intelligence. He further added that he should like to get away from England, change his name, and begin a new life. And this new life is what anyone would desire for this misguided and unhappy youth, who is, I am persuaded, deserving of more sympathy than, by the very nature of his crime, he will ever elicit. Loyal love for a good Queen will naturally drown all consideration for her bad subject. But he is worth consideration, for he is made of fine stuff, easily to be moulded either for good or for evil. He has got into a wrong groove, and has been running day by day to perdition. Put him in the right groove, and the higher nature will develop itself, and he will equally run to excellence. I am so certain of this, and so interested in the boy, that, when his term of imprisonment expires, I will gladly associate myself with Dr. Tuke and others in trying to get him into good training and a new country.

Everyone who observed O'Connor during his trial must have been struck by his look of intelligence, and his intense amusement, amounting at times to the tears and laughter of hysteria, at the idea of learned persons gravely trying to prove him mad, and attribute to him an unconsciousness of the nature of that plea which was suggested to him solely by his own honour and integrity. It was interesting likewise to watch his *pose* in the dock—the *pose* of vanity and self-importance,—as though he knew he was being photographed, and wished the sun to do him every justice.

Physiologically and psychologically this instructive case may be summed up thus:—Arthur O'Connor is a delicate, finely strung, impressional youth, with unfavourable hereditary proclivities, and weak bodily frame. He is constructed of that material out of which, under misdirection, insanity is too frequently generated; but, under direction, a fine order of intelligence is equally to be developed. With careful management, good diet, fresh air, and wholesome teaching, his mental and physical structure will both improve. His apologists have mistaken honest but foolish political convictions for “delusions,” and an act of mock heroism for an “insane impulse.” He has neither delusions, nor illusions, nor hallucinations. He has been improperly handled, and has made a young fool of himself. If the future will handle him—or rather, if he will handle the future—differently, he should become a wise and sensible (though he will never be a strong) man.

Colney Hatch, April 16th, 1872.

THE CONVALESCENCE FROM TYPHOID FEVER.

By T. J. MACLAGAN, M.D.

THE convalescence from typhoid fever, even when there is no complication, is long and tedious; and during its progress there is a greater tendency to the development of pulmonary mischief and other debilitating disease than is found to exist after other forms of fever. Typhus, for instance, may bring the patient as near the point of death, and leave him as thoroughly prostrate, as an attack of typhoid; but as soon as the fever is gone he begins to rally and pick up; the tongue cleans; the appetite returns, and soon gets keen and sharp; digestion is as vigorous as in boyhood; the richest diet may be taken with impunity, and with a relish hitherto unknown; wine and other stimulants may be taken with equal relish and impunity, and in quantities which to the uninitiated seem almost sinful. The patient enjoys the good things of this life as he probably never did before, and rapidly and steadily gains strength. It is not so in typhoid. The appetite is less keen; digestion and assimilation are less perfectly performed; great caution requires to be exercised by the patient both as to the quality and quantity of his diet; and he finds that his convalescence is not only long and tedious, but that it is apt to be interrupted by discomforts and anxieties which are unknown to the convalescent from typhus.

I have suffered from both forms of fever since I entered the profession, and can bear personal testimony to the difference in the sensations of the two classes of convalescents. The convalescence from typhus was one of the most enjoyable periods of my life; that from typhoid was bereft of great part of the enjoyment which would otherwise have

accompanied it by the slowness with which strength returned, the discomfort caused by any indiscretion, and the constant feeling that care was needed to prevent a recurrence of such discomforts and possibly greater evils.

Why is this? In what respect does the convalescent from typhoid differ from the convalescent from other forms of fever? His chief peculiarity is to be found in the condition of the small intestine. It contains numerous ulcers, resulting from the destruction of the glands which were specifically affected during the fever. The number and extent of these ulcers bear a direct relation to the severity and duration of the attack from which the patient is recovering. The protracted duration of the convalescence from typhoid fever is usually attributed to the presence of these ulcers and the length of time that the patient is under the influence of the poison of the fever. The true explanation of the peculiarity alluded to is to be found, not in the *presence*, but in the *mode of formation* of the ulcers. They result from the destruction of glands which play an important part in the assimilation of the nutritious ingredients of the chyle.* The destruction of such glands cannot but be followed by a serious interference with the process of assimilation. Such interference affords a sufficient reason why convalescence should be slow, and why it should so often be further complicated by the appearance of pulmonary mischief in those at all predisposed to tubercular disease, and by the occasional onset of other diseases attributable to mal-assimilation. It is not so much that the food is not digested as that it is not assimilated. A convalescent from typhoid fever may consume (though seldom with the same relish) as large an amount of real nourishment as a convalescent from typhus, and may digest it too, but it is not assimilated in the same way; and food which is not assimilated had better not be taken, as it tends only to produce discomfort and retard convalescence.

