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Laryngological Society of London

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JANUARY 15TH, 1904.



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(From its Foundation.)

ELECTED

1893

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1894-6

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PROCEEDINGS
OF THE
LARYNGOLOGICAL SOCIETY OF LONDON.

EIGHTY-FOURTH ORDINARY MEETING, *November 6th*, 1903.

P. McBRIDE, M.D., F.R.C.P.Ed., President, in the Chair.

JAMES DONELAN, M.B.,
E. FURNISS POTTER, M.D., } Secretaries.

Present—28 members and 1 visitor.

The minutes of the preceding meeting were read and confirmed.

The PRESIDENT called upon Sir Felix Semon to open the discussion on

“THE AFTER-TREATMENT OF INTRA-NASAL OPERATIONS
(EXCLUDING NASO-PHARYNGEAL).”

Sir FELIX SEMON said:

MR. PRESIDENT AND GENTLEMEN,—The practitioner who looks for help and guidance to modern rhinological literature, concerning the question of after-treatment of intra-nasal operations, will reap but a poor harvest. Some even of the best and most modern rhinological text-books pass over the subject almost in silence, others dismiss it with a few words or, at most, sentences. That difficulties may be encountered in connection with this subject is hardly referred to in any of them, and it is quite the exception to meet with utterances such as

Moritz Schmidt's:* "The duration of the healing (viz. after operations for the removal of spurs, etc., from the septum) demands about four weeks in uncomplicated cases; should perforation of the septum have been unavoidable more time is required;" and as Chiari's:† "The after-treatment of these cases (*i. e.* when the lower turbinated bone or its anterior part has been removed instead of operating upon the deviated septum) is much simpler and shorter than in complicated operations for deviations, spurs of the septum, etc. For after such, one often has to plug, dilate, and perform small subsidiary operations for weeks, whilst after resection or extirpation of the lower turbinated body a four days' tamponnade by means of iodoform gauze suffices. Besides, after operations for deviation, perforation often threatens."

From this "conspiracy of silence," if I may so call it, it would seem but natural to draw the conclusion that the after-treatment of intra-nasal operations was a simple and trivial matter, not deserving any special discussion, and that experiences such as Schmidt's and Chiari's were quite exceptional. In reality, however, I venture to think that this impression does not correspond to the facts of the case. Personally I must confess that, if not very often, yet more frequently than I like, I have met with difficulties in the after-treatment of intra-nasal operations. Seeing the general silence on the topic in the admittedly best text-books, I naturally at first considered these difficulties to be due either to particular bad luck, or to particular clumsiness of my own, and I equally naturally felt somewhat shy at confiding my troubles to anybody. But when I had summoned sufficient courage to do so in private conversation with a few fellow-specialists of admittedly great manual dexterity, I found to my surprise—and might I say to my relief?—that the difficulties mentioned by Chiari, and experienced by myself, were by no means so exceptional as I had concluded them to be, and that they had been encountered—occasionally at least—by almost every man of experience to whom I spoke on the subject. This also clearly appeared from the discussion which incidentally took place in this Society

* 'Die Krankheiten der oberen Luftwege,' 3te Auflage, 1903, p. 597.

† 'Die Krankheiten der Nase,' 1902, p. 168.

on March 3rd, 1899. Last year, again, Dr. Hill, in the discussion of Dr. Lambert Lack's case of symmetrical thickening of the upper and anterior part of the nasal septum,* had the courage to state in this Society that he had had in cases of operations on the septum difficulties and disappointments, and that he had almost come to the conclusion that there was a tendency in all soft thickenings of the septum to recur after removal, and sometimes even of hard structures also. In the same discussion Dr. Pegler described a case in which he had repeatedly to operate upon a swelling of the septum, and in which the patient ultimately ceased to attend.

Under these circumstances I felt justified in renewing, when the question came before your Council, which subject should this year be chosen for a general discussion, the proposal which I had repeatedly made previously when the topic incidentally crept up in the course of discussion on individual cases shown to the Society, viz. that one of our meetings should be devoted to the discussion of the after-treatment of intra-nasal operations. The Council adopted that suggestion, and my belief that the subject is a suitable one for the purpose has since then been further strengthened by the fact that at the recent meeting of German otologists at Wiesbaden on the 29th and 30th of May of the present year, Dr. G. Krebs, of Hildesheim, read a paper on "The Preparation and After-treatment of Intra-nasal Operations," which led to a very animated discussion in which ten different speakers took part, and which revealed a great diversity of opinion amongst men of considerable experience on this particular question. I wish to express here my sincere thanks to Dr. Krebs for very kindly sending me a copy of his paper, which has since been published in the 'Verhandlungen der Deutschen Otologischen Gesellschaft,' and for a short précis of the discussion which followed the reading of his paper.

To make our discussion practically useful I propose, with the permission of the Society, to limit my observations to the after-treatment of more strictly speaking intra-nasal operations, particularly to those undertaken for the relief of nasal stenosis, and to entirely exclude the after-treatment of operations performed on account of disease in the accessory sinuses and in the naso-

* 'Proceedings of the Laryngological Society of London,' May 2nd, 1902.

pharyngeal cavity. The great majority of operations undertaken in affections of the accessory cavities are performed on account of chronic suppuration in those cavities, and this one fact so materially alters the character of the after-treatment, that to discuss these operations jointly with truly intra-nasal operations undertaken for the relief of stenosis would in all probability lead to a desultory discussion, and defeat the practical objects which I have at heart. Similar objections obtain with regard to the operations, including the after-treatment of naso-pharyngeal affections, and I therefore hope that I have the permission of the Society to limit my own observations to, and invite discussion on, the after-treatment of strictly intra-nasal operations only. It may perhaps appear to some members that the subject thus defined was a very narrow one, but practical experience has taught me that as a rule more useful discussions result from the thorough thrashing out of one definite subject, than from the inclusion of heterogeneous topics in one and the same discussion, and I hope that the present occasion will make no exception to this rule.

On the other hand, it will be indispensable to include in our discussion the questions of preparation for these operations, of the selection of the method of operation, and of the employment of cocaine and adrenalin during the performance of the operations themselves, as these topics are inseparably connected with the question of after-treatment which forms the subject proper of our discussion to-day.

This applies particularly to the question of the selection of the method of operation, and I propose therefore to discuss in my introductory remarks the main principles of the after-treatment in connection with the question of the selection of the method of operation.

With regard to the preparations for intra-nasal operations I need not dilate, speaking before a society of experts, upon the impossibility of proceeding so strictly aseptically as in most other regions of the body. Even if after completion of an intra-nasal operation the nostril operated upon could be plugged so hermetically as to effectually prevent the entry of infective material both from the front and posteriorly, yet the danger of infection by the secretion of the accessory sinuses could not be

effectually excluded. Additionally it must be confessed that the conditions under which many of these operations are performed, viz. during consulting hours at the operator's private residence, or in the out-patient room of a hospital, are not particularly favourable to the performance of really aseptic operations. Fortunately, however, practical experience, as well as the bacteriological investigations of StClair Thomson and Hewlett, and of Wurtz and Lermoyez, have shown that the mucous membrane of the nose is not by any means a good soil for the development of pathogenic bacteria; and—from the point of view of clinical experience—it is a curious fact that if any septic complications should arise after intra-nasal operations they usually do not occur in the nose itself, but much more frequently in the pharynx in the shape of tonsillitis, or of a more general inflammation of the mucous membrane of the pharynx or naso-pharynx, or in the form of an acute otitis media. In spite of this comparative immunity of the nasal mucous membrane, however, it will of course be the duty of every operator to carefully sterilise all instruments and other objects, such as gauze, cotton wool, brushes, celluloid plates, etc., which, during and after the performance of intra-nasal operations, may come into contact with the parts operated upon. That the operator's hands should be properly disinfected before the performance of any such operation goes without saying. In exceptional cases it may be necessary to disinfect the patient's external nose and its surroundings in the usual way by means of soap, ether, and sublimate. In cases in which there is much secretion or formation of crusts in the nose these will have to be removed previous to the operation itself by means of a tepid 4 per cent. boracic acid or a physiological salt solution. I refrain from entering upon further details concerning the preparations for the operation, as the subject is only incidental to my task proper. A number of noteworthy particulars concerning this question will be found in Dr. Krebs' paper previously alluded to.

Concerning the operation itself, I take it that in the great majority of cases local anæsthesia will be preferred to general. It is so very essential that the operator should at every moment see exactly what he is doing, that the one advantage of the patient's sitting upright, and the operator's being able to con-

concentrate a powerful light upon the parts to be operated upon, which he thus sees in the position to which he is accustomed, in my opinion quite outweighs all claims which may be made in favour of a general anæsthetic. Moreover, the majority of these operations can be performed so rapidly, and are so little painful after repeated applications of cocaine, that there is no need for a general anæsthetic with its attendant disadvantages, of the employment of an assistant, of interference with the field of operation by the anæsthetist's apparatus, etc. Of the various methods of applying cocaine, viz. by a spray, by the introduction of plugs of cotton wool saturated in a cocaine solution, and by painting the region to be operated upon by means of a camel's-hair brush, I prefer the last named as the surest, and the one least likely to produce symptoms of cocaine poisoning. I always in these cases use a 20 per cent. solution.

With regard to the employment of adrenalin, I have on previous occasions raised the question * whether after its use secondary hæmorrhages were not observed more frequently and more abundantly than without its use. Personally I have only had one really serious hæmorrhage after intra-nasal operations, and I am far from accusing the application of adrenalin which I used in this case as its cause. But in spite of Bukofzer's very valuable paper on that subject,† and of his reply to my question,‡ I confess I am still under the impression that since I have used adrenalin in these cases I hear more frequently statements made by my patients as to the occurrence and persistence of bleeding a few hours after the operation than in previous times. From the somewhat timid but increasing support occasionally given to these statements of mine (see, for instance, Dr. Delie's letter in the 'Internationales Centralblatt für Laryngologie,' vol. xviii, p. 400), I conclude that my experience has not been exceptional, and I should be glad to hear in the discussion which is to follow these introductory remarks what the observations of the members of this Society are on that point. In one respect I think there will be general agreement with the advice given by Dr. Krebs, the wisdom of which I had appreciated from my own personal

* 'Internationales Centralblatt für Laryngologie,' vol. xviii, p. 306.

† 'Archiv für Laryngologie und Rhinologie,' vol. xiii, p. 2.

‡ 'Internationales Centralblatt für Laryngologie,' vol. xviii, p. 354.

experience before reading his communication, viz. that in operations undertaken for reducing the redundant mucous membrane covering the lower turbinated bones, the previous application of adrenalin to these structures deprives us, in consequence of the extreme contraction of the erectile tissue, of a correct judgment of how much ought to be removed, and that in these cases the application of adrenalin is inadvisable. In operations on the septum, etc., I use adrenalin chloride 1 : 1000, and apply this also by means of a camel's-hair brush.

With regard to the various methods of operation, the following ones are at our disposal :

1. Operations by means of chemical caustics (nitrate of silver, chromic acid, trichloroacetic acid, phenol sulpho-ricinicum, etc.).
2. Electrolysis.
3. The galvano-cautery.
4. Cutting instruments (knives, scissors, chisels, saws, trephines, snares, etc.).

Which of these methods is to be employed will, of course, depend upon the nature of the case, and upon the proclivities of the individual operator. Here I have only to deal with the reaction which follows the employment of the individual method used, and the necessities which in consequence may arise with regard to after-treatment.

