

the angles of the ribs in the dorsal region, and of the transverse processes in the lumbar region. A projection backwards of the ribs on one side, with depression of those on the other, or a corresponding deviation of the transverse processes in the lumbar region, certainly indicates persistent curvature with structural changes to a proportionate extent in the intervertebral cartilages and oblique articulating processes. In practice, these deviations are more apparent when the patient is examined in the stooping position.

The author did not consider that the ligaments or muscles underwent any important changes in the early stage of the affection. As the structural changes described depended entirely upon unequal pressure on the intervertebral cartilages and the oblique articulating processes, the author believed these structural changes to be capable of being repaired by the efforts of nature during the period of growth, if the mechanical cause of unequal pressure be removed. Hence, in treatment he relied upon partial recumbency, to the extent of at least six hours a day, by the use of a reclining chair, and also recommended the use of spinal instruments, first, as a directive force of balance, diminishing the irregular distribution of weight upon the spinal column when curved; and secondly, as a direct mechanical force exerted upon the part of the spine curved. Upon these principles, he regarded partial recumbency and mechanical support as the only two curative means at the disposal of the surgeon. Gymnastic exercises could not, in the opinion of the author, be considered as a curative means in persistent curvature with structural changes, however slight. He regarded them merely as curative in cases of weak spine or functional curvatures, and capable only of preventing these from passing into or becoming cases of confirmed curvature.

When, therefore, there was no evidence of structural changes, the author relied upon gymnastic exercises, combined with partial recumbency. If, on the other hand, evidence of structural changes existed, he relied upon mechanical support with partial recumbency.

In conclusion, the author stated that the curable stage of lateral curvature was limited to the early period of the affection—probably one or two years—when the structural changes are slight and recent, and when we have youth and growth in our favour. If this opportunity of curing a spinal curvature be lost, it rapidly becomes incurable, and capable only of being arrested by mechanical support.

Dr. DICK observed that, when the spine had a lateral curvature, the bodies of the vertebræ were compelled to rotate with every movement backwards or forwards of the spine; in fact, he had proved this to be a law of any elastic rod. Any pressure applied to the sides of the spine only increased the rotation; consequently, in order to be of any use, pressure must always be applied to the back. He found that in fixed curvatures instruments were only of use to support the weight of the body; but in these cases, after division of the muscles, the spine often became moveable and amenable to ordinary treatment, and so very good results were to be obtained, as in a boy of 19, whom he had now under his care. When admitted into hospital, this boy had three strongly marked curves; but now, after division of the muscles and the appropriate after treatment, two of the curves had disappeared, and the third was very much better. In these cases, of course, a long continued course of treatment was necessary; but he had never seen any danger arise from dividing the muscles. During the absorption of the effused fluid in pleurisy, at first a purely lateral deviation of the spine took place; but as soon as the patient began to move about and to bend the spine, rotation was at once established.

Mr. STEVENS did not believe that rotation of the vertebræ was an essential element in curvature of the spine, but that this was generally dependent on some condition of the muscles. When no structural alteration had taken place, a patient might be very easily cured, and that without the application of any cumbersome instruments and without confinement. If structural change had taken place, no cure could be expected, but further changes might be prevented and the condition of the patient improved; but even then there was no necessity to confine the patient in a recumbent position. He thought that the division of muscles was, to say the least of it, a most uncalled for proceeding, and asked what good it had ever effected even in torticollis; he had never seen any, but had witnessed very excellent results from treatment without cutting.

Mr. DE MÉRIC thought the division into functional and structural curvatures a very good one: the former class was very easily cured, and it was from these cases that so much credit was often derived. He wished to know more of the etiology of the disease, and whether mere vicious habits of position were sufficient to produce so much alteration of structure. Besides the pathological conditions mentioned by the author of the paper, Broca of Paris had found the intervertebral substances in course of destruction, whilst the bones were free from disease. As to treatment, the most natural thing to do seemed to be to

apply mechanical support; and, judging from its results in other cases, such as knock-knee, he should expect it to have a valuable influence in the cure of the complaint.

Dr. CLEVELAND suggested the probability of structural changes in the spine beginning at a very early period, from the faulty positions in which children were carried by nurses.

