

the insane, and I am happy to state, that in every instance my recommendation was speedily attended to. Were the guardians of other Unions as prompt in these matters as those of the Buntingford Union, we should find much fewer cases of chronic and incurable insanity—those opprobria, not only of our counties, but of the kingdom at large!

Who that has read attentively the official report of the Commissioners in Lunacy, will deny that a thorough and sweeping reform is required in these matters? It has been too much the practice in many counties to farm out the paupers to the proprietors of private asylums at so much per head per week, like so many brute beasts, wholly forgetting that these unfortunate individuals are our fellow-creatures, and suffering under the direst calamity with which it has pleased an Almighty Providence to afflict mankind. Then, again, distance was considered no object, provided a shilling or two a week were saved in the keep! They were transferred to the humane proprietor of a private asylum, if an ex-assistant poor-law commissioner, so much the better, (of course, no better school for training up the finer feelings of our nature could be found than the grand National Bastille at Somerset House.) It is truly high time that every county in England, Scotland, and Wales, should be provided with its own public hospital for the remedial treatment of the insane, to be governed by its own officers, and visited by its own magistrates. We should then have a spirit of generous rivalry, as to which county should produce the best regulated hospital. How is it now? Why, the poor wretches are hurried off perhaps nearly two hundred miles from home; their dying moments are uncheered by the presence of an affectionate wife or sister; no clergyman or minister of their own denomination to pray by or comfort them in their last extremity! Why, the blackest felon or murderer in the kingdom is better cared for! Then, as to this same learned body of commissioners in lunacy, what have they done until lately? Literally nothing. They have just roused themselves out of a many years' slumber, and, like so many bats, they are still blinking at the light. With one or two honourable exceptions, who or what are they? We know Dr. Prichard, of Bristol, as the author of an useful compilation on insanity; but as to the *οἱ πολλοὶ* of the body, what are they? A set of imbecile old dotards, relieved here and there by a smirking briefless barrister. If you want a man to discover the abuses of any asylum, give me one who has managed an asylum himself; one who is not nice about bad smells &c., who will examine every privy, water-closet, the straw and bedding of the insensible patients, &c. These latter are the individuals who suffer in the public, and more especially the private madhouses. Your strong maniacal patient will take care of himself, and your brute keeper (if he knows when he is safe) will let such characters alone, seeing that there is such a thing as retribution even in this world. I repeat the observation, and all practical men will bear me out, that the weak, imbecile, and dirty patients are those more particularly abused by ill-disposed attendants, *quasi* keepers. Where amongst the commissioners shall we find a Conolly, a Hitch, a Gaskill, or a Powell? Let the commissioners be chosen from the mass of medical superintendents of hospitals for the insane; from men who have devoted their whole energies and talents to the relief of the insane. Then, and not until then, we may expect some salutary reforms in the management of certain public and private madhouses, they cannot be called hospitals for the insane.

South Derbyshire, June, 1846.

THERAPEUTICAL INDICATIONS IN STRICTURES OF THE URETHRA.

A SERIES OF APHORISMS.

By LEROY D'ETIOLLES, of Paris.

1. STRICTURES exist in different degrees, which, so far as regards the treatment, may be classed under the three following categories:—

Strictures which permit the passage of the urine, of sounds, and bougies.

Strictures which permit the passage of the urine, but resist the passage of bougies and sounds.

Strictures which permit the passage neither of bougies and sounds, nor of the urine; that is to say, strictures accompanied by retention.

For the strictures of the last category, we may be obliged to have recourse to urgent means, such as the necessity alone would authorize.

To the second category may be applied a certain number only of the curative measures.

It is only the first category which admits of a choice of all the different methods of treatment.

2. Some strictures are curable; others are incurable.

3. Many strictures, curable at first, are rendered incurable by ill-directed treatment.

4. Curable strictures cannot all be overcome by the same method of treatment.

5. In the majority of cases it is impossible—for the strictures situated beyond the meatus urinarius—to discriminate immediately in what way the treatment should be directed. It is only by the progress of the treatment that we are enabled to acquire a certitude.

6. Dilatation is the only method essentially free from unavoidable dangers: if it does not cure every stricture, it will, at least, aggravate none.

7. There are some valvular strictures which a single catheterism may break down or obliterate; but the greatest number demand a longer residence, or the repeated introduction, of the dilating agents.

8. The gradual temporary dilatation—performed each day during less than an hour—is the simplest and most convenient manner of treatment for the patient. It is proper to try it in the majority of cases.

