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OBSERVATIONS  
ON  
THE PHENOMENA OF  
**INSANITY.**  
BEING A  
SUPPLEMENT  
TO  
OBSERVATIONS  
ON THE  
CASUAL AND PERIODICAL INFLUENCE  
OF  
PECULIAR STATES OF THE ATMOSPHERE  
ON HUMAN HEALTH AND DISEASE.



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LONDON :  
1819.



## PREFACE

TO

OBSERVATIONS ON THE PHENOMENA OF INSANITY.

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IN a recent publication I have endeavoured to establish the following doctrine,—That there are peculiar States of the Atmosphere, independent of its Heat, Weight, or Moisture, which have a particular influence on human Health and Disease, as well as on other natural Phenomena. This influence, depending on different states of the Atmosphere at different times, becomes various in its mode of operation: hence it not only causes a general disturbance of the health, but seems to have considerable share in producing the varieties of the symptoms. These peculiar conditions of the Atmosphere happen at times apparently very uncertain, and their influence is therefore denominated *casual*. It seems to be the cause of epidemic diseases.

That there is likewise, apparently independent of the above, a periodical Influence, occurring twice in the course of twenty-eight days, which has a very general operation: it affects immediately the Brain and Nervous System, causing a general increase of irritability of the whole body, and it lessens the capability and relish for intellectual exertion.—That its effect is greater or less in different persons, in proportion to the susceptibility and weakness of their constitutions—That persons who are very irritable are liable to feel this influence at both the above periods, and it often lasts for several days; but strong and healthy individuals only feel it once in the month, and with them it is trifling, and of short duration—

That healthy persons who are affected at one time in the month, are not affected at the other: hence these times may be regarded as two distinct periods, each of which recurs once in about twenty-eight days; and they are therefore called the Monthly Periods of Irritability.—That at these periods the symptoms of all chronic complaints are exacerbated; and headach, epilepsy, catalepsy, and various nervous diseases to which there may be a predisposition, are most liable to happen.—That the symptoms of various sorts of Insanity are worst about this time, but particularly the melancholic kind: hence suicides from disease are more numerous.—In females, the catamenia usually takes place at one or other of these two periods; and when irregular, sometimes occurs at both.—Parturition generally takes place at some one of these periods, and consequently abortions are then more to be apprehended than at other times in the month. Finally, wounds heal less readily, hydrophobia is more common, infectious diseases have crises, and all those phenomena occur which can be ascribed to increased irritability. The periods do not seem to coincide with any exact time of the moon, but their occurrence twice in a lunar revolution is a circumstance worthy of notice.

I have also shown that there are Diurnal Periods of Diseases, some paroxysms occurring at stated hours, as at noon, two o'clock, six o'clock, midnight, &c. &c. That there are likewise Periods of Diseases which occur every second, third, or fourth day. Diseases which observe any of these Diurnal, Tertian, or Quartan Periods, have their worst paroxysms (at their accustomed hours) during the time of the Monthly Periods. That some Diseases have particular Periods of their own, and terms of Duration, which last many months, independent of the other periods. These disorders, as well as those before described as happening from the *Casual Influence*, are worse at the monthly Periods.

That some diseases are frequently found to recur at nearly the same time of year for several succeeding years: hence there are Annual Periods of Diseases, which, while they last, are worse at the times of the monthly influence.

Finally, that in derangements of the mind, the periodical influence only causes an exacerbation of the paroxysms, while the peculiarities of the symptoms depend principally on the particular organisation.

And I have shown that the periodicity of diseases is confirmed by collateral observation on animals and plants, and is conformable to all the phenomena of Nature.

I proceed here to endeavour to explain how Insanity in particular may become subject to the *periodical and casual Influence*,

by inferring its physical nature from its Symptoms, and the striking analogy between this and other nervous diseases. The doctrine I have here tried to establish respecting madness may be thus comprehended.