Excluding electrolysis, which, in spite of the warm recommendation of a few authors, does not appear to have gained a firm footing amongst the usual methods of intra-nasal operations, and of which I have no personal experience, it may be stated, I think, without fear of contradiction, that, generally speaking, of all the methods named, the galvano-cautery is the one which more frequently gives rise to considerable reaction than any other one. Time was, and that not long since, when the galvano-cautery was looked upon as an almost universal panacea in all operations on the nose in which reduction of tissue was aimed at, and when it was used extensively and energetically by almost every one who had to deal with these affections. I think I am correct in summarising the present situation by saying that its popularity, although by no means exhausted, has been considerably on the wane in the course of the last ten years. This is, I believe, not merely due to the fact that the results hoped for in all possible affections of

the nose were by no means always obtained, but also in a not inconsiderable degree to the troubles but too often arising from the post-operative reaction after its employment. Not that these troubles arise in *all* cases. I am particularly anxious not to damage my case by overstating it in any particular, but whilst the reaction after the employment of the galvanocautery usually keeps within easily controllable bounds, it cannot be denied, I think, that in a large number of cases an eschar forms which at first is firmly adherent, and only several days after the operation becomes sufficiently loosened to be removed without producing fresh reaction. Here one of the troubles occurs, which are, I think, hardly dealt with explicitly enough in most of the text-books, seeing its frequency. Even though great care should have been taken to avoid injury to the opposite mucous surfaces, not rarely a rather general inflammatory reaction follows the application of the galvanocautery, and if one sees the patient on the day after the operation one finds that the nostril operated upon is swollen in its entirety, and that the opposite surfaces nearly, or, indeed, completely touch one another. Before the operator's mind the spectre of the formation of adhesions rises, and I think we all know how troublesome it is to deal with these. What is he to do under these circumstances? Probably he knows from unpleasant previous experience that meddlesomeness in these cases but too often revenges itself by ever-repeated and even increasing inflammatory reaction, necessitating very prolonged and tedious after-treatment; leaving matters alone may, on the other hand, actually result in the formation of adhesions between the two opposite surfaces. It is, of course, easy enough to prevent from the very first the touching one another of the two opposite surfaces by interposing a foreign substance, such as a strip of iodoform gauze or some aseptic cotton wool, or a celluloid plate between them, but this again has considerable practical disadvantages. In the first place any foreign substance introduced into the nose after an operation usually produces a great amount of irritation not only in the nose itself, but also in the adjoining territories, and may even lead to septic complications. There will be few specialists, probably, who have not occasionally seen some tonsillitis or general pharyngeal

catarrh, or a mild form of general septicæmia manifested by high temperatures and swelling and tenderness of the cervical lymphatics after plugging; whilst rarer complications, such as otitis media or empyema of one or other of the accessory cavities, are by no means unheard of, leaving rarer troubles alone, such as meningitis, dacryocystitis, etc., of which isolated examples may be found in rhinological literature.

Secondly, if the nose be plugged very firmly, and for some length of time, the plug is apt to cause local anæmia of the injured parts, and thereby to prevent healing. This is a point to which Mr. Waggett in one of our previous discussions, when I raised the question we are now discussing, very properly drew attention.*

Thirdly, if but a thin strip of gauze or a celluloid plate be introduced in order not to interfere too much with the circulation in the parts operated upon, they are not rarely sneezed out by the patient; or the opposite might occur, and they might penetrate into the naso-pharynx.

It is not easy to advise, seeing that one is thus sometimes "between the devil and the deep sea," which course ought to be followed, and this is one of the points on which I hope we shall hear in the subsequent discussion the views of experienced members of the Society. Personally, whilst loathing the tedium of the after-treatment in such cases, I am most inclined to merely watch the course of events, and to interfere only when the formation of adhesions, unless prevented, seems unavoidable. But it is undoubtedly a great reproach to the galvano-caustic method, which, indeed, has induced me to more and more narrow its employment of recent years, that this watching sometimes necessitates frequently repeated visits on the part of the patient. In not a few cases, even if all goes well, and the eschar comes spontaneously away, or is removed without difficulty a few days after the operation, fresh sloughs form repeatedly, and have to be watched and removed as necessity may arise, so that the duration of the after-treatment thereby becomes even more prolonged. It has been suggested that most of the drawbacks named may be obviated not by cauterising the free surface of the mucous membrane, but by plunging a pointed galvano-cautery below the surface, and producing

* 'Proceedings of the Laryngological Society of London,' March 3rd, 1899, p. 59.

adhesions between the mucous covering and the periosteum, thus diminishing the erectility of the soft structures, binding them tightly to the underlying bone, and thereby diminishing the obstruction of the passage of air. I have repeatedly tried that method, but may summarise my experiences by saying that whilst even this method does not infallibly protect against violent inflammatory reaction following, its ultimate results were usually too insignificant to warrant me in recommending it.

Naturally, under these circumstances the employment of other methods of operation suggests itself, such as that of chemical caustics, either after the use of the galvano-cautery, or primarily. At one time after Heryng's recommendation I used crystals of chromic acid, but did not find them sufficiently effective to deal with considerable hypertrophies of the mucous membrane. It may be that this experience has deterred me from employing trichloroacetic acid in solid form, as recommended from various quarters. I should like to hear the experiences of members of the Society on its use. I have also formerly frequently availed myself of *solutions* of caustics in various concentrations, but cannot say that, whether they were used alone or after galvano-caustic applications, I have found that they modified in a favourable manner the inflammatory reaction, which to me is the bugbear of operations for nasal stenosis.

Theoretically, one should expect that the employment of cutting instruments would be more calculated than any other method to minimise such inflammatory reaction, and, indeed, in a goodly number of cases in which they are used all is plain sailing. This applies particularly to the snare. How insignificant in most cases is the reaction after removal of nasal polypi by means of the snare! In other cases, again, slight inflammatory œdema may follow the use of the knife, the saw, the electric trephine, chisel, etc., such as would be but natural to expect, but this œdema in a few days subsides spontaneously. In a third category, however, which, according to my personal experience, unfortunately forms a not inconsiderable fraction of the total number of cases coming under observation, the reaction very unexpectedly is much more violent, and the difficulties arise which have induced me on several previous

occasions, and again now, to bring the question of the treatment after intra-nasal operation before our Society.

Let me describe by means of an imaginary concrete case what I mean.

A patient consults one on account of considerable nasal stenosis, leading to mouth-breathing, unpleasant sensations in the throat, and frequent catarrh of the respiratory passages. His nose is extremely narrow externally, and internally on both sides. The stenosis is found to be due, say, in the left nostril to a very large spur from the septum, extending not merely through the cartilaginous, but also through a good deal of the bony part. This spur practically occludes the whole nostril, the turbinated bones on that side being not at all enlarged, so that removal, say of the front part of the lower turbinated bone on that side, would obviously not materially improve the condition. [I mention this particularly in view of the advice given by various authors in cases of crests and spurs on the septum obstructing nasal passages to leave the septum alone, and to remove the corresponding part of the turbinated bone or bones. No doubt this is feasible in a good many cases, but by no means in all, as in the one just sketched.] On the right side the stenosis, in our imaginary patient's case, is due to a certain but not considerable degree of general deviation of the septum into the nostril *plus* some enlargement of the middle and lower turbinated bones, with considerable swelling of the mucous membrane covering these structures. It is obvious that on the right side reduction of the turbinated bones, particularly of the lower one, will be required, whilst on the left removal of the spur is clearly indicated. Reduction of the enlarged turbinates on the right side is performed by means of curved scissors and the snare, according to Mr. Lake's method, and relief is obtained on the right side. The stenosis on the left side is dealt with by means of the electric saw or the electric trephine, which I prefer, after trying a good many methods, to any other. After previous cocainisation and adrenalin application, the spur is removed either at once in its entirety, or possibly by two introductions of the electric trephine, care being taken not to injure the mucous membrane of the opposite turbinate. The spur is thus taken away in its entirety, and even discounting

the transitory effect of the cocaine and adrenalin application, obviously a large and sufficient airway has been produced. The patient expresses himself delighted; a few strips of iodoform or cyanide gauze soaked in peroxide of hydrogen are loosely introduced into the operated nostril, not with a view of plugging, but merely of checking any tendency to secondary hæmorrhage. The patient is seen next day, when he reports that no untoward symptom has developed. The iodoform gauze is removed, there is ample passage for air, the surfaces look clean and smooth, and there are no symptoms of inflammatory reaction. Formerly, under such circumstances I used to insufflate some disinfecting powders into the nose, such as iodoform, aristol, euophen, etc. I have, however, just as little as Krebs,—whose statements on that point I shall quote further on,—been able to convince myself that this proceeding accelerated the healing of the wound, and have given it up. When you see your patient on the following day a large whitish slough may be found to cover the whole of the operated surfaces. This, however, in my experience does not occur frequently, and if it does, the slough can, as a rule, be easily removed at once, not being adherent as in the case of galvano-caustic eschars. Much more frequently, however, the following happens: the nostril, when examined on the second day after operation, is decidedly narrower than it was on the previous day, owing to a general swelling of the field of operation. Naturally one attributes this to some transitory inflammatory œdema, and, remembering the fundamental principle of surgery, viz. if possible not to interfere with the normal healing of wounds, one leaves the matter alone, thinking that this apparently inflammatory swelling will, within a few days, subside of its own accord. Soon, however, one finds that unfortunately one has been mistaken in one's hope. Far from subsiding, the swelling even increases, and has evidently come to stay. Now troubles may arise, such as I described before in connection with galvano-caustic operations: renewed stenosis, danger of adhesions, difficulty in keeping the opposite surfaces asunder, and protracted after-treatment. In other cases no violent reaction and no troublesome symptoms ever occur, except possibly for some length of time the formation of crusts on the

operated surfaces, which can be easily washed away with a physiological salt solution. The net result, however, is that, when the healing of the wound has been completed, the permanent enlargement of the passages is much less considerable than it was at the moment of the completion of the operation, and although the patient himself may be, and usually is, quite satisfied, a still small voice within tells the operator that the result is not quite as brilliant as he had flattered himself it would be when he inspected the nostril after the removal of the spur. Nor is it uncommon in my experience that patients who have been operated upon by skilled specialists for nasal stenosis consult one in order to ask whether not something more could be done for them.

Now, what does happen in these cases? Why did it happen? Can it be prevented? These are the three questions which, above all others, will I hope form the main topic of to-day's discussion.

If we want to give an absolutely unprejudiced reply to the first question—what does happen in these cases?—it would be, I think, to the effect that an equally undesired and undesirable *excess of repair* is taking place. I purposely avoid the expression "regeneration" because that would imply that all the previous constituents of the removed excrescence—mucous membrane, vessels, nerves, glands, cartilage and perichondrium, bone and periosteum—had been reproduced. In the absence of conclusive histological evidence proving the occurrence of such a regeneration, I refrain from using that expression, although occasional utterances met with in rhinological literature distinctly point to the conclusion that the idea of a true regeneration is entertained by various authors. Personally I am rather inclined to believe that the post-operative permanent swelling, of which I have spoken, is due to new formation of dense connective tissue. The rapidity of the process and the absence of callus-formation, which could be demonstrated by the touch of the probe, seem to me in favour of the latter view. I put this forward, however, only as an hypothesis; the actual nature of the ultimate tumefaction will have to be ascertained by future microscopic investigation.

In reply to the second question, viz. why did this tumefaction

arise?—the most natural reply would seem to be that in all probability it had something to do with the method of the operation, unless indeed it be surmised that the tissues constituting the septum and the floor of the nose were endowed with a special proclivity towards repair after removal. Against both these views, however, the powerful argument at once arises, why, if either the method of the operation, or the physiological properties of the parts were at fault, the excess of repair did not take place in *all* cases? And this objection seems to me a real stumbling-block, for surely if either the method of the operation, or the peculiar conditions of the tissues were to blame, it is not easy to see why the difficulties described should not arise in all cases in which these parts had been subjected to operative interference. Yet it must be emphatically repeated that they are met with in a certain proportion of the cases only which have been operated upon by trephine, saw, chisel, etc., whilst in another fraction all is plain sailing. There remains the lame explanation of a “personal disposition,” an explanation more or less of the nature of “the refuge of the destitute,” and mentioned by Dr. Krebs in that sense in a correspondence which I have had with him on the subject. It holds the less good in the present case, because having given a good deal of attention to this question, I am confident that nobody would be able to say what that personal predisposition consists in. Neither age, nor sex, nor general state of health gives the least clue beforehand to the operator what the reaction after the operation will be like. I have had men in rather advanced age, gouty, plethoric, indulging in the luxuries of the table, and in alcohol, healing promptly, and without the least trouble; whilst I have met with the difficulties described more than once in the case of healthy young persons. Quite recently in a case of traumatic nasal stenosis in an otherwise perfectly healthy boy I had to contend with the difficulties described, and had to keep him under observation for nearly five weeks after the operation.