Such is the condition of every convalescent from typhoid fever. When he is reduced to skin and bone by a long and trying illness, and when he requires all the nourishment that can be given, a number of the channels by which the chyle enters the system are destroyed, with the inevitable result of greatly retarding the return of strength. In time nature accommodates herself to the altered circumstances; the other absorbent parts of the intestine do the work previously done by the glands which have been destroyed, and by-and-by they are not missed. Such a compensating increase of function requires some time for its completion, the time varying in different cases according to the number of glands which have been destroyed. Until it is completed health and strength cannot be fully restored. Every physician knows that the diet and regimen of a convalescent from typhoid require to be carefully regulated. A typhus convalescent may be left almost entirely to the cook, and may be sent away for change as soon as he can move about with a little comfort. It is not so with the convalescent from typhoid; diet must be so regulated that he does not have more than the altered condition of his intestine permits of his assimilating. The quality should be good, but the quantity not great; neither should too long an interval elapse between each meal. Nourishment should be given frequently, say every three hours, and in small quantities, rather than in large quantities at wider intervals. It should also be very gradually increased. The uninjured absorbent portions of the bowel accommodate themselves to the increased work gradually, and not completely for some time. The work given them to do should therefore be also increased gradually, and full diet should not be returned to until there is good reason to believe that it may be properly assimilated. Nothing is so apt to retard convalescence as sudden changes from a comparatively poor to a rich diet. During the first week or ten days of convalescence I generally confine the patient to milk, beef-tea, and the lighter farinacea, given in small quantities and frequently. The object is (1) to give only such articles and such quantities as may be assimilated before the seat of the destroyed glands is reached, and (2) to guard against unnecessary depression by giving a second meal as soon as the first is digested and got rid of. By gradually increasing the quantity of food the action of the absorbent parts of the bowel is stimulated, and the patient is in time brought in safety to his wonted health and strength.

* See a paper on the Bowel Lesion of Typhoid Fever, its Nature and Treatment, in THE LANCET for Jan. 20th and 27th.

There should be no unnecessary exertion or excitement for some weeks; the patient should not try his strength, but should rest content with the assurance that digestion and assimilation are being properly performed, that he is gradually gaining ground, and that no local disease is manifest. As assimilation is imperfect, no needless waste should be created by undue exercise of either mind or body. All that can be taken up by the lacteals is required for restoring to the normal the various organs of a body which has been wasted by the long duration of the fever, and which has had an important part of its restorative apparatus destroyed during the course of that fever. Therefore there should be no unnecessary waste. Again and again I would urge the necessity of abstaining from directing to the muscles any undue portion of the comparatively meagre supply of nutriment which gets into the system, and every bit of which should be utilised in warding off as far as possible those serious organic changes (the results of mal-assimilation) which are so apt to show themselves in the lungs and other organs. A convalescent from typhoid fever should not take much exercise until health is pretty well established, and should not return to business for at least two months after he is able to leave his room.

In an interesting communication read at the last meeting of the British Medical Association, Dr. T. Clifford Allbutt, of Leeds, gave the notes of five cases of marasmus in which the wasting was attributed by him to mal-assimilation consequent on destruction of the absorbent glands during an attack of typhoid fever. Such extreme cases I have never seen, but could quite fancy their occurring.

Dundee, March, 1872.

CHLORAL IN HYDROPHOBIA.

By J. D. SAINTER, L.F.P.S. GLAS., L.S.A. LOND.

ON Wednesday, November 29th, 1871, about 9.30 P.M., I was hastily summoned to visit Mr. M—, whose residence is in an adjoining street. He is about forty years of age, and I have known him for some years as a person of active, business-like habits, temperate and always enjoying good health. On approaching his house I found the neighbourhood in a state of great excitement, and his bedroom was nearly full of people. He was yelling and struggling in frightful convulsions on the bed, and it required the united efforts of eight or ten people to keep him upon it. Upon inquiry, I learned from Mrs. M—, that after her husband had been at home for half an hour, he complained of feeling very poorly, and said he would go to bed. She likewise added that he had not been well for the last week or more. Shortly after he had gone up stairs she heard a disturbance in the bedroom, and upon going to see what was amiss, she found Mr. M— floundering on the floor, apparently unable to stand upright, quite unconscious, and screaming with agony. She immediately left the house for help, and found two or three friends who returned with her, and with some difficulty they dragged the poor sufferer from under the bed, where he had crept, and placed him upon it. After I had witnessed the terrible scene above described, and having waited until my patient had become moderately tranquil, I noticed first the peculiarly wild expression of his features, his eyes being very brilliant, with the pupils fully dilated. He sighed now and then, seemed timid and anxious, and upon recognising two or three friends around the bed, he asked them, "What they were doing there?" "What was the matter?" Pulse about 95, and slightly intermittent. He complained of an uneasy sensation about the epigastrium, and was inclined to be sick; also of stiffness about the neck, and a sore-throat. Occasionally he ejected frothy mucus from the mouth in a whining tone of voice, with incoherent raving. After a short interval, upon offering him some tea, the muscles of his face began to twitch; he grinned, and, looking wistfully at it, after some little hesitation he swallowed a little with difficulty. Soon after this, his breathing having become greatly embarrassed from spasmodic action of the diaphragm and the muscles of the larynx and pharynx, he sprang up suddenly, foaming at the mouth, in a perfect frenzy of delirium, and tossing his hands about in all directions, he made desperate efforts, with hideous howls and

