

2. That after the introduction of vaccination, the deaths by small-pox, under ten years of age, were $\frac{1}{11}$ th of the whole deaths under ten.

3. It was asserted, and in my opinion, proved, that measles are not more fatal now than before the comparative extinction of small-pox.

4. It was proved, in opposition to the statements of Dr. Watt, and others, that the diseases of infancy, including measles, have not increased of late years in fatality, but the reverse; the deaths, under ten, which, in 1791, were 1 in 48·70 of the population, being, in 1821, only 1 in 75·29; and 1830, 1 in 74·31, of the population.

5. That the improvement exists at every period of life under 10.

6. That the proportion of stillborn is actually also diminished, when compared with the number of inhabitants.

43, West Nile Street.

Since the above essay was written, the mortality bill, for 1831, has been published, and the following are its results:—

Population.	Total Deaths.	Deaths under 10.
202,426	6,547	3,371

The deaths are 1 in 30·91 of the population; while, in 1830, they were only 1 in 39.

The deaths, under ten years of age, are 1 in 60·04. The deaths under ten are 51·48 per cent. of the whole deaths.

III.—*Observations, Pathological and Practical, in Medicine and Surgery; including Reports of Cases, with Remarks.*
By THOMAS ADAM, Surgeon, Barrhead.

◆
No. I.

1. *Rheumatic Ophthalmia.*

ON Tuesday evening, 28th December, 1830, at a public dinner, I felt a current of air playing upon my right side every time the door was opened. I sneezed repeatedly. On the 29th, I had pretty severe pain of head, especially about the right ear, aggravated by blowing the nose, or straining in any way. On the 30th felt chilly and feverish, and the pain of head continuing. On Saturday, 1st January, 1831, was exposed to cold and damp, and about seven P.M. was seized with circum-orbital pain, worst in temple and brow. The pain continued increasing in severity for two hours, at which time I observed my pulse about 84,

and felt feverish, thirsty, and chilly. The right eye watered considerably, and the pupil was slightly contracted. At this time, nine P.M., I took Colchic. Acet. $\zeta i.$, with a little magnesia and sulphate of magnesia. To the preparation of the above quantity of colch. acet., there had gone about three grains of the dried bulb. In about an hour, the pain had considerably abated, and pulse fell to 72. I took then two grs. of calomel and one gr. of opium, and soon slept soundly, the pain not returning during the night.

On Sunday, 2d January, while out in the forenoon, felt every heavy step aggravate the pain—still circum-orbital—very considerably. By one P.M. the pain nearly as severe as on previous evening. Eye watery. Pulse 90. Skin hot. Thirst. Right nostril discharging most mucus. About two P.M. took nearly the same quantity of colchicum as on the previous evening. In an hour the pain had considerably abated, and in half an hour more, was entirely gone. Eye, now, not in the least watery. At this time the bowels acted, and I was pretty severely griped and purged during the evening. No return of pain. On Monday, 3d, the pain returned for a few hours, while out walking, and also the catarrh, but went away in the afternoon. Purging still continues. On Tuesday, 4th, the pain returned while out paying my visits, and increased in severity to three P.M., when I took about 40 drops only of the *colchic. acet.* In about an hour, the pain left me, and never afterwards returned.

Remarks. From the circum-orbital pain, the watery eye, the contraction of the pupil, and the cause of their appearance, I set the case down, the first night, as one of rheumatic ophthalmia. Upon consulting Mr. M'Kenzie's paper on this affection of the eye, I found that the means prescribed, would be more troublesome and inconvenient than I could, *with willingness*, have submitted to. I thought, therefore, that I would postpone the employment of them, at least until I had tried the colchicum. This, in varying doses, it will be observed, gave relief every time it was exhibited—three times in little more than one hour. No other sensible effect was produced, except by the second dose, which was followed by severe griping and catharsis. If the two grains of calomel taken on the previous evening had not contributed to this, I had taken nothing else, saving the colchicum capable of producing it.

