history of aural suppuration, and the hearing is good. There is nystagmus on deviation of the eyes to the right, not in the opposite direction. The caloric reactions are interesting. Cold water in the left ear gives a quick and very active response, marked coarse nystagmus towards the right with very severe vertigo towards the left. On the right side the reaction is very much less marked, and almost no sense of vertigo is caused. The patient has optic neuritis. There is nothing important in the general history, and nothing to point to a luetic taint. Dr. Stockman has kindly examined the patient and has taken her into his ward. He has made a provisional diagnosis of cerebellar tumour.

There was an interesting exhibition of specimens, photographs, skulls, etc., contributed to by several members.

Dr. KERR LOVE brought before the society the claims of the *Votta Review*, the Journal of the American Association for the Teaching of Speech to the Deaf. The review is published at the Votta Bureau, an establishment founded by Dr. Graham Bell with money given him as a prize for the invention of the graphophone. In this connection the speaker reminded the meeting that the world owed the telephone to the deaf, for it was while searching for some means to aid his deaf wife that Dr. Bell discovered the telephone. The *Votta Review* reminded us that otology was greater than aural surgery, and that the brilliant results of operative work should not be allowed to exclude the fact of deafness and its consequences from the otologist's attention. Dr. Love also referred to a meeting to which he had been invited in London on June 9, which had for its object the foundation of a British National Bureau for the promotion of the welfare of the deaf. This Bureau was to be founded by a Mr. Bonn, who, deaf himself, was anxious to do something for the deaf as a class. The Bureau, Dr. Love understood, would be scientific rather than pedagogic in its aims, and it was probable that medical men would be represented on its council. He asked the society to allow him to convey to Mr. Bonn a message of its appreciation of his proposal. To this request the members readily and sympathetically acceded.

It was decided to hold the next meeting in Edinburgh in November, under the chairmanship of Dr. J. Malcolm Farquharson.

THE ROYAL HUNGARIAN SOCIETY OF PHYSICIANS IN BUDAPEST.—SECTION OF RHINO-LARYN- GOLOGY.

February 28, 1911.

President: DR. A. ONÓDI.

Reported by DR. A. LIPSCHER, Secretary.

TWO CASES OF FRONTO-ETHMOIDAL MUCOCELE.

By DR. M. PAUNZ.

In a man, aged thirty-eight, and a woman, aged twenty-six, tumours formed in the right internal orbital angle above the upper eyelid, the

size of a hazel-nut, fluctuating and covered with healthy skin. The nose was healthy to appearance in both cases. After exploratory incision had demonstrated unmistakable distension of the frontal sinuses, the Killian radical operation was performed in both cases, with complete success. The author, influenced by the fact that in all the cases he had hitherto operated on signs of inflammation in the frontal and ethmoidal cells were clearly visible, is of opinion that it would be better to apply to this condition the name suggested by Killian—"sinusitis frontalis chronica cum dilatatione"—instead of the old appellation "mucocoele."

TYPHOID LARYNGITIS.

BY DR. M. PAUNZ.

The patient was a man, aged twenty-one, the subject of typhoid fever complicated with inflammation of the lungs. At the onset of the fever, he suffered from hoarseness and later on also from difficulty in breathing. The author saw the patient three months after the onset of the typhoid fever. A swelling was seen below the level of the cords, which were slightly congested. The swelling was rounded and covered with inflamed mucous membrane. The lumen of the larynx was narrowed to the dimensions of two or three millimetres. There was great difficulty in breathing, with cyanosis. Widal positive. Acute submucous laryngitis was diagnosed and the presence of pus suspected. A low tracheotomy was performed, in the course of which the abscess burst, a considerable amount of pus escaping both through the tracheal opening and through the mouth. Subsequently intubation and dilatation of the constriction were carried out and with success. In typhoid fever laryngeal catarrh is common, and abscess and perichondritis are by no means rare. But submucous laryngeal inflammation with abscess formation is unusual and as a rule is not recognised at the time.

Dr. L. SIMKÓ said that the patient was now undergoing treatment with O'Dwyer's intubation tubes, and it was hoped that he would be able to leave the hospital without his tracheotomy tube. The vocal cords were still thickened and moved imperfectly.

TELANGIECTASIS AFFECTING THE MOUTH, PHARYNX, AND LARYNX.