Among the multiform diseases to which, from original predisposition, and the influence of numberless exciting causes, the human body is liable, may be reckoned Insanity; or derangement of the faculties of the mind, which depend on irritation of the organs of the brain, kept up by the reaction of a fulness and inflammation of its vessels, and more or less of a disordered state of the digestive organs.—That the particular symptoms in Insanity depend on the particular parts of the brain so affected.—That the violence of the symptoms is commensurate to the degree and kind of derangement in the animal machine, which may be clearly pointed out in its beginning, (before the mental symptoms occur,) as appearing usually in periodical paroxysms. And that the medical treatment which is most successful, must consist in rectifying the state of the digestive and other natural functions, and a course of lowering treatment by bleeding.—That all these circumstances, taken collectively, naturally induce us to place Insanity among other nervous diseases, from which it seems to differ in the particular locality of the diseased cerebral action. Future observations may confute, confirm, or modify, this view I have taken of the disease, which, for several years past, I have taken pains to enquire into, and which is an important object of research, from its increasing prevalence in civilised nations.

In England Madness is said to have increased in a very great degree, and numerous causes have been given for this increase, perhaps no one more truly than the habit of Stimulation which over-Diet, Drink and habits give to the brain and nervous System. Those who take athletic exercise in the open air in this Country, counteract its good effect by habits of proportionate high feeding, and by drinks of a stimulating nature; while the temperate are oftentimes studious and sedentary..

Another circumstance which contributes most effectually to nervous diseases, is the great want of free ventilation and the custom of close Rooms. Warm Rooms are certainly desirable in our climate, but it should be warmth with a free egress and ingress of atmospheric air; and for this reason all Rooms for the reception of company should be provided with ventilators in the upper part of the room. Persons should likewise sleep in well aired chambers. These precautions would diminish the frequency of nervous diseases.

T. F.

*Tunbridge Wells, September the 26th, 1817.*

## OBSERVATIONS,

&c.

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**I**NSANITY cannot be accurately defined, because in its various modifications it borders too closely on other nervous diseases; and it exists in all degrees, from the least to the greatest state of cerebral derangement. But we are capable of adverting to several morbid symptoms, which seem to concur in almost all its modifications. The consideration of Insanity may be divided into two parts:—the morbid symptoms of disorder in what are called the automatic functions of the animal Machine; and the particular hallucination or kind of insanity. The former of these may be properly considered as the disease which is to be subjected to medical treatment; and it consists more or less in a too great determination of Blood to the Brain: the latter depends principally on the original structure and comparative magnitude of the different organs of the brain, or in their comparative activeness; and it is much under the influence of moral causes. On the former depends the existence of the disease; on the latter, the varieties in its modifications. The former may be called the disordered state of the automatic functions; the latter, that of the functions of animal life. Their division will be more fully illustrated by the subsequent detail of symptoms.

§ 2. In cases of Madness, as in all those diseases called nervous, there appears a particular determination of blood to the head, producing, in many cases of insanity, a slow inflammatory action

of the vessels of the brain and its coverings. This fact has of late been almost indisputably proved. It was first impressed on my mind by observing the greater degree of density, hardness, and weight, of the skulls of madmen; a circumstance which became known when the students of the physiology of the brain collected a great number of crania, particularly Gall and Spurzheim. I had in my possession a great many, which were dense like ivory, and which differed materially in texture from the skulls of healthy persons. This hardness of the cranium is not near so great in persons subject only to those nervous diseases which produce less violent and less perverted cerebral action. It is conformable to acknowledged facts to ascribe the aforesaid hardness of the skull to continued inflammation of the head.

The great determination of blood to the head in Insanity, increased during its paroxysms, may be felt at the carotid and temporal arteries, as was frequently proved to me when I first attended to this disease. But the great disproportion between the pulsation of the radial artery and the carotid, which would lead directly to the knowledge of the particular determination of blood, seems most distinctly and accurately noticed in a small tract published by my friend, Dr. Thomas Mayo.\* I have perceived this symptom wherever I have been permitted to examine patients during the paroxysm; but I passed it over, from finding it to occur in other nervous disorders:

This fact of its being common in other disorders of the sensorium, shows that something more is yet necessary to produce the insane state of the brain. I believe this other thing to be referrible to the particular seat of the inflammatory action, which the determination of blood to the head either directly causes, or at least is closely connected with. And this view of the subject, corroborated by numerous facts, enables us in some measure to explain the modifications of the symptoms. In the present section I shall confine myself to the automatic functions, and to the medical treatment.

