make the two following statements. I never anywhere said or suggested that a force of "four pounds" was required to pass a probe in a healthy woman, nor a force of even half a pound. Dr. Bennet's assertions as to the state of the healthy *os uteri*, *externum* and *internum*, are, I am convinced, erroneous and inconsistent with anatomy, physiology, pathology, and daily experience. It is well-known that some gynaecologists speak and treat as if every woman suffering from dysmenorrhœa or sterility had a strictured cervix; but it is not necessary, in order to account for such proceedings, to resort to Dr. Bennet's dictum that the *os uteri internum* is normally closed during life, except at certain times.

These remarks render it unnecessary for me specially to consider the observations of Dr. Boulton; and those of Dr. Greenhalgh raise no question upon which I am called to make comment.

I thank each of the gentlemen above referred to for their valued criticisms; and I end by saying that I believe the treatment of spasmodic dysmenorrhœa by mechanical means appears to me, at present, to be best effected by the use of a graduated series of metallic bougies, applied as I have elsewhere described—never at any time allowed to remain in the uterus above a few minutes. [See *Edin. Med. Journal*, May 1872.]

ON PALSY OF THE VOCAL CORD FROM INTRACRANIAL SYPHILIS.

By J. HUGHLINGS JACKSON, M.D., F.R.C.P.,

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I WISH briefly to draw attention to the occasional nervous origin of syphilitic aphonia, if such an expression may pass. Suppose a patient, who is manifestly the subject of syphilis, becomes aphonic. It would be unsafe—especially if he had any evidently nervous symptoms—to conclude, without looking into his larynx, that he had syphilitic disease of that organ itself. It would be as unjustifiable as concluding, without ophthalmoscopic examination, that his blindness, if he were blind, too, was owing to syphilitic changes in the eye itself. There is another possibility; the fact is that, in some cases of "syphilitic aphonia" there is no other abnormality discoverable in the larynx than paralysis of one vocal cord. In these cases the palsy may safely, in a person presenting outward signs of syphilis, be put down to syphilitic disease affecting the rootlets of the eighth nerve. The recognition of this possibility is obviously of moment. For there is as much practical difference betwixt affection of voice from syphilitic laryngitis and affection of voice from syphilitic disease of the eighth nerve, as there is betwixt affection of sight from syphilitic iritis and affection of sight from paralysis of the third nerve.

I am convinced that, in physicians' practice, aphonia from intracranial syphilis is not exceedingly uncommon; at any rate, it is so far from being very rare, that we can be practically certain that aphonia in a syphilitic patient is owing to syphilitic changes in the larynx itself. And if the patient have paralysis of any cranial motor nerve—for example, the third nerve—the question surely will arise automatically, "Why should not this patient's aphonia also be due to affection of a nerve-trunk as well as his double vision?" "Why should not the eighth nerve suffer from syphilis as well as the third or fifth?" For it is as certain that the eighth nerve supplies the muscles of the vocal cords, as it is that the third supplies the muscles of the eyeball.

I have seen several cases of paralysis of the tongue, palate, and vocal cords from, as I believe, intracranial syphilis; but I will refer only to two cases of palsy of the vocal cords in which *post mortem* examination disclosed syphilitic disease involving, among other parts, the eighth nerve. I would first remark, however, that in these cases, and in all other cases of palsy of the intrinsic muscles of the larynx which I have published, the larynx has been examined for me by my colleague Dr. Morell Mackenzie.

In the *London Hospital Reports*, vol. iv, 1868, p. 314, I have reported the case of a man who had paralysis of the *portio dura*, of the tongue, and palate and vocal cord, all on the left side. Dr. Morell Mackenzie examined the larynx, and established for me two things: (1) that the left vocal cord was paralysed; and (2) that there was no other sort of affection of the larynx. The patient subsequently died hemiplegic from blocking of cerebral arteries. The points of this case which I wish to make prominent are (1), that there was, among other lesions, intracranial syphilitic disease involving all the nerves of the medulla oblongata on the left side, the eighth nerve, of course, among them; (2) that the larynx was found on *post mortem* examination, as Dr. Morell Mackenzie had predicted, free from local syphilitic disease. Mr. Frederick Mackenzie dissected the larynx, and only atrophy of the left crico-arytenoid muscle.

