THE LARYNGOLOGICAL SOCIETY OF LONDON.

Eighty-Fifth Ordinary Meeting, November 4th, 1903.

J. CHARTERS SYMONDS, F.R.C.S., Vice-President, in the Chair.

The following cases, specimens, and drawings were shown:

Drawings of Localized Psorospermiosis of the Mucous Membrane of the Septum Nasi.

Shown by MAJOR O'KINEALY, I.M.S. A microscopic specimen and report of the first case of this condition, discovered by Major J. C. Vaughan, I.M.S., and the exhibitor in 1894, were brought before the Society in April, 1903.* He was now able to show three drawings of other cases through the kindness of Major F. J. Drury, I.M.S., the Professor of Pathology at the Medical College, Calcutta, to whom also, with Lieutenant-Colonel G. Bomford, I.M.S., the Professor of Medicine, he was indebted for further information. The drawings accurately depicted the clinical appearances of the growth and the microscopic structure of a fresh section of it.

Since the original case, about seven or eight others had been seen at the Medical College Hospital, and most of them by Captain T. B. Kelly, I.M.S., to whom was due the credit of recognizing the disease by its clinical appearances. It had only been met with in natives, no common cause had been discovered for the presence of the parasite, and it seemed to be confined to isolated cases, as none of the patients had been aware of any similar affection among their fellows. Epistaxis was practically the only symptom complained of, and the growths bled very readily. They apparently occupied the same position on the anterior part of the cartilaginous septum in all cases and had the appearance of a strawberry or a raspberry, or perhaps still more of an arbutus berry.

Captain Kelly had found removal of the tumor, with cauterization of the base to be the best form of treatment, and appeared to have had no complaints of recurrence since the adoption of this plan.

A section of the growth when fresh was seen to be studded with minute white dots, which under the microscope were found to be cysts filled with granular bodies. Each of these bodies contained about a dozen refractile granules, and there seemed to be a pore in the cyst wall through which the bodies escaped into the surrounding tissues.

So far as could be ascertained, this species of sporozoon had hitherto not been known in man. Its proper place among the

*,"Die Protozoen als Krankheitserreger."

Sporozoa had not yet been determined, and the opinions of those who had seen it differed as to whether or not it should be classed with the Coccidia. Pfeiffer, in his work on the Protozoa,* described a somewhat similar parasite in the tench, and classified it with the Myxosporidia.

Drawings of a Large Piece of Bone removed from the Larynx of a Boy.

Shown by MAJOR O'KINEALY, I.M.S. The patient, a German Jew, æt. 5 years, came into the Presidency General Hospital, Calcutta, from Singapore, on the 20th November, 1899, with the history that about five months previously a piece of bone had stuck in his throat while he was eating some stewed duck. As a result of this there was marked dysphagia and pain in the throat, which gradually passed off after about ten days, but his voice had been permanently reduced to a whisper.

On admission the child could not speak above a hoarse whisper, and his breath was offensive. Laryngoscopic examination showed a white body, about a line in breadth, lying in the antero-posterior diameter of the larynx, midway between and slightly above the ventricular bands, and extending from just below the cushion of the epiglottis to the middle of the upper border of the interarytænoid fold. When examined with the probe, it felt like a piece of bone, and was found to be firmly fixed at both ends, where it was embedded in pink nipple-shaped masses of thickened tissue. The thickening was greater anteriorly, where the foreign body was more firmly impacted, and there extended downwards between the ventricular bands. Both vocal cords were congested, but moved freely. Below the left cord, and parallel to the foreign body, lay another white linear body, which looked like a second piece of bone.

The body was removed by the endolaryngeal method under cocaine anesthesia, and some force was required to dislodge it. The measurements of the bone were—length three-quarters inch, width at base five-eighths inch, thickness at base one-tenth inch, thickness inclusive of ledge one-quarter inch, thickness in other parts one-twentieth inch. The boy rapidly regained his voice, and left hospital on the 29th November, 1899.

When the age of the child and the size of the foreign body were considered, it was interesting that so little trouble should have been caused by its five month's impaction in the larynx, a result doubtless due to the position in which it lay.

Report of a Case of Unilateral Fibrinous Rhinitis.

Shown by MAJOR O'KINEALY, I.M.S. A Eurasian boy, æt. 4 years, was admitted into the Presidency General Hospital, Calcutta, on the 7th June, 1900, with a history of purulent discharge from the left nostril and pain of about seven days' duration. The child occa-

* "Proc." vol. x, p. 109.

sionally suffered from fever, and about a month previously caught a slight cold, which was followed by a little running from the nose.