With respect, however, to the cause of the physical symptoms, there appears some obscurity: for though the cerebral inflammation be a prominent symptom, the cause of the determination of blood to this or that part of the brain remains, in many cases, unexplained. I consider it as the consequence of the too great activity of the cerebral organs, either the result of hereditary predisposition, or of violent excitement from strong emotions of the mind;

\* This Tract, professedly founded on the long practice of Dr. Mayo, sen., is highly valuable from its perspicuity of diction, its exemption from hypothesis, and the importance of the treatment it recommends.

or as resulting from the co-operation of these causes. According to this view of the phenomena, passions which call any particular part of the brain into violent action may not only favor the disordered state of the automatic functions, which may be necessary to insanity, but may also determine the particular hallucinations. This opinion might be fairly deduced from the doctrine of the plurality of Organs in the Brain, even were there not other circumstances which could confirm it.

If we carefully examine the ostensible symptoms of disease in Insanity, we shall find them such as occur in most other nervous complaints. The hurried action of the vascular system, particularly in the pulsation of the carotid and of the temporal arteries, the determination of blood, as well as the insensibility of the stomach to stimuli, are found in numerous diseases in which the usual functions of the mind remain unimpaired. But a very similar treatment appears beneficial in all those diseases which are marked by the above phenomena; namely, alterative medicines and depletion: because in all, the principal object is to rectify the state of the digestive functions, and to diminish the inflammatory action of the vessels of the head: consequently, the clear elucidation of the fact, that Insanity occurs where the inflammatory action affects the internal organic parts of the Brain, and that it varies according as particular Organs are affected, becomes more a subject of curious speculation, than of absolute medical utility; at least so far as respects the medical treatment. I shall proceed, however, in endeavouring to illustrate this fact, since it is closely connected with the consideration of the moral causes, and tends also to prove that the determination of blood to the head is only secondary in the chain of the physical causes of Insanity, though it evidently reacts on, and perpetuates the primary cause, which consists in irritation of the Organs, but which is often diminished or wholly removed, when, after a course of lowering medical treatment, the determination of blood is lessened or destroyed. The same argument seems applicable to the disorder of the digestive organs, which reacts on the Organs of the Brain. Hence alterative medicines and bleeding become important; since cerebral inflammation, as well as the disordered bowels, would maintain the primary cause, which, by a reflected action, would mutually keep up the disorder in the vascular and digestive organs. The primary cause, that is the too great activity of the Brain, is, therefore, the real object to be removed. The disposition to it is connate and hereditary, and is brought on by moral causes which violently excite the Brain, and also by disorders which, beginning in the digestive or vascular systems, excite those of the cerebrum by sympathy: it is subject, like disorders of other parts, to casual and periodical parox-



ysms, depending on atmospherical Influence ; and it is often cured by the power of depletion to remove the secondary and exciting causes. It sometimes ceases of itself, when, by great changes in the atmosphere, some external irritant is apparently withdrawn.