Dr. Krebs tells me that in some of his own cases he thought he had discovered more tangible causes of the difficulties described in the following conditions:

1. Cases in which he believed that not everything diseased had been thoroughly removed; *e. g.* if in cases of hypertrophy

of the lower turbinate the pathological enlargement of the posterior end, or on the lower lateral side, had been left untreated.

2. Cases in which the primary cause had not been first removed; *e. g.* when before removal of the lower turbinate a co-existing primary hypertrophy of the middle turbinate, or adenoid vegetations, or empyemata of the accessory cavities had not been dealt with.

3. Cases in which the after-treatment had been too meddling.

I cannot say that I should in any of my own cases accuse such conditions, as those described by Dr. Krebs, to have been the causes of my difficulties. I certainly have met with them much more frequently when operating upon the septum than when removing parts of the turbinates, and the only doubt which I have sometimes had in my own mind was whether possibly the removal of the *mucous membrane* covering the bony or cartilaginous excrescences, for the reduction of which the operation had been undertaken, had anything to do with the subsequent excessive reaction and excessive repair. Theoretically, one would, of course, expect the very opposite, *viz.* greater cicatricial contraction owing to the greater loss of substance produced; and additionally there is the testimony of so experienced an observer as Moritz Schmidt, who states* in the latest edition of his text-book that he no longer troubles in the least about the mucous membrane, and that he had seen no disadvantages accruing thereby. Still, I think it right to mention this point, which brings me to the third question to be considered in this connection, *viz.* whether and, if so, how the tendency to excessive repair could be prevented? Seeing that—in my experience at least, and apparently also in Chiari's,—the difficulty is most frequently met with when operating upon the septum, the natural way out of it obviously is to altogether avoid, if possible, operating upon the septum in cases of nasal stenosis due to both crests or spurs of the septum and enlargement of the turbinates, and produce a better airway by partial resection of the lower, and, if need be, also of the middle turbinated bone. I certainly think that, if this be feasible, it is the most natural way out of

* *L. c.*, p. 591.

the difficulty, although it must not be left out of consideration that sometimes when the lower turbinated bone has been reduced in size, a few months later, enlargement of the middle turbinated bone on the same side is met with, and although in other instances excessive repair takes place in the region of the lower turbinate itself. I may remind the Society of a case in point brought forward years ago by Dr. Hill under the title of "Regeneration of Tissue along Inferior Crest after Turbintomy."*

In not a few instances, however, as in the imaginary illustration given before, the simple expedient of substituting resection of the turbinates for operations on the septum itself is out of the question, and the septum itself has to be dealt with. Assuming for a moment that after all there was something in the simple removal of septal enlargements with their covering mucous membrane by means of saw, trephine, or chisel, which caused violent reaction and excessive repair, the question arises whether anything could be done to combat them, or whether other forms of operation could be advantageously substituted. With regard to the first-named question, the rather surprising proposal has been recently made by Dr. Kreilsheimer, of Stuttgart,† to apply after operations performed with the saw or trephine the galvano-cautery at red heat to the wound, and to insufflate for a time xeroform upon it. It is true that the author recommends this procedure not so much with a view of preventing reaction as secondary hæmorrhages. But when I read his proposal I confess it looked to me rather like "driving out Satan by Beelzebub," seeing that to the reaction caused by the cutting operation, the irritative effect of the galvano-cautery was to be superadded. However, I did not mean to be deterred by theoretical considerations from giving the method a trial, and recently adopted it in a suitable case. The effect, however, was exactly what I had anticipated; reaction was very considerable, the wounded surface was found covered the day after the operation with a large slough, which completely occluded the nose, and after removal several times re-formed, and the duration of the after-treatment was not in the least curtailed. I

* 'Proceedings of Laryngol. Society of London,' Nov., 1895, and Jan., 1896.

† 'Fraenkel's Archiv für Laryngologie,' vol. xi, p. 339.

may have been particularly unlucky, but the experience was hardly encouraging enough to repeat the experiment.

On the other hand, I think that a method recommended by Moritz Schmidt, and slightly modified by myself, although not actually preventing inflammatory reaction, and certainly not the excessive repair, will be found of material assistance in diminishing, at any rate, the former. This is the use after operation of a weak boracic acid and cocaine spray. Schmidt recommends this spray in the concentration of three grains of cocaine and half a drachm of boracic acid to six ounces of water. Instead of employing simple water as an excipient, I use a solution of adrenalin chloride 1 : 10,000, in which the cocaine and boracic acid are dissolved. The use of this solution three times daily for several days after cutting operations in the nose not inconsiderably diminishes, in my experience, the inflammatory reaction, and thereby helps in curtailing the duration of the after-treatment.

Still the question remains, whether not special forms of operation could be advantageously substituted for the simple removal of deformities of the nasal septum.

It is, of course, well known that the late Dr. Asch, of New York, has proposed an ingenious method of treating deviation of the septum. It consists "in making a crucial incision through the cartilaginous septum over the most prominent part of the deviation, breaking down by finger or forceps the basis of the segments thus formed, and in the insertion of a hollow splint." The method has met with much favour in America, but has for some reason or other, so far as I know, not gained a footing amongst intra-nasal operations in this country or on the continent of Europe. I have no personal experience of it, and I hope we shall hear something about it in our discussion from those who have gained some experience of their own. I may, however, remind the Society that it is much more calculated to deal with deviations than with crests or spurs, extending not only through the cartilage, but also through the bony part of the septum, the latter being the cases in which I have most frequently met with difficulties.

Dr. Krebs, when corresponding with me on the subject, spoke

most highly of the operation originally introduced by Krieg,* and subsequently modified by Bönninghaus, consisting in total removal of the deviated parts of the cartilaginous and bony segments of the septum. Bönninghaus's modification consists in making on the convex side of the septum three incisions through the mucous membrane, the one parallel to the dorsum of the nose, the second along the mobile part of the septum, and the third corresponding to the floor of the nose. This is followed by resection of the mucous membrane of the convex side and of the cartilages and bones as far as they take part in the deviation, so that after the operation the septum consists only of the mucous membrane of the originally concave side.

I confess that when I read the detailed description of the method in Bönninghaus's original communication in 'Fraenkel's Archiv,'† I thought that it was a big undertaking. As a matter of fact the author himself recommends it in very severe cases of septal deviation only. This will be easily understood when one learns that the operation, according to his own experience, requires from half an hour to two hours, and that in these cases he considers local anæsthesia infinitely preferable to general. Still, seeing the tedium of the after-treatment in so many cases in which these obstructions are dealt with by simple removal by means of cutting instruments, it appeared to me well worth consideration whether one should not resort to it, more particularly in view of the fact that its results are highly extolled by Krieg, Bönninghaus, and Krebs. However, whilst preparing these introductory remarks, I have within the last few days come across some observations by Hajek and Menzel in the very latest number of 'Fraenkel's Archiv,'‡ which appear to me so noteworthy, and bear so much upon the question which we are discussing to-day, that I hope I shall be permitted to quote in full the first sentences of Hajek's paper in verbatim translation. They are as follows:

* 'Med. Correspondenzblatt des Württembergischen ärztlichen Landesvereins,' 1886, Nos. 26 and 27; and 'Berliner klinische Wochenschrift,' 1889, Nos. 31 and 32.

† "Ueber die Beseitigung schwerer Verbiegungen," etc., 'Fränkel's Archiv,' vol. ix, Heft 2, 1899, p. 269.

‡ "Bemerkungen zu der Krieg'schen Fensterresektion," 'Fränkel's Archiv' vol. xv, Heft 1, pp. 45 and 48.

“Since the publication of the paper of Bönninghaus, in 1899, I have carried out Kriege’s ‘window-resection’ in more than 100 cases. In 35 cases I was in a position to control the results of the operation for one to two years afterwards. I may be permitted to say at once, before entering upon questions of detail, that the results have been uniformly good, and that in my opinion similar good results, particularly in the case of severe deviation, are not obtained by any of the usual methods. I ought, it is true, to add at once that the method is complicated, technically difficult, and of long duration (half an hour to one and a half hours), and that it requires much patience on the part of the patient and of the operator. For this reason the value of the method must not be gauged by the results of the first few cases upon which anyone may operate, as quiet and circumspect working is only acquired after some time.”

“To the difficulty just named hitherto the disadvantage was added of a large wounded surface on the convexity being left until cicatrisation had taken place, and not rarely even afterwards formation of crusts became an incessant source of subjective troubles for the patient. One could not help feeling sometimes that the price which the patient had to pay in order to obtain in course of time a free passage through the nose was rather too costly.”

Hajek then proceeds to explain that by the new modification which he now introduces into the Krieg-Bönninghaus operation, and which consists in keeping the mucous membrane on the convex side intact, this disadvantage is entirely done away with. He admits, however, in opposition to the opinion of his assistant Dr. Menzel, who describes the modification in full in a paper which immediately follows Hajek’s own communication in the new volume of the ‘Archiv,’ that the technique of the Krieg-Bönninghaus operation is thereby not only *not* rendered any easier, but on the contrary made somewhat more difficult!

In view of the novelty of Hajek’s suggestions, and the fact expressly emphasised by him that familiarity with this operation can only be gained by protracted experience, I of course refrain from expressing any opinion concerning it. It will have to be practically tested, and its value determined. A few facts, however, are, I think, tolerably clear from all that I have said so

far, viz. (1) that it seems there are actual practical difficulties in dealing with many cases of nasal stenosis; (2) that no universally acknowledged method of operation apparently exists; and (3) that the difficulties of the after-treatment have been found to be considerable by a number of competent observers, independently of one another. I emphasise the last-named fact particularly for this reason, that I expect we shall hear in the discussion some expressions of surprise that anybody should have met with such difficulties as those described, coupled with the statement that the speakers had never encountered them. I should of course not doubt such statements, but would appeal to the lucky ones, who possess so enviable a record, to describe in full detail to their less fortunate brethren by the adoption of what method they had obtained their universally satisfactory results.

It remains for me only to discuss a few points common to most intra-nasal operations in which active after-treatment comes into question, whilst it need hardly be said that after some such operations, as, for instance, after removal of nasal polypi, no after-treatment whatever is required.