I have noticed this case, because, although colchicum is frequently used in other rheumatic affections, it has never been used or recommended by Mr. M'Kenzie, or any other writer with whom I am acquainted, in this disease. I may

farther remark, that I was more disposed to ascribe the catharsis, so immediately succeeding the second dose of colchicum, to it, than to the calomel, as I had an instance about the same time, of its very speedy operation as a cathartic. To a gentleman with chronic pericarditis, I administered 40 drops of the vinegar, to ascertain whether it would produce any effect upon the heart's action. His bowels had been in that state, that he was requesting a purgative to take at night. In less than an hour he had a free evacuation.

I tried the colchicum in a case of rheumatic ophthalmia of some days standing, afterwards, but, with the exception of one night, with little or no relief to the nocturnal pain.

2. *Dysmenorrhœa.*

If the obstinacy of, or the degree of suffering caused by, any disease, or the variety of opinions entertained as to its nature and appropriate treatment, are entitled in any case to give importance to the study of any morbid affection, this is one peculiarly important. I intend to make a few remarks, only, upon such points as are still unsettled or obscure, or such as have come under my own observation.

The remote and predisposing causes have not been satisfactorily ascertained; neither in my own cases, nor in the observations of others have I met with any thing certain. The degree and seat of the pain, and also the period at which it occurs, vary almost infinitely. The truth of this remark may be perceived, by consulting the more faithful and minute descriptions of the phenomena, such as Dr. Locock's in *Cyclop. of Pract. Medicine*, Dr. Burns', Dr. Dewees', and Dr. Mackintosh's.

Pathology.—Upon the subject of the nature of this disease, or the morbid condition of the uterus or uterine system, I find, upon consulting authors, a great want of unity of opinion.

Inflammation of the uterus or of its lining membrane, has been supposed to be the morbid condition, and the cause of the morbid phenomena, in all, or the majority of the cases of this complaint. Dr. M. Hall has remarked that dysmenorrhœa from an inflammatory condition of the uterus is still more common perhaps than amenorrhœa from the same cause. After stating that it often proves a cause of sterility, he mentions an instance in which "the patient at length became pregnant; but the substance of the uterus was diseased, and presented the form of painful tumours on examination of the abdomen; and after delivery, a fatal inflammation destroyed the patient. On examination, the uterus was found to be the seat of a diseased structure, in a state of partial suppuration." He regards this

inflammatory condition, likewise, as the cause of the formation of the false membranes of coagulable lymph, such as are formed, in some cases, in the trachea, and in the intestines. Dr. Hall has not, however, furnished us with any diagnostic mark by which we may discover the presence or absence of this inflammatory condition. As neither Dr. Hall nor any other writer of eminence, with whose works I am conversant, has alleged that inflammation is the only morbid condition, the supply of this desideratum in the diagnosis would be of much value in pathology, and of more in practice. The importance of a certain diagnosis, will be more clearly evinced, if it be true, as Dr. Hall has stated, that "an active application of antiphlogistic remedies is *absolutely necessary* to relieve the patient, to subdue the inflammation, and to secure the organ from a future state of disease of a still more formidable character."* I have consulted the writings of Dr. Locock, who "does not deny the occasional existence of inflammation, particularly in plethoric and robust constitutions;"† of Dr. M. Hall, as above referred to; and of Dr. Mackintosh, who believes that, though in the majority of cases it depends upon a different cause, "it may depend upon inflammation of the lining membrane of the uterus;"‡ and in none of them can I discover either any statement of the reasons which induced them to believe in such a condition, or of any symptom or symptoms considered sufficiently diagnostic or characteristic of this inflammatory condition. If, while destitute of evidence of any such condition, and of marks to indicate it when it does occur, we believe in it, and employ means to remove it, we may with equally good sense and sound logic, believe in the existence of witches, and revive the justly exploded plan of extirpating them by fire. I mean, that the annals of medicine seem unable to furnish sufficient reasons for a belief in an inflammatory condition of the uterus, as the proximate cause of dysmenorrhœa, and that, when prescribing in accordance with such a belief, we are but acting empirically.