The doctrine, that Insanity is connected with cerebral inflammation, and that the kind of hallucinations vary according as particular organs of the brain become the seat of the affection, is confirmed by collateral observation on other nervous diseases. In all these there appears an evident increase of the quantity or momentum of blood in the head, subject to particular laws of distribution, whereby different parts become affected. Dr. Parry has ably illustrated this fact : and it begins to be a general doctrine among other distinguished writers on medicine. But the primary cause is apt to be overlooked, or confounded with the ostensible symptoms. The opinion maintained by M. Abernethy seems, to me at least, the most rational : for though in nervous diseases, and in those denominated local, there be a particular increase of vascular action, yet we must eventually refer this action to irritation, previously occurring in weak and susceptible parts. Moreover, when the nervous irritation occurs, from whatever cause, weakness of particular parts is not the only cause of their becoming the seat of the disease. There are atmospherical causes, which happen casually, and are insensible, that not only irritate generally, but which fix the particular symptoms, as well in the human subject as in animals. <sup>1</sup> This external influence is local in some regions ; and on the knowledge thereof is founded the custom of prescribing particular places as medical agents in the cure of particular diseases, and of proscribing others as insalubrious. The eyes in one place, or at one time, are most affected ; the ears at another ; and so on. In these cases, the determination of blood must be referred to the recurrence of local or sympathetic irritation.

External causes of irritation produce similar effects, which are more transitory, because there be no permanent cause, acting by sympathetic influence : but when this external cause is violent, the inflammation produced reacts on the irritated nerves, and the disorder is protracted. I shall endeavour to show, in the sequel, that this is precisely the case with many kinds of insanity ; that is, similar causes, acting on the cerebral organs, produce Madness, which, when they occur in the nerves of the senses, produce erroneous or imperfect sensation, and in the other parts of the body cause local complaints. Reserving this application of the doc-

<sup>1</sup> A correct history of the plagues and epizooties which are recorded in history, compared with journals of the electroscopes, would be highly interesting.

trine to insanity to another section, I shall proceed to enumerate some of the symptoms of several dissimilar nervous complaints.

§ 3. Too much exertion of the eyes, independently of premature paralysis of the nervous apparatus, produces local inflammation in the circumjacent parts. But ophthalmic diseases occur also from sympathetic and atmospherical influence : so also of other parts.

The auditory apparatus affords an example : violent sounds, like sudden glare of light to the eyes, cause inflammation of the organ. Deafness is frequently caused by an accumulation of blood, either producing obstruction in the Eustachian trumpet, or in some other part of the ear. It is sympathetic, is under the influence of the atmosphere, and is sometimes relieved by hæmorrhages. In Epilepsy, violent affections of the Mind bring on the attack ; while it is sometimes referrible to the sympathy of the Brain and nerves with the overloaded or irritated stomach ; or is the result of the two causes acting together. I need not enumerate other diseases. I have already called attention to the nervous irritation, from local, sympathetic, and atmospherical irritants, as the principal cause ;—to increased vascular action and disordered bowels, as the regular concomitant and maintaining force in the disease ;—to the periodical recurrence of the symptoms which mark stages in the progress of the malady ;—and to the successful treatment by means of alterative medicines and depletion.

§ 4. An irritable state of the Brain, and inflammatory action of its vessels, is common to insanity of almost all kinds, and to nervous diseases of very dissimilar sorts. But the partial affections of the organs explain the peculiarities of the symptoms. Recent discoveries in physiology have taught us to regard the brain as a complication of many distinct organs, which are the material instruments of different sentiments, propensities, and intellectual faculties, of animal life. As the natural and healthy functions of these organs is different, so must they excite different maniacal ideas in a state of disease. We find, agreeably to this view, that when any particular organ be larger than ordinary in mad persons, their insanity often consists in some derangement of that particular faculty of which the large organ is the instrument. I have examined too many cases of melancholy, for example, to doubt of the following fact, which I have constantly found ; that the organ of cautiousness, or that part of the brain under the upper posterior part of the parietal bone, is generally much developed in that modification of insanity. I have observed frequently a very large cerebellum in persons deranged by *furor uterinus* ; and in those who, during their maniacal paroxysms, have manifested violent erotic propensities. I recollect two cases of persons with a natural genius for mechanics, who, when insane, raved of machinery, and who

had the corresponding organs very large. I could enumerate an abundance of cases ; but I shall forego the consideration of the external figure of the head as an indication of character, in the present stage of the inquiry, and shall confine my observations to the following limited branch of the subject,—that the preponderance of any particular sentiment, passion, or faculty, constituting the character or genius of the healthy subject, is strongly marked in his insanity, and predisposes to the kind of symptoms : and that when the cerebral functions have been so disturbed by moral causes as to bring on the disease, the symptoms of derangement often appear in those passions or faculties which have been greatly called into action, and irritated by the aforesaid moral causes.