First and foremost the contingency of secondary hæmorrhage wants some consideration. Opinions vary very considerably, as only recently shown in the discussion which followed the reading of Dr. Krebs' paper, as to whether prophylactic plugging is necessary and desirable in all such cases. Personally I entirely agree, as will have been seen from my preceding remarks, with Dr. Krebs, that firm plugging should, if possible, be altogether avoided, as it does not with certainty prevent secondary hæmorrhage; as such hæmorrhages may and often do occur when the tampon is removed on the day after the operation; as it may lead to infection of the adjacent parts; as the anæmia of the parts caused by the firm pressure is likely to interfere with the healing process; as it is anything but pleasant for the patient; and as I feel sure that the reactive swelling within the next few days after the removal of the tampon is greater than when this measure has been omitted. In operations, therefore, in which there is no particular reason to expect considerable secondary hæmorrhage, I nowadays use no plugging at all, and only give the patient the boracic-acid-cocaine-adrenalin spray,

the composition of which I have indicated previously. If the wound caused by the operation should be at all extensive, I introduce a loose strip of cyanide gauze, saturated in peroxide of hydrogen (1 : 20 volumes), into the operated nostril, not with a view of effecting compression, but merely with a view of preventing subsequent hæmorrhage. [Krebs, instead of this, recommends the introduction of a small strip of gauze, or of a soft piece of absorbent cotton, saturated with adrenalin chloride (1 : 4000), which is to be retained for ten minutes only.] The patient ought of course to be directed to keep quiet, to rest on his return home for a while quietly with his head slightly raised, not to blow his nose violently, and if in spite of all bleeding occurs, to apply cold water compresses over his nose. The simple advice, originally given by Hueter and resuscitated by Krebs, that the patient should, when hæmorrhage occurs, inspire deeply with his mouth closed, and slightly expire with open mouth, will be found very useful in practice. It need, however, hardly be said that none of these measures affords an absolute guarantee against secondary hæmorrhage; that in some cases, particularly after operations on the posterior ends of the lower turbinates, application of more powerful styptics or of energetic plugging by means of Bellocq's cannula may be found indispensable, and that even after the application of the latter on removal of the tampon fresh hæmorrhage may occur. It will be very interesting to hear, in connection with this question of hæmorrhage, the experiences of members of the Society, whether my own impression is shared by others, viz. that since it has become the universal practice to apply solutions of adrenalin chloride to the mucous membrane of the nose previous to intra-nasal operations, secondary hæmorrhages have become more frequent, and somewhat more persistent than in previous times.

In the discussion which followed the reading of Dr. Krebs' paper in the German Otological Society on the points just mentioned, such different opinions as the following found expression :

Wolf (Frankfurt-am-Main) inquired whether after the application of adrenalin secondary hæmorrhages were not more abundant.

Thies (Leipzig) spoke against the use of preparations of adrenalin for styptic purposes.

Schech (Munich) condemned as strongly as Krebs had done general meddlesomeness in after-treatment, but would not like to be deprived of twenty-four hours' plugging.

Siebenmann (Bâle) warmly advocated the use of plugging in order to arrest hæmorrhage, but advised to use wet tampons.

Zarniko (Hamburg) agreed with the opener of the discussion in all essential points, and stated that in the course of the last ten years he had only twice found it necessary to plug; he also strongly recommended that patients about to undergo intra-nasal operations should abstain from the use of alcohol for several days previously.

Werner (Mannheim) considered short plugging required.

Körner (Rostock) thought one may do without plugging, but ought not to perform these operations in the out-patients' room.

Kronenberg (Solingen) emphasised the importance of after-treatment, and considers adrenalin very useful in operations in the upper parts of the nose.

Krebs himself, in summing up the discussion, referred to Bukofzer's experiences, from which he concluded that the fears as to more frequent and greater hæmorrhage after its use were unfounded. He himself laid more stress upon deep inspiration through the operated half of the nose than upon adrenalin applications. He had given up plugging for the reasons stated in his paper, already previously to the introduction of adrenalin.

From all this it is obvious that anything but unanimity prevails with regard to the use of adrenalin previous to, and the use of plugging after the operation.

As regards other general principles, we all, I think, will be agreed that meddlesomeness should be deprecated. Unfortunately, however, as I have tried to show, it is not always easy to say where meddlesomeness ends and neglect begins. If adhesions should, after all, unfortunately form, because one does not wish to disturb the normal course of healing, the operator is practically certain to be accused of neglect, and if he wishes to escape that Scylla, and sees his patient daily until all risk of the formation of adhesions is practically over, he is apt to fall into the Charybdis of being accused of making a big

thing out of a small operation. I can quite understand the patient's feelings in this matter, and I must confess that it seems to me an opprobrium to our branch that at a time when the biggest operations in other parts of the body are performed in one sitting, the period of after-treatment being of the briefest, it should be looked upon, to conclude from the writings of various rhinological authorities, as a self-understood matter, that the after-treatment of these simple operations should occupy a period of many weeks! What Krebs states about the principles to be followed in cases of *normal* healing of the wound will probably be endorsed by most specialists. He says, "The normally healing nasal wound is not to be considered as an object of treatment at all. The patient, who, as a rule, feels very little trouble after the operation itself, ought to be told that, as he has a wound in his nose, he should abstain from alcohol, and that he ought to avoid diving and swimming, as well as violent sniffing up, in order not to get pus through the tube into the middle ear. The nasal cavity itself, however, ought to be left alone. It is one of the most valid principles of surgery not to disturb wounds in their regular course, not even to probe them. Yet, how much is sinned against this direction in the nose! One sees that the patient is told to come, after, for instance, removal of parts of the lower turbinated bone, every day or every second day, when, with pain and difficulty, scabs are loosened with the probe and removed with the forceps; one sees washing out, touching, cauterising of granulations, burning, insufflations, etc. All this is usually superfluous, sometimes even disadvantageous to the healing of the wound. All that is necessary is to control whether the wound heals normally, particularly whether adhesions are forming, and whether the complaints of the patient have been removed by the operation. In many operations, particularly by means of the snare, it will be sufficient if the patient is seen once more, say after a fortnight. In other cases a somewhat more frequent control will be desirable. No universal formula can be given; I believe, however, in cases when the wound heals normally it will almost always be sufficient to examine the patient again on the first, seventh, fourteenth, and twenty-eighth day after operation. On these occasions one may remove dried crusts if they should

be disagreeable, one may cauterise luxuriant granulations with solid nitrate of silver, and one may insufflate antiseptic powders,—for instance, xeroform. That regular insufflation of disinfectant powders promotes the healing of the wound I have not been able to convince myself after long trials made with iodoform, aristol, airol, dermatol, xeroform, and menthol and boracic acid. When wounds have been made by means of the galvano-cautery, and in others in which much secretion takes place, it may be required to apply to the introitus of the nose a mild ointment, such as menthol-vaseline (1 : 100), in order to prevent eczema. If there is a risk of the formation of adhesions a more active after-treatment is required. The patient should be seen daily or every second day. The nostril which is in danger is to be opened *pro tem.* by means of cocaine or adrenalin. The cicatricial bands, which have already formed, ought to be divided by cutting instruments (not by means of the probe, because through this more slowly healing wounds are produced), and a little piece of gutta-percha paper, disinfected by sublimate and subsequently rinsed in a salt solution, should be introduced into the nose. If the patient does not blow his nose such a strip will be retained for hours or even days in the same place. Some authors recommend an orthopædic after-treatment after operations for deviation of the septum. This after-treatment is superfluous when the deviated parts of the skeleton of the nose have been thoroughly removed; if this has not been done they usually result in failure.”

So far Dr. Krebs. Whilst I entirely agree with him that in cases of normal healing of the wound, meddlesomeness is to be strongly deprecated, and whilst I find all the directions he gives with regard to this point admirable, I confess to my regret that in my experience the number of cases in which the wound does *not* heal normally is greater than one should expect from the brevity of his remarks on that point, and that I find neither in his paper, nor in the discussion which followed it, a panacea for the prevention of, or really effective dealing with, such difficulties as those which have induced me to propose this subject for discussion in our Society. I devoutly hope that in our discussion we shall hear of some method or methods through the adoption of which we may generally obtain in all cases

effective curtailment of our after-treatment, and in many cases even better results from the operations than those realised by our present methods.

Sir FELIX SEMON read the following letter from Mr. Butlin, who was unable to be present.

“ MY DEAR SIR FELIX SEMON,

“ I am very sorry indeed that my attendance at a committee of the two Colleges will prevent me from being present at the Laryngological Society and taking part in the discussion on “The After-treatment of Nasal Operations.” I did not know it was to come on so early in the session, but I suppose that the members are in such a hurry to tell their personal experience that they cannot wait until the new year.

“ Had I been present, I meant to speak, rather of un-success than of success. For, while I have had no difficulty at all in many cases, there have been other cases in which no kind of after-treatment has seemed to be attended with success. The more one does for some patients, the worse they seem to be. The difficulty of preventing adhesions, of maintaining the large passage one has made at the time of the operation, of raising the valleys and keeping them up, of lowering the hills and keeping them down, etc., is enough to choke off the youngest and most stout-hearted of nasal surgeons. There have been patients with nasal troubles on whom I have operated, whom I have afterwards heartily wished I had never seen.

“ Of course, I hear of nasal surgeons who never meet with such cases as these. I can only congratulate them. But I can truthfully say that I have been consulted by patients of many of the best nasal surgeons in this town on account of the failure or very partial success of operations which they have undergone; and I have no doubt, on the other hand, that some of my failures have, in like manner, consulted some of my colleagues among the members of the Laryngological Society. Each one of these patients always seems to think that, had the operation been performed by some other surgeon than the man who did operate, he would have been a sound and happy man!

“ Believe me, yours very truly,

HENRY T. BUTLIN.”

Dr. SCANES SPICER said that what chiefly struck him in the introductory paper, as well as in Mr. Butlin's letter, was the recognition of the very real difficulties, complications, and duration of the surgical treatment of nasal obstruction—conditions which removed nasal surgery from the category of minor surgery. This was a conclusion which the so-called advanced rhinologists had contended for years ago. He knew of no class of surgical case which demanded more tact, judgment, and skill than the management of nasal cases, and their conduct to a satisfactory termination, with a minimum amount of after-treatment (*i. e.* an indefinite multiplication of operations).

The significance of what he had to say lay in its application to the diminution and simplification of the so-called after-treatment of nasal operations, and the obtaining of the maximum amount of benefit possible in the minimum of time, rather than in the discussion of minor details.

His first point was that it was not wise to confine one's attention merely to the chief objective abnormality (*e. g.* spur, deflected septum, or "moriform") and to operate on that, but to regard all the conditions in the individual case contributing to the obstruction, to consider the proportions in which they did so, to adopt a policy reasonably calculated to restore a permanently efficient, normal passage, and ensure a speedy recovery with a minimum of after-manipulation. He thought he must have encountered an unusually high proportion of complex and difficult cases, but he could affirm that of late years his cases were comparatively few in which the obstruction could be effectively dealt with casually in the consulting room with cocaine. To take an imaginary case, one might have in an obstruction case to consider spurs, bony deflections, cartilaginous dislocations, various enlargements of middle and inferior turbinated bodies, adenoids, and anterior nasal stenosis as all factors in the existing obstruction. One cannot envy the lot of the patient who has to give up months or years to the removal of such a combination by a succession of operations, or wonder if he become neurotic to the degree of insanity, and wander round from one specialist to another. He would therefore recommend, firstly, a complete diagnosis of, and secondly, a well-planned and boldly-executed operation on, the various factors actually making the obstruction, as the best preventive of unduly protracted after-treatment.

This led to his second point, that in these cases he considered it advisable to give a general anæsthetic in order to permit such a combination to be dealt with at one *coup*. Sir Felix Semon seemed rather to prefer local anæsthesia as giving a better view of the field of operation in the nose, but he could assure the Society that he had done all his private obstruction operations for several years in the rhinological position, with as perfect a view as it was possible to have, and with the additional advantage of the patient's head being without difficulty maintained in the most convenient posture for just as long as was necessary. This, of course, necessitated the patient being in a nursing home, and he had found that very seldom in the last few years had his obstruction cases required to be in the home more than ten to eleven days, and were then usually sufficiently convalescent to pass out of the surgeon's hands. He had had more success since he had used Lake's rubber splints and similar sheets of soft rubber, which permitted gentle irrigation and some ventilation of the operated nasal cavity, without causing the irritation and hæmorrhage which so often attended the removal, and changing of the gauze-packs he had previously used.

He was very far from asserting that every case was cured of everything for ever and ever by this method, but there was no comparison between his results now and seventeen years ago, when he commenced dealing with these cases by piecemeal operations. Obstruction cases

ERRATUM.

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Page 27, line 29, *for* "when" *read* "until."

were now almost invariably successful if the patient would only tolerate a brief period of confinement and after-treatment, and a second operation for obstruction after a fortnight was most rare.

