

proper as an alterative in that external species of erythematic inflammation which attacks emaciated subjects just as they are convalescent from a protracted fever; and the same remark is applicable to internal inflammations occurring in constitutions, the strength of which has been broken up by any other cause whatsoever; for in them mercury produces an extreme relaxation and irritation which they cannot sustain, and indeed they are far more fitted for the tranquillizing operation of opium. But there are two interesting diseases concerning which a few remarks shall be subjoined, as calomel has been found useful in the one, and opium in the other, and as they have either a relation to arterial inflammation, or to venous congestion.*

* In another treatise I have expressed it as my full conviction, that mercury is much abused in chronic diseases, to which it has certainly been too universally applied; but I cannot refrain from mentioning here, that my friend Dr. Ayre, in his excellent treatise on Marasmus, has introduced a substantial improvement in the mode of administering mercury in chronic affections of the liver, the minute doses which he recommends being generally preferable to ordinary ones.

INSANITY.

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MANIA is either a primary or a secondary disease. It is primary when the brain is the organ first and decidedly affected; it is secondary when the brain is affected from some distant disorder. Like apoplexy, too, it is either acute or chronic, and also marked by venous congestion or by arterial excitement. In several cases, I have seen mania ushered in by the strongest signs of cerebral congestion, while the tone of the heart was extremely oppressed, the face very pale, the pupils dilated, the hepatic secretions disordered, and the skin cool and relaxed. Whereas in other instances, I have observed mania to commence under what we term an excessive determination of blood in the arteries, with swollen, reddish face, ferrety eyes, full bounding pulse, and preternatural heat of the surface, but especially of the forehead and hairy scalp. In the congestive variety, patients often complain a little before the attack of a load or confusion in the head, with an oppressed or heavy feeling at the heart or epigastrium; and in the excitive variety, patients often complain of a pulsating pain or fullness in the head, while the action of the heart is increased both in force and frequency, without any sense of weight or oppression there. These two varieties are evidently of the acute kind, and indeed sometimes pass into each other; the symptoms of congestion appearing first, and those of excitement afterwards, as is observable in many fevers. In one gentleman in particular, who had been thrice a patient of mine within five years for separate attacks, the mania was always preceded by the most manifest indications of venous congestion in the brain; for the oppression was so great at each attack as to border upon apoplexy, while there was an impeded pulse, a cool skin, and a pallid face, with glairy eyes. But as

soon as the pressure of the venous congestion was removed, by the use of the warm bath, of the lancet, and of purgatives, an excessive determination of blood took place to the head, attended with fever; and though the blood drawn when the symptoms of venous congestion were present never exhibited the buffy coat, yet it generally did so when abstracted after the arterial excitement had occurred. In this case, the functions of the liver were always disturbed with those of the brain, and I have seen others in which the former organ was still more deeply implicated: but though an affection of the liver be common, it is not an invariable and a necessary concomitant of either of these varieties of mania; and the affection of the liver as often follows as precedes that of the brain, so that in one instance it shall appear to be an effect, and in another a cause of the morbid conditions on which insanity depends.

When an affection of the liver, or indeed of any other remote organ operates on the brain so as to produce ultimate madness, this operation is not direct but indirect; for the affection of the remote organ proves an irritant to the heart, the increased action of which excites the mania, by propelling the blood too powerfully towards the brain. Or the return of venous blood being interrupted through the remote organ, as may happen in cases of congestion of the liver, the circulation of the brain is thereby mechanically affected, and madness succeeds; and the common observation of every day may convince any one how much an obstruction in the liver influences the brain, since those in whom it exists are seldom free from pain, or some other uneasiness in the head. It would be extremely useful to have a more impartial account than we have at present of those diseases of the head and other parts which mutually influence each other; for what are sweepingly called the digestive organs have lately occupied so exclusive an attention in the doctrine of sympathies, as to have shut us out from a comprehensive view of the subject. An irritation may be established in the head and affect the digestive organs, it may be established in the latter, and affect the former; or it may be established in the chest or even in an external part, and ultimately affect the head and

digestive organs either separately or combinedly. But in all these cases, we find the first effect of the irritation is to disturb the heart's action, and that disturbance produces disease in other parts which had been previously disposed; though when a combination of local irritation exists, it is sometimes difficult to trace the order in which the various affections arose out of each other. Whenever however an irritation arises in any one who has an hereditary or acquired tendency towards a particular disease, that irritation should always be attended to as early as possible; for if it be neglected, the particular disease will be always most sure to supervene, and it was once in this way, that I saw madness follow a disregarded disorder of the skin.

