

direct proof of its being necessary. If a person, as Cicero beautifully supposes, had been educated from infancy in a chamber where he had only seen the light through a small chink, he would have been apt to consider this chink as necessary to vision; and so it may be in regard to our corporeal organs, which so far from being necessary to mind, may even limit the range of its operations, like so many chinks in the walls of its prison. But granting that mind was material, it does not logically follow that it is destructible, for it were just as easy for the Deity to make matter as spirit immortal. The fact is, that the belief of the immortality of the soul has little to do with the question of its materiality or immateriality, for this almost universal belief results from our moral constitution, and is, perhaps, intimately associated with the first principles of our nature; and surely no man, who marks the benevolent designs of the Deity in the external world, and who is deeply imbued with a love of the human race, could wish to consider the hope of a future existence as vain and visionary. Matter does not perish, for what appears to be its destruction is only a change of its form; and as mental operations cannot be resolved into material substances, why should any one imagine, that mind, with all its superior attributes, perishes, when the very dust upon which we tread seems to be everlasting? Madness is indeed an awful malady, and might a first sight convey an impresson, that mind itself was liable to the changes and decay of our material structure, but it surely only shows the intimate connexion which it has with matter; for I have seen no case of this disease in which there were not previously the most distinct evidence of some disorder in the brain to which the madness might be referred as a consequence, without supposing that mind was abstractedly diseased. It were needless to object to this doctrine, because madness is often produced by mental emotions. Those emotions never act directly but indirectly, by having a most powerful influence over the action of the heart; and if we reflect that the action of the heart in its turn has great influence over the circulation of the brain, we shall be at no loss to account for madness on the principles here maintained.

If these premises be correct, to restore the organ, through

which the mind chiefly operates, to a sound condition, will be the best way to remove madness. It would amount to little to contend, that it will be of no use to restore the natural state of the brain, while the mind itself may continue to influence it morbidly; for we might as well say, that the effect produced on the brain by a blow should not be removed, because it may be re-produced by the repetition of the blow. It often happens after such an injury, that the disease induced remains for some time; we evidently perceive, then, that as the injury is not renewed, it is simply the continuance of the effect; and so it may be in many cases, when the disorder of the brain is produced through the medium of the mind. For the effect remaining, in the latter instance, does not show, any more than in the former, that the state of the mind continues to maintain the morbid action of the brain which it originally induced: and granting that it should, it would still be of considerable advantage to counteract its influence by proper remedies, lest it might derange the structure of the brain, and thus not only render the madness permanent, but shorten life. Indeed, in every case of mania, it will be equally necessary to remove, as far as possibly can be done, every thing from the mind, as from the body, which has produced, or is likely to produce, an injurious effect.

The preceding, it is readily allowed, is a very imperfect and faint outline of the pathology of the various modifications of madness; and it should not been drawn here, but for the purpose of exhibiting a method of treatment which, if it should prove as successful in the hands of others as it has been in mine, will contribute to lessen the duration and fatality of this awful disease. But before proceeding further it will be necessary to state, that I consider madness generally remediable in its commencement, and most frequently incurable when it has existed for some time. The special grounds upon which this opinion is founded are briefly these:—in the commencement, madness is maintained by functional disorder only; but when it has existed for some time, that disorder has generally produced either such a change of structure, or morbid condition of the vessels in the brain, as does not usually admit of removal. The indi-

cations of functional disorder were clear and indisputable in the beginning of every instance of mania which has fallen under my care ; and when I have been able to remove that disorder, sanity of mind has generally succeeded. It is, however, but candid to confess, that I have traced the history of some cases, in which, the first signs of disordered action disappearing, the circulation *seemed* to be restored to a natural condition, and yet there was no abatement of the mental malady. Still such cases do not overturn the opinion here advanced ; for even in them it is most probable, that the primary disorder in the circulation had effected some morbid change in the brain, by which the madness was confirmed. In this most complicated and mysterious organ, very slight changes would be equivalent to such an effect, although they in general left the bodily health unimpaired. In three examples of this nature, I found after death some small ossifications in the meninges, with more serum in the ventricles than common ; and I have never seen the brain of any patient, who had been insane, perfectly natural on minute examination. Besides, in long-continued cases of madness, it does not follow that because the blood appears to flow naturally along the radial and other external arteries, every other part of the circulation must be in a healthy state. Many large tumours form on the surface of the body without ever affecting the pulse ; and if such irregularities can thus occur externally, why may not certain derangements exist internally, without being indicated by the pulse ? Nay, we do know that the heart itself, the very centre of the circulation, occasionally suffers certain degrees of morbid change without disturbing the pulse ; and can we wonder if something similar should take place in regard to the brain ? Can we be surprised, after the first congestions or determinations have subsided in mania, that they should leave effects sufficient to prolong the disease, even when the pulse at the wrist and elsewhere seems to beat naturally ? In the circle in which the blood revolves, local interruptions may be induced, of which the pulse gives no information, from the heart's action not being thereby disturbed.

