The presence of such bridges of tissue indicated, he thought, an incomplete operation.

The PRESIDENT said the finger-nail was very useful in completing an operation. Dr. McKeown's explanation of the improved hearing seemed to him probable, and helped to explain the good results obtained by the older operators with the finger-nail. The hæmorrhage caused a temporary alteration of the circulatory conditions with improved hearing for a time, followed, of course, by relapse. Probably most of them had noticed great improvement in hearing the day after operation; but, as a rule, he thought it was gradual, and to be ascribed to the subsidence of catarrh and improved ventilation of the tympanum.

Dr. McKEOWN in reply explained that he did not advocate a finger-nail operation, but suggested that the finger should be used to clear the fossæ of Rosenmüller in suitable cases—*i.e.*, when the growths were soft, and could be broken up and detached in that way. This would avoid risk of harmful cicatrization—a far more serious thing than recurrence. Immediate improvement and ultimate impairment of hearing power in his cases were determined by observation.

(To be continued.)

THIRTEENTH INTERNATIONAL MEDICAL CONGRESS, PARIS.

August 2-9, 1900.

SECTION OF LARYNGOLOGY AND RHINOLOGY: SUMMARY OF COMMUNICATIONS.

Translated and abstracted by DR. HEMINGTON PEGLER.

The Diagnosis of Cancer of the Larynx. By Professor B. FRAENKEL (Berlin).

The author holds that the microscopical examination of pieces removed from a tumour of the larynx is of fundamental importance in the diagnosis of cancer. If the result of the examination is negative, no certain conclusions can be drawn. Preparations, on the other hand, which give positive results enable us to make an exact diagnosis, and indicate the treatment. The difficulty is that ordinary sections for the microscope can only be obtained from very small pieces of tissue. The hardened pieces should be embedded in paraffin, and serial sections cut, which are best stained by the method of van Geison, or with picrocarmine.

It is not sufficient for the diagnosis to find in the preparation

globular collections of epithelial cells, though these, it is true, are very suspicious; we must see in the sections epithelial cell nests where one ought not to meet them. It is necessary to be cautious in arriving at a diagnosis when epithelial processes, continuous with the surface, pass into the deeper parts of the tissue. A number of pathological processes, syphilitic amongst others, cause a similar overgrowth of epithelium.

The irregular structure of the epithelium, such as we find in the atypical epithelial nests, is the characteristic feature of cancer.

The Diagnosis of Laryngeal Cancer. By Professor MORITZ SCHMIDT (Frankfurt-a-Maine).

The symptoms of laryngeal cancer, such as pain, stenosis, odour, etc., the author considers are not of themselves characteristic, as they are met with in many other diseases of the larynx. Laryngeal cancer, he goes on to say, arises in different parts of the larynx. It is distinguished in the great majority of cases from other tumours of this organ by the fact that its original character is preserved during nearly the whole course of the disease.

There are exceptions to this rule; the cases which arise in the depth of the tissue, close to the perichondrium, at times cause a proliferation on the mucous surface, closely resembling true papillomata. The origin of this form of cancer of the larynx is also the cause of a special predisposition of these cases to perichondritis during their progress, so that the appearance of the disease is very often masked by this superadded symptom.

Cancer of the ventricle of Morgagni very much resembles internal perichondritis of the thyroid cartilage.

In two cases Professor Schmidt quoted the cancer originated in, or extended later to, the inferior and posterior part of the cricoid cartilage, and did not betray its presence except by a paralysis of the recurrent nerve, which was bilateral in the case published by B. Fraenkel; whilst in the other, which he himself had observed, the paralysis was limited to the left side.

The diagnosis is sometimes very difficult even to the most experienced surgeon. It can be confused with tubercle, syphilis, sarcoma, etc. Two cases of confusion with tubercle, occurring in the author's practice, were described.

Since the diagnosis of laryngeal cancer is sometimes uncertain, especially for doctors who have a limited experience, one must have recourse to other means of arriving at the diagnosis—viz., the patient's history, the search for traces of maladies present or

past, antisyphilitic treatment, and, last of all, excision of a small piece for microscopic examination. Conclusions:

1. Cancer of the larynx nearly always presents at the commencement, and during its course, the characters of a tumour of different forms.