On admission the left nostril was completely blocked by some foreign substance, and was full of muco-purulent discharge. The right nostril was clear and healthy, as was the remainder of the respiratory tract. The submaxillary glands were slightly enlarged and tender, the temperature was between 99° and 100° , and there was a little albumen in the urine.

On removal the obstruction was found to consist of a solid fibrinous cast of the left nostril, yellowish white in color, covered with muco-purulent secretion, and about two inches long. There was slight bleeding after it was removed. No antitoxin was used, and the child rapidly recovered under internal tonic treatment with an alkaline nasal douche. There was at first a good deal of discharge from the nostril, occasionally blood-stained, with some tendency to the formation of membrane, which, however, soon stopped, and the glands subsided. The temperature, which never went above 101.4° , fell to normal in a few days, the albuminuria disappeared, and the boy left hospital on the 19th June, 1900. When seen subsequently he was quite well, and none of the household had suffered in any way.

The fibrinous mass was unfortunately thrown away without being examined, but Dr. J. Nield Cook, the Health Officer of Calcutta, kindly made bacteriological examinations of the discharge and the membrane that re-formed. No Klebs-Löffler bacilli could, however, be discovered. Despite this negative result, the albuminuria and other constitutional symptoms point to the conclusion that the case was in reality one of mild nasal diphtheria, such as many other cases of so-called fibrinous rhinitis have proved to be.

Report of a Case of Membranous Tonsillitis in a Child Suffering From Plague.

Shown by MAJOR O'KINEALY, I.M.S. A Eurasian boy at $3\frac{1}{2}$ years was admitted into the European General Hospital, Howrah, on the 29th March, 1902, suffering from fever of about twelve hours' duration. The child came from a plague-infected neighborhood, and immediately after admission he had an attack of convulsions with diarrhoea, and a rise of temperature to 104.2° .

On the 1st April moist sounds were heard in both lungs, having started in the left lung the day before, and a couple of enlarged and tender glands made their appearance, without any obvious local cause, below the angle of the jaw. The following day the glands were larger, and had fused into a hard painful mass, and a yellowish-white adherent membrane was seen to cover the right tonsil. An injection was given of 5 c.c. of serum, representing 1000 units of diphtheria antitoxin, and the throat was treated locally with sublimate lotion (1 in 1000), with the result that the membrane gradually disappeared.

Meanwhile, however, the general condition of the child became graver, and he developed definite symptoms of plague. Bubonic swellings successively appeared in the right side of the neck, in both

submaxillary regions, below and behind the left ear, and in both groins, accompanied by acute lymphangitis of the right thigh. Albuminuria and double broncho-pneumonia set in, the diarrhoea persisted, and the temperature, which had remained high since admission, ranged from 100.4° to 105°, only once falling to 98° for a short time; while the pulse rate and respirations increased to between 132 and 144, and 44 and 64 a minute respectively, and the child died on the 14th April, 1902, in spite of all treatment. No bacteriological or post-mortem examination was made.

It is known that inflammation and ulceration of the tonsils and pharynx occur in plague;* a diphtheroid pharyngitis has also been noted in the later stages of the disease, and is looked upon as a very grave sign.† In the present case the circumstances were different, inasmuch as the membrane appeared on the tonsil at an early period, before the diagnosis of plague was fully established, and gradually disappeared after the use of diphtheria antitoxin. The patient undoubtedly died from plague, and the question therefore arose whether his case should not be regarded as a double infection of diphtheria and plague, originating in the tonsil, rather than a diphtheroid condition arising from the latter disease.

Case of Laryngeal Disease in a Man of Fifty-one and a half Years of Age Showing Extensive Ulcerative and Hypertrophic Changes; for Diagnosis.

