulv. Jalap, ʒj. Statim. Sum. B Træ Ferri Mur. ʒvij.; Syrup Zinzib, ʒi.; Aq. Font ad. ʒjv. The parts have been dusted with flour, which is to be continued. Sigr. A teaspoonful every two hours.

Dec. 25th.—Pulse 80; bowels have been well moved; the tongue is now clean; parts affected neither so red, so swollen, nor so painful; the right eye is now open, but the left eye is closing, and the left side of the head and face becoming affected; to continue tincture regularly.

Dec. 26th.—Pulse 96; much the same; to continue tincture.

Dec. 27th.—Pulse 96, but softer; all the symptoms amended; to have dose of castor oil.

Dec. 28th.—Pulse 76; convalescent, and continued well.

Remarks.—The first effect of the treatment was so beneficial, that he was tempted to be less assiduous in his attentions to his bottle. I saw him on the 25th, just as the consequences of his negligence were becoming apparent. A more steady attention to his medicine very soon put him out of danger, and restored him to health.

CASE II.—Mrs W. R., aged 23, first seized four days ago. To-day, November 27th, 1851, her face and forehead are swollen red and painful; the eyes are both closed; the redness is extending over the scalp; the bowels are constipated; the tongue loaded with a creamy fur; pulse 120. Nothing has been done but dusting the face with barleymeal, which is to be continued. B Calomel, gr. x. h.s.s. B Pot. Sulph. ʒji.; c.m.s. B Træ Ferri Mur. gr. xx. To be given every two hours in a little water.

Nov. 28th.—Pain and swelling in face better; a little redness and

pain extending into the neck ; pulse 96 ; tongue clean ; bowels not moved for a week, as powders were neglected to be taken ; to take powders, and continue tincture.

Nov. 29th.—Powders taken ; bowels freely moved ; pain and redness gone ; skin desquamating ; one eye open, other nearly so ; pulse 96.

Dec. 1st.—Convalescent ; swelling not quite away ; to have a dose of salts.

Dec. 3d.—Well.

This case shows well its action in cleaning the tongue, independent of any purgative.

CASE III.—J. Y.'s child, aged 4 months. Slight redness of the left labium pudendi was observed in this child two days ago. To-day, Dec. 20th, 1851, the redness and swelling affect both, and extend over the pelvis ; to have a dose of oil, and two drops of the tincture of the muriate of iron in a teaspoonful of water every two hours.

Dec. 21st.—Bowels have been freely moved ; redness now confined to right labium, which is much swollen, but it is also extending over the right hip and thigh ; the parts to be kept carefully dusted with dry flour and covered with wadding, and the drops continued.

Dec. 22d.—Much the same.

Dec. 23d.—Redness paler ; skin of labium less tense.

Dec. 24th.—Convalescent.

CASE IV.—Mrs B., aged 25, was seized on the evening of Feb. 6th, 1852, with violent headache, and bleeding from the left side of the throat, which is swollen red, and painful ; the tongue is foul ; bowels constipated ; to have ten grains of calomel immediately, and a large dose of oil next morning ; the throat to be steamed with hot water, and a poultice applied externally.

Feb. 7th.—Throat better ; as the bowels have not been very freely moved, her medicine is to be repeated.

Feb. 8th.—Bowels have been well cleared out ; the tongue is cleaning ; the throat better ; but the left cheek and ear are swollen red and painful ; to have twenty drops of the tincture of the muriate of iron every two hours.

Feb. 9th.—A large bulla the size of the palm of the hand, has formed on the left cheek ; the ear is very much swollen and painful, also the left side of the scalp, which is full of smaller bullæ ; pulse 140 ; tongue foul ; the hair to be cut out ; the parts which have been hitherto fomented to be dried and dusted with flour, as the dampness is uncomfortable ; ten grains of calomel to be given immediately, and followed in four hours by two drachms of sulphate of potash ; to continue iron.

Feb. 10th.—Pulse 120 ; redness somewhat paler, otherwise much the same ; bowels well moved ; motions very offensive.

Feb. 11th.—Much the same.

Feb. 12th.—Ditto; whole face very much swollen and disfigured; the skin cracked; lips bleeding; bowels have been thrice moved; the motions not so offensive; to continue the iron.

Feb. 13th.—Has been very delirious all night, but is to-day looking and feeling better; pulse 120.

Feb. 14th.—Passed a better night; is to-day much easier; pulse 112.

