

Asylum notes on typhoid fever / William Carmichael McIntosh.

Contributors

McIntosh, William Carmichael, 1838-1931.
University of Glasgow. Library

Publication/Creation

London : Printed by J.E. Adlard, 1863.

Persistent URL

<https://wellcomecollection.org/works/p3992y34>

Provider

University of Glasgow

License and attribution

This material has been provided by This material has been provided by The University of Glasgow Library. The original may be consulted at The University of Glasgow Library. where the originals may be consulted. This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.

**wellcome
collection**

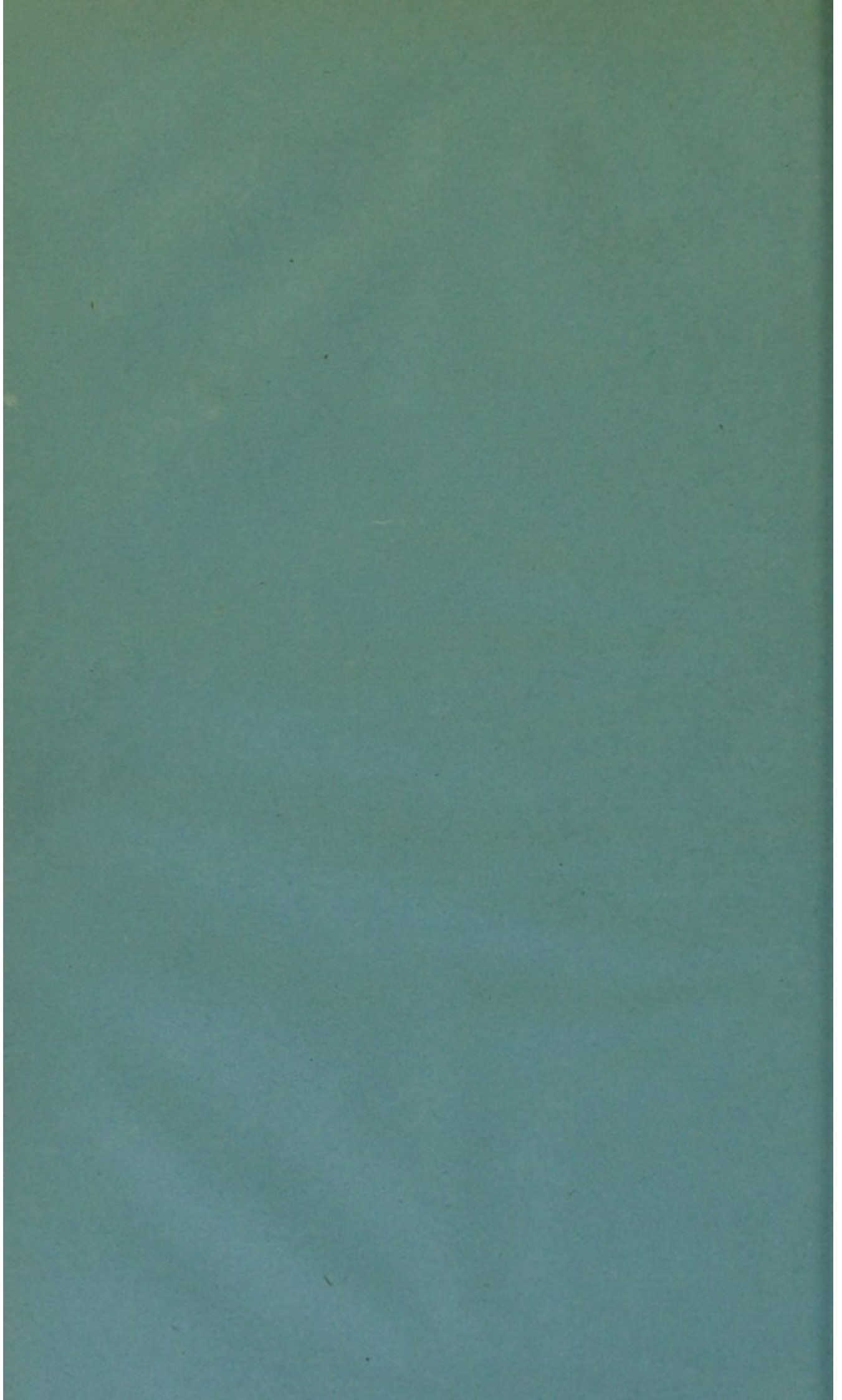
Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>





of Laird

1541 - 1900



ASYLUM NOTES

ON

TYPHOID FEVER.