BY DR. J. SAFRANEK.

The patient was a male, aged twenty-six. The right half of the face showed dilated veins, and in the lateral region of the neck the veins showed through the skin as distinct bluish streaks. On the under-surface of the tongue the veins were enlarged to the thickness of a quill. On the dorsum near the tip the dilated vessels had formed two blood-spaces about the size of a bean. On the right side of the soft palate a network of dilated vessels was visible. On the alveolar process of the lower jaw there was a purplish swelling, about the size of a bean, composed of tortuous vessels, and a similar, but larger, tumour lay in the recess of the right pyriform sinus. No further changes were discoverable in the circulatory or other organs.

LUPUS OF THE LARYNX.

BY DR. J. SAFRANEK.

(1) A man, aged thirty-six, manifested typical lupus nodules, ulcers, and stellate cicatrices on the epiglottis, ary-epiglottic folds, ventricular bands, and in the subglottic region. The vocal cords themselves were healthy. The nose, throat and integument showed no sign of lupus. There was no pyrexia or other sign of tuberculosis. Tubercle bacilli were absent from the sputum. The case, therefore, was looked upon as one of primary lupus of the larynx.

(2) The patient was a male, aged twenty-nine. In addition to patches of lupus vulgaris on the skin of the nose and face the mucous membrane of the upper air-passages was extensively affected by the disease.

The cases were under treatment by Pfannenstiel's method.

Dr. E. POLLATSCHKE had found trichloroacetic acid useful in such cases. The disease often lasted for years without getting any worse, and, as a rule, ran its course without causing any pain.

Dr. E. BAUMGARTEN some years before had demonstrated a case of primary lupus of the larynx in which tracheotomy had been found necessary. At a later date the patient became pregnant and abortion was induced. Considerable improvement followed without any local treatment.

EMBRYONIC CYSTS OF THE GUMS AND RETRO-PHARYNGEAL REGION.

BY DR. A. ONÓDI.

The author showed an eighth-month foetus with cysts in the gums and retro-pharynx filled with embryonic jelly. The retro-pharyngeal cyst was 10 mm. long, 13 mm. high, and 16 mm. broad.

THE RECESSUS FRONTALIS.

BY DR. A. ONÓDI.

In the anterior and upper part of the middle meatus of the nose higher up than the line of insertion of the middle turbinal, there is a well-defined hollow, the recessus frontalis. It forms the (? antero-inferior) region of the frontal sinus, and may also contain the orifices of some of the anterior ethmoidal cells. Ritter and Heymann look upon this recess—under the name of the infundibulum—as the deeper part of the hiatus semilunaris. Onodi, using the name in its older as well as in its more modern sense, includes not only the hiatus semilunaris between the uncinate process and the bulla ethmoidalis but also the hollow already mentioned, the recessus frontalis. The recessus frontalis may be absent and the frontal sinus may open into the recessus bullaris which lies above the bulla ethmoidalis; in one of his cases the frontal sinus opened indirectly into the middle meatus by opening into one of the anterior ethmoidal cells. The speaker demonstrated the relations of the frontal sinus to the recessus frontalis and to the hiatus semilunaris.

With Surgical Section.

March 16, 1911.

President: DR. P. KUZMUK.

THE EXPOSURE OF THE CRANIAL CAVITY AND BRAIN THROUGH THE NASAL ACCESSORY SINUSES.

BY DR. A. ONÓDI.

The speaker alluded to the statistics he had collected of 106 cases of brain abscess complicating suppuration of the nasal sinuses; 82 of these were secondary to frontal sinusitis, 11 to ethmoidal disease, 4 to antrum suppuration, and one was secondary to sphenoidal disease. Twenty-five cases of cured extra-dural abscess following frontal sinus suppuration were on record, and among these there was one case in which exploratory puncture of the brain had been performed with a negative result. In seven of these cases the posterior wall of the frontal sinus had been perforated and in eleven cases it was found to be diseased. In twenty of the cases of brain abscess the posterior sinus wall had been perforated and in fifty-seven of the cases it was diseased. In the majority of the cases the brain abscess was situated in the frontal lobe; three times it was found in the temporal lobe, once in the pedunculus cerebri and once in the cerebellum. Of these 106 cases of brain abscess 12 recovered as a result of operation and 29 died in spite of operation. Exposure of the cranial cavity through the ethmoidal cells in life had not yet been carried out.

