LITHOTRIPSY.

CURE OF STONE IN ONE SITTING.

By W. B. COSTELLO, Esq.

THE pages of THE LANCET already contain several cases of lithotripsy in which I have performed a cure in *one sitting*, and I send you another in which relief was obtained by a single application of the instrument, the duration of the operation not exceeding three minutes. The subject of this case is Mr. Rorke, of Usher's Quay, Dublin, aged 70, a man of full habit, and suffering occasionally from gout. About eighteen months since, he suffered great pain in his loins, and voided some small calculi. In October last the lumbar pains increased, and extended to the bladder, the urine becoming bloody. In fact he had all the symptoms of stone in the bladder, with this peculiarity, that he could neither walk across his room, nor stand upright. He remained in this state until the 20th of April last, when he came to me. The existence of a stone in the bladder had been ascertained previously to his leaving Dublin, by Mr. O'Reilly, a distinguished surgeon and lithotomist of that city, who did me the honour of placing him under my care. I operated on the 21st of April. The bladder was capacious and columnated. A small stone was felt at one of the posterior angles of the trigona, apparently fixed in the orifice of the ureter. The instrument employed was a small, short-curved percussor, which being inverted, its blades were brought together on the stone, and the calculus was thus detached from its situation. My next step was to secure it in the instrument, and then to crush it, which I did with my hand only. The patient uttered no complaint during the operation. In the course of the next twenty-four hours, he voided two small entire calculi of the size of a wren's egg, and began to use his feet without experiencing the horrible pains which had for six months before debarred him from all such exercise. On the next day some fragments were voided, and he felt himself quite well. On the third day he had great pain in making water, the pulse became frequent, the urine high-coloured and glairy, though not fetid; fragments and debris of stone were still passing; the use of the copaiba mixture had increased the frequency and pain of micturition; the tepid hip-bath was used at night, and he had an opiate suppository; the pain in the urethra, and the scalding, still continued. Taking his gouty diathesis into

account, and seeing no reason why this morbid principle might not invade the urinary apparatus, I ordered *lig. opii sed. gtts. x, cum gtts. xxx vini colchici*, and all his pain ceased in a single night. The urine became natural, and he returned to Dublin on the 8th inst., after having walked and amused himself about London and its environs for a week.

From the circumstance of the two small calculi being expelled whole, immediately after the largest had been detached from the extremity of the ureter, I conclude that they had been imprisoned behind it in the ureter. If it were not so, they might have been expelled long before. If this supposition be correct, it may explain the circumstance of his inability to walk without excessive pain.

This case gives token of the triumph which lithotripsy is destined to achieve, when its application shall be more extensive, and it is resorted to at a more early period of the affliction.

7, Parliament Street, Westminster,

May 24, 1833.

DERANGEMENTS OF THE FACULTY OF
LANGUAGE

FROM INJURY TO THE

ANTERIOR LOBE OF THE CEREBRUM.*

By W. A. F. BROWNE, Esq. Surgeon.

THE chief inducements to collect the following facts were, that they have never before been systematically arranged, many of them never published, and none referred to their true explanation; and that they tend to elucidate the general question of insanity, by exhibiting an individual power under disease. Could the unhealthy manifestations of each faculty be thus separated, our notions would become clear, not merely of insanity abstractly considered, but of each example of insanity submitted to our care. We should then be enabled to trace the disease to its origin, to estimate its extent, and to adapt our treatment to the peculiarities presented. At present, lunacy is regarded as a disease of the whole mind, not of one, two, or more powers of that mind; and the cure is attempted, in all cases, by one and the same means, though it would be equally rational to treat pneumonia, asthma, and phthisis, by the same medicines, because they all impede the performance of the respiratory function.

* Condensed from the Phenological Journal June, 1833.