BY

W. CARMICHAEL McINTOSH, M.D.,
ASSISTANT-PHYSICIAN AND SUPERINTENDENT, MURRAY'S ROYAL
ASYLUM, PERTH.

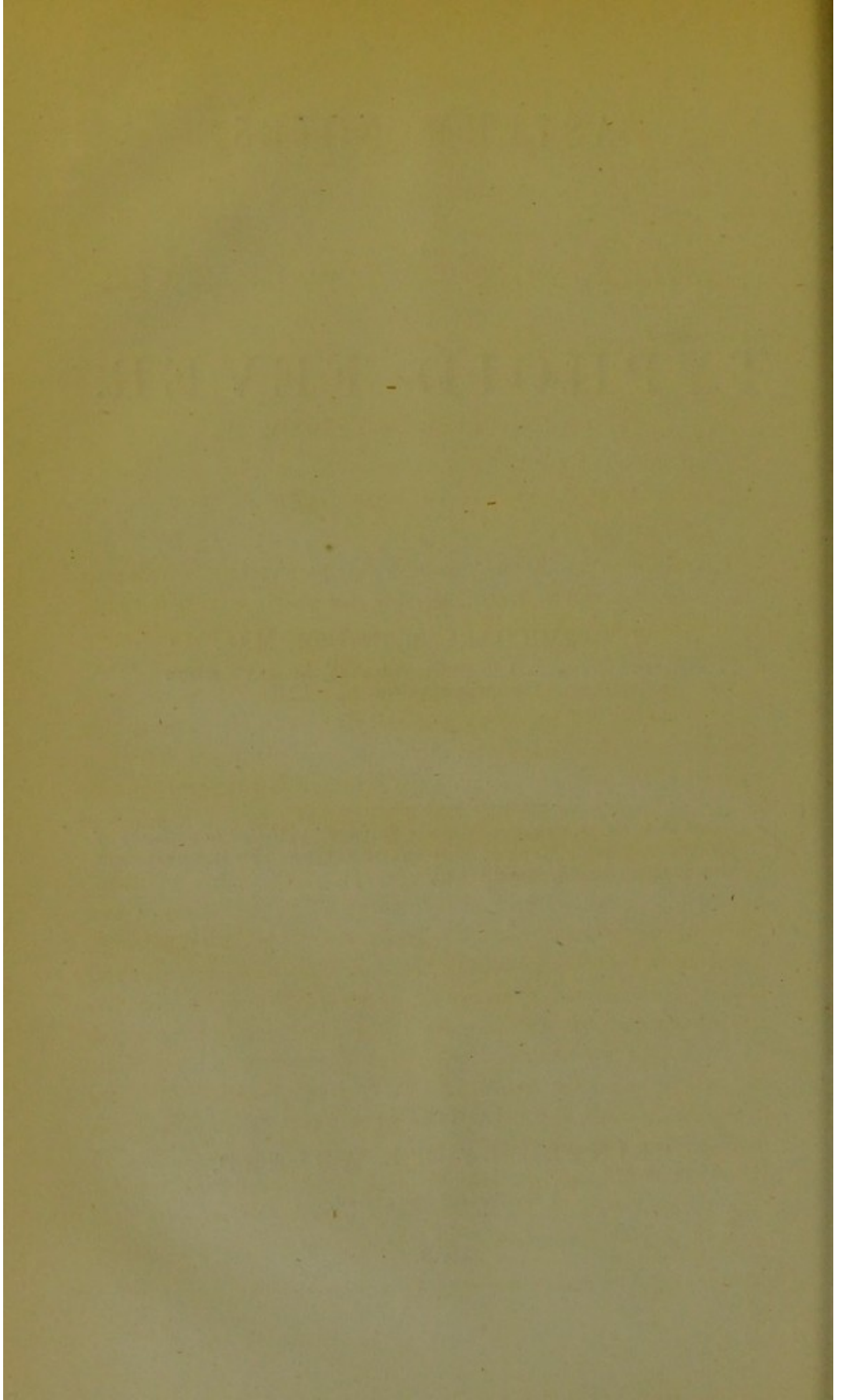
*[Reprinted from the 'JOURNAL OF MENTAL SCIENCE,' published by authority of
the ASSOCIATION OF MEDICAL OFFICERS OF ASYLUMS AND HOSPITALS FOR
THE INSANE, No. 45, April, 1863.]*

LONDON :

PRINTED BY J. E. ADLARD,
BARTHOLOMEW CLOSE.