Irritation, or irritability of the uterus, to an extreme degree, appears to Dr. Locock, to be the immediate cause of this distressing disease; and as great irritation is but a step removed from inflammation, "it is very probable" he says, "that in some cases, where a membrane is expelled, inflammation of a peculiar character may be excited." Apparently the principal reason for this belief of the Doctor is, that the women

* Commentaries on some of the more important of the Diseases of Females, 1827.

† Cyclopædia of Pract. Medicine, vol. i. p. 662.

‡ Elements of Pathology and Pract. of Physic, vol. ii.

most liable to the complaint, are those possessing great susceptibility of frame, who are subject to hysterical affections, and who have strong passions, and ardent temperaments.

Besides the above-mentioned theories of the pathology of this disease, the following have been mentioned as proximate causes: spasm of the vessels—organic affection of the uterus—want of nervous energy in the uterine system—and the secreting vessels allowing blood to pass through them, instead of the uncoagulable secretion. I may remark, by the bye, that the only attempts, of which I am aware, to make any essential distinction among the cases of this multiform affection, have been two in number. Dr. Dewees is the only writer, so far as I know, who has made the attempt at such a division of the cases. He says, “there appears to be two distinct states of this affection—one where the mammæ sympathize with the uterus, and become tumid, and oftentimes extremely painful—the other is, where there is no such affection induced: these two conditions are not equally manageable; the one accompanied with painful breasts, so far as our observations have yet gone, is the most so of the two.”* The other attempt at distinction is founded upon the occurrence of a membrane in some cases, and not in others. But as a pathological difference corresponding to these varieties in the phenomena has not been discovered, we must hold both varieties to be, probably, essentially the same.

I might conclude my remarks upon the pathology of this disease, by expressing strong doubts, or more than doubts, that we are still in ignorance of the nature of this painful and obstinate malady, were I to do, as some late writers and reviewers have, for reasons known to themselves, hitherto done. A late pathological writer has discovered a morbid state of the uterus, by which “not only are all the phenomena which take place in dysmenorrhœa most satisfactorily accounted for, but also the intractable nature of the disease, and the unsatisfactory result of every mode of treatment hitherto recommended.” It also accounts for the *ergot of rye* shortening the period of suffering, and the rarity of conception in such cases; the fact, that the semen must reach the uterus before impregnation can take place, having been proved by Dr. Blundell. In brief, Dr. Mackintosh has discovered that, in a majority of cases of this complaint, the *os uteri* is uncommonly small, in some scarcely admitting a hog's bristle; in others, a common silver probe. This condition of parts he attempts to remove by dilatation, and states, that from 1826, when he first tried

* Compendious System of Midwifery, Par. 372.

dilatation, till 1830, he had treated fifteen cases of dysmenorrhœa by dilatation, and had permanently cured all the patients. This should be encouragement sufficient for the profession inquiring and satisfying themselves, and it is chiefly that some may be induced to submit the discovery, and the plan of treatment, to the test of experiment, or to publish the results, if any have made the trial, that the subject is mentioned here. I had only once an opportunity of examining the state of the *os uteri*, and I found it sufficiently open to have admitted a bougie as large as No. 8, or 10; yet still the disease continued. The details of the discovery, &c., must be consulted in the Doctor's volume above referred to, as it would be unnecessary to copy them here.

Treatment.—Of all the methods which have been adopted for the radical removal of this disease, exclusive of Dr. Mackintosh's plan, I find none confidently spoken of as attended with much success, save that of Dr. Dewees. The treatment "which has proved most successful with us," says Dr. D., "is the volatile tincture of guaiacum." Regard must be paid to the state of the system, and perseverance for two or three months is often necessary. He has observed where this medicine was most decidedly useful, that the first menstrual period after its use is more than usually severe. He says, that this plan, though not universally, has been generally successful. It is a curious fact, which is mentioned by Dr. Locock, that, in a few cases, a remarkable connexion between this disease and rheumatism in the same person has been observed; and that the medicines, such as guaiacum and colchicum, given to relieve the rheumatic symptoms, have, at the same time, cured the dysmenorrhœa. This was accidentally noticed in a case, some years ago, by Dr. Gooch, with regard to guaiacum, and he consequently was induced to try that medicine, where the painful menstruation existed without the rheumatism, and sometimes with success. Dr. Locock has confirmed this observation in several instances. Thus it is probable, that Dr. Gooch in England, and Dr. Dewees in America, were using the same medicine, unconscious the one of the other's discovery or experience. I tried the plan of Dr. Dewees, according to his directions, and I am certain that the medicine was regularly taken for upwards of three months, and my other orders punctually complied with, but without any benefit. The only medicine which, in my hands, has been of decided benefit, is the tincture of iodine. This has usually made the first period after its use more severe, but it has accomplished a permanent cure.