His third point was with reference to a condition which led to a repetition of operation, and which he did not think was as yet recognised as a cause of prolonged after-treatment, and that was a condition of anterior stenosis due to alar collapse and alar rigidity, the result of which was necessarily, on common physical principles, to lead to a condition of rarefaction of the air in the nasal chambers on inspiration through the nose. This diminution of air-pressure on the walls led to vascular turgescence and œdema, and it was not difficult to conceive that the removal of extra-vascular pressure from the constituent walls of the newly forming blood-vessels, combined with the positive force of capillary blood-pressure, led to the heaping-up of new cells, granulation masses, and thickenings, of which Sir Felix Semon had spoken.

As a practical outcome of these views he had for years aimed at restoring the physiological action of the muscles of the *alæ nasi* in respiration, and in most cases of complex nasal obstruction in which the *alæ* were collapsed, or rigid, or sunk in unduly on inspiration, he dilated with a screw dilator, to the fullest extent, the fibrous tissue of the *alæ*, taking care not to tear it. As a result of this, it was frequently seen that the normal expansile action of the *alæ* at once commenced, the air entered the nose normally, and the walls were subjected to normal variations of atmospheric pressure, instead of the relatively great suction which was experienced when there was alar stenosis. He believed the explanation to be that the muscles of the *alæ*, paretic from disuse, were unable to respond to the inspiratory impulse when the resistance offered by the rigid *alæ* was diminished. Subsequently he inserted smooth rubber rings in the vestibule with the idea of maintaining the mechanical dilatation, while the alar muscles regained their power and co-ordinated action with the other muscles of inspiration. These rings were inserted in front of Lake's splints.

Dr. STCLAIRE THOMSON said, that as they were all given to err, it was pleasant to find that they erred sometimes in good company, and that their leaders followed the same mistaken footsteps that they themselves had trod. To put it concisely, the best way of avoiding the difficulties of after-treatment was to have a strict regard for the natural processes of repair, and to take the utmost precautions before operating with regard to the preparation of the patient, the surgeon, and the instruments. Unfortunately—or perhaps fortunately—they could not improve upon the natural processes of repair, and, in regard to the nose, certain points had to be borne in mind in addition to those in other parts of the body, namely, the great excretion of moisture from the surface of the nose, the work of the ciliated epithelium, and the secretion of mucus. Bearing this in mind, it would be seen that it was of the highest importance to avoid, if possible, any after-treatment, and particularly the use of powders and plugs. They had to remember that fresh blood was itself a germicide. Lister used to be fond of pointing to the "organising blood-clot" in his wounds. This

blood-clot could be seen on the anterior end of the middle turbinal after amputation, and was frequently seen on the roof of the nasopharynx after the adenoid operation. He had only noticed this in private practice, as hospital patients were so uncleanly in themselves and their surroundings. He believed he was right in saying that Sir Felix Semon himself used no after-treatment for the adenoid operation, and most of them would agree with this. He himself had tried to introduce it at a hospital where the sanitary arrangements were not perfect, but the nurses had begged him to have the children's noses washed out at least once after the operation, as the smell was too foul for them to put up with; yet the operation itself was carried out as in private. As strict antiseptic measures in the nasal chambers were impossible, half-measures were irritating and useless. The attempt to make antiseptic lotions or powders in the nose have any germicidal action was futile; they might neutralise the toxins, but that was all, for the Schneiderian membrane would tolerate no active bactericide. Personally, he so seldom used the galvano-cautery nowadays, that his experience of the after-reaction was comparatively small. He believed more in the use of cold steel in the form of knife, scissors, punch forceps, or wire snare. Ash's operation he had performed only a few times and in selected cases, but with good results. He confirmed the use of Lake's soft rubber splints as being vastly superior to the hard vulcanite tubes introduced by Meyer in America. He could give some personal experience of the operation on the septum which had been mentioned. He had himself seen a patient under local anæsthesia have the septum resected and sit perfectly still for one and a quarter hours. This was in Germany. He did not think it would be done in this country. He was anxious to see if he could do the same operation under a general anæsthetic, but his experience was not yet sufficiently extensive to entitle him to refer to it before the Society. This method of submucous resection was, in his opinion, the most promising of septum operations. He could not altogether agree with Dr. Spicer as to the necessity of doing one large operation on the nose; he thought, with Lermoyez, that nasal operations should be done "in fractions." If surgical interference were limited to one side at a time, the reaction was much less than if both sides were attempted at one sitting.

Mr. CRESSWELL BABER said, that the chief practical point to consider was the after-treatment of ordinary cases of operation for nasal obstruction in which portions of the septum or turbinated bones had been removed, or the galvanic cautery had been applied. From some years' experience he was convinced that the less done to the nose after operation the better. The plan he adopted in these cases was to do nothing to the nose whatever except placing a light plug of antiseptic wool, dusted on the first occasion with iodoform, into the vestibule. This was frequently changed. After a week he examined the nose, applying cocaine, and removed any slough with forceps, and if there were any chance of adhesions he passed a fine probe through the cavity. This he repeated once a week if there was any likelihood of adhesions, or he instructed the patient to pass for himself a thin bone spatula, about nine-sixteenths of an inch in width, right through the nasal cavity, and let him do it two or three times a week. He had

used these spatulæ for the last seven years in a good many cases, and found them very satisfactory for preventing adhesions. He thought in only two circumstances was it necessary to leave a foreign body in the nasal cavity after operation: (1) in excessive hæmorrhage, which was very rare in his experience; (2) in cases in which a deflected septum had been divided and pushed into a more normal position, a tube or other apparatus might be necessary to keep it in place. As regards washing out the nose, he did not do this until some weeks afterwards if there were much discharge. Granulations might be touched with silver nitrate. He found, that in sawing off a ridge from the bony septum, in order to get a satisfactory result, it was generally necessary to remove the small inferior turbinated body on the deflected side at the same time. A very important point had been raised by Dr. Spicer, and that was to examine very carefully the state of the vestibule before doing any operation in the nasal cavity for obstruction, so that disappointment might not ensue. Sir Felix Semon had expressed his astonishment that a septum should sometimes take five weeks to heal. In his (the speaker's) experience it generally took that time or more, and one had to watch the case until it was quite healed. As regards anæsthetics, he thought general anæsthesia was necessary in a good many cases, and it gave good results. One could see exactly what one was doing by having the head slightly raised and working with the aid of a reflector.

Dr. BRONNER referred to the question raised by Sir Felix Semon as to the application of cocaine. He formerly used a spray, but now he employed powdered cocaine, eucaine, and desiccated supra-renal extract, and applied it on wet cotton wound round a probe; in this way he was able to localise very much better. He was a great advocate of the galvano-cautery, and used it nearly every day of the week, and he had had very few bad results. He used a cautery with a very thick, broad point, and burnt away the tissue to the extent he considered necessary. He regarded as a most unsurgical procedure, the method of sticking a thin point into the mucous membrane, as this often set up severe inflammation of the turbinal. As regards the after-treatment, he prescribed a 4 per cent. solution of bicarbonate of soda, and told the patient to syringe the nose frequently. This relieved the pain and prevented the formation of crusts and sloughing. Should there be sloughing, he removed the crusts and applied trichloroacetic acid. He always used a trephine for removing spurs. He did not consider it remarkable to get a swelling of the cartilage after trephining; as in all other parts of the body, any operation on cartilage was followed by local thickening, which lasted for some weeks. With reference to the septal operation, he generally did that suggested by Moure, and he found it fairly successful. He generally used a general anæsthetic. He had tried the wonderful operations which had been described, and found them exceedingly difficult, requiring a lot of time, and the patients would not have them. In spite of what had been said, he thought that it was dangerous to give an anæsthetic when the patient was in a sitting position. As regards hæmorrhage, he always applied powdered ferropyrine, and he had never had a serious hæmorrhage, except in one case, where the patient told him after the opera-

tion that he was a "bleeder." He always told the patient to syringe with very hot water if there were any hæmorrhage. He never used a plug, but put in a small piece of cotton wool, to be changed every fifteen minutes. He gave most of his patients an antiseptic mouth-wash, and in his district, where he had the poorest to treat, he found it necessary to lay emphasis on the importance of having a clean mouth, as a septic mouth very readily gave rise to suppuration in nasal operations. He found that it was better for the patients to come frequently and have a little done at a time than to have the total causes of obstruction removed at one sitting by a big and long operation under a general anæsthetic. There was always a certain amount of danger in a big operation, and many fatal cases had occurred. In Moure's operation for deviation of the septum, of course, a general anæsthetic was necessary; but when the nasal obstruction was due to other causes a general anæsthetic was unnecessary, dangerous, and uncalled for, except the patient were very nervous. He had seen many cases, some with emphysematous chests, weak hearts, and who had been advised to undergo an extensive operation, whom he had cured in a few sittings with a local anæsthetic.

Mr. WAGGETT thought that in the hands of a skilled anæsthetist nothing was better than a general anæsthetic with the patient sitting up. On the other hand, local anæsthesia made it possible to divide an operation into separate stages, which was often desirable. The discomfort and inflammatory reaction sometimes following galvanocauterisation were much reduced if the parts were swabbed with glycerine and carbolic acid. As regards adrenalin, he agreed with Sir Felix Semon that it increased post-operative reaction in most cases, and that its use induced a tendency to hæmorrhage. He was, however, bound to say that, although he often used adrenalin, he had not seen any troublesome hæmorrhage for some considerable time, ever since he had adopted the routine use of peroxide of hydrogen after all cutting operations of any magnitude in the nose. His practice was to have a mixture of the peroxide (vols. 10) with an equal quantity of tepid water pumped into the nose every three hours during the first two days after operation. Not only did this prevent hæmorrhage and keep the nose clear of blood-clots, but where it was desired to keep a splint in the nose for several days, or where a gauze packing had been employed, these could be retained in the nose without fear of sepsis. He generally used a cocaine nasal spray for the purpose, passing the small terminal of the instrument two inches or more into the nose above and below the splint, or into the interstices of the packing. As to the permanent thickening mentioned by Sir Felix Semon as occurring after some operations on the septum, he believed its degree was more or less proportional to the length of time taken in healing. After the removal of a spur by the electric trephine or the saw the wound should not be retarded in its healing by the ischæmia which resulted from tight plugging, nor irritated by loose plugging. Moure's operation for deflected septum had this advantage, that the cuts were placed above and below the part which needed to be pressed upon by the splint. He was in the habit of using Lake's splint after this operation.

Mr. HUNTER TOD testified to the excellence of the Krieg-Bönninghaus operation. During the last two years he had adopted this method in the treatment of cases of nasal obstruction due to deviation of the septum, and had operated on some thirty to forty cases. His chief reason for preferring this operation to any other was the simplicity of the after-treatment. Intra-nasal splints were not required, and continual daily dressings were avoided. Plugging the nose with gauze during the first twenty-four hours after the operation to prevent hæmorrhage, and the daily employment, for three weeks, of a simple nose wash followed by the use of an oily spray, to prevent the formation of crusts, was all that was required. He advocated the use of a general anæsthetic, the patient being in the usual recumbent position. The nose should be plugged, just before the anæsthetic was administered, with gauze soaked in a freshly-prepared .5 per cent. solution of cocaine and supra-renal extract in order to prevent hæmorrhage during the operation. The only difficulty in the operation was the avoidance of an accidental perforation of the septum. He incised the mucous membrane as far forward as possible, on the side of the obstruction, and then cut through the cartilage carefully, separating it with a probe from the mucous membrane of the opposite side. As much of the cartilage, and even of the vomer and plate of the ethmoid, as was necessary was now removed by means of a special punch forceps which Meyer and Meltzer had made for him. The mucous membrane on the side of the obstruction was removed with the cartilage, and only a single layer of mucous membrane left to represent the septum. This gradually stiffened, and afterwards formed a straight septum. The wound healed within a month. The result was usually very satisfactory. It was sometimes necessary to remove, on the non-obstructed side, the anterior ends of the middle and even of the inferior turbinates, if their mucous membrane were hypertrophied, to prevent obstruction on this side, owing to the straightening of the septum. He agreed with Sir Felix Semon that the use of supra-renal extract increased the liability to hæmorrhage, usually beginning two or three hours after the operation, and for this reason he always plugged the nose for twenty-four hours after the operation.