Among the first observations of Gall was the discovery, that a relation subsists between the talent for acquiring a knowledge of language, and a prominence of the eyeball. He was led probably to remark this fact at school; and, apparently, in consequence of the deep impression made by the circumstance, that a series of observations was commenced which has produced results of which we can scarcely yet estimate the importance. His researches did not assume a systematic form; indeed, until his acquaintance with physiology had suggested the true course to be pursued, they deserve no higher character than that of being a highly curious collection of pathognomical observations. An accumulation of facts at length compelled him to generalise the special faculties by which eminence in life is attained, and Gall ceased to regard "*les grands yeux à fleur de tête*," as indicating more than the prominence of a mass of brain reposing on the orbital plate. When truth has once dawned, it is wonderful how rapidly the landmarks of knowledge rise on the view. Confirmations of his opinion as to the connexion of this portion of the brain with the faculty of language, were obtained by Gall almost unsought for, and became of such a nature as to place all scepticism at defiance. Of these the pathological proofs are the only class connected with the subject here under discussion. This class may be subdivided,

1st. Into those cases where the faculty of language was impaired in consequence of external injuries involving this part of the brain alone; and,

2ndly. Into those where similar effects followed internal disease seated in the nervous tissue.

The following cases belong to the first class.

1. An officer received the thrust of a sword immediately above the eye. From that period he could scarcely recollect the names of his dearest friends. The other powers were not enfeebled.

2. A young man, at Marseilles, was wounded by a foil above the eyebrow. The injury totally destroyed his recollection of the names of his most intimate acquaintances; even of that of his father.

3. Baron Larrey submitted to Dr. Gall the history of an individual, in whom the broken point of a similar instrument had penetrated, from below the internal canthus of one eye, through the cribriform process of the ethmoid bone, into the anterior lobe of the brain, resting on the orbital plate of the other eye. Hemorrhage and paralysis were the immediate effects, and were succeeded by the extinction of vision, taste, and smell. The

hearing was imperfect on the side principally injured. The voice was likewise lost. The senses gradually returned, and the patient was able to speak; but he could no longer affix the proper names to objects, though the perception of their qualities remained unaffected. He recollected clearly the person, figure, and features of M. Larrey, and recognised him at once; but, notwithstanding this, he could not recall his name, but designated him Monsieur Chose.

The second class comprehends individuals who, being attacked with apoplexy, or some other disease peculiar to the brain, present a total or partial loss of the faculty. One example will suffice. A patient found, on recovering from apoplexy, that he could no longer express, by means of spoken language, his feelings or ideas. His appearance was not that of a lunatic. His intellect suggested replies to the observations addressed to him: he did all he was requested to do. An elbow-chair was pointed out to him, and he was asked if he knew the use of it: he responded by seating himself in it. He was incapable of articulating a word that was spoken in order to induce him to repeat it, but some time afterwards it escaped him involuntarily. In his embarrassment he pointed to the lower part of his forehead, evinced great impatience, and indicated that from that spot proceeded his impotency. His tongue was not affected, for he pronounced with perfect ease a certain number of isolated words. Nor was his general memory implicated, as he testified great sorrow that he was unable to express himself on any subjects of interest discussed in his hearing. He could no longer read or write. Dr. Gall recounts six additional cases, exclusive of that met with by Dr. Spurzheim at Inverness, which depended upon similar causes, and exhibited a precisely similar result.

The very interesting observations of Mr. Hood* (next in order) are, in every respect, corroborative of the evidence of Dr. Gall, and even more instructive as to the precise nature of the function performed by the orbital convolutions of the anterior lobes. In neither of these cases was the loss of the memory of words permanent. In one it was total; in the other, the power of using signs by which to communicate thought, appears to have been confined to a few vague expressions, such as knowing "plenty," or nothing, about the matter at issue, as the case might be. In both cases a process of

* Transactions of the Phrenological Society, p. 235.

education rather than of recollection was instituted from the period of convalescence, advancing rapidly when the vigour of the constitution was re-established. We are ignorant of the organic cause to which the symptoms of these patients are to be attributed. In both, indications of great cerebral excitement preceded or accompanied the mental affection, which, it is exceedingly probable, depended upon local inflammation or congestion.* Appended to Mr. Hood's paper in the Transactions are two cases, observed by Dr. Gregory, which coincide entirely with those narrated by Gall. Wepferus and Dr. Reid mention similar instances.