If the observations of Dr. Mackintosh are not confirmed

by the profession, this disease, as appears from the foregoing inquiry, must still rank as one of the *opprobria* of medicine: from which state may it soon be rescued! This inquiry may seem incomplete; it has been strictly and solely pathological.

3. *Delirium Tremens*.

To the purely practical practitioner, who meets with this affection so seldom succeeding any other cause than the well known and almost universal one—abuse of liquors containing alcohol—there may be little in the study of its causes very attractive, or instructive; but the student of pathology, the explorer of the laws of disease, may find something interesting even here. There are several other causes which have produced this condition, and it would be a very gratifying result of his researches and reasonings, if the pathologist should discover in what circumstance, or circumstances, these agents agree—what common property they possess. Is it the production of exhaustion? The other agents are, 1st. The shock resulting from injuries or operations, chiefly in those who are addicted to hard drinking, or in such constitutions as are called irritable. I know, that when this is the agent, a different name has been given, though the symptoms are nearly the same. If it be, however, the delirium traumaticum of Dupuytren, it is the symptomatic delirium tremens of Barkhansen.* If unacquainted with the cause, who could distinguish them? 2d. The laying aside the habitual use of opium, suddenly. This has been observed by Dr. Armstrong. The next two have been observed by Dr. Ayre. 3d. The poison of lead. 4th. Starvation. I am not aware that Dr. Ayre has published his observations on this cause, but I find that he stated this at a meeting of the Westminster Medical Society, 26th January, 1828. Dr. Ayre had an opportunity of seeing much of this complaint while practising at Hull.

Symptoms.—I think that Dr. Pearson's description of the symptoms, occurring in the first notice of this disease which seems to have attracted the attention of the profession, is the most brief, yet graphic, which I have perused. It was thought worthy of republication by the editors of the London Medical and Surgical Journal, in May, 1830. Those symptoms which he has enumerated as precursors of the disease, very exactly correspond with those which Dr. Blake has described, as forming what he has called the first stage. They are, indeed, whether called the first stage, or the precursors frequently

* See Dublin Journal of Med. and Chem. Science, No. 2, May, 1832.

met with, as the sequences of a fit of severe intoxication, without being followed by delirium tremens at all. The description by Dr. Armstrong, is the most impressive and easily remembered of any. Dr. Blake's division into three stages, though not appearing in the same light to me, has been adopted by Dr. Carter,* and praised as founded upon a philosophical view of the subject. It differs from other descriptions, only in erecting what are called precursory symptoms into a first stage.

Morbid Anatomy and Pathology.—Neither in lectures nor monographs upon this topic, have I ever met with any notice of the peculiar state of the blood in the head found, in several cases, by Mr. Howship. Lest I may be supposed to misrepresent, I quote his own words. "But what do we learn," says he, "by diligent examination after death? That, instead of the proper constituents of healthy blood, the vessels, large and small, especially those within the head, contain a fluid which, in the transparent veins of the brain, appears like water scarcely tinged, and in the arteries is pale and thin, from the great deficiency in the quality and quantity of crassamentum."† He gives four dissections, in illustration of this morbid condition, viz., cases 14, 15, 16, 17. Dr. Armstrong has found the veins of the pia mater very much loaded, and generally some effusion between the pia mater, and arachnoid membrane, and others have noticed similar phenomena; yet, from all the morbid appearances hitherto observed, no satisfactory pathology has been established. It may be called general irritation, nervous exhaustion, constitutional disorder, or what you please. Very convenient words, certainly!