Shown for DR. SCANES SPICER. This case was shown at the meeting of this Society on April 12th, 1901 ('Proc. Laryng. Soc.,' vol. viii, pp. 106-7). Of the suggestions offered—(1) an exploratory thyrotomy, and (2) a course of mercurial inunction, combined with larger doses of potassium iodide—the patient elected the latter. In a few months the thickened appearance of the posterior wall disappeared, and the left cord regained its mobility. The patient kept well for eighteen months. Early in the present year a small warty mass appeared on the right cord, together with general thickening, reddening, and variable oedema of the whole left side of larynx and epiglottis. In spite of the resumption of the antispecific treatment this persisted, and was followed by ulceration of the left side of epiglottis and left half of tongue; this had not been arrested by cleansing sprays, or insufflations of orthoform or iodoform. No tubercle bacilli were found on examining sputum, and there were no enlarged glands or cachexia. The last few weeks there had been some pain and dysphagia. The appearances were quite equivocal, and the case was shown to elicit opinions as to the nature of the condition and suggestions for treatment. Dr. Scanes Spicer himself suspected malignancy, but doubted the expediency of excision on account of the extensive involvement of the epiglottis and of the left half of the larynx. The case well illustrated the difficulties which beset the diagnosis of laryngeal neoplasms in certain instances, even although under constant observation.

* Jennings "A Manual of Plague."

† Scheube "The Diseases of Warm Countries."

MR. W. G. SPENCER thought it was a case of hypertrophic tubercle.

MR. P. DE SANTI said that he showed a case to the Society some years ago very similar to this, and well known to various members. The patient had chronic tuberculosis, and so much stenosis that tracheotomy had to be done; he lived for nine years afterwards. On many occasions his sputum was examined, but no bacilli were found. He himself saw him for a period extending over seven and a half years; the man was also known to professors abroad. There was a great difference of opinion as to the diagnosis. Eventually he died of a sharp attack of acute tubercle, and there was no doubt it was a form of chronic tuberculosis from which he had suffered. He had syphilis in Japan, and it was a question whether the case was not a mixture of tubercle and syphilis. A similar explanation might apply to Dr. Spicer's case.

DR. STCLAIR THOMSON, judging from the appearance only, considered the case one of tuberculosis in a syphilitic subject.

SIR FELIX SEMON agreed with the opinion that it was a mixture of tubercle and syphilis. It might be a kind of hyperplastic form of syphilis, which recurred from time to time and disappeared under the use of antisppecific remedies. What induced him to believe the case was a mixture was the appearance of the epiglottis, which was more like a syphilitic than a tubercular ulcerating tumefaction.

DR. SCANES SPICER said the patient got practically well on one occasion on antisppecific treatment, and continued so for eighteen months. The thickening and ulceration then came on again rapidly, and more extensively than before. In reply to Mr. Spencer he said that a negative result had hitherto followed examination for tubercle bacilli.

DR. TILLEY and MR. LAKE regarded the condition as probably epithelioma, and advised radical extirpation of the diseased tissues.

Case of Operation for Rupture of the Trachea.

Shown by MR. CHARTERS SYMONDS. Mr. M., æt. 30, while riding a bicycle in September, 1899, ran into the pole of a van. He was unable to state exactly what happened. There could be no doubt that he had received a heavy blow in the neck, either from the pole of the van or the handle-bar of the bicycle. When brought home he had great pain in the neck, was unable to lie down, and expectorated blood. Emphysema appeared in the neck and chest, and lasted for about eight days. There was an irritating cough, which was relieved on the fifth day by the expectoration of a slough. No cartilage was found in the slough.

In October the breathing became difficult, and stridor appeared. In November he had an attack of acute pneumonia. The distress of breathing was greatly increased by the tracheal obstruction.

On November 21st he was seen in consultation with Dr. Craig. The voice was clear, indicating that the larynx had not been injured. On moving about he breathed rapidly, and on further effort there was distinct stridor, evidently arising in the trachea.

On laryngoscopic examination the larynx was normal, the vocal cords moved well, and there could be seen about the level of the third ring a pale projection from the left side, and to the extreme right a dark irregular aperture, evidently the altered lumen of the trachea. This was only visible occasionally. Externally the trachea was irregular, being somewhat depressed on the left side, and slightly prominent on the right.

A diagnosis of rupture of the trachea was made, but whether the stenosis was due to contraction of a wound in the mucous membrane only, or whether it involved the trachea, remained doubtful. The depression on the left pointed to injury of the cartilage.

As the man was unable to take any exertion without difficulty of breathing, he was advised to submit to an operation, with a view of removing the obstruction. He took some time to make up his mind, and it was not until February of the following year that the operation was performed. There had been no increase in the symptoms during the previous month, so that the stenosis had probably become stationary three months after the accident.

On dividing the trachea in the median line the bulging from the left side was confirmed. The third and fourth rings were injured. One of them was broken and bent inwards. They had been also separated, so that the trachea appeared somewhat lengthened on this side, and sharply bent inwards. The mucous membrane had evidently been ruptured, but was soundly healed. The deformity was partly corrected by removing a part of the cartilage, and sewing the adjoining rings together. At the same time the sutures were so placed as to avert as much as possible the indented wall. The trachea was not closed. The wound was covered with gauze; a tube was not used.