shrieks, to jump off the bed. This was luckily prevented by the bystanders, as on the previous occasion; and after becoming exhausted by his fearful efforts, he sank gently down on the bed, and covering himself overhead with the bedclothes, he lay in a state of stupor. Presently another attack seemed imminent, he became restless, and, throwing off the clothing, he pointed to the pit of his stomach, tremulously exclaiming, "Now I feel it coming on; its working up; lay hold of me!" Convulsive difficulty of breathing, with constriction of the throat, then advanced apace: he snapped his teeth, hawked and spat, and became furious, being nearly suffocated; and similar measures were adopted by way of restraint as I have mentioned before. These paroxysms of excitement, attended by more or less intensity of suffering, succeeded each other about every ten minutes. On one occasion my patient exhibited a biting propensity. During a very severe attack he laid hold of my overcoat sleeve, which is a thick double-milled cloth, and took a piece clean out of it the size of a half-crown. He likewise snatched at one of his friends, and seized one of the buttons of his coat. Such were some of the most prominent and leading symptoms that presented themselves to my notice. That some of them were of an hydrophobic character I had every reason to believe, more especially when recollecting that I had cauterised Mr. M—'s hand for a bite from his own dog some four or five months ago.

With respect to the treatment, shortly after I had been called in, as I have before stated, he complained of nausea, and I went home for an emetic. On my return I met C. J. Sanford, Esq., surgeon 2nd Royal Cheshire Militia, whom I invited to see the case. After the operation of the emetic (which required two ounces of ipecacuanha wine given at twice before vomiting was produced), my patient appeared to be relieved, the spasms being less violent. By-and-by, however, they became more active, so much so that it appeared to me exhaustion would sooner or later be the consequence unless something was done. I therefore suggested to my colleague that we should try the chloral hydrate. Accordingly twenty grains in simple syrup were administered every hour. After the third dose the violence of the symptoms began to moderate. After the fourth dose there was a still greater improvement. The next dose brought on slumber, and this soporific effect was kept up by giving the same dose of the chloral at longer intervals. For the next twenty-four hours nothing of any consequence occurred, with the exception of slight twitchings of the face and jerkings of the arms and legs during sleep. These were allayed at any time by an extra dose of the chloral. Beef-tea, mutton-broth, common tea, or water-gruel were given him occasionally, which he swallowed without much objection when fairly roused up. During the next three days the somnolency was kept up by the medicine, with only a few twitchings showing themselves. On the morning of the fifth day he awoke out of a gentle slumber, and said to his wife: "I feel as if I should like to bite somebody." This was the last symptom noticed of an hydrophobic character. After the fifth day the chloral hydrate was discontinued, and the quantity taken altogether amounted to 360 grains.

In this case I have to remark that there was not so much thirst or foaming at the mouth as I have seen in others, neither was there so much objection to swallowing fluids when deglutition was practicable and he was not affected by sounds or currents of air. There is not much doubt, however, that if the attack had lasted longer the symptoms would have assumed a still more aggravated form. I have great faith in the chloral hydrate in many affections, and, in this instance, I should have given it by injection rather than have omitted to use it.

It may be easily imagined, after what I have reported, that the physical powers of my patient had been severely taxed. It required some weeks before he was able to leave the bedroom, owing to extreme nervous depression and general prostration. His mind was kept as much as possible in a state of repose for fear of bringing on any remaining tendency to spasm. Little or no allusion was made by any person to him as to what had been the nature of his illness; and after a time, when fit to travel, he went among some friends in Derbyshire. He has lately returned, able to attend to business; and I have gleaned from him the following particulars with reference to the premonitory symptoms of his case. He states that a fortnight before