The very important researches of M. Bouillaud, contained in the "Archives Generales," must now be adduced. M. Bouillaud was, at the time of the publication of his memoir, to which it is due to the cause of truth to direct the attention of the scientific, a mere candidate for fame; a young, enthusiastic, but almost unknown student, who had recently completed his studies, and who was not a phrenologist, in the English acceptation of the term. He now occupies a distinguished place among the physiologists of his country, and his industry augurs still greater services to science. In the plenitude of his fame, with his views matured, he is now a zealous phrenologist, and the editor of the Journal of the Phrenological Society of Paris. In his essay,† three cases of the loss of the power of language, consequent on apoplexy, are related, in order to demonstrate the existence, speciality, and locality, of the organ. In two of these, the anterior lobe of the brain, at the part which corresponds to the orbital arch, was reduced to a soft purulent-looking matter. The third was restored to health. No fewer than sixteen instances follow, in which the same correspondence of mental deficiency and organic lesion was discovered—in which the recollection of words, and their relations and application, were altogether destroyed, although the patients generally showed, by their gestures and looks, that their silence proceeded, not from a want of ideas, but from their no longer possessing the means of rendering them cognisable to others. Several of these cases are selected from the works of MM. Rostan and Lallemand, two of the most accurate

and highly-esteemed writers on nervous diseases on the Continent.

The next feature to be noticed is, the description of another series of apoplectic affections, in which all the symptoms witnessed in the other cases were present, with the exception of impaired language; and where dissection proved the destruction of substance in a part of the brain distant from that lying on the orbital plate. Of the numerous and forcible arguments brought forward by M. Bouillaud to prove the connexion between the mental phenomena and the injury, no notice need here be taken, as that question has long ago been decided; and, presuming on the acquiescence of all who have inquired into the subject, I shall endeavour, in the present paper, to ascertain the influence of disease, exerted through the nervous organs, in modifying the decrease of this power.

The conclusions of M. Bouillaud, however, gave rise to a controversy, which, as it bears closely on the present inquiry, merits a brief description. M. Pinel, the son of the writer on mental alienation, conceiving it incumbent on his hereditary reputation to expose the fallacy of the hypothesis of so young, so inexperienced, and, scientifically speaking, so plebeian a person, inserted the history of five cases in Magendie's *Journal de Physiologie*, calculated, in his opinion, to place the matter in its true bearings. By a strange error in selection, and an obliquity of judgment, or, rather, by the irrepressible energy of truth, the boasted refutation not merely proved a humiliation to its author, but yielded a number of valuable facts in support of the proposition it professed to combat. In the succeeding volume of the same periodical, there appeared a triumphant reply from M. Bouillaud, enabling the public to judge on which side of the question the truth lay. M. Pinel conceived, that by giving instances where an impaired power of language was synchronous with apoplexy, which dissection afterwards showed to have injured some other part of the brain, he should succeed in disproving the connexion supposed to exist between that power and the orbital convolutions. It would have been difficult to devise a more unphilosophical mode of accomplishing his purpose, seeing that the most simple method would have been, to point out cases where, with the intimate structure of this portion of brain disorganized, the power remained in a state of health. But, granting that he had selected the logical means of solving the enigma, it is amusing to see how he fulfils his intention. The first case is that of a woman whose speech was impaired in

* The individual whose case is recorded by Mr. Hood in the Phrenological Transactions, survived his recovery two years and eight months. He died of apoplexy, after repeated paralytic attacks experienced during the eight months preceding his death. His memory of words continued unimpaired to the last.—ED. P. J.