She continued now steadily to improve, the pulse falling day by day, till on the 18th it was 76, and she was speedily quite well. Notwithstanding the great amount of swelling over the head, and the general severity of the disease, not a drop of matter formed.

CASE V.—A child four months old, on the eighth day of vaccination, had a slight blush below the elbow, on the same arm. A dose of oil was ordered, and the parts to be well dusted with flour. On the ninth day, the whole arm was swollen to double its natural size, and intensely red. Three drops of the tincture of the muriate of iron were ordered to be given every two hours. Next day the swelling and redness were almost entirely gone, and even the natural areola around the vesicles much paler than in general. The iron was ordered to be gradually diminished. The child was speedily well.

On the Treatment of certain Cases of Rheumatism with Aconite.

While the employment of aconite in rheumatic fever, where it is desirable speedily to affect the system, entails an amount of care and watching, from the powerful nature of the remedy, which renders it unsuitable for country practice, there are certain cases of sub-acute rheumatism for which it is most suitable. These are chiefly synovial in character, with a more or less marked febrile state of the pulse. Where that is wanting, as in more chronic cases, aconite is rarely useful. In less urgent cases of affection of only one joint, and in many cases of sciatica, regulation of the bowels, and the local employment of the aconite, are often sufficient.

As aconite, without being cumulative in its action—*i. e.*, it is never prolonged or developed after the immediate action of the last dose has ceased, yet has this peculiarity, that one dose paves the way for another, rendering its action more powerful often than was to be anticipated, the dose requires to be very cautiously increased, and very often gradually diminished. I have in one case gradually increased the dose of Dr Fleming's tincture to ten minims thrice a-day, and as gradually diminished it to one; still keeping up the same amount of action. The patient was much benefited, but not cured. Sometimes it produces symptoms of gastric disturbance, which, when they threaten, are best prevented by giving the aconite after a meal.

Diaphoresis was believed by Störk to be one of its principal actions, yet Dr Fleming never observed it, and I have only seen it once; but in that case it was most copious, the whole bedding being saturated after each dose. The patient was not benefited by his perspirations, and on account of them the aconite was stopped. To obtain the curative action of the aconite, its physiological one requires to be fully developed—the coincidence of the two is generally well marked. It is best given in plain water; and for external use, its tincture may be mixed in various proportions with plain soap liniment. The presence of opium, so often combined with it, is unfavourable to the development either of its physiological or curative action. I add two cases.

CASE I.—J. F., a male, aged 45. Sixteen years ago had an attack of acute rheumatism, affecting the left side of the chest and right shoulder, accompanied by palpitations, which have not since troubled him. The heart's action and sounds are normal. Sixteen weeks ago, had a return of his complaint, which he says has now fallen into his left knee, weakened probably by a previous luxation. For some weeks he has been almost unable to walk. The joint is not much swollen, but tense and painful, always half-bent. His pulse is 66. He was ordered to foment the joint with hot salt and water several times a-day, and to take a minim and a-half of Tr. Aconit. Nap. (Fleming's), three times a-day.

Jan. 2d.—Two days since last report is a little easier, and can bear more weight on the limb; dose increased to three minims thrice a-day; pulse 60.

Jan. 4th.—Dose increased to five minims thrice a-day.

Jan. 7th.—Afternoon.—Has taken no aconite since morning; pulse 64; can now extend the limb nearly straight, and move it more easily; little pain in the joint, unless it get a twist; continue five minims thrice a-day.

Jan. 10th.—Pulse 60; can stretch out leg fully, though still pained in so doing; slight gastric symptoms were present yesterday, but are now gone; physiological action developed; affecting the back of the throat and left haunch; six minims of the tincture to be given thrice a-day.

Jan. 14th.—Has been sick all day; vomiting everything; pulse 64, but raised by the action of some spirits he has taken to relieve the sickness; on attempting to rise, his head swims, and objects disappear, accompanied by a most intense prickling sensation all over him; pain in joint gone, motion as free as in the unaffected one, but it is still weak; aconite stopped, but hot douche to be continued. There was no return of the rheumatic pain, and the joint speedily got strong.

