cautious we ought to be in drawing such conclusions is evident from the circumstance that this compound may possibly be found in the body, or in the secretions, even without its indicating poisoning, for no one certainly will number iodide of potassium, or iodide of sodium, among the poisons.

(To be continued.)

THE DUALITY OF THE MIND KNOWN TO THE EARLY WRITERS ON MEDICINE.

By JAMES G. DAVEY, Esq., M.D., Surgeon to the Hanwell Lunatic Asylum.

A PERUSAL of the paper of Dr. Wigan contained in your last number for March, on "The Duality of the Mind," induces me to regret that that gentleman is not, as it appears, familiar with phrenological science. Had he been acquainted with the writings of the immortal Gall, or even with those of Spurzheim, he would then have deemed the publication of his paper but superfluous. For nothing more nor less than the conviction of the "duality of the mind," as taught by Boerhaave, Haller, and Van Swieten, and even by Hippocrates himself, induced Gall to commence those labours, which are destined to uproot alike the fallacies of the metaphysicians and the insane chimeras of pseudo-physiologists. Van Swieten observes that, "as the consciousness of impressions in two similar organs is single, as, for example, in the two ears, two eyes, &c. &c., so mental consciousness, generally, is single, though the brain be double;" and Spurzheim states, "The two hemispheres of the brain, and the individual parts or organs of each, may be in different and quite opposite states, and produce different affections. It is seen, then, that Dr. Holland is not the only writer who has advanced one single step to prove "the duality of the mind," as implied by Dr. Wigan.

The doctrine of the separate completeness of the two hemispheres of the brain, as of that of the two eyes and ears, has alone enabled phrenologists to successfully combat the arguments of their numerous opponents. In many cases of injury and disease of the cerebrum, confined to one hemisphere, the integrity of the various mental powers has induced many to deny the dependence of mind on matter; forgetting what would be the effect of an absorption or atrophy of one kidney, or the removal, by accident or operation, of one of the testes, or that respiration is often carried on by one lung.

"In giving the histories of cerebral injuries," observes Spurzheim, "the duplicity of the nervous system has very generally been forgotten. But one half of the brain may be destroyed, and the various faculties still be manifested by the other of the opposite side, just as one of the optic, auditory, or olfactory nerves may be destroyed, without our being blind, deaf, or deprived of our smell. It is well known, too," he adds, "that the two hemispheres of the brain may be in very different states of health." Thus, in cases of double vision, the reciprocity of the two hemispheres no longer exists, and consciousness, therefore, loses its unity or individuality, and becomes double. Some persons cannot only hear two persons at the same moment speak on different matters, but even remember what both may say; "and numbers of madmen," says an eminent physician, "hear angels singing, or devils roaring, only on one side." One of Gall's friends, a physician, often complained that he could not think with the left side of his head; the right side was an inch higher than the left. Gall attended a gentleman who for three years heard peasants insulting him on his left side. He commonly discerned his derangement and rectified his error. Tiedemann mentions a certain Moor who was alienated on one side of his brain, and observed his madness with the other. In cases of ordinary apoplexy, succeeded by either temporary or permanent local or general paralysis, we are afforded examples of disease confined to one hemisphere only of the brain, the other retaining its normal character. The difference between such cases, and others of the kind above recited, consists in nothing more than in the locality of the morbid action. In insanity the disease is confined, generally, to the sensory fibres, in paralysis to the motory. It is, in fact, with the brain as with the

nerves, whether those of sensation or motion. The former may be morbidly acute, and the latter either normal or enfeebled. A patient may be affected with chorea, and insensible to touch. A case is recorded by Dr. Parry, of Bath, wherein the motion of the whole tongue was perfect, but the taste of one side impaired. Not only are the two sides of the brain or its hemispheres to be found in different states of being, so to speak, whether in reference to the health of the sentient or motory fibres, of which the cerebral mass is composed, but even the whole nervous system occasionally undergoes so complete a metamorphosis that the sufferer may be said to hold two existences, the one alternating with the other, and both representing the utmost conceivable extremes, showing, as above explained, that consciousness is not always single.*

Having then shown that "the truth" was "beginning to dawn" at a period long anterior to the present, I shall hope to prove that the "errors" Dr. Wigan would avoid for the future would long since have ceased to have existence had the writings of Gall received that attention they so much deserve. Phrenologists are quite agreed, and have long taught, that "each cerebrum is a distinct and perfect whole, as an organ of thought," that "a separate and distinct process of thinking, or ratiocination, may be carried on in each cerebrum simultaneously," that each cerebrum is capable of distinct and separate volition, and that there are very often opposing volitions;† they have, however, very wisely taught more than this. Gall was the first to demonstrate not only "the duality of the mind," so long since taught by Hippocrates, Boerhaave, Haller, and Van Swieten, as has been before observed, but also the plurality of it.