2. Cancer which arises in the depths of the tissues of the larynx sometimes gives origin to a true papillomatous proliferation on the surface of the mucosa. This form closely resembles perichondritis throughout the whole duration of the disease.

3. Cases of cancer of the ventricle of Morgagni, as viewed by the laryngoscope, often present an appearance very like that of internal perichondritis.

4. In very rare cases the cancer commences behind, and almost beneath, the cricoid cartilage, and only betrays itself by paralysis of the recurrent nerve.

5. To exclude syphilis it is sufficient, as a rule, to give daily for a fortnight 3 grammes of iodide of potassium.

6. One can arrive at a certain diagnosis by removing a small piece of the tumour for microscopic examination. To do this a double curette cutting from above downwards is preferable.

7. Only a positive result by microscopical examination is decisive.

Purulent Ethmoiditis. By Dr. HAJEK (Vienna).

The term "purulent ethmoiditis" was defined as disease of the mucosa and of the osseous framework of the ethmoid bone, accompanied by a purulent discharge; tuberculous affections, syphilis, and traumatisms, also processes due to malignant neoplasms, were not included under this term.

The author divided the subject into—I. Disease of the mucosa (muco-periosteal investment), consisting in (1) acute forms of catarrhal inflammation. As soon as the free nasal surface is attacked the orifices and the cells are involved also (empyæma); this last form has a tendency to become chronic. (2) Chronic form of catarrhal inflammation, with hypertrophic tumefactions of the muco-periosteal investment of the interior or exterior of the cells, or both, and formation of polypi on the nasal wall of the ethmoid (extra- and intracellular myxoma of Bosworth). (3) Inveterate forms of chronic inflammation, characterized by extensive growth of polypi on the nasal portion of the lining membrane of the ethmoid; ulceration of the mucous membrane of the cells; and simultaneous production in the same place of thickenings in the form of cushions or nodules of granulations.

II. Disease of the trabecular structure, consisting in (1) superficial changes, irritation of the periosteum, and later on sclerosing or rarefying osteitis (Hajek, Zuckerkandl); and (2) deeper changes, osseous necrosis in acute and chronic empyæma by pressure or by thrombo-phlebitis and periostitis of the opposite side like that met with in the frontal sinus.

The Treatment of Purulent Ethmoiditis. By Dr. F. H. BOSWORTH (New York).

In purulent ethmoiditis the essential condition is one of imprisoned pus. Each of the trabeculae involved constitutes, as it were, a small abscess. There is but little tendency to a spontaneous cure. The prominent, and practically the only, indication is to open each and every cell, and to release the accumulation of imprisoned pus. If this be true, the important consideration is as to the best method of accomplishing this end. The gouge, forceps, snare, curette, scissors, burr, spoon, or other devices may be used. In the author's experience, the end is best accomplished by first uncapping the ethmoid cells by the use of the wire snare ecraseur, and then breaking down the trabecular walls by means of the burr.

The Indications of Thyrotomy. By Sir FELIX SEMON (London).

The author begins by explaining the reasons of the still existing unpopularity of thyrotomy, and expresses his belief that an era of far greater usefulness is dawning for it. He prefaces his special indication by the remarks that, in discussing nowadays the indications of thyrotomy, it is imperatively required to discard from one's mind antiquated notions about its dangers and drawbacks; and that, with scarcely a few exceptions, the indications of this operation are not compulsory, but merely facultative.

He then discusses seriatim the following indications which, in his opinion, present themselves at the present moment for the performance of thyrotomy. They are: (1) Foreign bodies in the larynx; (2) injuries to the larynx; (3) laryngocele; (4) stenosis of the larynx; (5) acute laryngeal perichondritis; (6) laryngeal tuberculosis (including lupus); (7) scleroma of the larynx; (8) new growths in the larynx: *a*, benign; *b*, malignant.

Whilst with regard to the first seven indications his opinions on the whole agree with those which at present are generally recognised, he pleads again very warmly for a much more general adoption of thyrotomy as a radical operation in cases of early intrinsic malignant disease, and supports his view by the excellent and lasting results he himself has obtained in 83·3 per cent. of all

the cases of malignant disease of the larynx which have been treated by himself by means of thyrotomy.

