by means of ganglionic cells with the fibres of the corpora pyramidalia.*

Towards the inferior extremity of the medulla oblongata, the fibres of the corpora pyramidalia are divisible into three distinct kinds. 1. The decussating fibres, which pass downward and backward into the antero-lateral columns of the spinal cord on the opposite side, so that the right pyramid sends fibres into the left side of the cord, and the left pyramid into the right side of the cord. These decussating bundles of fibres are doubtless the channels through which the mandates of the will are conveyed to the four extremities; and that they are so, is proved by the experiments of Dr. Brown-Séquard, who, on dividing the whole of these decussating fibres, produced entire paralysis of all the limbs. 2. A few fibres which are continued from the pyramids directly down to the anterior surface of the cord on the same side. These latter are continuous with the antero-lateral columns, and appear to serve the purpose of establishing a direct communication between each half of the medulla oblongata and the corresponding half of the spinal cord. 3. The arciform fibres, which curve round the corpora olivaria, and appear to incorporate themselves with the corpora pyramidalia in front, and with the corpora restiformia behind, and are thus the superficial connecting fibres between the anterior and posterior parts of the medulla.

In man, quadrumana, and carnivora, the corpora pyramidalia are larger in proportion to the size of the body than in hoofed animals, probably in consequence of the more varied motions of the fingers and toes.

[*To be continued.*]

NOTE ON THE LARYNGOSCOPE.

By James Russell, M.D., Birmingham.

My principal object in this communication is to bear my testimony to the value of the suggestions made by my friend Dr. George Johnson in the *Medical Times and Gazette* for February 14th, in relation to the use of the laryngoscope. Having myself tested the utility of these suggestions, I feel assured that they are calculated materially to facilitate the employment of the instrument, and to bring it into more general use. They will, I think, attain this end by enabling any one who is interested in the matter to obtain for himself, with very little trouble, that practical acquaintance with its manipulation which is absolutely necessary in order to obtain admission for it into the throat of his patients.

The position of the frontal mirror on the forehead is, unquestionably, a great improvement over the position hitherto directed by Czermak. Not only does it avoid the difficulty created by endeavouring to look through the central aperture in the mirror, but the adjustment of the mirror itself is far more readily effected, and the direction of the light is altered, according to the requirements of the particular case, with far greater facility when no obligation exists for maintaining a particular portion of the mirror opposite to the eye. Nor are these advantages gained at the cost of illuminating power.

But the most important part of Dr. Johnson's suggestion is that which presents so ready and effective a method for performing autolaryngoscopy, as that which is attained by the aid of the ordinary toilet looking-glass. By this method, a means of conducting the operation, which is always at hand, is substituted for the more costly apparatus of Czermak; and, what is of no small importance, the process of inspecting one's own throat is closely assimilated to that which we employ in examining the throat of our patients. By following his directions, I have been able, not only to exhibit to others my own vocal apparatus, but also to introduce them readily to the use of the instrument. In more than one instance, persons who have witnessed its employment for the first time, succeeded at once in using it upon myself.

I cannot yet boast of much experience; but, from the observations I have made, it has appeared to me that the practice of autolaryngoscopy affords the most effectual means of acquiring that facility in the use of the instrument which is requisite, not only to enable the operator to view the interior of the larynx, but also to obtain tolerance of the faucial speculum. So far as I have seen, the difficulty experienced by the patient depends to a very large extent upon the delicacy of manipulation possessed by the operator, and particularly on his success in avoiding contact between the throat-mirror and the posterior wall of the pharynx. Unless I mistake, it will be found that, by mastering the greater difficulty of autolaryngoscopy, our further progress will be materially advanced.

It need not be remarked, that some perseverance will be needed before a beginner can assure himself of success on his own person; and, no doubt, the difficulty will be greater in some persons than in others, from variations in the conformation of the parts concerned in the examination, and particularly from differences in the degree to which the epiglottis naturally conceals the parts below it; but a little experience will suffice to overcome the difficulty; and I think it will then be found that, as in morals, careful self-examination will advantageously precede the examination of other persons.

Two cases of laryngeal affection, which have lately presented themselves to me in the General Hospital, afford an interesting illustration of the gain in forming diagnosis which is offered to us by the laryngoscope. The subjects of these cases entered about the same time; each presented the ordinary symptoms of subacute laryngitis. In one, the symptoms were of a fortnight's duration; in the other, they had been present for a month, but with a brief interval of relief. Each patient had been exposed to the ordinary exciting causes of laryngitis. The last mentioned patient, however, was affected with advanced disease of the heart, and presented the rare phenomenon of a double *mitral* bellows-murmur. In this man, certain symptoms suggested a suspicion that the laryngeal affection might possibly depend rather upon some defect of innervation, than upon an inflammatory affection, but the evidence was too incomplete to warrant of itself the neglect of the ordinary treatment for laryngitis.