But the disordered vascular action is always the attendant on the disease ; and hence I infer, that the madness consists in derangement of material organs. I dwell less on the proofs I have derived from examining the forms of cranium, because I am aware of the unwillingness of the public to admit facts that can only be accurately ascertained by a laborious and continued direction of the attention to this subject almost exclusively. I shall, therefore, only allude to the cerebral organs casually, where the examples of the coincidence of forms of the head with the disease is particularly striking. If the present state and popularity of the science permitted me to speak in the strict language of my own opinion, I should say as follows :—The organs of the brain may be deranged separately or together, any number of them at once, or one separately : hence, patients are insane in one particular faculty, and judge of it by another ; when the organ of cautiousness is the particular subject of cerebral irritation, the prominent characteristic of the insanity is fear and melancholy ; the organ of ideality would add whimsical and imaginary dangers ; the mysteering faculty gives a superstitious turn to the illusion, and the patient then sees visions, hears angels sing, voices calling him, &c. ; or, when the upper parts are deranged, he is religiously mad ; when the organ of combativeness is morbidly active, he is raving and furious ; or destructive if the part of the brain behind the ears be inordinately large, or be called into diseased action. When the symptoms vary or alternate, as fury, melancholy, &c., it is because the irritated or inflamed state is shifted from one to another organ. But I forbear any further allusion to the separate organs, and proceed to relate a few cases in the order of their phenomena.

§ 5. A patient of irritable and nervous constitution, with much ideality and cautiousness, became sensible of increasing irritability, and could not regulate his bowels by medicines. The circulation became more and more hurried ; he had successively headaches, nausea, vertigo, and irregular spirits, and was sensible of

monthly exacerbations of these symptoms: at length he felt a sudden and fixed melancholy, which, he assured me, came on as it were in a moment, and speedily went off after taking high food. He had, during the paroxysm, a maniacal fear of some far distant event, which he dreaded. About a month afterwards he was attacked again; he took purgative medicines, as he said, "this fear has a peculiar coloring; it is morbid." The disease became a continuous melancholy,<sup>1</sup> or insanity, with maniacal fear, varying in the sportive change of its object, with diurnal exacerbations. It subsided, during a change of weather, a month afterwards: but he had slight periodical returns. Some years afterwards, when he thought himself cured, he had some violent cause of anxiety: after this cause was removed, he felt constitutional melancholy, and said it was morbid:—"The swell of the ocean is left after the storm has passed away." He was so convinced himself that some organic part had been too much acted on, and had been left in a state of morbid activity in kind as well as in degree, that he made himself the subject of experiment, and, like many madmen, reasoned with metaphysical accuracy and precision on his hallucination. He took lowering medicines and diet, and great exercise, and by degrees lost the disease. But he had monthly returns in a slight degree, for about a year afterwards. This is a case in which, in a constitution predisposed, the violent excitement of a particular organ (or at least of a particular sentiment) led to a morbid and perverted activity of that organ after the exciting cause was removed; in consequence, as it would seem, of a catenation of morbid bodily symptoms, marked by determination of blood to the head. This latter circumstance was confirmed, during both the attacks, by a full and hurried pulsation of the carotids. The diurnal periodicity of the disease was shown by the flushing of the face and increase of action about noon; and its metastasis by the consequent change of the flushing to melancholy and fear about two o'clock. Finally, during the time it was not continuous, it evinced monthly paroxysms at the periods of irritability.<sup>2</sup> It seemed, in the first attack, to have been excited by atmospherical influence, as it occurred during the time of an epidemic, and an irregular distribution of aerial electricity; and it showed its connateness by affecting the largest organs, after a high degree of

<sup>1</sup> Dr. Darwin has tried to establish a distinction between Hypochondriasis and Insanity. They appear to me only modifications of a diseased state of the Brain.