The above view of mania seems to presuppose, that there must be some antecedent disposition in the brain, else why should an affection of the liver, for example, lead to madness in some persons and not in others. The more we inquire into the history and pathology of diseases, the more we shall be convinced, that latent and local predispositions determine the seat and character of the symptoms; for though those predispositions may exist under ordinary states without producing disturbance, yet when the system receives any shock, the effects of that shock will be concentrated in the weakest part. It is thus, in numerous individuals exposed to the same exciting cause, that in one the brain shall be affected, in another the lungs, and in a third the stomach, and so forth; because before the occurrence of the palpable disorder, these organs had severally been predisposed, and they only became diseased by the circulation of the blood having been disturbed from some increase or decrease in the action of the heart, or from some mechanical impediment to the free transmission of blood. What we call increased determinations of blood to particular parts are in general merely obstructions in the smaller vessels, by reason of which the blood cannot be so readily returned through the veins; so that the currents of blood transmitted by the heart through the larger arteries, continue to accumulate in those arteries, which accordingly become more distended than others, but the action of which is not more frequent; and indeed observation on the pulse in va-

rious places at the same moment will convince any one that the action is the same in all the arteries, our common language on the subject being figurative and incorrect. Local determinations of blood, as above explained, are very conspicuous in many diseases, but in none more so than in mania; and where an obstruction in the capillaries of the brain exists simultaneously with an increased action of the heart, both the carotid and temporal arteries are often excessively distended with blood.

The acute attacks of mania, congestive as well as excitiv, are often so formidable, that there is immediate danger from the pressure of the venous congestion or of the arterial excitement; so that they both require, at their commencement, a treatment similar to that of the congestive or excitiv apoplexy, according to the character of the symptoms. These attacks are sometimes so sudden, as to require the greatest promptitude to save the life of the patient. Some years ago, I attended a gentleman who was labouring under hepatic disease, with some threatenings of insanity, and he was so suddenly seized with an apparent apoplexy of a violent kind, that he must have shortly expired, if the family surgeon and myself had not been present. He was walking backwards and forwards in the room in an agitated manner, as he had done for some days previously, when all at once the attack came on, and he fell down in a profound apoplexy. Without the loss of a moment of time, we plunged the lancet into the main branch of the temporal artery, and by abstracting thirty ounces of blood seemingly prevented his death. But soon after this period, the madness was manifestly developed, and it required a regular course of medicine before it was perfectly removed.

Sudden or excessive abstractions of heat from the skin, the depressing passions, sedentary employments, and indigestible food, are causes which often lead to the congestive variety of acute mania; while the excitiv variety is often produced by exposures to a high temperature, by strong emotions of the mind, by stimulating drinks, and by intemperance in diet. It has been said, as a bitter national reproach, that the one half of the people of Great Britain is scrofulous, and the other half mad; and there is perhaps a much nearer affinity be-