—
1863.

c



ASYLUM NOTES ON TYPHOID FEVER.

BY

W. CARMICHAEL McINTOSH, M.D.

FEVER and other diseases amongst the insane attract attention in their mental as well as in their physical relations ; and if at the same time both sane and insane suffer, a comparison of the cases is interesting. Besides, in an asylum the patients are especially under charge from the first faint indications of the malady, and the previous history, habits, and constitution of each individual are familiar. In ordinary cases of fever amongst the community at large, the particular currents of the patient's thoughts and volitions do not attract special attention, save in protecting him from injury ; and if insanity or other brain disease subsequently occurs, the features of the fever-poisoned brain are generally unknown and forgotten. Additional light might be thrown upon mental pathology and treatment, if such observations, sufficiently extensive, were correctly made and recorded. Alienists, on the other hand, have long noted the influence of physical diseases in the course of an attack of insanity ; and recently cases from foreign journals were given by Dr. Arlidge,* where recovery has followed from wounds causing profuse suppuration in melancholia and general paralysis, from scarlatina in suicidal melancholia, from dysentery in mania and melancholia, from dysentery and acute rheumatism in monomania, from dysentery and a compound fracture of the elbow in religious monomania ; lastly, profuse intestinal hæmorrhage is mentioned by M. Baillarger as ushering in recovery in a case of painful hallucination of vision consequent upon injury

* 'Journal of Mental Science,' October, 1862.

from a railway accident. Numerous other interesting cases are mentioned in the pages of our medico-psychological literature. Professor Laycock lately made known to me the case of a young girl, *æt.* 15, an epileptic, who had typhus fever for five weeks, and never had a fit all that time. As she recovered, the fits returned as before (several daily), and ultimately the patient became acutely maniacal.*

In the following cases of typhoid fever, which occurred in the Perth Asylum, none were so fortunate as to be permanently benefited in their mental condition by the blood poison, yet the changes observed in the speech and bearing of the invalids were not without interest. Besides, in an asylum, where intercourse with the external world is somewhat limited, there is a good field for examining into the causation and spread of such diseases.

The epidemic occurred in the spring of 1862, and from all I can learn had no connection with contagion, and indeed the onset of the fever in the individual cases had little evidence of this, except in the instance of the man who waited on the male patients. All the cases occurred on the ground-floor of the house, with the last-mentioned exception. Several cases of what appeared to be irregular ague occurring in the same wards likewise rendered the spontaneous origin of the disease the more probable.

The first person attacked was a female attendant, *æt.* 28, who on the 20th of April felt unusually fatigued, but went about her duties till the evening of the 22nd, when intense headache, weakness, languor and shivering compelled her to give in. She occupied the ground-floor of the house, which is much below the level of the lawn in front. The shivering last mentioned was followed during the night by profuse perspiration, which soaked her garments.

On the 23rd she had nausea, rapid pulse, great thirst, and was very restless; sweating occurred every few hours.

24th.—After the operation of a purgative, she felt easier, though still prostrate; the sweating, however, returned in the evening, and her pulse averaged 108; pupils dilated; eyes sore and heavy; tongue covered with a white fur; face flushed. For the succeeding three or four days she was much in the same condition—with alternate shiverings and sweatings, and she was completely prostrated. Her

* Communicated by Mr. Dyce Duckworth, St. Bartholomew's.

catamenia came on, and before disappearing, the discharge became abundant and leucorrhœal.

On the 29th there appeared some scattered papules on her skin, which felt itchy. The chest likewise began to pain her, and she had difficulty in breathing; no abnormal sounds were observable, however, on using the stethoscope, though there seemed slight dulness on percussion; pulse rapid (106). For several days afterwards general debility, frequent sweatings, constant nausea, and a variable pulse, which on one evening reached 140, marked the case, and little alteration followed on removal to a higher and more airy room.

Up to this time she had not suffered from diarrhœa, but on the 8th of May this made its appearance, and she had two or three ochrey stools daily for several days; tongue moist and white; pulse variable, sometimes down to 80. Over the breast and body generally there occurred an eruption of pimples, from the bases of which the cuticle shortly peeled; they caused much itching, which was relieved by the application of glycerine. The debility in this case continued for many days, with restlessness at night, sweating, and a tendency to headache; and it was not until the 6th of June that she was able to take an airing in the grounds. The fluctuating state, and the feeble and capricious appetite which continued during her long convalescence, was very wearisome and trying to the patient, who was seldom two days alike; the progress of to-day often being almost negatived by the relapse of to-morrow. Throughout the entire case, she was always able to report on her own state, and nothing like delirium occurred, except that about the beginning of May she wished to get out of bed several times to resume duties.