He made a rapid recovery, and has not suffered from any inconvenience since.

A Case of Obscure Ulceration of the Left Vocal Cord for Nearly One and a half Years' Standing in a Gentleman Aged 60.

Shown by SIR FELIX SEMON. The patient, a very thin and unhealthy-looking gentleman, aged about 60, was sent by Dr. Buckell, of Chichester, on June 14th, 1902, on account of hoarseness, which was found to be due to isolated congestion of the left vocal cord. Careful examination of the chest failed to reveal any tuberculous mischief, and there was no history of syphilis. Complete rest of voice was recommended, and a general tonic, together with benzoic acid lozenges. When seen again six weeks later, the congestion of the left vocal cord was distinctly diminished, and his general health improved. He went to Switzerland, and was further benefitted, but when seen again at the beginning of September the left vocal cord was found in part ulcerated, and in part tumefied. The ulceration occupied the middle part of the left vocal cord, and the tumefaction surrounded it on all sides. At the same time the mobility of the cord was quite preserved. Although syphilis seemed to be practically excluded by the patient's previous history, which was intimately

known by Dr. Buckell and Dr. Thomas Wingrave, who on the occasion just named, and later on, used to accompany the patient, he was given iodide of potassium in ten-grain doses. His expectoration was repeatedly examined by Mr. Shattock for tubercle bacilli and for epithelial fragments, and his weight and temperature were carefully registered by Dr. Buckell. The result of all these examinations was absolutely negative. From that time onwards the case had become more and more obscure. Temporary improvements alternated with aggravations of the hoarseness, and also of general sensations of pain and discomfort in the throat and all round the neck, of which the patient had complained from the very first. The left vocal cord was sometimes more, sometimes less tumefied, and always ulcerated, but the ulceration did not show any tendency to extend further than when first seen: the tumefaction in its neighborhood had always remained on a very limited scale, and the mobility had throughout remained perfectly free. On more than one occasion slight enlargement of the cervical lymphatic glands on both sides of the neck had been observed, but this had always disappeared. The patient had been seen on various occasions by Mr. Butlin, and by Mr. Charters Symonds, who had entertained the same suspicions towards which he had leaned, viz. that the ulceration was either tuberculous or malignant, more likely the former; but the absence of any further developments, and of any demonstrable signs of either lesion, had not confirmed our fears. The Society would in all probability find the patient extremely ill-looking, and there was no doubt he was, but he was not one whit more so than when first seen, nineteen months ago, and he had ever since been able to fulfil the duties imposed upon him by his connection with many benevolent associations in addition to the cares of his own business. Dr. Wingrave, who had known him for twenty-five years, told him that his appearance had always been the same, that his weight had never been more than 8 stone 6 pounds, and that he and his family had always been extremely neurotic.

In the whole of his practice he only remembered one single case, which ultimately turned out to be epitheliomatous, in which an ulceration and tumefaction of a vocal cord of an obscure nature had remained so long stationary as in this case. In the early stages of his affection the possibility of anthrax was mentioned, as he was a wool merchant; but there had been nothing in the case, then and since, to justify that suspicion. He should much like to hear the views of the Society as to the diagnosis in this case.

The CHAIRMAN had seen the man some time ago, and the condition to-day was very much like what it was then. It struck him that the surface was a little less prominent and a little smoother.

DR. SOANES SPICER said it appeared to him the fleshy condition of the left cord (which was not now at all paretic) was due to small masses allied to vascular fibroma, and that the condition was not of a malignant nature.

DR. HERBERT TILLEY thought that the granular congestion of the freely movable cord was in favor of chronic tuberculosis, and this

even in spite of the fact that no tubercle bacilli could be found in the sputum. Chronic fibroid tuberculosis in old people was often unaccompanied by any active symptoms for long periods of time.

DR. BEALE agreed with the view taken by Dr. Tilley. He had seen cases (and watched them) of chronic tubercular disease of the lung where similar fleshy masses had been present. They were limited to one side and superficial, and had the curious vascular appearance that was seen in this case. He had not seen these cases very frequently, but he thought this was the nature of Sir Felix Semon's case. They did not interfere with the movement at all.