The other case (*op. cit.*, p. 318) is (in so far, I mean, as it illustrates the occurrence of aphonia from intracranial syphilis) so like the one above mentioned, that I will only say of it, that Dr. Morell Mackenzie found, as in the other case, palsy of one vocal cord, and no other affection of the larynx itself; and that Mr. Frederick Mackenzie reported of his dissection of the larynx—"except atrophy of the intrinsic muscles on one side, nothing of any importance was found."

I will not enter into the consideration of purely physiological topics. Bernard's experiments on the spinal accessory and pneumogastric nerves, and on the different sources of the motor fibres which the trunk of the pneumogastric contains for the double set of movements—vocal and respiratory—of the larynx, are well known, and may be read in any work on physiology. I have given a short account of this subject in the *London Hospital Reports*, vol. i, 1864. (The two cases mentioned in this paper are recorded in the fourth volume.) At page 363, vol. i, 1864, I give a brief account of Dr. Lockhart Clarke's researches on the relations of the nuclei of the spinal accessory and lingual nerves.

A CONTRIBUTION TO SCHOOL HYGIENE.*

By R. LIEBREICH, Esq.,

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THE contributions to school hygiene which I shall put before you do not refer to questions which would come under your consideration as a matter of course. I rather wish to draw your attention to a subject which hitherto has not been considered as belonging to your domain, but the close connection of which with general hygiene it seems to me most important to prove; I allude to the lighting of the class-rooms, and the shape and position of the tables and seats. At first sight, it might appear that this could only refer to the special hygiene of the eye. But this is not the case. Indeed, badly lighted rooms and improper school-furniture spoil the eyes and increase short-sightedness. But this is not the only bad effect. The lungs and viscera become compressed, the spine and shoulder-blades are kept out of their normal position, by the constrained attitude in which the youthful body, at the very time of its growth and development, is kept for hours every day. Thus the way is prepared for the development of chronic diseases; and this must not only considerably impair the health of individuals, but also tend to promote physical degeneracy, and deteriorate the vigour and *physique* of the nation.

If the bad attitude of the children in schools could be only ascribed to want of attention on the part of the masters, and to carelessness on the part of the children (as is generally assumed), then, indeed, you would have nothing to do with the matter. It is, however, easy to prove that, with the present arrangements, it is impossible for the children, from physiological as well as from anatomical reasons, to remain straight for any great length of time, but that they could be enabled to do so by a proper distribution of light, and by well adapted school-furniture.

The proper light is most easily obtained if the class-room be of an oblong shape; the windows being in one of the long sides, and the tables arranged parallel to the short walls, so that the light may fall from the left side. The desk of the master ought to be placed near the short wall towards which the scholars look.

Light coming from the right hand is not so good as that from the left, because the shadow of the hand falls upon that part of the paper at which we are looking. Light from behind is still worse, because the head and upper part of the body throw a shadow on the book; but the light that comes from the front, and falls on the face, is by far the worst of all. In the first place, it does not attain the object desired; and next, it is most hurtful to the eye. The object is to make the fully illuminated faces more visible to the master; but the children, instinctively desirous of avoiding the unpleasantness of the full glare, assume all sorts of positions which turn their faces from the master. In reading, they turn the head round the vertical axis, generally towards the right, in order to let the light fall on the book, which, when held straight before them, is completely in shadow; while in writing, or in reading (the book being on the table), they bend their heads as low as possible, in order to shade their eyes by the projection of the forehead. In this way the faces are much less visible to the master than if they were held upright and illuminated from the left side; and if, according to the regulations of the Committee of Council, the light also fall full upon the face of the master, he will be entirely prevented from seeing them. This method of lighting the room is very injurious to the eye, because,

* Read before the Association of Medical Officers of Health.