The treatment in this case consisted of a purgative of castor oil at the outset, milk and farinaceous diet, Aq. Acet. Ammon., at the commencement, and seidlitz powders for thirst. Quinine was tried in small doses (grs. v, twice daily) with temporary benefit. An occasional warm bath, nourishing diet and wine, catechu and chalk for diarrhœa, and bismuth and camphor for vomiting, were the chief remedies used.

On the 24th of April, two female patients were taken ill in the gallery waited on by the former attendant. The younger of the two, æt. 24, a case of recurrent mania, at this time convalescent, was seized with intense headache, so great that, although a very vain

girl, she requested her hair to be cut off, and she perspired profusely; pulse 110. She complained especially of great pain in the occiput and general soreness of body; tongue covered with a white fur, moist; pupils widely dilated, and eyes suffused. She was put on farinaceous diet, had a purgative of castor oil, and Aq. Acet. Ammon. ζ ss every three hours (in a little sugar and water). For some days the pulse continued at 108, and she perspired a good deal; her appetite, however, was fair. Fearing that local miasmata might have some connection with the case, she had \mathcal{R} Quinæ disulphatis, grs. v, twice daily, but with doubtful efficacy. Instead of being a lively and spirited girl, she became reserved and quiet, lying in bed with a semi-dejected and anxious aspect, and only speaking when addressed. Her conversation, however, was always rational.

On the 3rd of May one or two rose-coloured spots appeared on her thorax and epigastrium, and she was weak, sickly, and faint. From a slight injury to the Schneiderian membrane of the nose, profuse bleeding ensued. She was removed from the ground floor to the infirmary ward up stairs without much change in her symptoms; pulse 100; skin hot; tongue furred and moist, and sleep often disturbed. Never, on any occasion, however, did she become irritable and troublesome, and she made no complaints. After this a few rose-coloured spots appeared on the abdomen and at the bend of the arm, but these soon disappeared. Beef tea and nourishing diet were prescribed with advantage, and all the medicine necessary was an occasional laxative (Tinct. Sennæ co.), which in its operation never caused any tendency to diarrhœa.

About the end of May she was able to get out of bed, and rapidly regained her usual condition. The symptoms in this case were very mild, and there was neither affection of bowels, chest, nor kidneys; but the peculiar nature of the eruption, the pulse, tongue, and concomitant cases of greater severity rendered the diagnosis trustworthy. The only effect noticeable in the mental condition of this patient was the salutary calming of her usually buoyant spirits, and the absence of her recurrent fits of noisy excitement. There was no loss of temper, or irritability; on the contrary, she always strove to give as little trouble as possible.

The other female who took to bed at the same time as the former had chronic mania, and was sixty-four years old. The pulse was 90, full; skin dry, and headache intense; tongue furred, and

appetite failing. She also had a purgative and Acetate of Ammonia. It was a most unusual occurrence for this person to complain, and though of the above age, she was one of the most vigorous and wiry patients in the institution, and her entire muscular system was hardened by incessant use. She had intense headache for several days, and though depressed, feverish, and emotional, never lost her habits of mischief and drollery. She recovered without further symptoms, evidently in virtue of the innate power of her constitution.

The next case occurred in a female fifty-seven years of age, who suffered from chronic mania. At all times she was lethargic and torpid, and the only organ which seemed to be duly exercised was her tongue. She was found lying on the gallery floor in a weak condition on the 23rd of April, and was immediately put to bed; pulse 115; tongue furred and dry. In the evening she became much excited, shouting, and in a state of terror declaring that some one was going to murder her, and that people were plundering her of her fancied money. She continued in a feverish condition, with much thirst for some days, her nights in general being disturbed and noisy.