Diagnosis.—At the meeting of the Westminster Medical Society, referred to before, Dr. Ayre was asked what were the pathognomonic features of this disease; he answered, that the tremor of the hands, the coolness of the skin, the perspiration, the irascibility of the temper, the loquacity of speech, and, above all, the false images that are presented to the mind's eye of the patient, were the distinctive characters of delirium tremens. I have seen a few cases, and in none was there any difficulty in deciding what was the disease. Occasionally there may be cases which, from being less or more complicated with other affections, may be very puzzling. It appears from Dr. Bright's Reports, vol. ii., that an inflammatory condition of the brain not unfrequently occurs in intemperate people, or a combination of the two affections, phrenitis and delirium

* Cyclop. of Pract. Med. i. 511.

† Practical Remarks upon Indigestion, &c.; by John Howship, London, 1825.

tremens. On the other hand, I find that Dr. Chapman, in his *Materia Medica*, affirms, that "symptoms of inflammatory action, incident to this disease, are *always* fallacious; and the system, for the most part, very speedily sinks into a dangerous degree of debility, by the slightest depletion."* It is not long since I witnessed the mistake of treating delirium as a case of inflammation of the brain, and a fatal termination speedily following the depletion; but I hope, from the improved state of medical education, such a mistake could never be committed again. I can scarcely refrain, however, from stating, that if any practitioner were to know no more than what he could learn from Dr. Good on this subject, he might go on to the end of his career, scarcely knowing that such a disease was to be met with, and certainly unfurnished with any marks by which to recognise it when it did occur to him. His is, indeed, a poverty-stricken article. If any one, however, study the cases and remarks of Dr. Bright, in his 2d volume, and the diagnostics of Dr. Armstrong, he will find himself, I think, fully prepared for deciding confidently, and correctly, in the cases, happily rare, in which the line of demarcation may be indistinctly observable to the *visus indoctus*.

Treatment.—It will be observed, that this article is not meant to be a complete essay or monograph on this disease, but rather a running commentary upon the facts and the opinions of others, it having happened that I have consulted a very extensive number of authors upon the subject. It has not been by any knowledge of the nature of the disease, that we have been led to the discovery of a method of cure; but by attempting the palliation of a very prominent symptom.

Although some have recommended to commence with the administration of an aperient, it seems to me only a loss of time; for, as Dr. Coates has said, the patient **MUST SLEEP OR DIE**. We ought, therefore, to procure sleep as soon as possible, and afterwards remove the effects of the opium on the bowels. As there exists astonishing variety in the modes of administering opium, to produce this result, it may be useful to some, to have presented to them the result of an extensive consultation of writers. Dr. Armstrong advises giving sixty drops of tinctura opii, to be repeated every six hours, for the first two days; but he thinks that if you do not succeed in that time, you will rarely succeed at all, by opium merely; and then, he says, you should be cautious how you continue to push it in large doses afterwards. When this mode, there-

* *Elements of Therapeutics and Materia Medica*, by N. Chapman, 2 vols. Vol. ii. p. 171.