Dr. HERBERT TILLEY thought that all rhinologists in this country would agree that in the great majority of cases where an intra-nasal operation was performed for the removal of a septal spur or crest, or for the correction of a deviated septum, a general anæsthetic was advisable. The additional risk was slight, and was more than counter-balanced by the fact that the surgeon need not regard the feelings of his patient, and by a careful arrangement of pillows he could have the patient's head in any convenient position that he might desire. He thought the galvano-cautery had lost favour for two reasons:—(1) Its effect was not permanent. A patient might obtain relief from nasal obstruction lasting for many months, but generally the condition returned again, and further intervention was necessary. In a bad case of hypertrophic rhinitis the removal of the anterior fourth of the inferior turbinal body gave great and permanent relief, and the time involved in treatment was less. The operation could easily be done under "gas" anæsthesia. The inflammatory reaction referred to by

Sir Felix Semon was, the speaker thought, much minimised if some glycerine of carbolic acid, or even pure carbolic acid, were applied to the eschar immediately after the application of the cautery. It further acted as an antiseptic and local anæsthetic. He confessed some surprise at the frequency with which Sir Felix Semon had met with adhesions following the use of the galvano-cautery, or intra-nasal operations. Of course it might be replied that a surgeon might fail to see many such cases because his failures passed into the hands of other rhinologists. That might be true, but even then we should all occasionally meet with the failures of others; but the speaker could only recall two cases of adhesions (giving rise to symptoms of obstruction) which had come under his notice during the past year, and in both these instances the cautery had been used by unpractised hands. He thought that an adhesion, whether it occurred after the use of the galvano-cautery or a cutting operation, indicated that the surgeon had wounded the opposing areas. In the removal of a septal spur it was a very easy thing to abrade the mucous membrane of the opposite turbinal body, and this unconsciously; and an adhesion would almost certainly result if a suitable plug were not inserted, or, better still, a little more than necessary of the obstruction should be removed in order to ensure a wider interval between the wounded parts. He thought a flat saw was less calculated to injure neighbouring parts than the circle of a trephine, which must necessarily occupy much more room in the nose. Normal mucous membrane would never unite with a granulating surface. In the case of the cautery point, if it be impossible to burn the redundant tissue of the turbinal without scorching the neighbouring mucous membrane of the septum, it is highly probable that cauterisation would be of no permanent value in so narrow a nose, and therefore an anterior turbinectomy should be carried out. He agreed with those who had found adrenalin predispose to a freer secondary hæmorrhage. His own plan was to apply a 10 per cent. solution of cocaine to the parts to be removed, say five minutes before the general anæsthetic was administered. Having removed the obstruction, bleeding in ordinary amount was not checked, and he rarely inserted any plug at all. If it were necessary, however, he used strips of ribbon gauze and left them *in situ* for forty-eight hours; if removed before this, the hæmorrhage was often as free as in the first instance. The *Liquor Opii Sedativus* was often a valuable drug for quieting the circulation in nervous patients where constant oozing of blood from the nose was a source of anxiety. With regard to the overgrowth of new tissue upon the site of a former obstruction, the speaker thought that this would become less of a bugbear if it were made a golden rule, in operating for nasal obstruction (especially septal outgrowth), always to remove a good deal more than seemed necessary at the time of operation. He had never regretted removing too much, but often that he had been content at the time of operation to ensure free respiration. Far better make a perforation through the septum, than that removal of the obstruction should be followed by that excessive growth of formative tissue so well described by the introducer of the discussion. In cases of deviated septum Asch's operation had given him excellent results. To keep the parts in

position he always used Lake's splints, removing them every day for the purpose of irrigating the nasal cavities with a warm saline lotion. In this, as in nearly all intra-nasal and sinus operations, oxygenated water was an excellent styptic and cleansing agent.

Dr. WATSON WILLIAMS, alluding to the question raised by Dr. Tilley as to the use of the galvano-cautery, said that when one had a case of nasal stenosis, one looked to see whether the stenosis, great or small, was due to something which could be readily removed by a minor procedure, or whether its removal required a rather complicated operation. Some of the most marked cases of stenosis were those which could be most easily removed; where the galvano-cautery was employed for the middle and inferior turbinates there was a possible danger in the formation of adhesions which gave considerable trouble in the after-treatment. To prevent such accidents he had had a speculum made with long ivory blades which were adjustable so that either blade could be made an inch to an inch and a half longer than the other. This enabled one when putting in the speculum on either side to expose the turbinate body for the application of the cautery, whilst the septum was protected. Since using this instrument he had found it a great convenience, as it avoided a good deal of the after-trouble, which was formerly so frequent, inasmuch as the burning of the mucosa which arose was sometimes due not to actual touching of the opposite side, but to the scorching from the proximity of the cauterising point by reflected heat. There was always a difficulty in preventing adhesions when two raw surfaces occurred in such close proximity. With the more extensive operations he had been at a loss sometimes whether or not he should plug. If one used a plug one had to remove it soon, for, in spite of all antiseptic precautions, it became exceedingly foul in twenty-four to forty-eight hours, and the changing of plugs was always liable to set up fresh hæmorrhage. On the other hand, if one did not plug one was liable to be summoned at any moment in consequence of severe secondary hæmorrhage. As far as his experience went, he was bound to say that the tendency to hæmorrhage was increased by the use of adrenalin. Personally, he had found nothing so useful for the prevention of hæmorrhage as peroxide of hydrogen, which he generally used in the after-treatment of these cases. It was also most useful in the removal of plugs, because it loosened the blood-clots, and enabled one to remove the plugs by gentle means, whereas if force were used the hæmorrhage which one so desired to avoid was almost sure to occur. He considered the operation for deviated septa described by Mr. Tod eminently satisfactory in suitable cases; but it was most desirable that if this operation were to be done the septum should not be previously cauterised or submitted to other methods of treatment which might render the perichondrium more than normally adherent to the underlying cartilage.

Dr. DUNDAS GRANT said that intra-nasal surgery was full of surprises. In cases which seemed most unfavourable the results were often unexpectedly brilliant, but it occasionally happened that in the most straightforward-looking ones the local or general disturbance was most serious. Intra-nasal operations were a source of constant

anxiety. He was in accord with the view expressed by Brieger at the Florence Congress, namely, that as much as possible of the mucous membrane should be left to exercise its microbicidal action, and therefore as little as possible should be done at a time. He was much gratified to find Sir Felix Semon and Prof. Chiari in favour of the anterior inferior turbinectomy which he had advocated in his introduction to the discussion on the Uses of Turbinotomy as applied to the Inferior Turbinated Body (May 12th, 1897), and which he frequently practised in preference to operating on the septum. The anxiety attending nasal operations depended upon the possibilities of hæmorrhage, local or general sepsis, the formation of adhesions, insufficient result from removal of too little tissue, or persistent crust formation and dry pharynx from the removal of too much. Lastly, the occurrence of coincidental disease, contagious or otherwise. In regard to hæmorrhage, he avoided plugging if by any means possible. At the most he applied the end of a strip of gauze to the raw surface until the patient reached home. By preference he did even minor intra-nasal operations in a nursing home, or sent the patient to one immediately from his consulting-room for one or two nights. The gauze was there removed at once, any bleeding being allowed to take place over a basin while the patient breathed vigorously in and out through his nares. He only reapplied the gauze if the hæmorrhage was very excessive. The avoidance of plugging was the first step towards the prevention of sepsis, but the observance of the rules of aseptic surgery as relating to the sterilisation of hands and instruments, cotton wool, cocaine solutions, etc., was of course of the greatest importance.

In galvano-cauterisation of the inferior turbinated body he thought he had been fortunate in avoiding the formation of adhesions by practising this exactly in the manner he had described at Ipswich. He applied cocaine on a pledget of non-absorbent wool, leaving it *in situ* for about fifteen minutes, then carefully swabbed away all moisture by means of absorbent wool, so as to avoid scalding the opposing surfaces. He next introduced the galvano-cautery point under the mucous membrane as deep as the periosteum, and withdrew it while still at a red heat. This submucous galvano-caustic puncture could be repeated, if required, at several spots. The punctured spots were then painted with deliquescent trichloroacetic acid (which appeared to produce an antiseptic seal); the whole turbinated body was then brushed with a 10 or 15 per cent. solution of antipyrin (which kept it in a state of contraction for several hours), and lastly a little aristol or europen was insufflated (as calculated to help in forming an antiseptic scab and a barrier between the opposing surfaces which it seemed quite gratuitous to dispense with). The patient was ordered, as a rule, a few doses of bromide of potassium, with a little salicylate of sodium as a calmative comparable to the sedative solution of opium already referred to, and devoid of certain of its objections. On two occasions his anxiety to ensure a sufficient result as quickly as possible had led him to practise this submucous cauterisation with exceptional thoroughness, and the exfoliation of a thin sequestrum from the surface of the inferior turbinated body had resulted. He now con-

sidered it necessary to exercise great discretion. He had, like Sir Felix Semon, seen adhesions in cases in which operations had been performed by other practitioners, but he had also seen them present in several cases in which no operation of any kind whatever had been performed. In some patients the nasal mucous membrane was abnormally sensitive, and he had seen a case in which very alarming nervous disturbance appeared to have been occasioned by a simple though thorough examination of the nasal cavity by means of a long-bladed speculum. The disturbance seemed analogous to that occasionally produced by the passage of a urethral bougie. In the particular instance the examination was, however, followed by a railway journey and a good deal of social exertion. The question of how much to remove in any given case was often a difficult one, but especially in cases of deflection of the anterior part of the cartilaginous septum with concomitant thickening. It was most undesirable to produce a perforation, and it was better to err in the direction of removing too little. This could be easily corrected, but a perforation could not be closed. It was undoubted, however, that in many cases of perforation there was little or no resulting discomfort, and the restoration of nasal patency afforded great relief. He did not advocate complete turbinectomy if other measures were sufficient, but in some narrow noses the results of this were most brilliant, and the discomfort, if any, from crusts, of short duration. The subjects of nasal operation were very liable to accidental infections, such as those of scarlet fever and influenza. These usually manifested themselves with abnormal rapidity, probably not later than forty-eight hours after the operation. This was the period of anxiety. He practised and advocated Mouro's operation for deflection of the cartilaginous septum. He had used Mouro's hollow metallic splint, and also the straightening transfixion needle, but the strong recommendation he had heard of Lake's india-rubber splint was irresistible. In general, he advocated the removal of as little nasal tissue at a time as was compatible with the restoration of reasonable patency, the avoidance of travelling or exertion after operation, the reduction of nasal tamponing to a minimum, and as far as possible the avoidance of exposure to infectious disorders.