On the 29th, tongue still furred and pulse rapid (110), and she is full of her ordinary delusions as to her daughter, who she imagined was being abused and shamefully treated in the asylum. Her thirst continued great, and she had many seidlitz powders and bitrate of potash mixtures, which she devoured with avidity. No eruption was observable at any period of her illness. To be brief, she remained in a weak and feverish condition for about a month, with a hot and dry skin, and a variable pulse, which sometimes in the evening reached 140, taking little else than fluids, and every now and then becoming noisy and abusive. Towards the end of May the pulse fell and became steadier, and with the exception of a large furunculus on the hip, she had no further physical annoyance. She rose on the 2nd or 3rd of June, and resumed her former obscene and noisy language. Throughout her bowels were quite regular. The slight nature of the symptoms, and the absence of any complication, do not make it suprising that the disease had little or no influence on her ordinary mental manifestations, except at the commencement, when she was seized with panphobia. In a few days this faded away, and the usual delusions about the improper detention and abuse of her daughter in the asylum returned as before.

Another female, *æt.* 30, labouring under chronic mania, with homicidal propensities, took ill on the 25th of April. She was a powerful, heavily developed woman, and very troublesome from the frequency and severity of her assaults. She complained of feeling "curious;" her countenance was cyanotic and dusky, and tongue loaded. She had a purgative of castor oil, which operated freely. Loitering about for a day or two in a doubtful condition, she was at last compelled to take to bed on the 30th of April. She felt sick and giddy; tongue with a well-marked brownish, dry, glazed portion in the centre, whitish at the edges; pulse weak and rapid; countenance turgid and speech confused.

On the 1st May her respiration was considerably affected, and bronchitic râles abounded over the entire chest, which likewise was dull on percussion. A large mustard sinapism was applied to her chest, and she had *grs. x* Potass. Chlorat. in syrup thrice daily. Next day her respiration was still more embarrassed, but a repetition of the sinapism gave relief. The bronchitic rhonchi were loud and audible to the unassisted ear, and the heart's sounds were muffled; tongue dry and brown in the centre. On her abdomen, and thorax, and the upper part of her arms, are many spots, larger than in the other cases, and of two kinds—small reddish pink, and larger brownish ones with a light scurf; the latter of course were independent of the present ailment.

3rd May, countenance still turgid, and skin hot; pulse 114. She complained much of abdominal pain during the night, and bent her body in agony; it was relieved by warm fomentations. Formerly taciturn and gloomy, prone to assault cunningly, and talk incoherently, she even at this stage of the disease presented a remarkable change in manner and conduct, being patient, gentle, and subdued. She inquired after her friends, and hoped they would come and visit her, wondering how she could have been so wild as to act as she had done; and expressed a hope that she might be restored to her family after she recovered from the present bodily ailment. Never before had she manifested the slightest solicitude in regard to her friends, and her repeated ferocious and stealthy onslaughts on her companions and the attendants had rendered her an object of suspicion and dread to both. All this urbanity was therefore new and agreeable, and rendered her case one of more than ordinary interest. Instead of the peevish and fretful disposition too often displayed by

such a case in a sane person, she was rational and composed in all respects—a condition vastly different from her ordinary demeanour.

The bronchitic murmurs were still present on the 5th, though modified; and the pulse fell to 90. About this time she complained much of crampy pains in the thighs, which caused her great uneasiness. During the next ten days the pulse kept down, and her bowels, tongue, and appetite improved, though sometimes the pains in the limbs annoyed her.

On the 18th, however, she felt weak, and had a slight faintish attack, and her pulse rose to 130, small. She had sweats every now and then, and her tongue became furred and white, and her countenance flushed and heavy.

For eight days after the last-mentioned date she continued uneasy, her pulse on the 25th rising to 140. After this relapse, however, she progressed favorably, and, like the others, rose about the beginning (5th) of June. Quinine was given continuously for a considerable time in this case also, but its effects were not marked. During the early part of her convalescence she evinced more especially those characteristic changes in her manner which have been noted above, and she was afterwards allowed to mingle freely with her neighbours, which she could seldom do with safety formerly. Her bearing was gentle and subdued; her inquiries for her friends at home frequent and kind, and her habits steady and industrious. But, alas! all this apparent improvement in her mental state gave way as her physical recovery became established, and by degrees her former homicidal and quarrelsome disposition usurped this better nature, and made her as troublesome, dangerous, and crafty as of old.

A case of dementia, *æt.* 34, was the next female sufferer. She felt ill on the 6th May—losing her appetite, and looking haggard and discoloured; pulse rapid, and she has headache. She had a laxative of castor oil, and was removed to the infirmary. The headache continued next day, with the addition of pain in the back and abdomen; pulse 100, and skin hot. She also has a slight cough and sore throat.