DR. LAW said that in comparison with the growth in the case shown by Dr. StClair Thomson, so far as he could see, this appeared a more isolated growth, and not a tuberculous infiltration. This growth, he thought, was possibly vascular.

SIR FELIX SEMON, in reply, said that, whilst thanking the various speakers for their suggestions, he was afraid that not much fresh light had been shed upon the case. Personally, he was inclined to believe that the ultimate solution would be found in chronic tuberculosis.

A Case of Epithelioma of the Larynx, Twice Operated Upon by Thyrotomy and Resection of the Crico-thyroid Membrane.

Shown by SIR FELIX SEMON. The patient, a gentleman, aged 58, who had been suffering for a long time from albuminuria and chronic bronchial catarrh, and had, after a fresh attack of bronchitis several months before, become completely aphonic. Examination of the larynx proved extremely difficult, and only after repeated efforts was it seen on the next day that on the front part of both vocal cords there were irregular nodular whitish outgrowths, not big, each being about the size of a half a pea. The whole, however, made more the impression of a malignant growth than of a papilloma. The growths were so small that the hoarseness seemed quite out of proportion to their size. It was extremely difficult to make out any further details, as the view into the larynx was always only a matter of a second, whilst he was catching his breath. Seeing his age, the probability of the growth being malignant seemed greater than that of simple papilloma; but whatever the growth, it seemed clear that external operation would be unavoidable in view of the unusual difficulties owing to the anatomical configuration of the larynx. The patient was advised to that effect, but it was proposed that he should see either Mr. Butlin, or, as he was about to go to Edinburgh, Dr. McBride, the President of this Society.

The patient not only followed this advice, and saw Mr. Butlin but when he had obtained an opinion from him similar to his own (Sir F. Semon's), went and saw Dr. Greville MacDonald, who very kindly wrote on May 29th that he had expressed his opinion somewhat diffidently as to the nature of the case, and had very strongly advised an intra-laryngeal operation for the sake of substantiating the diagnosis. This view was also taken by Mr. Charters Symonds, who was more hopeful than Dr. MacDonald that the disease might

possibly be benign. Dr. MacDonald then removed a piece of the growth intra-laryngeally on May 25th, which on microscopic examination was found to be a typical epithelioma.

Before performing a radical operation the patient was sent, in view of his chronic and considerable albuminuria, to Sir William Broadbent, who wrote that he did not think that the albuminuria would be a bar to the operation, in view of the high specific gravity of the urine, and in view of the fact that the renal affection had not interfered with tissue nutrition, since he gained a stone in weight at Cannes, and in view of the fact that there was no serious arterial degeneration.

Thyrotomy was performed on June 14th of this year, when the affection was found to be much more extensive than any of those who had seen the patient had anticipated. The whole anterior and lateral walls of the larynx in the region of the vocal cords was one mass of disease; the vocal cords were involved in by far the greater part of their length, particularly the right one, where the disease extended nearly to the arytaenoid cartilage, and also implicated the ventricle of Morgagni. The left vocal cord was found to be affected in its entire anterior half; the disease extended to a considerable distance into the subglottic cavity, and had already perforated the crico-thyroid membrane in the shape of two or three little knobs in front of that structure. On the other hand, the thyroid cartilage was fortunately found not to have become involved on either side, and it was possible to strip off the diseased mass on both sides. The cartilage appeared white and glistening. The basis was well scraped, and the crico-thyroid membrane removed *in toto*. The patient bore the operation, which lasted nearly two hours, very well, except that the breathing at various stages of the operation was very curious, sometimes extremely intense, and at others very shallow, and again recalling the Cheyne-Stokes type.

The patient made a good recovery, and left the home about three weeks after the operation with the wound almost entirely closed, except in the middle part, where a small opening still remained. His albuminuria had greatly decreased, and the bronchial catarrh, from which previous to the operation he had considerably suffered, had much diminished. The last time he was examined before leaving was about $3\frac{1}{2}$ weeks after operation, when the large internal wound was seen to be freely granulating, and there was apparently no recurrence of the disease.

The growth removed was submitted to Mr. Shattock for microscopic examination. His report completely corroborated the diagnosis made after Dr. MacDonald's intra-laryngeal operation, viz., that the growth was a squamous-celled carcinoma.

On August 10th he received a letter from the patient, dated from Blair Atholl, telling him that during the last few days he had been suffering from increasing breathlessness, which had at times been rather threatening.