This latter, too, must inevitably be conceded if we would admit the many "propositions" of Dr. Wigan. It appears evident to me, on a careful review of the contents of that gentleman's essay, that the conclusions it embraces are by no means justified. The premises on which they are based are necessarily too limited. The "two," the "conflicting volitions" of which Dr. Wigan speaks, and which he very properly regards as "enlisted into the services" of the moral feelings, the sentiments, and religion, and as constituting the first principle of action among both the sane and insane, take their character not so much from the different and opposing states of the "two cerebra" as from that of particular and corresponding parts, or organs, of the two hemispheres of the brain. The controlling power of which he speaks is not generally exercised by one hemisphere over the other, but by individual parts of each hemisphere, simultaneously, over other parts, or "organs," of the brain more or less distant. To speak, therefore, of "presenting motives of encouragement to the sound brain, to exercise and strengthen its control over the unsound brain," meaning thereby the two hemispheres of the organ, is advice which applies only to the exception and not the rule. Cases of double consciousness, like to those narrated above, are exceedingly rare, and to such only does this particular advice apply. What the "rule" requires is rather the healthy excitation in the person of the lunatic, or in him criminally disposed, of other organs or parts, common to both hemispheres of the cerebral mass, the nature of whose functions severally disposes to desire the most opposite, and so a line of conduct at once the very converse, to that previously conceived and designed. Herein we are enabled to understand both the precise nature of, and remedy for, "the discrepancy between the functions," not of the two brains, but of the different parts of the same organ. Herein alone consists the explanation of the loss of balance between the several characteristics of man, and of the absence of that controlling power by which he is enabled to preserve his conduct in harmony with the laws and usages of civilised life. This position, too, affords the only clue whereby to unravel the mysteries of mental derangement, of, in one word, insanity; and to understand the nature of those "trains of thought which constitute incoherence," which are, however, as

* Vide Combe and Spurzheim.

† See Gall's Works, Paris, 1810.

multitudinous as the *healthy* mind can conceive, and not only "two," as Dr. Wigan maintains. Incoherence of speech in the lunatic, as in the drunkard, is a mere symptom of the confused and irregularly succeeding action of the different cerebral organs; it may or may not attend on either an excessive or diminished action of the brain, on both violent mania and imbecility, as I have elsewhere explained.* The annexed cases supply examples of my phrenological position. About two years ago I had under my care a monomaniac whose insanity was marked by great religious extravagancies. She died, and the examination of the brain demonstrated the surface of the organ of veneration of either hemisphere of the brain strongly and inseparably adherent to the membrane above it. In this direct locality, too, the membranes were all adherent, and very considerably thickened.

E. G., a young woman, a patient in the Hanwell Asylum, died in November last, of visceral disease. She was described as "excessively arbitrary, and occasionally most violent and dangerous." She declared herself a person of great rank, and sometimes the Queen. On examination, "the brain" was discovered "generally much congested. The arachnoid membrane about the posterior and upper parts of the brain, particularly about the organs of *destructiveness* and *self-esteem*," on either side, "presented the colour of deep vermillion," and was much thickened. From a long and intimate acquaintance with the above cases I am enabled to declare that in themselves they decidedly contradict the proposition of Dr. Wigan, wherein he says, "that when both cerebra are the subject of disease there are no lucid intervals, no attempts at self-control," and he certainly errs in adding, that "in such forms of insanity there are no means of promoting the cure." The case I am about to give affords an illustration of "man's power over himself to prevent or control insanity," but it does not show that when one *brain* wills what is lawful and right, consistent with the duties a man owes to himself and others, and with the forms of society existing at the time in the country he lives in, the other *brain* suggests a process of ratiocination to justify or palliate some vicious or criminal act, but that rather the opposing forces are in parts only of the same organ or hemisphere. I was consulted only last week, with Dr. Conolly, by a gentleman, who, after an absence of four days from his home, which he had left purposely to commit suicide, and had on each day, and on many succeeding occasions, gone to the water side, with the resolution to effect his awful design, and intent only on it, called at the asylum to claim that protection he felt he so much needed. So often, he informed us, as he essayed the last act which was to sever the frail link which bound him to mortality, he found himself, to use nearly his own expression, as it were spell-bound, and his suicidal propensity suddenly paralysed by the spontaneous occurrence of the most awful degree of conscious feeling it is possible to conceive. He described himself as an instrument in the hands of some dreadful power, which impelled him to the commission of an act which of all others, he had, from his boyhood, very highly disapproved, and that the horror he conceived of his awful position was only equalled by his desire to escape it. In the above case we are afforded an example of a morbid activity of the destructive propensity kept in abeyance by a liberal endowment of conscientious and reverential feeling, or, in other words, of disease confined to the organ of destructiveness, and indicated by the impulse to kill, controlled by the organs of conscientiousness and veneration. I may here add, that about a year since, I had under my care a case in many respects analogous to this, in which the *impulse to kill* was controlled by great parental affection. In the first, the organs of *veneration* and *conscientiousness* are as well developed as those of *philoprogenitiveness* are in the second. Both of these cases furnish the grand principle to be kept in view in the treatment of the insane; it is that which obtains in the Hanwell Asylum; and without it I positively assert no man can discharge his duties