9. In order to perform suitably the temporary dilatation, it is of consequence to observe an almost insensible gradation in increasing the size of the bougies, of whatever kind they be, and to proceed by such a ratio as the hundredth of an inch. In this manner we avoid the reaction produced by too sudden a dilatation, and arrive sooner at the cure.

10. There are strictures which very readily yield to the temporary dilatation. By following the gradation, (advised in aphorism 9,) one or two hours sometimes suffice to raise their calibre from the twenty-fifth to the third of an inch. But these are strictures formed by the vascular enlargement and swelling of the mucous membrane only. Sometimes they retain these characters for several years.

11. The greatest number of strictures require the repeated introduction of the bougies for several days in rotation. At each sitting we should beware of commencing with the bougie, which had been the last introduced the day before, and filled up the contraction. It is necessary to go back several gradations, and gradually remount up to that which rubs against the stricture on entering it, after having passed, without interruption, one after the other, the bougies of inferior diameter.

The one which just fills up the calibre of the stricture is to be left in for five or ten minutes, after which, another one is to be presented, larger by the hundredth part of an inch, which is to be left several minutes in its turn, and so on. In proceeding thus, we gain, each day, the hundredth, the fiftieth, the twenty-fifth, part of an inch, and sometimes more; but on the condition of never employing force to make the bougies penetrate.

12. The dilating bodies vary according to the different degrees of the strictures. When the urethral passage has less than the seventeenth part of an inch, the fine bougies of gum, or, in their absence, of spermaceti, are alone applicable. The wax bougies, even if they could be brought to this degree of tenuity, would be too soft; the wires of lead would break, and the wires of iron or of silver would perforate the sides of the canal.

13. When the strictures are capable of admitting more than the twelfth part of an inch, we may then make use of the bougies in wax, in gum, or of metal, provided that they be well proportioned, and graduated by hundredths of an inch.

Still the gum bougies are preferable to those of wax, because they are not, like the latter, susceptible of softening, by warmth, to the point of bending upon themselves, and becoming knotted in little lumps. They are also preferable to the metallic bougies, because they possess a suppleness, which renders their introduction and their residence less painful, when it is necessary that they should remain. Moreover, it is easy to give the gum bougies all the necessary rigidity, when it is required, by means of a thin iron wire. The weight, too, of a series of gum bougies is much less than that of a set of tin ones, necessary for a cure.

Above the sixth part of an inch, in order not to injure the urethra, it is preferable to employ gum bougies made to the curved shape, and introduce them without the iron wire.

14. The mechanical dilators may be useful sometimes for completing the cure, and effacing altogether the inequalities of surface which the contractions leave behind them. This cannot be done by the bougies, since they are obliged to pass through the orifice of the urethra, naturally narrower than the rest of the canal.

15. The mechanical dilators which open out uniformly in all their length are objectionable on account of the violence they exercise against the external orifice of the urethra. Those which enlarge themselves beyond this opening are preferable.

16. The mechanical dilators, which obey directly the surgeon's hand, are preferable to those which open up by means of a vice.

17. The mechanical dilators are worth nothing as a general method. Their action is too sudden for the extensibility of most strictures, and they are more painful than the bougies and sounds.

18. The permanent residence of sounds in the urethra, prolonged during several days, softens, resolves, and may cure, certain strictures which resisted the temporary gradual dilatation.

19. The enlargement of the greatest number of contracted passages, which resist the temporary dilatation, may be accomplished in three or four days. Sounds, larger and larger, are to succeed each other every eight or ten hours. Two of them, however, remain twenty-four hours; the first, in order to soften the tough tissue, and prepare it for the dilatation; the last, in order to ensure and maintain the dilatation.

20. In proceeding with the rapid permanent dilatation, it is not necessary to follow the almost insensible gradation in the size of the instruments, so essential to the success of the temporary dilatation. We may increase the calibre by twenty-fifths of an inch, and sometimes more, at each change of the sound.

21. In order to ensure the enlargement of the passage obtained by the permanent dilatation, it is necessary to follow it up by the daily introduction of a series of bougies, during several minutes. This manœuvre, repeated during eight days, will complete the treatment.

22. The slow permanent dilatation, in which method each sound remains during two to three days, may cure some contractions, which neither the temporary dilatation, nor the rapid permanent dilatation, had been able to obliterate.

24. The slow permanent dilatation, as well as the sudden or rapid permanent dilatation, ought to be followed up by the daily temporary introduction of bougies, as indicated at paragraph 15.

25. Cauterization may cure some strictures, for which the three above methods of dilatation have proved quite inefficacious.