tween these two diseases than writers on the subject have generally seemed aware; at least in many families where madness prevails hereditarily, there scrofula also prevails, and has prevailed. Both the causes of scrofula and madness are frequently to be found in the vicissitudes of our climate, and in the mixed or irregular diet which we adopt, together with the use of wine and spirits. It is exceedingly to be regretted, that the mode of living amongst the higher orders, who influence the habits of the middle and lower, is daily becoming more complicated; and this is the case not only with regard to diets, but also to drinks, for both the dishes and wines are now more numerous and varied than formerly. Next to the abuse of animal food and wine among the higher, is that of spirits among the middle and lower classes of society: for numerous acute and chronic attacks of the brain, and of other vital organs, are distinctly attributable to such unnatural stimulants incessantly increasing the action of the heart; so that the blood is circulated more rapidly than was designed in the constitution of our nature, and the weakest organs are consequently liable to become diseased. If madness be hereditary in any family, it is often induced by the daily use of wine or spirits; and indeed eating largely of animal food has a similar effect, as I have sometimes seen strikingly exemplified. Man is not only more complicated in his animal enjoyments as he advances in civilization, but he is also more liable to mental agitations, when actively engaged in the world; and it is perhaps owing to the operation of these two causes, together with the variableness of our atmosphere, that madness is so common in Great Britain. But it is time to pass on to the description of the more chronic forms of mania, which are frequently excited by such causes as have just been enumerated.

The chronic forms of mania steal on insidiously for a long time before the subjects of them can be pronounced positively insane. The one which arises from a strictly congestive state of the brain, is preceded by paleness of the face and skin, by watchfulness and restlessness, by some feeling of uneasiness in the head, by an occasional load at the region of the heart, and by more or less derangement in the hepatic secretions. The pulse is almost always weak or oppressed

during the day, and the surface often damp with a cold perspiration; but the pulse frequently becomes fuller and quicker towards the evening, from the accession of a short and imperfect excitement, in which the skin is generally hot in some places and cool in others. Dejection of the spirits is usually among the first symptoms, together with a want of regular sleep; and next some defect of memory appears, with dulness or confusion of the intellect, a marked change in the eyes almost like a squint, and a tendency to deviate from accustomed habits and pursuits. When these symptoms have continued a certain period, the patient has frequently some threatenings of apoplexy or epilepsy, and if the effects of these should not prove fatal, at length he becomes clearly deranged; but about this time, especially if depletion be used, the appearances of general oppression subside, and the pulse grows full and strong, with other evidences of excitement, especially about the brain. Not long since, I was consulted for a gentleman who had recently sustained an attack of apoplexy, and who did not apparently throw off its consequences so readily as his friends had expected. He conversed with great rapidity upon a variety of subjects, and though he said nothing that was strictly incorrect on any, yet his general manner indicated some affection of the brain. On inquiring particularly into the history of his case, I found that for more than three years before the attack of apoplexy, he had been subject to swimming in the head, and an uneasy sensation under the ribs of the right side whenever he was on horseback. These symptoms alone led me to suspect, that some insidious mischief had long existed in the brain and liver; and I became confirmed in this opinion, by ascertaining, that he gradually became pale and shrunk soon after the forementioned time, lost his spirits, and had been subject to sudden, lancinating pains in the joints. A few days from the commencement of my attendance, a violent attack of mania supervened; but in about two months afterwards a favourable change took place under an active treatment, though some months afterwards he died of another attack. Other cases of a similar nature might be adduced to show how secret and concealed the approaches of insanity may be, before the develop-

ment of the decided disease; and indeed this is so much the case, that we should never treat with indifference any example which wears the least character of hypochondriasis, for patients hardly ever complain without reason.

The other chronic form of mania, which is connected with arterial excitement, is generally preceded by uneasiness in the head, by some heat of skin and some quickness of pulse, particularly at nights, by watchfulness or short disturbed sleeps, and yet, what is remarkable, the strength is increased. As the morbid train of phenomena advances, the patient becomes more irritable, and often extremely suspicious. A sensible change takes place in his demeanour, and even in his moral character, so that, compared with what he formerly was, he appears like a different individual. Sudden and uncommon attachments or aversions are now often formed, and expensive or parsimonious habits pursued, inconsistent with the former conduct, or with the present situation of the patient. Unfounded fears or strange fancies arise, and what pleases at one time offends at another; and during the progress of these symptoms, the memory may be observed to grow more defective and confused. In this, as in the other chronic form of mania, the liver is very liable to be diseased.*—But on many occasions it is difficult to say whether the liver is primarily or secondarily affected; but in chronic diseases of the brain in general, I am disposed to believe, from my own observations, that the liver is more often secondarily affected, than many modern authors seem inclined to believe. In the course of my experience I have seen several cases of chronic diseases of the brain originate insidiously from blows or other injuries applied to the head; and in the progress of most of these, the functions of the liver became more or less vitiated, though they had been natural previously to the occurrence of the accident. Chronic affections of the brain are often seen so indistinctly denoted for