to the unfortunate lunatic in behalf of whom he may be consulted. It unfortunately happens for Dr. Wigan's re-discovery of the *duality* of the mind, that the theory is *alone* very ill adapted to support the superstructure he has raised from it. If that gentleman were to study the writings of phrenologists, and test their observations in the great arcanum of nature, he would, I doubt not, directly see that the *PLURALITY* of the mind is indispensable to his conclusions. To suppose that the hemispheres of the brain have each one faculty, and that that one is either *good* or *bad*, is, indeed, to simplify the labours of the great Gall. How humiliating so retrograde a position in mental science at this day. Dr. Wigan may be assured that the physiology and pathology of the brain, as taught by phrenologists, is a matter of *demonstration*, and as easy of *proof* as the sun at noon-day; and however little that gentleman may be disposed to agree with me, I will add, that just so much as that glorious luminary eclipses other celestial bodies in the firmament about it, so are the discoveries of Gall destined to swallow up all those "baseless fabrics of a vision" which have, and do even now, from time to time, gain the credence of man.

ON THE RELATION BETWEEN INSANITY AND THE STATE OF THE BLOOD.

By JAMES SHEPPARD, Esq., Stonehouse, Devon.

THE great importance of a correct knowledge of the pathology of insanity has doubtless caused the editor of THE LANCET to insert the two communications which have lately appeared on the proximate cause of insanity, the one from Mr. Whiteman, and the other from myself. Again I crave indulgence that I may be able to reply to the arguments and suggestions which have been brought forward by Mr. Whiteman, not so much to answer him personally, as to meet the same objections, if they have arisen in the minds of others; and I will say that in the present day there is no subject more deserving of attention, nor is there any more demanding a patient investigation at the hands of the profession, as well from the magnitude and importance of the subject pathologically considered, as from the fact that there is no disease that is more occupying the public attention, nor one in which our fellow-men can be more interested. Mr. Whiteman commenced the investigation with great calmness, and with perhaps as little prejudice as could be expected from any man who had been accustomed to judge for himself, and who, perhaps, may have previously formed his own conclusions on the very subject in question.

Innovations in medicine are ever met, as, perhaps, they ought to be, with opposition; and be that opposition but fair and manly no one could wish it otherwise. It is by discussion that truth becomes developed, and by opposition the claimant is often driven to an emergency which is the means of absolutely demonstrating the fact. I would desire that the inquiry into the proximate cause of insanity should be conducted on the broadest principles of philosophic inquiry. Far be it from me to desire to contract another man's investigation by maintaining that *I have proved* that insanity invariably depends on a morbid condition of the circulating fluid. I would content myself with suggesting "that there is at least presumptive evidence that insanity always depends on morbid conditions of the circulating fluid;" that is to say, there is in my opinion presumptive evidence that the peculiar manifestations of the mind which are termed insane manifestations, may depend on a peculiar stimulus imparted to the brain by a peculiar and diseased condition of the blood. All I maintain that I have proved is, that I have directed the attention of the profession to a point hitherto overlooked, hitherto unattended to; and that point is, the connection that manifestly exists at times between insanity and morbid conditions of the blood. Has not this connection been entirely neglected even in the most complete works on insanity? No author that I have had an opportunity of consulting even *hints* at diseased blood among his causes of insanity. Nor am I aware of any gentleman that has even spoken of diseased blood as a cause of insanity, excepting Dr. Wigan, in a late number of THE LANCET, where he speaks of it

* Vide Medical Legal Reflections on the Trial of Daniel M'Naughten.