26. Cauterization is practised in three different ways—viz., directly, laterally, and forwards from behind.

REVIEWS.

A New Memoir on the Nervous System. By MARSHALL HALL, M.D. London: Baillière. 1843.

(PART I.)

IN some recent leaders in this journal we have advanced the just and meritorious cause of the author of this work against the iniquitous doings of the Royal Society. We have called his discovery the discovery of the Spinal Marrow, and we have placed it high in the scale of discoveries, venturing even to award it the SECOND place in physiology. Some of our readers may think this a partial view of the question, and we therefore consider it right to give the reasons upon which our judgment is founded, conscious that we are right, and that all candid and unprejudiced minds must, upon due consideration of the data, arrive at the same conclusion. It is not our intention to write the eulogy of Dr. Marshall Hall or his discovery, but to give a plain account of the latter; it is its own best eulogy. Our real object is to place the thing fairly before the profession, according to the desire of our correspondents. For the sake of clearness in developing our exposition, we shall arrange the subject under different heads.

The point from which the discovery of the True Spinal Marrow started.

Harvey had been dead one hundred and fifty years, during all which time no great discovery in physiology, worthy of being placed near that of the circulation, had been made, when CHARLES BELL, stung to investigation by the taunts of Sir Humphry Davy and Dr. Young, that the old

methods of advance were exhausted, entered upon the anatomical analysis of the nervous system. The splendid result was, that he decomposed the cerebral nerves into nerves of volition and nerves of sensation, proving that the nerves of volition were connected with the anterior portion, and the nerves of sensation with the posterior portion, of the spinal cord. It is not here necessary to trace this idea to its source, and to describe the efforts of the subsidiary actors. This discovery was ultimately developed so as to include all the nerves of sensation and voluntary motion. Another labour of Sir Charles Bell was, to treat of a class of involuntary nerves distinct from the sensational and voluntary, under the designation of the respiratory, including the pneumogastric, the facial, the diaphragmatic, &c. These nerves were considered by Sir C. Bell to arise from the lateral columns, which he termed the respiratory tract of the medulla oblongata. Sir Charles Bell also added what he has called the nervous circle, by which is meant the transit of the sense of contraction from the muscles to the brain when in action, so as to regulate the amount of voluntary power to be exerted along the motor nerves, distributed from the brain to the muscles.

M. Flourens, by his experiments, had already drawn, within the cranium, the line between those portions of the nervous centres, mechanical irritation of which would or would not excite motor actions in the muscles. This separated the lobes of the cerebrum and cerebellum, with the optic thalamus and corpus striatum, from the tubercula quadrigemina and the medulla oblongata.

Previously to these investigations by Sir C. Bell and M. Flourens, it had been demonstrated in the way of experiment by Legallois, that respiration depended on the medulla oblongata. This was an important step in physiology, and was indubitably the commencement of the discoveries which have since shed so much light on this division of the nervous system.

The discovery of the dependence of respiration upon the medulla oblongata, by Legallois; the distinction between the excitor and in-excitor portions of the inter-cranial mass, by M. Flourens; the description of the respiratory involuntary nerves, by Sir Charles Bell, were all the points really *known* respecting any distinction between the contents of the cranium and the spinal canal. Long before this, the elder writers, Whytt, Prochaska, and others, had spoken of obvious reflex *acts*, such as those of sneezing or coughing, and the movements of decapitated animals had very obviously been referred to the spinal marrow; but no reflex *function* had been understood, and the use of the movements observed in the decapitated animal, to the living animal, was not at all known. There were observations of *acts*; the involuntary and voluntary, pathological and physiological, being mixed together; and there were also simple experiments which led to nothing beyond the facts observed in them; but not a single induction had been made. *The Spinal Marrow had no existence in physiology.* It was always visible to the eye of the anatomist, and sometimes excited his wonder; but there was no *scientific* knowledge of the spinal marrow as a distinct organ performing special functions in the œconomy.

Origin of the Discovery of the True Spinal Marrow.

The sight of the vein-valves, entering the mind of Harvey, led to the discovery of the circulation. Sir Charles Bell was led on to his discoveries by studying a sketch of the apparently confused distribution of the nerves of the neck. This origin of his labours was in keeping with the genius of Bell; his ideas of form were so correct, that it was said of him, if he had not been a great anatomist he would have been a great artist. It was the observation of the separated tail of the eft that led, in the hands of Dr. M. Hall, to the discovery of the true spinal marrow. The fact that the separated tail of the triton moved when the skin was irritated, taught his informed observation, at a glance, that there must be a new form of motion besides that dependent on the brain, on peristaltic