When the interior of the larynx was illuminated in these two men, a most striking contrast appeared in the condition of their respective vocal apparatus. In the patient last mentioned, the condition of the parts closely corresponded to that exhibited in Figs. 1 and 2, taken from my own throat. The glottis was widely open (Fig. 1) during tranquil respiration, so that the upper rings of

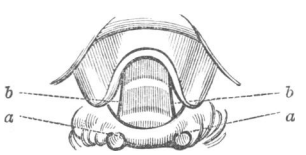

Fig. 1.—*a a*. Apices of Arytenoid Cartilages. *b b*. Vocal Cords.

the trachea were brought into view; the mucous membrane of the larynx and the vocal cords were perfectly healthy; and the cartilages of Santorini, indicating the situation of the apex of the arytenoid (*a a*) cartilages, were distinct. From time to time alternate movements of

* The nucleus of the hypoglossus and the passage of the fibres through the fibres of the corpora pyramidalia, are beautifully shewn by Stilling, in his illustrations of the Pons Varolii, plate III, h. u. P.

approximation (Fig. 2) and of separation were performed by the arytenoid cartilages during the respiratory process, followed by the vocal cords; and similar

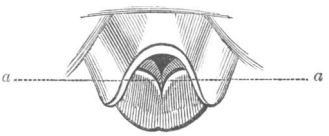

Fig. 2.

movements were excited by any trifling sensation created in the throat or larynx. In the case first mentioned, on the other hand, the interior of the larynx presented all the characters of a low form of inflammation (Fig. 3). The epiglottis was erect, and in part

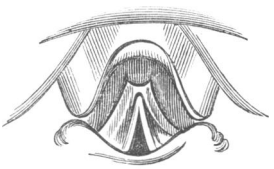
Fig. 3.

everted; strings of adhesive mucus sometimes stretched across the upper orifice of the larynx; the mucous membrane was thickened, and projected into the cavity of the larynx as prominent cushions; the interior of the organ resembled a broad funnel, at the bottom of which appeared the glottis, the lips of which were nearly approximated; and during tranquil breathing, the movements of the arytenoid cartilages, and the alternate closing and opening of the glottis, which formed so beautiful a phenomenon in the preceding case, were performed to a very limited extent; a white superficial ulcer occupied the edge of the left vocal cord.

I may just mention, that this is the second case in which I have met with functional derangement in the larynx, connected with mitral disease, carried to such an extent as to call to my mind the symptoms which accompany aneurism of the aorta, and are produced by pressure upon the vagus or its branches.

P.S.—Since the preceding remarks were written, a patient has entered the hospital, who illustrates the advantage obtained by the practice of laryngoscopy even more clearly than those whose cases have been referred to. He presented considerable aphonia, with symptoms suggesting the existence of chronic laryngitis, yet with certain peculiarities. A considerable polypus was found attached by a broad base, to the front of the larynx, and in part to the right false vocal cord.

Derby Infirmary. A special meeting of the governors of this Infirmary, was held last week to consider: Firstly, whether in future there should be one physician instead of two; and secondly, whether there should be four surgeons instead of three. The result of the meeting was that the existing rules are to remain *in statu quo*. Dr. Ogle stated that it was quite impossible for one physician to do the work of the hospital; whilst, on the other hand, Mr. Gisborne incidentally mentioned that the present staff of three surgeons was amply sufficient. The Weekly Board had suggested the alterations which were proposed at the meeting in consequence of the frequent changes which had recently taken place in the office of physician; it being stated that young men had accepted the appointment, and, not meeting with the public encouragement they expected, had resigned in disgust, either to try their fortunes elsewhere, or to take to general practice.

Reviews and Notices.

A Clinical Memoir on Certain Diseases of the Eye and Ear, consequent on Inherited Syphilis; with an Appended Chapter of Commentaries on the Transmission of Syphilis from Parent to Offspring, and its more Remote Consequences. By Jonathan Hutchinson, F.R.C.S., Senior Assistant-Surgeon and Lecturer on Surgery at the London Hospital, etc. Pp. 259. London: 1863.

It must be well known to the profession, that Mr. Hutchinson has for several years assiduously applied himself to the investigation of the signs of hereditary syphilis; and that on this subject he has made some valuable contributions to medical science, inasmuch as he has pointed out means by which, as he believes, we may distinguish between the appearances produced by hereditary syphilis and those arising from other constitutional disease. It must not be supposed, that he entertains and wishes to induce in others a too wide belief in the prevalence and injurious effects of the syphilitic taint. Such an accusation, he tells us, has been made against him; but he asserts it to be unjust, and says that

"The result of my inquiries, upon my own mind, has been to limit my belief in its extent" (*i. e.*, of inherited taint), "whilst there are peculiar forms of disease which I believe to be its special results, I feel confident regarding the great majority of the chronic diathetic diseases of early life, that they have nothing whatever to do with it. As with acquired syphilis, so with the hereditary, it produces only its own special and peculiar results; and to the trained observer these are, for the most part, easily distinguishable from all others."

The first chapter contains the record of twenty-three cases of Acute Iritis dependent upon Hereditary Syphilis, partly collected from works, and partly occurring in Mr. Hutchinson's practice. This affection is one of the rarest symptoms of hereditary syphilis; it occurs most frequently in female children, about the fifth month. It affects one or both eyes in about an equal number of cases; and is generally uncomplicated. The phenomena of acute inflammation are obscure; but

"Irregularity of the pupil, the presence of white, yellow, or red lymph, tumidity, loss of lustre, and alteration of colour in the iris itself, are the symptoms upon which the diagnosis is to be based. Generally also there will be seen on minute inspection a faint pink zone in the sclerotic. There is very rarely much congestion of the conjunctiva; and the cornea is almost always clear." (P. 24.)

The treatment mainly consists in the daily application of atropine drops to dilate the pupil; and the administration of mercury, for which purpose Mr. Hutchinson generally uses mild mercurial ointment.

In the second chapter are described the histories of one hundred and two cases of Chronic Interstitial Keratitis; this being the name given by the author to the Scrofulous Corneitis of Mackenzie. Without absolutely asserting that *typical* interstitial inflammation of the cornea is always of syphilitic origin, Mr. Hutchinson at present believes such to be the