fore, fails, he gives an aperient daily, and a moderate opiate afterwards. Dr. Blake, in what he calls his first stage, or during the continuance of what Dr. Pearson has enumerated as the phenomena, which precede the attack, gives ten drops of tinct. opii every second hour, and, in the intermediate hour, one ounce of the accustomed stimulus. In his second stage, or in what others describe as the disease, he prescribes full doses of opium, diffusible stimuli, and antispasmodics. To these, he generally adds calomel, and Dover's powder; two grs. of the former to six of the latter, every two hours, until the system becomes affected, or the disease yield.* In the first, distinct notice of the disease, upwards of thirty years ago, by Dr. Burton Pearson, of Lazonby, in Cumberland, it is recommended to administer a full dose of opium in a glass of wine, and to repeat it in smaller doses, for several hours successively.† It may be added, that Dr. P. wisely regulates the quantity, in proportion to the constitution of the patient, habits of intoxication, degree of the disease, and other concomitant circumstances. Dr. Eberle‡ says, opium generally operates very well after one or two emetics; and farther, that if given at all, it should be given in large doses, and unless particular circumstances forbid its farther use, continued until sleep be procured. Dr. Chapman§ says, that of all the remedies he has ever tried, he has found a combination of camphor and opium the most successful in this disease. "My rule is, to give these medicines in large doses, till the patient becomes composed, and then to sustain his strength by a generous diet, and cordial drinks." Mr. Playfair states,|| that, in India, he generally succeeds in procuring sleep in about 12 hours—few cases requiring 24 or 36—by administering 100 drops of tinct. hyoscyam., with 30 of tinct. opii, repeating 20 of the former, and 10 of the latter, every two hours, till sleep is procured. But all these doses are comparatively trifling, and all those, comparatively, but timid practitioners, when placed in juxta-position to the *heroic* Dr. Coates, one of the physicians to the Pennsylvania Hospital, in Philadelphia. He has published a lengthened and very excellent paper upon this subject, in the North American Medical and Surgical

* Blake's Original Essay in Edin. Med. and Surg. Journal, No. 78, for October, 1823; or his Practical Essay on Delirium Tremens, 8vo. p. 68, 1830, the substance of which constituted his thesis for graduation at Glasgow.

† Vid. his Essay republished in the Lond. Med. and Surg. Journ. for May, 1830.

‡ *Materia Medica*, vol. ii. p. 29.

§ *Elements of Therapeutics and Mat. Med.* ii. 171.

|| *Transactions of the Medical and Physical Society of Calcutta*, vol. i.

Journal. He observes, that "the disease is entirely and absolutely under the control of opium; though the fevers and other diseases, which are liable to accompany it, are by no means so. It admits," he continues, "of very large doses of opium, which are not productive, either at the time, or subsequently, of any injurious consequences, *provided they are not repeated after a tendency to sleep is evinced*. The patient must SLEEP OR DIE. There is no alternative. Yet the physician should personally watch the effect of very large doses of opium." In the early part of his professional life, he often witnessed and deplored the mortality following the stimulo-narcotic plan. Two cases, in which very large doses of opium were exhibited with success—in the one, 45 grains, and in the other, 400 drops of laudanum, in five hours—made a strong impression on his mind, and induced Dr. C. to act afterwards on the principle, "THAT SLEEP MUST BE OBTAINED AT ALL HAZARDS." Five or six grains alone are, in any case of severity, absolutely a nullity. The most successful amount with Dr. C., has been generally from 12 to 28, or 30 grains; "but in an honest judgment," says he, "I can assign to it no limit. I have never seen, read of, or heard of, an instance in which it was productive of any harm." He very carefully watches its effects, when the case is so violent as to require very large doses, generally giving it every hour; but when sleep appears actually approaching, allows a somewhat longer interval. In slight cases, he leaves smaller doses with the attendants. In corroboration of the safety and success of these *heroic* doses, he gives the testimony of several respectable American physicians. As Dr. Coates' Essay seems, in every respect, one of the best monographs on this disease, I would recommend whoever may be studying the subject, to peruse it; and especially, if not completely satisfied about the propriety of such immense doses, as I have not been able to quote at length either his explanatory observations, or any of his cases. I have taken a more extended notice of it, however, not only on account of its originality and excellence, but also to bring it before the notice of the profession in this country, as I have not found it noticed in Dr. Carter's article in the Cyclopædia of Practical Medicine, nor by any late writer, although it has now been upwards of four years before the profession in America.