Technique of Thyrotomy. By Professor SCHMIEGELOW (Copenhagen).

The operation, which must be preceded by tracheotomy, is performed under deep anæsthesia.

The tracheal cannula must be made in such a manner that it prevents the sucking in of blood during the operation. Hahn's tube, with a plug, is the best. After having opened the larynx by an incision in the thyroid cartilage, the lower part of the pharynx must be plugged with a sponge, in order to prevent the saliva from going into the larynx.

In order to diminish the sensibility of the mucosa of the larynx, a solution of cocaine must be applied.

The operation over and the hæmorrhage stopped, the cannula, with the plug, is removed, and the interior of the larynx powdered with iodoform. The wound is simply covered with wool and iodoform gauze, which is changed several times during the first days. The patient must lie with his head as flat as possible, and after five or six days the wound will be sufficiently closed to allow the patient to get up.

The Immediate and Remote Effects of Thyrotomy. By Dr. GORIS (Brussels).

In order to obtain as many results as possible, for purposes of comparison, the author had sent a form to specialists, on which he had asked them to report the diagnosis, the age and sex of their patients, the exact seat of the affection, the general condition of the patients at the time of the operation, the method employed, and the immediate and subsequent results of the operation.

He had received reports of 105 cases, divided in the following manner: 62 operations were for malignant tumours of the larynx, 14 for tuberculosis, 25 for benign tumours, 2 for stenoses; 1 was for a foreign body, and 1 for rhinoscleroma.

Out of these 105 operations, 4 succumbed through pneumonia during the eight days which followed the operation.

Thyrotomy, he considers, taken by itself, enters the list of safe operations, since it gives a proportion of less than 4 per cent. of deaths.

Thyrotomy for Malignant Tumours—Sex.—Malignant tumours especially affect the male sex; in fact, out of 62 cases, 55 referred to men, 3 to women. In 4 cases the sex was not stated.

Age.—From this point of view the cases are divided as follows: Below 30, none; from 30 to 40, 4; from 40 to 50, 14; from 50 to 60, 20; from 60 to 70, 18; from 70 to 75, 4; age not stated, 2.

Voice.—The results as regards the voice varied according to the extent of the operation. Generally the removal of a vocal cord permitted the utterance of certain sounds. In some cases the voice remained excellent after the extirpation of a cord, owing to the formation of a cicatricial band.

Subsequent Results.—Sarcoma and carcinoma, although tumours of a different degree of malignancy, are grouped together, because the number of sarcomas recorded is too unimportant to influence statistics.

Of the 62 cases mentioned, 7 must be subtracted, in which extirpation of the larynx had been performed. Those cases are not separated in which, when thyrotomy was performed, it had been preceded by the removal of a portion of cartilage; in these thyrotomy always remained the important operation, and the resection the accessory one.

The statistics include 6 cases in which the operation was really of too recent date to permit of any conclusions being drawn.

There remain then 49 cases, giving the following results: Alive at the end of 10 years, 1; from 5 to 8 years, 8; from 2 to 5 years, 14, being 23 cases in all, and giving a proportion of 46·9 results which can be considered as cures. There were, in addition, 7 cases which had survived the operation more than a year without a recurrence of the disease.

Thyrotomy for Tuberculosis.—Here the results are much less brilliant. Of 14 cases quoted, 3 only could be considered as cured; in the others the operation had rather appeared to accelerate the progress of the malady.

Thyrotomy for Benign Tumours; Stenoses.—The results with regard to the voice were variable, but were generally good. Diffuse papilloma is the affection for which thyrotomy was most often performed; although not completely preventing recurrence, thyrotomy is the operation for choice.

Out of 2 cases of stenosis of the larynx, 1 was cured; in the other normal respiration through the larynx could not be obtained.

Finally, in a case of extensive rhinoscleroma of the larynx Chiari obtained a perfect cure by the excision of the swelling under the glottis.

Spasmodic Rhinitis. By Dr. ALEXANDER JACOBSON (St. Petersburg).

