

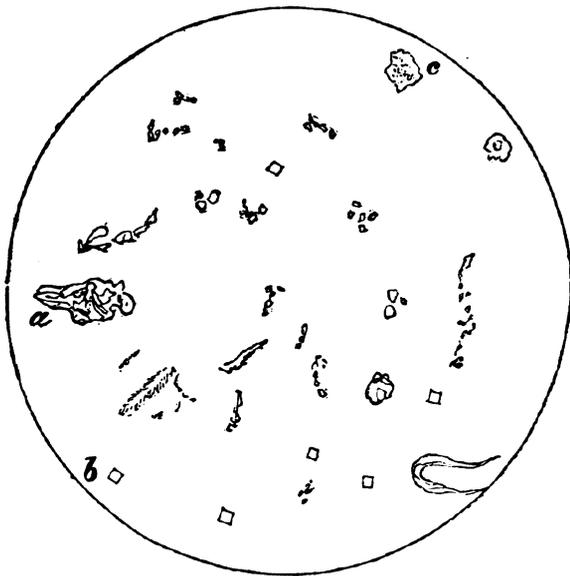
be the few words of the latter author: "The sediment deposited by acute serous urine, is usually of a deep brownish red colour; and consists essentially of the lithate of ammonia" (p. 122). But this is followed by: "In all instances, on the application of heat (about 150° or 160°), acute serous urine becomes opaque, from the deposition of albuminous matter." Now this latter observation does not at all apply to the deposit in question.

The deposit appears generally in the convalescent stage of the disease, or, at least, after the disappearance of the eruption, and is generally, but not always, associated with dropsy; but I have seen it in all stages. I have seen it accompany the eruption: I have also seen it without any eruption—in fact, as the only symptom of this erratic malady; of this, more anon. Generally persistent through some days, or even two or three weeks, it is occasionally fugitive or intermittent, and has sometimes occurred during a single day without any subsequent recurrence.

The quantity of urine is generally profuse—as much as two quarts in twelve hours from a boy twelve years old. In the utensil, the deposit appears as a dark turbid cloud, floating about the lower third of the contents. The colour is a deep dirty olive brown; in fact, of a character never to be mistaken. The brown colour is fugitive; and agitation in carrying the urine, or even long standing (two to three days), will, to a great extent, remove it.

Effect of Chemical Reagents. Liquor ammoniæ clears the urine, but not thoroughly. Nitric acid renders it more clear than does liquor ammoniæ. Strong nitric acid renders it almost perfectly clear. By heat, the urine becomes almost entirely clear. The reaction is strongly acid. Boiled with liquor potassæ, it leaves a thick sticking residuum on evaporation. (I would not like to insist on this point, as there is a little confusion in my notes.)

Microscopical examination, with Ross's quarter inch object glass (linear power 400 to 500), shewed a few discs of carbonate of lime (c); a few cubes of chloride of sodium (b); and fragments of epithelium (a). The mass of the deposit consisted principally of aggregated globules, some broken in various forms—linear, circular, and other—in aggregations of from three or five to nine or ten. Of this, I send a figure.



Such is the mean of several observations. I should state that the microscopical examinations were made in company with Mr. Nowell of Dunstable, a gentleman who, though not a member of our profession, is thoroughly versed in the nature of urinary deposits, and in the employment of one of the best instruments it was ever my fortune to make use of. I enclose his note on the subject:—

"On further examination of the urine, and reading what Dr. Bird says on the subject, I feel quite certain that the deposit is urate of ammonia, together with an abnormal quantity of bladder mucus, epithelium, and other organic debris. Whether purpurine is present or not, I am unable to decide."