In those cases where madness comes on suddenly, and is

connected with great fulness in the vessels of the head, the immediate pressure must be promptly relieved, at the very onset, by free bleeding and purging ; otherwise the patients will be either in danger of dying, from venous congestion or arterial excitement of the brain, or they will be extremely liable to permanent alienation of mind. In the simple apoplexy, when you can succeed in overcoming the first powerful impulse, for the most part all the urgent symptoms soon disappear, but it is not so with madness ; for when you have reduced the force of the cerebral congestions or determinations, it will commonly be found, that they have produced or are connected with an affection of the brain, which is still to be erased before convalescence can be accomplished. On this account, it will generally be necessary to persevere for some time in the occasional use of local blood-letting, purging, and blistering, combined with a regular course of mercurials ; but after the pressure of the congestion or excitement has been evidently mitigated to a considerable extent, depletion by the lancet should be cautiously pursued ; since if it be carried too far it occasions a nervous irritation which acts powerfully on the heart, and which may protract or confirm the disease, and finally exhaust the powers of the patient. In the first two weeks of the attack, I have usually bled both from the arm and the temporal artery, until the fulness of the vessels of the brain was relieved, and the action of the heart restored to a more natural state ; yet at the same time the bowels were evacuated by calomel, jalap, and the sulphate of magnesia, the calomel having been given in full doses to procure its alterative as well as its purgative operation. After that period, it has been my usual practice to draw blood by leeches or by cupping about twice a week, to order a saline purgative about every second morning, and to give calomel daily in such doses as to insure a moderate but constant ptyalism for some time. When the last mentioned effect has been procured it has been customary with me to apply blisters occasionally to the shaved scalp ; and in some instances, they appeared very beneficial, where they did not act as irritants to the heart.— It is worthy of remark, that at least two-thirds of the cases of madness which I have attended, *in a recent state*, recovered

within the first three or four months, under this treatment; though hardly any of the patients showed signs of convalescence until the mouth had been affected about three or four weeks by the mercury, and until some degree of emaciation took place. It is occasionally a very difficult matter to induce ptyalism in mania, and whenever this is the case it is an indication that evacuations are required, which always tend to render the system pervious to the influence of mercury.—When ptyalism, however, is once induced in mania, it may be easily kept up by moderate doses of calomel or of the blue pill, or by mild mercurial frictions; and the last mentioned may often be used with good effect where the two former preparations disagree with the stomach or bowels. After sufficient evacuations had been premised, I have often combined small doses of opium with the alteratives; and wherever there was much nervous irritation, this combination always appeared more or less beneficial. Probably some narcotic will be discovered, which will greatly extend our influence over those cases of mania, attended with excessive irritation of the nervous system.

On the first occurrence of those cases of mania, where clear evidences of constitutional excitement existed, I have seen the shock of a cold shower-bath sometimes useful; but much harm may be done by persevering in such a measure when the tone of the heart and arteries has been subdued, for it then may increase or occasion fulness in the vessels of the brain, confirm the insanity, or induce an attack of apoplexy, of palsy, or of epilepsy. When, however, there is at any time an excessive determination of blood to the brain, or when the maniacal paroxysms become severe, cold stupes may generally be applied with great advantage over the whole head, secured in the form of a night-cap, that they may remain on; and under such a state of things, the head should always be raised very high, in order to retard the flow of blood by the arteries towards the head, and to accelerate its return by the veins, a circumstance which is highly important in many severe affections of the cerebrum. In those cases which are strictly congestive, the cold affusions cannot be safely employed; but the warm shower or slipper-bath may

be beneficial, in combination with depletion, by contributing to allay irritation, and to equalize the circulation. Where the mercurial course, with the means before mentioned, has failed to remove all the symptoms of insanity, I have generally persevered in the use of the warm or cold shower bath, with tolerably active purgatives; and when this treatment has been regularly pursued for some time, it has rarely disappointed my expectations, where the disease had not been of long standing before the previous application of the depletory and alterative measures. Some experienced practitioners, whom I know, have found considerable benefit from occasional emetics of antimony, but I cannot speak of them from my own observation in this disease.

The more chronic cases of mania, which steal on insidiously in the way before described, may be most frequently cured, if early encountered by bleeding, purging, and mercurials; but if they be allowed to proceed until fully developed, they will almost always prove less manageable than the acute forms. Sudden irregularities in the circulation arrest our attention at once, and may often be overcome without leaving any traces but what are removeable by judicious means; but slow congestions or excitements sometimes make deep and indelible impressions, before any serious mischief has been suspected. When, however, the insidious modifications of mania have been neglected until the decided attack has taken place, the same plan of treatment must be pursued as in the more acute varieties, with this exception, that the general depletion should not be carried so far; and even under circumstances apparently so unfavourable, I have known the steady perseverance in this treatment effect a cure, even when the precursory symptoms had been stealing on for two or three years. Upon the whole, therefore, I could wish, that the agents which I have advised combinedly or successively in mania, were fairly and extensively put to the test in the practice of others; for I must again repeat, that if they should prove as successful in their hands as they have done in mine, they will contribute to lessen the duration and fatality of this awful disease. There is an efficacy, it appears to me, in the conjoint use of bleeding, purging, and mercurials, which has

not yet been fully estimated in the early stages of mania; and as where these measures fail at that period, the subsequent employment of the shower-bath and purgatives will yet succeed, an encouragement is surely held out to give this plan an impartial trial. Yet it is only right to acknowledge, that my experience has not been extensive in mania, and therefore the treatment recommended is probably far too limited to be applicable to all the forms of the disease. The cases which fell under my inspection mostly occurred in robust patients who had lived irregularly, and who were well suited for free depletion in the first instance, and for purgatives and mercurials afterwards.