The patient only came to town after the difficulty in breathing had further increased, on September 1st. He then saw Mr. Ewen Stabb, who had kindly assisted at the operation. Mr. Stabb reported that

there was distinct inspiratory stridor, increased on exertion, and that externally there was nothing to be seen or felt. Laryngoscopic examination was most difficult, but a distinct greyish mass of apparently granulation tissue was seen in front, and on the left side projecting into the lumen of the larynx. As the dyspnoea increased Mr. Stabb saw the patient in consultation with Mr. Butlin on September 19th, when there was no doubt that the condition, which had altered very much, represented recurrence of the disease. The surface was now warty, and the growth more extensive.

On September 21st Mr. Stabb reopened the wound. He first introduced a Hahn's tube, and then reopened the thyroid cartilage in the middle line. It was then seen that there was recurrence on both sides of the middle line in front. The growth was more extensive on the left side, and distinctly limited in its area, the attachment almost pedunculated. The posterior portion of the larynx appeared quite healthy. The center of the attachment corresponded to where the crico-thyroid membrane had been. Mr. Stabb first cleared out the whole of the soft parts completely except a strip of mucous membrane about half an inch wide on the posterior wall, then on each side he separated the soft parts from the cartilage, keeping well away from the latter, and finally removed on each side a U-shaped portion of the laryngeal framework, including the lower part of the thyroid alæ and the anterior half or more of the cricoid cartilage, and a small portion of the upper part of the trachea. It appeared to him, and to Mr. Waggett, that nothing would be gained by removal of the whole larynx, the upper part of which was seen to be perfectly healthy. As he included in the parts removed the soft parts outside where the crico-thyroid membrane had been, there seemed justified hope that everything diseased had been exterminated. The patient made a good recovery, and had so far remained free from fresh recurrence. The growth removed at the second operation was examined by Mr. Shattock, and was found to be in every respect similar to that removed on the first occasion.

Remarks.—The case is noteworthy from more than one point of view.

1. In the first place it showed that chronic albuminuria and bronchial catarrh were not necessarily contra-indications to radical operations of this kind.

2. Although he was quite accustomed to find the disease much more extensive on opening the larynx than it appeared from laryngoscopic examination, he frankly confessed that he had not the remotest idea of the enormous extent of the disease in this case, and his surprise on discovering it was shared by Mr. Butlin and Dr. Greville MacDonald when he communicated to them the facts ascertained during operation.

3. At the time of the first operation he entertained, as stated, fears as to recurrence, owing to the wide extent of the disease; but he certainly should not have expected such recurrence to take place in the very region in which he had most energetically removed everything that appeared to be diseased, viz., in that of the crico-thyroid membrane. In this respect the case taught again the well-known lesson

that, if once the disease had got outside the precincts proper of the larynx, the danger of recurrence was much greater than if it was still confined to them.

4. The present result illustrated the fact that even under such circumstances one ought not to despair, but try to improve by further operation, the extent of which would, of course, in each case vary with the particular requirements, the result of the first interference.

He should consider it his duty to report at some future time the further progress of this case, the more so as the danger of renewed recurrence was of course by no means over.

Case of Complete Nasal Obstruction of the Right Side Due to Chronic Dental Abscess Arising from Root of Incisor Tooth, and Forming an External Fluctuating Swelling Below Right Nasal Bone. Two Years' Duration.

Shown by DR. HERBERT TILLEY. Patient was a man æt. 34 years. Two years ago he complained of complete nasal obstruction on the right side, with some swelling on the outer side of the nose. It caused no pain. The galvano-cautery was applied to the anterior end of the right inferior turbinal on two or three occasions, but without any improvement.

When first seen on November 10th the entrance to the right nasal cavity was seen to be filled by a fleshy, congested mass, resembling in its contour a much enlarged anterior termination of the inferior turbinal body; but it was more resistant than the latter, and did not appreciably diminish under the influence of a 20 per cent. solution of cocaine. An adhesion bound it to nasal septum. The external swelling fluctuated, but was not congested nor painful, and its edges "crackled" on deep pressure. Puncture of the swelling internally by means of a hollow needle was followed by a discharge of dark serous fluid containing cholesterin crystals.

The right incisor teeth were both "dead," and over the buried root of the outer one a small suppurating fistula leading towards the apex of the root was found. Under general anæsthesia the anterior end of the right inferior turbinal was removed, and also the incisor teeth. A probe could then be passed through the socket of the outer root, and made to project just below the right nasal bone.

The patient made an uninterrupted recovery.

(To be continued.)