* In the London Medical Repository, Dr. Burrows of London published an excellent paper on Insanity, about the same time that the first edition of this work appeared: and it gave me much pleasure to find, that my opinions, respecting the morbid conditions of the liver in this disease, so strongly coincided with those of that enlightened pathologist and practitioner.

a considerable period, that we not unfrequently mistake merely sympathetic disorders of the digestive organs for them; and in proof of this I have seen some remarkable dissections where prior to death the stomach had been deemed the sole seat of the disease, and yet that organ was sound, and the brain exhibited much derangement. Even slight injuries inflicted on the scalps of adults by falls, blows, or the like, when neglected at first, often lead to chronic inflammation of the dura or pia mater, and sometimes even to madness, as I have myself witnessed; and such accidents, therefore, should always be attended to at their occurrence, and even for some time afterwards, for moderate depletion, followed by an antiphlogistic regimen, may prevent a great deal of mischief. An old lady was once placed under my care for insanity, but she was so speedily removed by her friends to an asylum, that I had not time to investigate her case: and I was credibly informed, that when she died soon afterwards, a fracture was accidentally discovered in the skull, which had till then, unfortunately, escaped observation. Such cases should teach us the utmost caution in our inquiries into the causes and symptoms of insanity: and it certainly does appear to me, that injuries of the head more frequently excite the chronic forms of this disease than is suspected; but this is more especially so in those cases which depend upon slow arterial excitement, and the history of which I have imperfectly sketched. In cases of this nature, there are sometimes also such unequivocal signs of apoplexy, near the time of the attack of madness, that copious depletion is required; but if such cases be traced backward for some time, a precursory train of symptoms may always be discovered which had led both to the apoplexy and to the madness.

It will have been perceived, that I consider insanity as the effect of some disorder in the circulation, whether produced by agencies of a corporeal or mental nature. It might be shown by familiar facts, that the brain is the principal organ through which the operations of the mind are performed; and it does not, as many have supposed, necessarily involve the doctrine of materialism to affirm, that certain disorders of that organ are capable of disturbing those operations. If the

most skilful musician in the world were placed before an unstrung or broken instrument he could not produce the harmony which he was accustomed when that instrument was perfect, nay, on the contrary, the sounds would be discordant; and yet it would be manifestly most illogical to conclude, from such an effect, that the powers of the musician were impaired, since they merely appeared to be so from the imperfection of the instrument. Now what the instrument is to the musician, the brain may be to the mind, for aught we know to the contrary: and to pursue the figure, as the musician has an existence distinct from that of the instrument, so the mind may have an existence distinct from that of the brain; for in truth we have no proof whatever of mind being a property dependent upon any arrangement of matter. We perceive, indeed, the properties of matter wonderfully modified in the various things of the universe, which strike our senses with the force of their sublimity or beauty; but in all these we recognize certain radical and common properties, that bear no conceivable relation to those mysterious capacities of thought and of feeling referrible to that something which, to designate and distinguish from matter, we term mind. In this way, I conceive, the common sense of mankind has made the distinction which every where obtains between mind and matter; for it is natural to conclude, that the essence of mind may be distinct from the essence of matter, as the operations of the one are so distinct from the properties of the other. But when we say, that mind is immaterial we only mean, that it has not the properties of matter; for the consciousness which informs us of the operations, does not reveal the abstract nature of mind, neither do the properties reveal the essence of matter. When any one, therefore, asserts the materiality of mind, he presupposes that the phenomena of matter clearly show the real cause of mind, which as they do not, he unphilosophically places his argument on an assumption; and his ground of reasoning is equally gratuitous when he contends, that mind is an attribute of matter because it is never known to operate but in conjunction with matter, for though this connexion is constantly displayed, yet we have no