Dr. Onódi described the methods by which the region of the pituitary body had been reached. There were two per-nasal methods which had been performed upon patients, namely that of Schloffer, through the ethmoidal cells after displacement of the external nose, and secondly, the endo-nasal route first performed by Hirsch. Hirsch had collected in all thirty-seven cases operated on, and to these Onódi added eight more. Eighteen of these forty-five cases had died. Hirsch had adopted the endo-nasal route in seven cases, and in six of these he had employed his perfected method of performing submucous resection of the septum so as to reach the anterior wall of the sphenoidal sinus and to expose the pituitary region by opening up the sphenoidal sinus. In five of his cases the operation was successful. The speaker mentioned also Kocher's modification of this operation which consisted in displacement of the nose, subsequent septal resection and opening up of the sphenoidal sinus. Hirsch's endo-nasal operation marked a great advance in rhinology. The speaker recommended both Hirsch's operation and Kocher's modification of it.

Dr. Onódi, by means of projected pictures, then demonstrated the topographical and surgical relations of the accessory sinuses to the cranial cavity and the brain. With reference to the puncture of the brain through the frontal sinus his researches showed that it should not be

performed more than 18 mm. above the level of the floor of the anterior cranial fossa, otherwise the needle might encounter the lateral ventricle or the basal ganglia. Below this level it is possible to insert the needle 4 or 5 cm. backwards and laterally. Abscess, when present, was usually situated in this lower region. On the convex surface of the anterior part of the frontal lobe in the neighbourhood of the frontal sinus the needle would enter the lateral ventricle and the ganglia if it were inserted 20 mm. above the base of the brain, and pushed backwards sagittally to a distance of 30-40 mm. For this reason the needle should not be pushed deeper than 2 or 3 cm. But if it were necessary for the needle to reach to the neighbourhood of the motor cortical centres—the pre-central convolution—or of the internal capsule, then it might be inserted at a point 4 cm. above the base of the brain, and passed in an upward and backward direction so as to reach the pre-central convolution, which lay some 8 to 10 cm. distant. The point described in brain surgery as the lower point for puncture lies 4 cm. above the middle of the supra-orbital margin. Only in a very few cases does this point lie in the neighbourhood of the frontal sinus. He had found only four cases out of 1200 skulls examined in which the frontal sinus extended upwards as far as this.

With reference to the operation on the pituitary body his investigations showed that the hypophysial eminence is not present in certain sphenoidal sinuses, and that the pituitary body is placed further back than the posterior wall of the sphenoidal sinus. In some cases the hypophysis is not encountered in the region of the sphenoidal sinus. Moreover, the sphenoidal sinus may be separated from the cranial cavity by a bony wall 10 to 12 mm. in thickness. He showed a preparation with a pituitary tumour and a strongly marked hypophysial eminence, and with a deep and broad sphenoidal sinus.

Dr. A. GYERGYAI, in 1910, had demonstrated at the Congress of German Laryngologists, at Dresden, his procedure, which rendered possible the direct examination of the naso-pharynx and the most posterior parts of the nasal cavities, and the performance of operations without any preliminary operative steps. By his method it was possible, as he had demonstrated on the cadaver and in X-ray pictures, after removal of the inferior and superior walls of the sphenoidal sinus to reach the hypophysis.

Dr. B. ALEXANDER said that for the correct estimation of the relations of the frontal, ethmoidal and sphenoidal sinuses radiographs were necessary which rendered comparison possible.

Dr. K. LANG thought that the endo-nasal exposure of the pituitary region, though capable of being precisely performed on the cadaver, was fraught with great danger when carried out during life.

Dr. J. SAFRANEK, although he agreed with the last speaker that the operation upon pituitary tumours by the endo-nasal route was difficult, nevertheless held that Hirsch's cases had proved that it could be carried out without much disturbance at the time of operation. As regards results, the endo-nasal method showed the same results as the other methods. In his opinion Hirsch deserved great credit for having worked out the endo-nasal operation.

Dr. ONÓDI, in reply, said that Hirsch's method was not applicable to all cases; in some Kocher's was the more suitable.

(D. M. trans.)