Taking it, then, at this, viz., "That the deposit in question consists of urate of ammonia, with an admixture of purpurine;" or, even leaving it an open question, I come to a second point, on which I would wish strongly to insist, though the space at my disposal warns me to exercise more brevity than is altogether congenial:—*I say without hesitation, that the occurrence of the deposit in question, attended with elevation of pulse and heat of the skin, during the progress of an epidemic of scarlatina, constitutes, to all intents and purposes, an attack of the disease, whether eruption or sore throat be present or not.* The present distinctive symptoms of scarlatina are two—eruption and sore throat; with these I range a third, viz., the peculiar state of the urine I have mentioned. I should say that this deposit occurs in at least 8 per cent. of the cases under treatment; probably much more, if the urine were regularly observed—a matter rarely to be compassed in certain descriptions of practice; and I think it very probable that at least 3 per cent. of the cases occur in which it is the only symptom. I think that, in one or two cases, I have observed the same deposit in the alvine secretions; these were in persons with whom it occurred to an extreme extent.

While some eruptive fevers are peculiarly limited in their symptoms, march, and duration, scarlatina has no character so constant as its *inconstancy*—an eruption varying in intensity from the deepest scarlet suffusion of the entire surface to a mere rosy blush of the neck or chest, or extremities where pressing on the heel; in character, from an aggregation of minute scarlet points, to the diffuse blotches of scarlatina morbillosa, or vesicular elevations almost simulating miliaria; in duration, from a few hours to seven or eight days; sore throat at one time, the appalling phagedenic form of scarlatina maligna; in cases short of this invading all the respiratory membranes; at another, a mere transient inconvenience. Add to these all the kinds and degrees of eruption without sore throat, or sore throat without eruption; and then, amongst the various characteristics of this erratic malady, I claim the admission of the urinary deposit I have described as a symptom, though more infrequent, not a whit less genuine than the others, and perfectly unequivocal in its character.

OPIUM-EATING.

By JAMES BOWER HARRISON, M.D., F.R.C.S., Corresponding Member of the Epidemiological Society of London, etc., Higher Broughton, Manchester.

In the April number of the *Psychological Journal* for 1854, I presented the reader with some particulars of the effects of opium-eating, as gathered from the romance-like story of De Quincey, and the melancholy revelations of the unhappy but gifted Coleridge. Of the tyranny of habit there can be little doubt; but the representations of one of these writers, at least, may have diffused in England somewhat exaggerated representations of the exhilarating and pleasurable effects of opium-eating. Let it be remembered, then, how much the influence of stimulants takes its complexion from the mental constitution upon which it acts.

The following case, which came under my own observation, serves at least to show that all opium-eaters are not equally felicitous in their experience, and that the inconveniences of a pernicious habit may exist without its enchantment.

On the 10th of April, 1855, a young woman, of the name of Margaret Robinson, called upon me, stating that she was an opium-eater, and had been requested to wait upon me, as one interested in such people. She was a

fresh looking young woman, and had a *lively, intelligent appearance*, which is contrary to what is usually stated as characteristic of the class. She said that she had taken a drachm of solid opium half an hour previous to her visit, in the presence of Mr. Brown, a respectable chemist and druggist in the neighbourhood. She mentioned that she had been in the habit of taking opium for six years, and that she had commenced the practice whilst suffering from an abscess in the side. She assured me that opium does not cause her to have any feelings of exhilaration or excitement. The effects last about twenty-four hours, after which she is obliged to repeat the dose. She has made several attempts to break the habit, but has given up the idea, owing to the supervention of diarrhoea on its discontinuance. When the effects of the opium begin to pass off, she feels pain in the back and limbs like rheumatism, or a soreness, as if she had been beaten, together with lowness of spirits and prostration of strength. These are again relieved by opium.

She wished me to prescribe for the diarrhoea—which I did; but I cannot say with what success. She thought that it would be exceedingly difficult to abandon opium-eating—much more so than spirit-drinking. She feels sure that she should not have resolution to give it up at once.