<sup>2</sup> See my "Observations on the Casual and Periodical Influence of Atmosphere on Insanity," to which I regard this paper as supplementary.

their ordinary excitement. I consider this case as instructive. I could advert to many others, with a similar history, wherein the symptoms varied according to the organisation.<sup>1</sup>

The knowledge of this partial cause of the symptoms seems as yet to promise no improvement in practice, since we know of no local bleeding capable of draining particular organs. But it leads us to employ moral agents, conjoined with medical treatment, since we can excite the antagonist faculties of the mind, and thus try to divert the irritation, and, by this means, the impetus of blood. The medical practice will remain the same as before this particular circumstance was known, and will consist of alterative medicines and depletion, with good air, and as much exercise as is compatible with circumstances. To this consideration I shall devote the next section. Suffice it to say, that the popular treatment of the disease in general appears wrong, while an alterative and depletory course seems highly beneficial. Indeed, this plan is generally the best for all nervous complaints. Tonics and stimulants afford temporary relief, but lead to a worse state of the patient in the end. In the periodical returns of insanity, tonics are excessively hurtful. I should have said more here about the alterative and depletory treatment, if the excellent remarks of Dr. Mayo had not been published. Founded on long and successful practice, it is hoped they will rouse the attention of practitioners to the most important errors now committed in the medical treatment of nervous diseases. The facts I have hastily gathered from cases viewed in mad houses far distant asunder, and cursorily examined during a tour, cannot afford such substantial documents as observations made on the same cases in different consecutive stages.

On the periods of insanity, which are irregular and regular, daily and monthly, and the terms or course of the disease, which may be shortened by lowering, and aggravated by tonic and nourishing medicines, I have already stated my opinion. I hope to publish cases, from time to time as I make them out, from the numerous notes I have collected, and from others which have been transmitted to me.

§ 6. There are several other phenomena, which I may call collateral, in insanity, which tend to show that the symptoms of madness depend on irritation and inflammation of particular or-

<sup>1</sup> Whether the casual or epidemic influence of the atmosphere determines the seat of the cerebral inflammation or not, in some cases, I do not yet know; but I suspect it, since this influence has such a great power over the symptoms in epidemical complaints in general.

gans of the brain. I speak of irritation and inflammation as being concomitant in the disease ; since, I believe, we may almost lay it down as a rule, that in inflammation there is always a high degree of nervous irritation previous to that increased action of the blood vessels which reacts on and maintains it. I must here advert to another fact in physiology, of almost equally general application, before I draw the parallel between affection of the organs of the brain and those of other parts ; namely,—that the increased activity of the nervous and sanguiferous systems of any part, at first only increases the natural action of that part ; but afterwards, when it proceeds to a greater degree, it produces an erroneous or perverted action. We shall see this equally apply to the brain as to other organs, on the supposition I have advanced respecting the cause of particular insanity ; and thus we shall be able to corroborate our doctrine by a sort of analogical proof, founded on the general laws of physiology.

First, with respect to the five senses ;—a certain quantity of activity in the retina, and of blood in the vessels of the eye, are necessary to sight ; but if this quantity be increased, as in local inflammation of the eyes, vision is painful or distorted : the action of the optical organs is likewise perverted, and ocular spectres, *muscæ volitantes*, and other illusive phenomena, occur in consequence of irritation and the increased momentum of the blood to those parts. A similar example may be taken from the imaginary sounds of voices in the ears, or the morbid sensation of smells, which do not exist in reality, but which seem to arise from an inflammatory and irritable state of the respective organs in the auditory and olfactory apparatus : these disorders, as well as deafness from what is called relaxation of the Eustachian tube, have gone away in many cases after accidental hæmorrhages, or cathartic medicines. The cause of these complaints, as well as of all diseases usually denominated nervous, have been ably illustrated by Dr. Parry in his “ Elements of Pathology.” And I have seen the more obstinate cases of this kind cured eventually, by a course of depletory treatment, where tonic medicines have previously been used without benefit. I have seen also, in two cases, a similar treatment subdue obstinate melancholy, where the temporary relief afforded by tonics had already produced a worse state of the patient after the immediate effect of the stimulus had ceased. In both these cases, the part of the brain before alluded to as being the organ of cautiousness, was very large.