Mr. ADAMS, in reply, said he thought that the benefit supposed to be derived from division of muscles was really due to the long continued confinement afterwards necessary: he did not believe the muscles either caused or kept up curvature; but in other cases of deformity, where the muscles were really in fault, as in wry-neck, great advantage was to be gained from subcutaneous division of the tendon of the offending muscle. He considered mechanical pressure as a directly curative agent, but it must be kept up for years, and must be applied either posteriorly or diagonally; he agreed with Dr. Dick that lateral pressure was productive of mischief, increasing the rotation of the spine, which was invariably present. Lateral curvature was not uncommon at 3, 4, and 5 years of age, and at these ages it rapidly became incurable, and there was no hope from treatment unless continued up to 20 years of age. A good plan with children was to tie them to a sort of cradle, such as he had seen commonly used by the peasantry in the South of France.

## CORRESPONDENCE.

### MEDICAL ADVERTISING.

SIR,—Under the above heading, there occurred some very appropriate remarks in the *JOURNAL* of the 7th ultimo. We have seen also the replies of the gentlemen therein alluded to in the *JOURNAL* of the 14th. The one is such as would be expected from the unobtrusive character of the writer. The other shows so much anxiety for "the honour and dignity of the profession of which he is proud to call himself a member", that one must naturally feel convinced it only requires to be pointed out to the writer that prescriptions of the character of those enclosed are not quite professional, when I am sure he will at once see the propriety of discontinuing them.

ALEXANDER MARSDEN, M.D.,

65, LINCOLN'S-INN FIELDS, W.C.,

*Surgeon to the Royal Free Hospital, Gray's-Inn Road, and to the Cancer Hospital, London and Brompton.*

At Home every Morning at 10 o'clock;

And on Monday and Thursday Evenings between 7 and 8 o'clock.

January 29th, 1868.—P. S. cum Jalapa xx; cap. ʒj, t. d.

Feb. 6th.—P. Salinae vij; i om; P. S. c. jal. ʒj, i bis die.

Feb. 13th.—P. S. c. opio xxi, i t. d.

Feb. 21st.—Rep.

℞ Mist. Stomach. ʒxij; cap. ʒj; t. d.; Pulv. Salinae, vij; cap. j om.

ALEXANDER MARSDEN, F.R.C.S.

Mr. —, Die Martii 9, 1868.

For more than twelve months, similar prescriptions by Dr. Marsden have come under my observation in the discharge of my professional duties. It will be obvious to your readers that none but the initiated chemists can interpret the hieroglyphics; Pulv. S. appearing to be the most frequent element. I am, etc.,

March 18th, 1868.

A MEMBER.

STATISTICAL SOCIETY.—At the thirty-fourth annual meeting, held on March 16th, the following Council and Officers for 1868-69 were elected. *President*: The Right Honourable W. E. Gladstone, M.P. *Council*: H. W. Acland, M.D., F.R.S.; W. Bagehot, M.A.; Major-General Balfour, C.B.; T. G. Balfour, M.D., F.R.S.; R. D. Baxter, M.A.; Lord Belper: Sir J. Boileau, Bart., F.R.S.; S. Brown; W. Camps, M.D.; H. Clarke, D.C.L.; L. H. Courtney; W. Farr, M.D., D.C.L., F.R.S.; W. A. Guy, M.B., F.R.S.; J. T. Hammick; F. Hendricks; J. Heywood, M.A., F.R.S.; W. B. Hodge; Right Hon. Lord Houghton; F. Jourdan; J. Lambert; L. Levi; Sir J. Lubbock, Bart., F.R.S.; W. G. Lumley, LL.M.; Sir J. R. Martin, C.B., F.R.S.; W. Newmarch, F.R.S.; F. Purdy; Rev. J. E. T. Rogers, M.A.; Alderman Salomans, M.P.; Col. W. H. Sykes, M.P., F.R.S.; J. Waley, M.A. *Treasurer*: J. T. Hammick. *Honorary Secretaries*: W. A. Guy, M.B., F.R.S.; W. G. Lumley, LL.M.; F. Purdy.