On the 9th she had several loose stools, light coloured, and very fluid. Tongue dry, and she is thirsty. Wine was added to her farinaceous diet, as she was of feeble build and strumous diathesis. The diarrhoea abated under catechu and chalk mixture, and she progressed favorably till the 17th, when her pulse rose from 87 to 100,

and she had a tendency to wander; hæmorrhage from the nostrils occurred from an injury with her fingers. Next day the diarrhœa recurred, and for the first time one or two small red papulæ appeared on her abdomen and back; they were slightly raised. The same astringents were used as formerly, and with benefit. Once or twice subsequently diarrhœa appeared, but it was easily managed.

Between the 18th and 25th fresh papules made their appearance in small numbers at a time, and others faded away. By the latter date she was considerably improved, and took beef-tea, chicken broth, &c., with relish; and without relapse she was able to leave her bed with the others in the beginning of June. Throughout her illness, except on a few occasions when sick and depressed, she retained a good deal of her ordinary mischief-loving, childish propensities, accusing her husband of flirting with the female attendants when he called on her, and swearing at and abusing the latter in the exercise of their duties. There has been no alteration in her conduct since.

Besides the foregoing cases, there were two or three other females in the galleries and rooms on the ground-floor seized with shivering, languor, sweating, and high pulse, and in general the symptoms of irregular ague, which lasted about a week. A simple purge was most of the treatment demanded, in addition to moderate doses of quinine.

Of the males, the first attacked was a stout florid man, æt. 45, of a highly arthritic diathesis, and one who seldom went beyond his gallery to take exercise or anything else. A case of monomania of pride and ambition, he dignified himself generally with the title of "emperor of all the nations," and was enraged if otherwise addressed; the presence of other dignitaries (for he usually dined beside a "king") had no other effect upon him than increasing his haughtiness and reserve. Inconsistently with his usually distant conduct, he came forward on the 23rd of April and complained of being sick and ill; his facial vessels, at all times well marked, were much congested, eyes suffused, and pupils dilated; tongue heavily loaded, pulse 106; he stated that he had passed the night in a sleepless condition. He had a full dose of castor oil. Next morning he was no better physically, yet mentally he had become wondrously affable, stickling, however, to being called by any other title than that of "emperor." His diet was strictly farinaceous, and he had cooling drinks for his thirst.

25th.—Vomiting occurred in the evening, followed by profuse perspiration, and he slept none.

On the 26th he lost sight of his dignity, and was solely taken up with the physical discomfort of want of sleep, begging earnestly to have only one half hour's good repose; adding that all his distress was due to "pressure," a delusion he has since retained in regard to other ailments.* He is likewise more incoherent than usual. In the evening he had 10 grs. of Dover's powder, and in a short time slept soundly, even with tendency to stupor, for the opium affected him much. Next morning he declared that he was better, and his pulse was less bounding; tongue still furred. A slight laxative (Tinct. Sennæ co. ζ ss) was mixed with his cooling drink, but had shortly to be discontinued, since a tendency to diarrhœa manifested itself, and the evacuations were fluid and ochrey. At night he did not rest well, averring that the "pressure" again affected him most injuriously; countenance and scalp very turgid; headache; pulse rapid.

On the evening of the 28th, Dover's powder again gave him sound sleep, but with the same tendency to narcotism.

29th.—He does not look well; lips dry and crusted, and tongue brownish at the tip. Dull, weak, and tormented with thirst, the exalted idea of his place and power remains still in abeyance. Some small red papules now appeared on the right side of the abdomen, and one or two elsewhere in the same region; pulse 100. Next day there was no improvement, and the cyanotic expression increased, even to lividity of the hands, and many bloody sputa were ejected. More rose-coloured spots made their appearance on the left side of the abdomen, on the thorax and arms; pupils dilated, was drowsy, and spoke little; experienced no pain except at the hip.

Diarrhœa became more evident to-day (30th), and in the evening he passed both urine and stools in bed; pulse 98, sharp; tongue moist; no pain or tenderness in the tumid abdomen, and no gurgling. The stools were characteristically ochrey, and quite fluid. He had catechu and chalk mixture, and chlorate of potash in boiled milk. The diarrhœa somewhat abated, for during the following night he had only one loose stool, but he frequently got out of bed, and wandered about the room; his notions of dignity, too, all came crowding back upon him; he was imperious and dictatorial, averring

* *e. g.*, Erysipelatous inflammation of the nose.

that he had power to make all men equal, and that no one should have power over another. The constant and watchful care to which he was subjected, and the due carrying out of medical orders rather than his own, seem to have made him imagine that his majesty was encroached on, and hence his remarks. Stutters in speech, the first part of many words being cut off; the tongue likewise goes through many wriggings before it is extruded. The spots are spread over the abdomen, some recent and distinct, others fading, and he complains of pain, but there is no localization of this on pressure.