In many cases of insanity we can distinctly trace the disease through various stages, which illustrate its analogy to the diseases of other parts. At first, the increased activity of the organ of

cautiousness is manifested by an unusual look of anxiety, exaggerated fears, and other marks of irritability. As the disease advances, these fears become more irrational; the melancholy sentiment becomes, as it were, fixed, and is associated with some maniacal delusion; the patient himself is even conscious of a change from an irritable to a perverted state of his feelings. The organs of digestion now appear more decidedly disordered, and the arterial action in the head is hurried. The same applies to other organs, according to the nature of the madness: those which are in nearer proximity seem to suffer the soonest, as it were from the general law of contiguous sympathy. Thus we find the Organs of 'Combativeness and Destructiveness' fall the most readily into the disordered state; and maniacal fury, and a destructive disposition, alternate with, or accompany melancholy. In like manner, as the eyes and nose, the mouth, &c. are in catarrhal complaints affected with inflammation, either alternately or together. Another circumstance, which seems explainable on the same supposition, and tends also to justify me in regarding these kinds of insanity as having their particular seats in the organs alluded to, is, that we find those parts of the head which are most contiguous to the deranged Organs become most often affected with the disease in mania and melancholia. In these diseases the ears suffer more than the eyes: there are many more madmen deaf than blind. Violent fits of anger, which is an affection of the cerebral organ behind the ear, have caused temporary deafness. Great bleeding from the nose, or a violent flood of tears, has sometimes produced a temporary relief from melancholy and irritation, which can only be referred to its relieving the patient from the fulness of the cerebral vessels. The effect of wounds of the occiput on the functions of the cerebellum, is too well known to leave a doubt about the sympathy between the exterior part of the head, and the parts of the brain under them. It is by contiguous sympathy that we can explain the effect on the brain of excessive venery, and its tendency to madness: the inordinate action into which the cerebellum (*or organum amoris physici*) is called, produces an irritable and inflammatory state of that organ, which is extended in time to the organs of the cerebrum. I have observed, that the external parts of the head most affected in erotomania are the parts behind the ears, and over the nape of the neck, where an inflammatory state is not only observed, but found to be periodical. I could produce numerous other cases from the notes I have collected, did I not

<sup>1</sup> I am compelled to use these terms, no others having been established whereby to designate the distinct and primary affections of the mind.

wish to avoid the odious imputation of swelling out a few hasty observations into a bulky volume.

The periodical paroxysms of insanity show also its analogy to other diseases of particular parts connected with general disorder. Simple disorder of the bowels, headach, and general irritability, accompanied, perhaps, with some local inflammation, have often been found to be periodical. Dr. Mayo has noticed in insanity <sup>1</sup> the periodical ending in the continuous state, and then being cured. I have observed the same of fits of toothach, and other local affections of particular nerves.

Lastly; the success of the lowering treatment in insanity tends to establish the parallel. Do we not find in many local inflammations, particularly about the head, that by our first producing a healthy condition of the digestive organs the symptoms abate, but that the local inflammation, not being subdued, keeps up the irritation, the digestion goes wrong again, and all is as bad as ever: recourse is then had to antiphlogistic measures of a more violent nature; the patient undergoes general depletion, and in time the affected part and general health get well together? Is not this often the process in insanity? <sup>2</sup>

Thus the phenomena of insanity, both in the symptoms and treatment, show its physical nature, and its analogy to other diseases of particular parts, accompanied by general ill health, liable to periodical returns, best cured by alterative medicines and depletion.