Dr. PEGLER said the objects he had in view in nasal operations and their after-treatment were the prevention of hæmorrhage, primary and secondary; the avoidance of septic infection and consequent abscess of the septum, septic tonsillitis, or aural inflammation; the absence of adhesion formation, and the establishment and maintenance of an efficient air-passage. If secondary hæmorrhage were, as usually stated, due to sepsis in the wound, it followed that keeping the latter as aseptic as possible would be a good prophylaxis against it, and this he had found to be the case in practice. As regarded primary hæmorrhage, he had been fairly satisfied with the bloodless method as carried out by the use of some one of the adrenalin solutions. Not having had secondary hæmorrhage after its employment so far, his experience scarcely accorded with that of previous speakers. He had had much more hæmorrhage in his early work than in his later, and attributed this to improved methods of operating, especial precautions being taken against leaving untidy surfaces on septum or turbinals,

or shreds of mucous membrane. He made very free use of iodoform insufflation, and avoided packing, at any rate for more than a few hours after operating, but of course there were circumstances in which a gauze plug must be employed, and it might require to remain for twelve hours or more. In very many cases the india-rubber splint served the purpose of both plug and splint, which was a great recommendation, and provided the splint was not too thick, and was suitably shaped, he had never had occasion to complain of ill effects from anæmia of adjacent parts. It was tensive pain that he dreaded, and not anæmia of the tissues, for the copious mucus that was invariably poured round and about the splint protected them. Hence healing went on freely in presence of a well-adapted splint, and the pressure effects upon shreds and unevennesses in the operated parts was a distinct advantage. The speaker said he had entered so fully into the subject of Lake's turbinal operation and india-rubber splints in his Ipswich paper that it was unnecessary for him to go over the ground again at the present discussion, but he was pleased that so many authorities who had spoken were now adopting these methods. Anterior turbinotomy had largely superseded the galvano-cautery in his hands, save only in roomy passages rendered slightly insufficient by erectile tumefaction: in tight chambers, and where there was bony enlargement of the turbinals, the cautery should be rigorously excluded. The explanation of adventitious tissue formation after cauterising by scorching, owing to the close approximation of the walls, was an excellent one, and this evil consequence should be sufficient to deter the operator from employing the cautery in such cases. The speaker fully concurred with Sir Felix Semon in his valuable remarks on the mucous turgescence, and apparent change for the worse in regard to space, after recent operation, say upon the septum, in a narrow fossa. For his own part, when he found this condition about to supervene he did not hesitate to sacrifice whatever might be needed of the inferior turbinal, and perhaps the middle, till the "right of way" was sufficient for good drainage, general safety, and comfortable respiration. It was sometimes convenient or unavoidable to allow the adhesions to form, and remove these and whatever was necessary of the adjacent wall at the same time or on some subsequent occasion, taking care to prevent re-formation by judicious use of the splint. A system of *sawing out*, when a septal outgrowth had to be got rid of, instead of merely cutting on the flat, was a great help in securing against subsequent trouble. Dr. Pegler said he would like to have heard more from Sir Felix Semon anent the work and writings of British rhinologists than he had done, but an operation that had come to us from Bordeaux and was of extreme value had had no mention except by subsequent speakers. He alluded to Moure's operation for deflection of the septum, and was much gratified to find his own endeavours to popularise this method had met with response. He trusted he might take some credit for these results, and he should welcome suggestions from other rhinologists for still further improvements in these often difficult cases. Subsequent experience confirmed his belief that Lake's india rubber was the best form of splint after doing a "Moure," and he was glad the simple cutting pliers (septotome) he

had devised were finding favour, but he should recommend the instrument makers to no longer render the blades detachable, as the advantage of this was not at all apparent. We were probably all in agreement with Sir Felix that true regeneration of the inferior turbinal after removal was quite impossible, but soft cushions of mucous membrane projecting from the septum, in fact from either wall (including the inferior turbinal), required much patience in treatment for lasting eradication. This was not the case, however, with lymphoid excrescences, which he had found much less liable to recurrence. Only that morning he had seen a patient from whom two large pedunculated lymphoid masses had been removed from the posterior extremity of the vomer seven years ago, and he was glad to see that the merest traces—gelatinous-looking thickenings—on either side now remained. Dr. Pegler said he would conclude by calling attention to a hæmorrhagic ulceration which very rarely supervened a considerable time after operation upon inferior turbinals that had been affected by œdematous and hypertrophic conditions. He had described such a case which had given rise to much difficulty, but ultimately yielded to iodine in Mandl's solution of the strength of one drachm of pure iodine to the ounce, locally applied.

Dr. DONELAN thought that synechiæ could be certainly avoided only by ensuring adequate separation at the time of operation, either by the removal of sufficient tissue, the use of suitable splints, or by both. Measures taken at a later period to avoid threatening adhesions were usually unsatisfactory in their results. A further advantage of Lake's splint was its somewhat absorbent surface. It could be sterilised and then impregnated with medicaments calculated to hasten healing. The troubles so often arising after septal operations were very often due to an endeavour to force the anatomical peculiarities of the patient to adapt themselves to some Procrustean procedure. This was not the occasion to enter upon a discussion of the merits of various septal operations, but, though those mentioned in the course of the debate were all excellent, in certain cases there were many examples of deformity,—as, for instance, where the extreme convexity formed, as it were, a basal angle of a pyramid near the floor of the nose, in which specially devised measures would alone be successful. The success of the after-treatment of these operations must always depend not only on the manipulative skill of the operator, but on the judgment and mechanical ingenuity with which he devised modes of attack suited to individual peculiarities.

Dr. FURNISS POTTER said that he had had a not inconsiderable experience of the use of adrenalin, but had not encountered any trouble from hæmorrhage following its application. He admitted that he had been in the habit of plugging with gauze, and usually removed the plug in from six to twenty-four hours. If an hour (or half an hour) previous to removal, the gauze were thoroughly moistened with a spray of hydrogen peroxide, and then carefully withdrawn, bleeding would be avoided. With reference to anæsthesia, from his own experience he found it more satisfactory in a great number of cases to operate with the patient sitting in a chair and with the aid of cocaine. He had seen a number of operations under general

anæsthesia, the patient being in a sitting position; ether could not be conveniently administered after the commencement of the operation, and continuance of the anæsthesia with chloroform in the upright position, in his opinion, was by no means devoid of anxiety. He certainly thought that such operations as removal of septal spurs and inferior turbinectomies (which formed a large proportion of the operations under discussion) could be performed most satisfactorily without a general anæsthetic, except in the case of extremely nervous, excitable persons.

Dr. WILLIAM HILL felicitated Sir Felix Semon on being more in sympathy with earnest rhinologists than on recent occasions when he had made "some observations" on nasal surgery. The opener of the discussion had referred to an instructive case, which he (the speaker) had many years ago brought before the Society, and spoke of it as one of "Regeneration of the Turbinated Bone." Now that was certainly a misquotation of title, and doubtless due to quoting from memory. He could not remember at the moment the exact words used, whether "turbinal body" or "turbinal tissue," but he had just consulted his neighbour, who, like himself, had had similar cases, and was familiar with the literature of the subject, and Dr. Tilley had informed him that the term "tissue" had really been employed. At all events he felt sure he had not gone so far as to assert that a whole turbinal bone had been regenerated, but he had undoubtedly claimed that there had been an obvious reproduction of a potential turbinal body, which included mucous membrane, glands, and erectile tissue, and apparently some extra formation of bone. In this case he later removed some of the softer part of the regenerated body, and it was found by Dr. Pegler to consist, on microscopic examination, of the ordinary turbinal vascular tissue covered by mucous membrane. There might be pathological objections to the use of the term "regeneration" in this relation, but he had been unable to find another word which more appropriately represented the apparent sequence of events in this case. He was not, of course, prepared to loosely use the word regeneration in reference to every tumefaction recurring at the site of removal of obstructing structures in the nose. When, however, a patient was suffering from hyperplastic enlargements in the nose, he thought that on removal of the obstructing structures (whether turbinal, or septal hyperplasia, or polypi), there was often subsequently evidenced an undoubted proclivity to recurrence quite apart from the temporary, though often prolonged tumefaction and excessive granulation immediately following and resulting from operative interference. The cause of this tendency to reproduction or recurrence must be sought in the conditions leading to the original obstructive lesions which had not been counteracted, and which, in our present state of knowledge, were not always discoverable. Sinus disease was, of course, occasionally present as a causative, and therefore removable factor, but often the ætiology was absolutely obscure.

In order to reduce excessive tumefaction and to prevent adhesions occurring immediately after operation, the speaker strongly recommended pressure by splints and bougies rather than by medicated gauze, as the latter often caused pain and bleeding on removal; on

the whole there was nothing like rubber, and he generally, though not exclusively, used Lake's rubber splints. After Moure's operation (performed with Pegler's shears) he had found Asch's celluloid conical splint of great utility when inserted into the narrower nostril.

For keeping down tumefaction after the removal of the larger splints or bougies, *i. e.* a day or two after major operation on the septum, he had found it of much advantage subsequent to syringing, to dilate the inferior meatus with a laminaria tent for half an hour previous to the introduction of a rubber, soft tin, or celluloid splint. Tents should be made wedge-shaped with a sharp knife in order to facilitate their introduction. Thin splints only could be tolerated at first, *i. e.* after removal of the large operative splint, but later they should give place to thicker ones. Such splints should be inserted for a time daily for several days and even weeks, according to the nature of the case.

Adrenalin Dr. Hill had been led practically to discard in after-treatment for quite another reason, however, than the debatable one of whether it caused secondary hæmorrhage, for he had found it one of the worst irritants that he had ever applied to the nasal mucosa; and he felt strongly that its routine use in hyperæsthetic and inflammatory conditions was contra-indicated. For the same reason cauterisation, whether electric or chemical, found no place in his after-treatment; nor, again, did strong antiseptic lotions; and as weak ones were useful only, or at all events principally on account of their mechanical action, he preferred to perform frequent lavage with water, previously boiled, and trust to that and to the germicidal action of the nasal mucosa. He did not wish to speak too dogmatically on this point, but, as a rule, in addition to lavage with sterilised water he only used antiseptic powders in cases where there was fœtor present before operation, and again where the ethmoidal cells had been opened. The discussion had been not only interesting but suggestive.

Sir FELIX SEMON, in conclusion, expressed his gratification that so interesting and vivid a discussion had taken place. He did not intend to reply to some remarks, which had fallen from one or two speakers, and which obviously were outside the pale of the present discussion, but would confine his own observations strictly to the question of the after-treatment of intra-nasal operations.

In the first place he was anxious to confess that he had not been able to verify before the meeting took place the exact title of Dr. Hill's communication, and had quoted from memory. The error would be corrected before his manuscript went to press.

The discussion had beyond doubt revealed the fact that on many essential points concerning the daily routine of practice, the views of the various experts, who had spoken, were widely at variance, and that, so far as he could judge, no absolute unanimity prevailed in any single topic that had been touched upon.

There were, however, five points, at any rate, concerning which it had been made quite clear that a large majority of the speakers were agreed on. The first was the employment of general, in preference to local, anæsthesia in this class of operations. With regard to this point the remarkable consensus of opinion, which had been elicited by

the discussion—and of the existence of which rhinological literature gave no clue whatever—had been very instructive. Although some members of the Society had very properly not hesitated to express theoretical fears of the employment of a general anæsthetic when the patient was placed for a considerable length of time in a sitting posture, he felt bound to say that the practical experience of so many other members seemed, in his opinion, to outweigh these fears; and the fact that the operations in question could with advantage be performed under a general anæsthetic, appeared to him a practical gain, which in itself justified the selection of the topic as a suitable subject for a general discussion.

The second point was that the tendency to secondary hæmorrhage seemed increased by the use of adrenalin. He had been pleased to find that so many members of the Society had from personal experience corroborated what he had said of the greater frequency and persistence of secondary hæmorrhages after the use of adrenalin. True, these hæmorrhages fortunately seemed but rarely to be of a serious character, but the fact that their occurrence had been signalised by a number of independent observers surely removed them from the sphere of mere individual impressions. He would certainly not draw from this the inference that the use of adrenalin should be given up altogether in this class of operations, but undoubtedly it was a further useful result of the discussion, that operators, who wished to avail themselves of the drug in order to perform practically bloodless operations, should hereafter be prepared to find that this advantage might possibly have to be paid for by increased tendency to secondary hæmorrhage.

Thirdly, the usefulness of Mr. Lake's india-rubber splints had been so universally attested to, that if in future he had to resort to plugging at all, he would certainly employ them on the next occasion.

Fourthly, Moure's method of rectification of septal deformities had been so highly spoken of by all those who had availed themselves of it, that this would certainly induce those who, like himself, had no practical experience of it, to give this form of operation a fair trial.