The few cases of melancholia which I have seen were connected with congestion of the brain and liver, and in them the tepid bath and purgatives, with calomel and opium, proved highly efficacious; but it should be remembered, that whenever the brain labours under an accumulation of the blood either in the rise or progress of mania or melancholia, the lancet must be promptly employed: for when this measure is neglected, apoplexy or epilepsy often supervenes, or the structure of the brain is so much injured as to render the disease irremediable. When convalescence from mania has once taken place, the diet in general ought to be extremely abstemious afterwards, even during the whole period of life; for I have seen several relapses which were evidently occasioned by eating too much food; and this is a point which requires the more attention, as the appetite is often keen on the subsidence of mania.

But those who have attended much to the phenomena of an existing mania, must have observed that though depletion and the antiphlogistic regimen may be indispensable in the beginning, yet patients require to have regular supplies of light nourishing food during the progress of the disease. If they be neglected in this respect, they in general become highly irritable, and the whole circulation is thrown into great disorder. That both the nervous and vascular systems may be tranquillized as much as possible, no more restraints should be used than are absolutely necessary for the personal safety of the lunatic. If any objects are fitted to excite our com-

miseration, it must surely be those who are insane; and certainly the first and last impulse of nature is to pity and protect them. The rigid mode of coercion which has been so much adopted towards those unfortunate persons, could only have originated in ignorance or interest, for there can be no question that the gentler the moral treatment can be made, the greater is the chance of recovery. The scenes which have been lately brought to light in those places called asylums, are most repulsive to humanity; and as they have awakened the sympathy of the whole nation, we cannot doubt that a thorough reformation will be the consequence, and that the benevolent system, which has reflected, from the Retreat,* so mild a lustre upon the Society of Friends, will hereafter be universally adopted.

Between the local and constitutional states of the circulation in *recent*, and in *long continued* cases of madness, there is a wide difference; and it is in its earliest stages only while connected with those conditions of the vascular system before described, and not after it has become an habitual disease, that I consider it somewhat analogous to certain modifications of fever. If medical treatment be generally inefficient in *established* mania, it is surely unfair to conclude that it is likewise so in *incipient* mania; yet many writers on this subject have actually drawn such a conclusion. The friends of insane patients are most loath to part with them, until means have been tried for their recovery at home; and on that account hardly ever send them to asylums, until they have completely passed through the first stage of the disease,—that stage, and that alone, which is here contended to be generally medicable.—The reports, therefore, which proceed from those institutions are not to be considered really conclusive as to the power of medical treatment; since they commonly commence at that *advanced* stage of the disease where the efficacy of medicine may be said to terminate, and where every thing must be left to the moral regimen. There is yet indeed a chasm both in

* See Description of the Retreat, an Institution near York, for Insane Persons of the Society of Friends; containing an Account of its Origin and Progress, the Modes of Treatment, and a Statement of Cases, By SAMUEL Tuke. York, 1813.

the *early* history and treatment of mania; and the man who can supply it, will deserve and receive the gratitude of his fellow-creatures. As the Retreat is among the best institutions existing for insane persons, I could wish, that its humane and enlightened conductors, in particular, would closely direct their attention to patients *recently* afflicted with mania, when such are admitted; for my observation certainly induces me to believe, that medical treatment, at an early period, is far more efficacious than the ingenious Tuke has been led to suppose. But as this opinion is entirely deduced from the *incipient* cases which have now and then occurred in my private practice, it is offered with all the deference which becomes a comparatively limited experience in this disease. It was deposed by the late Dr. Willis, that *nine persons out of ten recovered*, who had been placed under his care, *within three months after the attack of the disorder*. His deposition speaks volumes in favour of a proper treatment in the incipient stage of mania; and I cannot but express a most earnest wish, that it may be in the perpetual recollection of all those who are intrusted with lunatics. In many instances, madness is most distinctly foretold by great mental agitation and by great irregularities in the circulation, and then bleeding and purging may actually ward off the attack. Some patients of this kind have a most urgent desire to be bled from the mere feeling of uneasiness about the brain, and this desire ought never to be disregarded, for if it should, the feeling of uneasiness may become so unsupportable as to prompt the sufferer to make an attempt upon his life. Where the throat had been thus ineffectually cut, I have known the mind at once restored to tranquillity from the loss of blood, a circumstance which is much in favour of the preventive power of venesection in threatened insanity. Even during the progress of madness those cases will hold out the most promise of recovery, where the clearest signs of bodily disease are apparent; and on the contrary, those cases afford the least hope, where insanity exists without any decided mark of the general health being disturbed.

BRAIN-FEVER

OF

DRUNKENNESS.