Such a view of the subject, in proportion as it is confirmed by observation, must alter the practice in insanity. Instead of being deluded by the specious appearance of amendment under the tonic regimen, or of omitting medical treatment altogether, from the apparent incurableness of the disease, and the versatility of its symptoms, we must proceed steadily with the lowering plan. As soon as the first doubtful signs of the disease appear in the periodical paroxysms of unusual irritability, we must note the circumstances before alluded to as denoting the determination of blood to the head, and must advert to the state of the abdominal viscera. These must become the first objects of attention, since experience has shown that we cannot expect any amendment in the nervous symptoms while the organs of digestion remain disordered. If by alterative medicines the healthy state of these functions be not effected; or if the nervous symptoms do not subside

<sup>1</sup> See the Work above cited.

<sup>2</sup> Consult Spurzheim on Insanity: *Hallè sur la Manie Atrabilaire*, &c. &c. &c.



with the visceral disorder, more active measures must be adopted, such as stronger cathartic medicines, repeated bleeding, and abstinence.<sup>1</sup> The manner in which such general and continued depletion acts in the cure of local inflammation remains unknown: but the balance of action in the sanguiferous system, and of excitability in the brain and nerves, seem to be restored by such means, both in madness and in a numerous train of other nervous maladies. The obscurity of the cause of these diseases is increased by the periodical fits in which they happen, many of which occur in particular seasons, or in daily and monthly paroxysms, referrible to atmospherical causes. The facts, however inexplicable, are undeniably true, and merit general attention. These periods will, in some measure, direct the conduct of the physician. We may prepare against the attack, or forcibly break the chain of consecutive symptoms. At the monthly periods, too, the crisis of certain forms of disease happen. These are also important, as it is injurious to begin certain remedies just before the critical exacerbation of many complaints.

Rational views of the physical nature of insanity, if duly acted on, may invalidate the charge brought against the practice in this disease—of making gaols of lunatic hospitals; of treating the insane more like prisoners than patients; of grouping various kinds of madmen together; and of fulfilling the character of mad houses; an epithet which the satirical pen of some continental writer has applied, as designating houses manifestly ill calculated for madmen.—These errors have partly arisen from the prevalence of a prejudice that insanity was the disease of a Being essentially distinct from the Body, and, therefore, not regulated by the ordinary laws of animal life.

The identification of the mind with the material organs is not intended to be understood by this allusion: but I insist on the disorder of the organs as the cause of madness.

I will not pretend either to defend or to dispute the propriety of the nomenclature used for the organs; but it serves to express the distinct faculties of the mind, whose organs have been named according to the new doctrine, the principles of which now begin to be admitted by the ablest physiologists.<sup>2</sup>—I have alluded to the

<sup>1</sup> The Case which, being related to me by a foreign physician, first suggested this opinion, was that of a man who, after the alterative plan *alone* had failed, recovered of a bad paroxysm after copious bleeding from wounds which he repeatedly gave to his own body. I have lately read of two similar Cases.

<sup>2</sup> I refer the reader to Dr. Spurzheim's Plate of the Brain.

general principles of this theory, in order to afford a more extensive opportunity to those who have the care of the insane, to investigate, and thereby to confirm or to confute the particulars. I have myself constantly noticed, in examples too numerous to detail, that mad persons are often deranged in the manifestation of those passions and faculties whereof the material organs (according to Gall's and Spurzheim's division) are the largest. While I proceed with and solicit research, I do not pretend to enough knowledge of insanity to assert positively the universal application of this theory. But facts are always useful; and the publication of them, by exciting inquiry, may lead to a nearer knowledge of their causes.

general principles of this theory, in order to afford a more extensive opportunity to those who have the care of the insane, to investigate, and thereby to benefit or to cure the particulars. I have myself constantly noticed, in examples too numerous to detail, that mad persons are often detained in the manifestation of those passions and faculties wherof the material organs (according to Gall's and Spurzheim's division) are the largest. While I proceed with and solicit research, I do not pretend to enough knowledge of insanity to assert positively the universal application of this theory. But facts are always useful; and the publication of them, by exciting inquiry, may lead to a more correct knowledge of their causes.

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