Dr. Jacobson, in his report, considers that (1) there are several kinds of spasmodic rhinitis having a different cause and course. (2) These forms are not yet sufficiently studied nor distinguished, and in consequence confusion often arises. (3) It is, therefore, very necessary to differentiate with precision hay-fever as one special kind; this form is the one most studied, and has quite a characteristic course, and a cause established by experimental researches (Blackley). The author considers that the most exact definition of this cold has been given by Morell Mackenzie, and recognised as excellent by A. Ruault. (4) Hay-fever ought to be considered as a form of spasmodic rhinitis (M. Lermoyez); and this name ought not in any way to be applied to spasmodic rhinitis brought on by any other cause. (5) It must be admitted that many cases of spasmodic rhinitis can be explained as vaso-motor paralyses—coryza vaso-motoria (Moritz-Schmidt). (6) Certainly there exist forms of spasmodic rhinitis which should receive the name of toxirhinitis (Jacobson), as is the case with toxidermia. (7) These toxirhinitides are caused by intoxication and auto-intoxication, and have an acute course, are complicated by gastric-intestinal troubles and skin manifestations (urticaria, etc.); they attack people in perfect health, who have no general predisposition; like all intoxicants, they are accidental, and have no tendency to recur. (8) Nasal hydrorrhœa, being brought on by constitutional causes, offers no local phenomena, except in abundant secretion. In these cases the mucosa is neither swollen nor inflamed.

Vocal Nodules. By Professor OTTOKAR CHIARI (Vienna).

Under the name of vocal nodules, various laryngeal lesions are described. In his report, Chiari limits himself to studying nodules which present the following characteristics:

These nodules are round or slightly elongated; they lie on the free edge of the vocal cords, most often at the junction of the anterior with the middle third; their position is almost always symmetrical. They are of a white colour, bordering upon yellow or pink; they have ordinarily a smooth surface, are sessile and opaque; they reach a maximum size of a pin's head. These special characteristics distinguish them clearly from fibromas, cysts, papillomas, and other neoplasms, as well as from tuberculous or syphilitic nodular growths. They never ulcerate; they rarely disappear spontaneously.

Authors give different opinions as regards their frequency.

Chiari has noted in the proportion of $\frac{1}{2}$ to 1 per cent. amongst patients attacked with affections of the larynx, taken *en bloc*; then he has ascertained that they are twice as frequent among women as among men. Perhaps this peculiarity is due to the fact that the former pay more attention to the purity of the voice than the latter. It is especially among singers that vocal nodules are found. They are also fairly frequent among children.

One must admit, as a cause of their growth, chronic and acute catarrh of the larynx, vocal fatigue, and perhaps also a defective method of singing.

Most writers consider vocal nodules as being formed by hyperplasia of the epithelium and of the superficial fibrous layers of the vocal cord. This opinion is upheld by histological researches; proofs are deduced in the report.

In conclusion, Chiari gives the result of personal researches which he has recently made on this subject, and he arrives at the conclusion that mucous glands are very seldom met with in the formation of vocal nodules.

(To be continued.)

NOTES.

THE Transactions of the Sixth International Otological Congress, held in London last year, have been published by the Southern Publishing Company, 62, Fleet Street, E.C. The volume contains about 500 pages, and several plates and illustrations. Besides a full report of the proceedings and papers read and discussed, there will be found some forty communications which were not read, but which undoubtedly deserve the attention of all desirous of keeping abreast of the literature of modern otology. The appearance of the Transactions within a comparatively short period of time speaks for the energy and industry of the secretary-general, Mr. Cresswell Baber, and of Mr. Arthur J. Hutchison and Dr. E. Hobhouse, who have assisted him. Copies will be forwarded to all Members of the Congress, and can be obtained by others (price 10s. 6d.) from the publishers or medical booksellers.

A revised edition of the Descriptive Catalogue of the Museum of the Otological Congress is in the press, and will very shortly be published.

We regret that, owing to our collaborateur, Dr. Atwood Thorne, having accepted service with the City Imperial Volunteers, now on active service, the publication of our "Bibliography" has been delayed.