In a conversation which I subsequently had with Mr. Brown, he told me that, when first she came to his shop to purchase her drachm of opium, he cautioned her as to the potency of the drug, and told her that she was probably mistaken as to the quantity she intended to take. In reply to this, she requested to be shown the weights he was in the habit of using, and immediately picked out the drachm weight from the rest of the weights on the counter, as an evidence of her familiarity with the quantity. He then suggested that it was possible that the opium she had formerly taken was not pure opium, but adulterated (as, at many of the inferior shops, it is mixed with chocolate or other harmless ingredients). She then requested to see his opium, and readily selected the best specimen he had. He now gained confidence in her, and she swallowed a drachm of opium in his presence. Since this time she has called repeatedly, and taken the same dose. She says she has had no children since she began taking the opium, and attributes this sterility to the habit. I may mention that the pupils of the eyes were not contracted as is common with those who are under the narcotic influence. Having taken her full dose of opium, she feels no desire to increase its effects by additional quantities.

Small as are these accessions to our knowledge on the subject, they may not be unacceptable to the psychological or toxicological inquirer.

CASE OF MALFORMATION OF THE DUODENUM.

By CROSBY LEONARD, Esq.

[Read before the Bath and Bristol Branch, Sept. 25th, 1856.]

ELIZABETH HILL, aged 43, was confined of her twelfth child on May 15th, 1855. Mr. Cooper, a medical pupil, attended her. The child, a female, was apparently mature, but small; it constantly vomited everything given; it gradually sank, and died on May 20th, a hundred and seven hours after birth. It had a small evacuation *per anum*, and vomited a little bloody fluid just before death.

I was present at the *post mortem* examination, on May 22nd. The child was very puny and shrunken in appearance. On opening the abdomen, the stomach was seen much distended with flatus. The commencement of the duodenum was enormously enlarged, of a globular shape, four and a quarter inches in circumference, the pylorus forming a marked constriction between it and the stomach. No outlet existed inferiorly. The small and large intestines were of normal size, the small intestine gradually tapering superiorly, and terminating about one-third of an inch from the distended duodenum, to which it was connected by cellular tissue only. The gall and pancreatic

ducts opened into the tapering upper extremity of the small intestines. The stomach contained some brownish fluid, mixed with small clots of blood. The large intestine was filled with meconium, the small intestines being nearly empty. All the other viscera were normal.

Association Medical Journal.

SATURDAY, OCTOBER 11TH, 1856.

THE DRAINAGE OF THE METROPOLIS.

THE question of the drainage of the metropolis is the great sanitary question of the day. We need not, therefore, apologise for commenting upon the discussions which have lately taken place in the Metropolitan Board of Works relative to the best manner of accomplishing that all important object. For years this grand proposal has been ventilated; the skill of engineers innumerable has been taxed to produce plan after plan; a Board, expressly appointed to carry out the work, has been hopelessly broken up by its inability to grapple with the question: one and all, they battled for the use of the Thames as their main outlet, and one and all their schemes have been trampled upon as so much waste paper by the public press, which will not on any terms allow the metropolitan river to be so befouled. This very determination to keep the river pure has found a voice in the very Act of Parliament which constituted the new Board of Works. The 135th section of that Act expressly states, "that such Boards shall make such sewers and works as they may think necessary for preventing all or any part of the sewage from flowing or passing into the Thames in or near the metropolis, and shall cause such sewers and works to be completed on or before the 31st day of December, 1860." After such explicit directions as these, backed by the opinion of the vast majority of scientific men, we should have imagined that the new Board would have resolutely set about carrying out the intentions of the legislature, by maturing such a scheme as would at once have been worthy of the metropolis and calculated to fulfil all the conditions necessary to insure the purity of the river which runs through the largest European capital. But it seems that they have expressly set themselves to work to defy the Act of Parliament, and to violate every principle of common sense. Their engineer proposes to them four plans for the drainage of the metropolis, and *not one of these* is calculated to fulfil the intention of the Act, or to comply with the general wish. Nevertheless, they have all been gravely discussed by the "Metropolitan Parliament", as the Board is called; and the most objectionable of the four, which deliberately proposes to throw the whole sewage of 2,500,000 people into Barking Creek, within sight almost of the capital, has received its approval, and been forwarded to Sir B. Hall, who of course very properly returned it as not calculated to accomplish the all important purpose—the purification at one and the