From the 3rd to the 5th of May his pulse became feeble, and he was more drowsy, with a falling of the cheek to the side on which he reclined; tongue brownish, but moist; eruption still present. His stimulants were increased. The account he gives of himself is that he has now got quit of the "putrescence," but that he is still weak.

On the 5th his pulse had fallen to 85, and though his tongue was dry, complained of no thirst; diarrhœa gone: many of the spots on the abdomen have faded, and all are less distinct. He spoke freely, and requested solid food, thanking those around for any kindly office done to him, and altogether was unusually affable and communicative.

His delusions reappeared again on the 8th, and he was much enraged at an attendant, whom he thought unskilful.

From the 8th to the 17th improvement went on steadily; one or two fresh spots, however, appeared on the 11th.

From the 17th to the 20th his pulse rose first to 95, and on the evening of the latter to 108, small; tongue furred, skin warm and moist, and appetite declining. He attributed the present relapse to the "pressure" in his bowels, and eagerly solicited purgatives.

From the 27th gradual improvement again took place, and though occasionally restless and more delusional than usual, he made a good recovery physically. His ideas of power and dignity remain unaltered, and but lately he demanded that his full titles be stamped on his clothes.

The next patient was a young man, æt. 23, a case of dementia, who inhabited the same gallery as the former, though he was regularly employed in the garden at pump-work during the day.

On the 25th of April he was dull, listless, and complained that

his back ached much, and he seemed cold; shivering, and crouching over the fire. He had a laxative of castor oil, which he vomited, so that another was necessary when he was removed to the infirmary.

27th.—He is abrupt and imperious in his demands, and makes no distinction between persons; pulse full and quick, and skin burning; thirst excessive, and he scrambles out of bed and drinks anything he can lay his hands on.

29th.—Some red papules out on abdomen, which did not altogether fade on pressure; irritable and restless, getting angry and excited if drink, in the shape of tea, is not supplied him immediately; and, although constantly tossing in bed, resents the slightest interference of a second party; pulse 90, full.

On the 5th and 8th he had several loose stools, all of a dark colour; and he now makes many pressing inquiries after his father, insisting, in his usual irritable manner, on seeing him directly; tongue with a central coating of whitish fur, clean at the edges; pulse 90; photophobia. The diarrhœa continued with varying severity on the 9th, 10th, and 11th, and assumed the characteristic ochrey colour; pulse 95; some fresh spots on abdomen; is as irritable as ever, and states that he is dying, and that he will be carried out in a coffin. Under the use of astringents, the diarrhœa abated during the next day or two, and little interesting occurred until the 18th, when he complained of pain in the left groin, the lymphatics of which had become enlarged. For the next eight days this pain, which shot down the thigh and leg, continued, in spite of warm fomentations and care. During this period, however, he regained his appetite, and his pulse became less variable; and by the 3rd of June he was able to leave his bed with an improved temper.

During the early part of his convalescence he wrote his father a very sensible letter, in a clear and legible hand, an effort which he had not attempted for years previously. His feelings in regard to his mother were also changed at this time, and he was anxious to see her, whereas he had formerly shunned and abused her. His friends stated that he had an attack of scarlet fever some years ago, and that ever since his antipathy to his mother was marked. After recovery he lapsed into the state of apathy and carelessness which usually characterised his life.

The last serious case was that of the male attendant, *æt.* 23, who waited on the two former, chiefly at night. He was an active,

vigorous young man, of most exemplary habits, a tailor by trade, and at the time of his seizure had a due amount of outdoor exercise, for he went to town thrice daily in the capacity of postman. His case was long and interesting; but since the chief object in the present instance is to use it by way of comparison and contrast, the following brief abstract of my notes will suffice.