In a very severe case I would be disposed to adopt the plan of Dr. Coates; but in one slighter, and allowing of more time, I would be much disposed to try the effects of giving the first dose in an enema, and the future doses, perhaps of two grains each, or some equivalent, as laudanum, sedative solution, or

some of the salts of morphia, every two hours. It is well known that Dupuytren succeeds by enema much better than by giving the opium by the mouth, in that species or variety which a surgeon most frequently meets with—that following injuries or surgical operations. In the 9th No. of this Journal will be found a case related by Dr. Weir, in which this drug, when given by the mouth, did not seem to produce much effect, but a full dose by the rectum was soon followed by a tranquil slumber and rapid amendment.

For information upon an American practice—the employment of emetics—I refer the reader to Chapman and Eberle's *Materia Medica*. Upon the minor and subsidiary means I have nothing of importance to state.

When speaking of the pathognomonic symptoms, I stated, that in some cases the disease was complicated with others, thus demanding great caution and minute accuracy in the diagnosis, and a suitable modification in the means of cure. For information upon this complicated form, the study of which is more difficult, I referred the reader, who might be desirous to study this important sensorial affection, minutely and pathologically, to the writings of Dr. Armstrong and Dr. Bright upon this topic. I have now to recommend to such a reader the study of a paper, by Dr. P. M. Latham, “on the Use of Opium in Fevers,” published in the *London Medical Gazette*, No. 227, for April 7th, 1832, or vol. x. p. 10. I have not perused any medical paper with greater gratification or more instruction for a very considerable period. It is obviously the production of a very reflective and observing mind, whose opportunities for observation have been ample, and employed solicitously for the advancement of science and the relief of suffering; and the composition of the paper is a very model, and must have been appreciated by those to whom the paper was read—the College of Physicians in London. The Essay is so succinct that nothing could be taken from it, without injury; I shall, therefore, not attempt to give an abstract of it, but as it may be easily procured, say that the subject of it is the delirium tremens of fever, though Dr. Latham will not so call it, for fear of misleading by a name. In many fevers the disorder of the sensorium does not keep pace with, or is not proportionate to, the disorder of other organs, but maintains either from the very commencement, or towards the termination, a fearful preponderance. This form of fever is chiefly met with among the higher and educated classes, eagerly pursuing the objects of wealth, and honour, and power—among the wretched in the lower ranks—and among the dissipated in all. Opium is the only remedy.

But Dr. Latham's experience has taught him what no reasoning, *a priori*, could have done, that a much larger quantity of opium is necessary to remedy certain sensorial disorders when they exist alone, than when they are combined with fever.

4. *Tonsillitis—Application of Leeches.*

In a few cases it has occurred that I applied leeches to the tonsil. The circumstances which struck me as most remarkable in these cases, were, 1st. That there is no pain, or almost none, produced by the bite. In my own case I did not know that the leech had fixed until I was told. 2d. That the wound has bled longer and more copiously, and yielded relief more speedily, than any incision made by the lancet on the tonsil, and I have made pretty deep ones. The leech should be a moderately sized, or pretty large one, in order to make a wound of size sufficient to bleed copiously, and keep open for a considerable time. The relief in two cases was immediate, and the inflammation was, from the moment of the bleeding, arrested. This mode of checking tonsillitis can obviously be but seldom applicable; but when it can be had recourse to, it would appear from my few trials, to be preferable to scarifications, however deep. I may add, that having kept one of the leeches which had been used, by itself, for several months, it did not die. In order to use a leech in this way, it is well known, a silk thread must be drawn through its body, and a tube used to convey it to its destination. I have found the pipe of an injection-bag the most convenient form of tube. A quill is sometimes used for a small leech.

5. *Leeches—Treatment of, after filling.*

An anonymous correspondent, in a note in the 9th vol. of the *Lancet*, records a mode of treating leeches after they have filled themselves with blood, less destructive, and by which they are ready to be applied again immediately. It consists in putting the leeches into a vessel with vinegar, until they disgorge themselves; then after washing them in clean water, they may be applied a second time, "and so on, *ad infinitum*." In one case of a scarcity of leeches, I found them fix as greedily the second time as at first; and as a surgeon may not always get as many as he wants, I mention the circumstance. In all cases, when present, I use the vinegar, but only dip them in for a moment, and assist the disgorgement by gentle stripping. I think this plan decidedly less destructive.