CASE II.—A. G., a male, aged 68. Three years ago, he had a

smart attack of acute rheumatism, chiefly affecting the wrists and shoulders. He has had occasional flying pains of rheumatic character, and has always had a constant pain in the right wrist, which incapacitates him for work; the wrist is slightly swollen and tense; the head of the ulna apparently thickened—as he says, shot out. When this took place, the pain was somewhat relieved, but it is still great and constant. The artery of this wrist beats fuller but not faster than that of the opposite one; pulse 60, full and strong. He has been long under the doctor's hands without relief, and was salivated about five weeks ago. Since then, he has been taking occasional hot baths, from which he has obtained trifling benefit; bowels opened by medicine last night; the wrist to be bathed with hot salt and water, and two minims of the tincture of aconite to be taken thrice a-day. Next day—

Dec. 20th.—Much the same; three minims to be taken thrice a-day.

Dec. 21st.—Took a hot bath last night, and slept better; pulse 60, but not so full; four minims thrice a-day.

Dec. 23d.—Is now freer of pain, and sleeps better than he has done for months; swelling of wrist slightly diminished, neither so tense nor hot; pulse 56.

Dec. 24th.—Still improving; five minims thrice a-day.

Dec. 26th.—Still improving; swelling diminishing; sleeps well, and is free from pain; pulse 56, soft and compressible, but there is no physiological action developed; six minims thrice a-day.

Dec. 28th.—Still improving; pulse 54; about a quarter of an hour after taking each dose, rawness of the throat is felt, accompanied by a prickling sensation, then passing down the affected arm and wrist, and speedily extending over the whole body; it lasts about three hours.

Jan. 7th.—Has been steadily improving since last report till yesterday, when he says his hand became worse; the wrist to-day is much swollen; no return of the pain, however, nor of the flying stitches; the physiological action of the aconite is still maintained; the pulse 60, soft and compressible; the swelling was therefore obviously produced by some cause acting locally; he was ordered to bathe the wrist well, and be more careful in future.

Jan. 16th.—Dismissed cured of the rheumatism, though the joint is still weak.

Remarks.—The action of the aconite on the pulse was in this case much more satisfactory than can be expressed either in words or figures. Shortly after commencing the use of the aconite, the flying pains, and those in the joint, began to leave him; and on its physiological action being developed, left him entirely. On the swelling of the joint diminishing, a sub-luxation of the ulna was found to exist where the hand was pronated. On rotation it slipped in, and when the hand was supinated, a mere thickening was felt over its situation. This is not uncommon in similar cases. I found that

previous to the 7th January, he had succeeded in getting a certificate of inability to work from one surgeon, which had been refused to be countersigned by another better known to fame, on the ground, after examination, that he was perfectly able for work; and, in revenge, he had gone and worked most manfully, with the view of injuring a joint he knew to be weak, and thus excite compassion—fortunately he failed.

DANIEL T. ROYAL

ARTICLE IV.—*An Account of the Epidemic Yellow Fever on board H.M.S. "Highflyer" in 1852.* By J. WATSON, M.D., Surgeon, R.N., Royal Naval Hospital, Jamaica.

H.M. steam ship "Highflyer," reputed to be a very fine vessel of her class, and remarkably well ventilated, arrived at Port Royal, Jamaica, from Europe, on the 20th October 1852, where she remained until the 28th, the shipping and town of Port Royal being at the time, and long previously, quite free from fever.

On the day last named, the steamer proceeded to sea, and anchored at the Havanna on the 3d November, where yellow fever existed, but not extensively, among the shipping and in the town. She remained there until the 19th November, when she sailed for St Thomas, which she reached on the 30th. At this time epidemic yellow fever raged with the utmost malignancy at St Thomas, and it had been communicated, in a fatal form, to several of the R.M.S.P. Company's vessels.

The merchant vessels were lashed alongside the "Highflyer" to coal her, positive orders being given that no communication should be held between the "Highflyer's" people and those of the merchant ships. It appears this order was not strictly observed, as medical aid was requested by the master of one of them—the "Art Union"—for his crew, who were all "down" with fever, and it was rendered by the medical officers of the "Highflyer." This, however, appears to have been the extent of the direct communication between the parties.

The "Highflyer" having completed her coaling, sailed at one P.M. of the 2d December from St Thomas, where she had remained exactly two days and seven hours.

While at the Havanna the officers frequented the town daily, as they also did at St Thomas; but the crew was not permitted to land at either place, unless when employed on duty in boats between the ship and the shore.

Proceeding from St Thomas, the "Highflyer" anchored at Trinidad on the 6th of December, where no fever existed at the time, and remained there until one P.M. of the 17th December. While at Trinidad she was joined by the flag-ship "Cumberland," from which she received two assistant-surgeons and a captain. Both of the for-