From the first his was clearly an illness from contagion, for he not only occasionally waited on the male patients during the day, but he slept in the same room at night. Attacked with intense frontal headache on the 30th of April, a laudable wish to be at his post and a manly resolve kept him on his feet for a day or two, but sleeplessness, persistent frontal pain, sickness, and vomiting, completely prostrated him by the 4th of May. The headache was peculiarly severe, and was scarce relieved by ice to the shaven scalp, while, to complicate matters, the typical diarrhœa set in on the 5th, and continued, more or less, to the end. During the first week he had also much pain in the throat, and his voice was husky and cracked. The brown, dry tongue, protruded with difficulty, and after many turns and twists, and the crusted lips, the pain in the region of the colon, the peculiar abdominal swelling, with gurgling on pressure, the attitude of his body (reclining on the back, with the knees drawn up), and the small, quick pulse, could not have been better marked. Hæmorrhage from the nostrils occurred on the 9th, profuse, and with difficulty staid, and a trace of blood likewise appeared in the dejections, and more clearly in vomited matters. The typhoid eruption now covered the abdomen in abundance, and might have been seen sooner but for the redness consequent on the application of mustard sinapisms; in a few days it extended to chest, arms, and backs of hands. With a hard and tympanitic abdomen, a pulse of 120, a parched tongue, and a mouth and lips covered with sordes, paralysis of the bladder, and frequent stools—some containing large masses of coagulated blood, and all more or less hæmorrhagic—led the case from bad to worse, and beyond the control of either astringent or stimulant. Incoherent and wandering in a very marked degree, and with difficulty kept in bed; hæmorrhage from the right nostril recurred on the morning of the 13th, to an alarming extent, and, from his extreme restlessness, could only be stanchèd by plugging the nostril.

On the 14th the small, weak pulse rose to 160; copious sweating

occurred frequently, and an abundant crop of sudamina appeared over the chest and abdomen, while the sphincter muscles readily permitted the escape of the clotted masses. *Carpologia* was well marked; and gradually sinking, he died on the 15th.

Of the post-mortem examination I will only glance at the state of the abdominal contents and the brain. The liver was anæmic, and the gall-bladder much enlarged, containing a light, straw-coloured fluid; spleen enlarged to four or five times its normal bulk; stomach with many hæmorrhagic points at its pyloric end; intestines discoloured, injected, and enormously distended; in the ileum a few hæmorrhagic points only occurred, without ulceration, while in the cæcum and colon lay the chief mischief, for the mucous membrane was thickened, and from the ileo-cæcal valve to the sigmoid flexure was one vast, bloody surface, with only a few interruptions; yet it was a capillary hæmorrhage, and no distinct ulceration, far less any circumscribed ulcer eating into a vessel, was discoverable. The mesenteric glands were everywhere dark and enlarged. Each supra-renal capsule contained a bloody fluid in the centre.* In the cranium the adherence of the dura mater on both surfaces, a considerable amount of subarachnoid effusion, and extravasation with a clot of blood in each internal ear, were the points of weightiest import.

There were two other male patients who, at the end of April, suffered from headache, furred tongue, and shivering; in one followed, in a day or two, by hot skin, profuse sweating, and much prostration; in the other by diarrhœa and epigastric pain. The former had quinine, iron, and nutritious diet; the latter, astringents and stimulants. Both were able to be up in ten days. The cases occurred on the ground-flat, and in patients predisposed by age or voluntary confinement. No local cause, even after diligent search, could be found to account for the outbreak on either side of the house.

By the foregoing notes it will be seen that scarcely two cases presented like features, and that the poison varied much in intensity. The females, in general, had mild attacks, without much complication, whereas the three males all had diarrhœa of a severe nature. The case of the male attendant is very interesting, on account of the number of the mucous surfaces where capillary hæmorrhage happened. It is further interesting in regard to the seat of the hæmorrhage in the bowel and the absence of ulceration. The state of the gall-

* His skin was always of a dusky hue.

bladder and spleen have a value in connection with the irregular ague which occurred in the mildest cases. The fatal case, too, is an example of the communicability of typhoid fever, for he was the one in most intimate relation with the sick.

In regard to those cases where a change (however short) for the better took place in the mental state of the patient, some interesting questions are started. Seeing that insanity has been supposed by some to be due to an inflammation of the healthy brain or its coverings, are we to infer that in the above instances healthy thought resulted from an accession of inflammation in a morbid organ? Or did the poisoned blood so adapt itself to the altered brain-texture (whether functionally or organically) that more normal mental manifestations ensued? If the results of such bodily ailments amongst the insane were often attended by alleviation or cure of the mental disease, we might, after the fashion of the professor of natural history at Cremona* with his epileptic patient, send our lunatics to a "marshy place;" but, unfortunately, the relief of the mental, on a supervention of the physical, ailment, seems as yet to be a coincidence, and it would be at once novel and hazardous willingly to venture on the experiment.

* Watson, 'Principle and Practice of Physic,' vol. i, p. 772.