† Archives Generales, vol. viii. pp. 25—45. 1825.

consequence of an attack of apoplexy paralyzing the lower extremities, right arm, and tongue. She ultimately died of epilepsy, when, what is designated the cicatrix of an apoplectic cell was found in the posterior part of the left hemisphere. What nullifies the tendency which M. Pinel proposed this discovery should have, is a short but emphatic sentence, in which it is declared that "she recovered the use of language." The *second* observation refers to a case where a lunatic, passing from acute mania to imbecility, became epileptic and paralytic. She was observed to remember incoherently, and to be scarcely able to articulate the words she wished. M. Bouillaud almost extends his courtesy too far in making the comment, that to the lesion seated in the tuber annulare was to be referred the general paralysis and consequent inability to regulate the movements of the tongue. The *third* case is so much allied to the first, that nothing more need be said than that an individual affected with paralysis which involved the tongue, could not articulate a sound. The disease is subdued or suspended, the power of speaking returns, and, after death, the structural alteration is detected in the superior and lateral part of the left hemisphere. The *fourth* case is where a woman is paralysed, speaks with difficulty, replies to certain questions only, &c. She then falls into a comatose state, cries but does not speak, dies, and is found to have extensive disease in the *anterior part of the brain*! Could anything be more satisfactory?

In the *Phrenological Journal*, vol. 3, Mr. Nicol, one of the medical attendants of the Northern Infirmary, Inverness, has reported two cases very similar to those of Mr. Hood. One of the patients died; and it was found, on dissection, that "about the centre of the under surface of the anterior lobe, (viz. in the situation of the organ of language,) the convolutions, to the extent of half-a-crown, were changed in colour to a light reddish brown."

I shall now describe cases of increased, diminished, and suspended, activity of this faculty. One of the least frequent conditions of language under disease, is when its activity becomes so exalted that it seems endowed with a new vigour and an extended range. This must depend on a preternatural determination of blood to that part of the brain with which language is connected. One case has been reported to me, in which an individual, when intoxicated, cannot be prevailed upon to speak anything but Gaelic, of which he possesses, even when sober, but a very limited knowledge. A phthisical patient whom I attended during the

last hours of life, addressed me, and all those around, in the language to which he had been accustomed in early life, and described his sufferings graphically, and as if unconscious that he did so, in words which were lost upon the greater number of his auditors. In the last stages of consumption, the blood sent to the brain is vitiated by imperfect oxygenation; but it is impossible to determine how far this may have influenced the scene we have described. In insanity likewise, the power of language occasionally labours under such exquisite excitement, that passages of authors, and even whole languages, which had been acquired in childhood, but altogether forgotten during the intervening period, are, as it were, resuscitated in the mind. Such varieties of alienation are however rare. Two examples may be cited. A Welshman, during an illness affecting the brain, is affirmed to have lost all recollection of the language he had been in the habit of using for years, but, in compensation, to have regained that of his boyhood. M. Pinel* speaks of a lunatic who was cured by Dr. Willis, and thus described the feelings he experienced during a paroxysm: "I always awaited," he says, "the accession of the agitation, which lasted for about ten or twelve minutes, with great impatience, because during its continuance I enjoyed a kind of ecstasy. Everything appeared easy to me; no obstacle opposed my ambitious progress; my memory acquired suddenly a singular perfection, and I recalled long passages of the classics." It is quite evident that, as there is a special faculty, there may likewise be a special insanity, affecting in various ways the healthy discharge of its functions. This disease is generally modified by involving a greater or less number of powers, such as *ideality, wonder, and veneration*; but it may occasionally be detected limiting its influence to the sphere of this faculty alone. In illustration of this, a case may be cited from Gall, where an individual imagined himself endowed with the power of speaking all languages; and who, it is presumed, uttered some incoherent and discordant jargon under this impression. This species of hallucination is sometimes met with in the institutions dedicated to the use of the insane; but then it is arrogated, and not attempted to be practised, by some sage or philosopher, as one of the attributes essential to his character, and conducing to his fame.

Cases of deviation, from a standard of health, must occupy our attention in another number.

* *Traité de l'Aliénation Mentale*, deuxième édition, p. 89, 90.