Finally, he was glad to hear that the occurrence of excessive repair after operations on the septum had been admitted by so many observers. From the paucity of remarks on this topic in rhinological literature, he had hardly expected that his own experience had been shared by so many others. The explanation given by Dr. Scanes Spicer was certainly an ingenious one, although he could not say that it was convincing at first sight.

Whilst with regard to the five points just named, a tolerable consensus of opinion seemed to exist, a considerable amount of dissension had become evident on other points touched upon in the discussion.

There was first of all the important question of plugging after operation. On that point the opinion of the Society seemed as divided as had been that of the German Society of Otologists. They had heard from some members of the Society that they *always* plugged, from others that they *never* did so, from others again that they sometimes did, and sometimes didn't. At the same time what was described as "plugging" evidently had a rather different meaning in the minds

of various operators. In fact, it was a case of "quod homines, tot sententiæ." Personally, he must repeat, as stated in his introductory remarks, that whilst post-operative interference of *any* kind should—*if possible*—be altogether avoided, it seemed to him quite impossible to lay down a hard and fast rule applicable to all cases.

Then there was the question of how much should, could, and ought to be done in one and the same sitting. On that point they had heard diametrically opposed views from operators of great experience. It was difficult to decide when doctors disagreed. Further experience would probably settle that question, which had a more than academic interest. He would not refer to the greater risk of sepsis if, in a locality where admittedly no strict antiseptics could be secured, a wound extending through the whole length of the nasal and naso-pharyngeal passages were produced, such as Dr. Scanes Spicer, from his remarks, apparently did not hesitate to create. But apart from that risk, surely the fact of *both* the opposite mucous surfaces being deprived of their covering epithelium by extensive operations, involving the turbinates as well as the septum, predisposed towards the formation of adhesions. And in connection with that fact he wished to say in reply to Dr. Tilley's expression of surprise, viz. that he (the speaker) should have so often met with adhesions, following the use of the galvano-cautery or intra-nasal operations, that these adhesions had not been produced by *him*, but had occurred in the practice of other operators, the patients in question having subsequently consulted him with a view to being relieved, if possible, of the continued obstruction.

Then, again, there was great discrepancy with regard to the sub-mucous use of the galvano-cautery. Dr. Dundas Grant had evidently found it useful, whilst Dr. Bronner regarded it as an unsurgical procedure.

Numerous other points could be enumerated in which diametrically opposed views had been expressed, but this was hardly necessary, as the discussion had shown throughout that the selection of the subject had been a judicious and a timely one. This discussion would certainly be studied in this country and abroad with the greatest interest by all specialists, and the various points raised would receive greater attention than they had so far in rhinological text-books. This had been his aim when he proposed this subject for discussion, and he hoped it was fair to sum up the result of the discussion by saying that this aim had been fully achieved.

PROCEEDINGS
OF THE
LARYNGOLOGICAL SOCIETY OF LONDON.

EIGHTY-FIFTH ORDINARY MEETING, *December 4th*, 1903.

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

JAMES DONELAN, M.B.,
E. FURNISS POTTER, M.D., } Secretaries.

Present—36 members and 3 visitors.

The minutes of the previous meeting were read and confirmed.

The following cases, specimens, and drawings were shown :

DRAWINGS OF LOCALISED PSOROSPERMOSIS 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, executed by Babu Behari Lal Das, the College artist, accurately depicted the clinical

* 'Proceedings,' vol. x, p. 109.

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 recognising 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 tumour, 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.

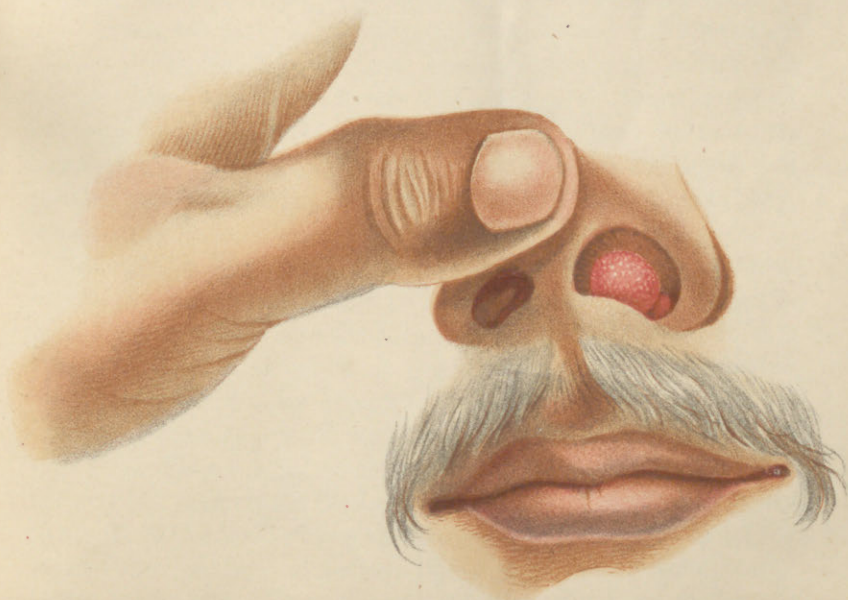
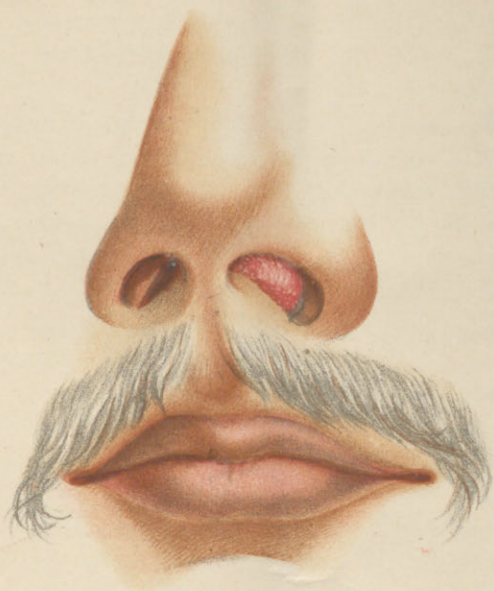
A section of the growth when fresh was seen to be studded with minute white dots, which under the microscope were found to be cysts filled with granular bodies. Each of these bodies contained about a dozen refractile granules, and there seemed to be a pore in the cyst wall through which the bodies escaped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

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

Sir FELIX SEMON expressed the hope that it would be possible to incorporate these drawings in colours in the 'Proceedings' of the Society as they seemed to be perfectly unique.

The CHAIRMAN agreed that they must make an attempt to have these drawings in the 'Proceedings' as suggested by Sir Felix Semon. He thanked Major O'Kinealy for presenting them to the Society.

* 'Die Protozoen als Krankheitserreger.'



Behari Lal Dás del

LOCALISED PSOROSPERMOSIS OF THE MUCOUS MEMBRANE
OF THE SEPTUM NASI.

To face page 44. Vol. XI.

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, who was healthy and very intelligent, 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 cocain anæsthesia, and some force was required to dislodge it. It was covered with an offensive discharge, and proved to be a large flat triangular piece of bone, which had been impacted with its apex vertically downwards. It seemed to be part of the breast-bone of a bird, and from the left-hand surface as it lay in the larynx a ledge of bone projected at right angles to the general mass, close to the apex. Owing to its position, only the edge of the bone's base and part of the upper surface of the ledge were visible, and looked like two pieces of bone in the laryngeal mirror. The measurements of the bone were—length

$\frac{3}{4}$ inch, width at base $\frac{5}{8}$ inch, thickness at base $\frac{1}{10}$ inch, thickness inclusive of ledge $\frac{1}{4}$ inch, thickness in other parts $\frac{1}{20}$ 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 months' impaction in the larynx, a result doubtless due to the position in which it lay.

The CHAIRMAN congratulated the exhibitor on the successful removal, and was glad to hear such good work was being done in India.

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 occasionally suffered from fever, and about a month previously caught a slight cold, which was followed by a little running from the nose. There was no similar trouble and no diphtheria in either the household or neighbourhood in which he lived.

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 colour, 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

ERRATUM.

PROCEEDINGS, DECEMBER, 1903.

On page 47, line 26 from the top, after the word "jaw" the words "on the right side" should have been added.

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 *æt.* 3½ 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 neighbourhood, 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. Before death the lymphangitis had cleared up, and, of the glands in the neck, those on the left side had subsided, those on the right had become smaller, and on this side also suppuration had occurred in the two glands first affected; there was nothing but a small white speck to be seen on the right tonsil. 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 by 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

* Jennings, 'A Manual of Plague.'

† Scheube, 'The Diseases of Warm Countries.'

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 œdema of the whole left side of the larynx and epiglottis. In spite of the resumption of the antispecific treatment this persisted, and was followed by ulceration of the left side of the 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 the 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.

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 antispecific 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 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 aperature, 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. At the present time there could be seen a pale scar projecting from the left wall, and nearly surrounding the trachea. The aperture was of good size, and the man was able to attend to his duties—those of a bank clerk,—and affirmed that he suffered no inconvenience whatever.

Sir FELIX SEMON congratulated the President on the very successful issue of the case.

A CASE OF OBSCURE ULCERATION OF THE LEFT VOCAL CORD OF
NEARLY ONE AND A HALF YEARS' STANDING IN A GENTLEMAN
AGED ABOUT 60.

Shown by Sir FELIX SEMON. The patient, very thin and unhealthy-looking, 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 benefited, 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 neighbourhood 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 de-

monstrable signs of either lesion, had not confirmed these 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 would 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. SCANES 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 favour 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 was 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, whilst staying at Cannes, 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 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. His pulse was very rapid (122) and easily suppressible. He sweated profusely after the operation, and spontaneously passed 32 oz. of urine during the first twenty-four hours, which with a specific gravity of 1026 contained a good deal of albumen, but not more than before the operation. The temperature was 101.2° the first night, and 100° the following morning. He was

able to take fluid food by the mouth on the first day, and on the second day the lower part of the wound, which was left open immediately after the operation, was closed.

Seeing the wide extent of the disease, he (Sir F. Semon) was of course not over-sanguine with regard to non-recurrence in this case, and told the patient's brother so immediately after the operation. 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. He went first to the sea-side, and afterwards to Scotland. 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 was advised either to return to town immediately as he (Sir F. Semon) was about to leave for his summer holiday, or to seek specialistic aid at Edinburgh or Glasgow.

The patient, however, did not immediately follow this advice, and 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, Mr. Waggett assisting, and Mr. Tyrrell giving the chloroform. 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 centre 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 was 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 results 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 ON 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.

The fact that an adhesion existed between the anterior end of the swelling and the septum seemed to bear out the remarks made by the speaker at the last meeting, viz. that when after the application of cocaine to a turbinal body it was impossible to apply the galvano-cautery to it without "scorching" or touching the opposing surface of the septum, *de facto* it was not a case in which the cautery should be used.

The PRESIDENT did not understand whether the swelling contained pus or not. He had seen cases of this type in which the swelling occurred in front of the antrum: in some of these the swelling went into the nose and obstructed it in part. Those he had had to deal with contained serum and not pus. He took out the lining wall, crushed in the bony wall, and left it alone afterwards.

SPECIMEN AND TEMPERATURE CHART FROM A CASE OF EPITHELIOMA
OF THE PHARYNX UNDER TREATMENT WITH OTTO SCHMIDT'S
CULTURE.

Shown by Dr. DONELAN. The specimen consisted of two sections taken from the floor of an ulcer situated on the right faucial pillars and right side of velum palati and uvula. It was an ordinary squamous epithelioma. The exhibitor did not enter into the history of the patient, as he hoped to show him at a later meeting, except to say that he had had syphilis twelve years ago. When first seen he had this ulcer and a large tumour about the size of an orange beneath the jaw and extending backwards into the parotid region. Energetic antisyphilitic

treatment was tried for a week, the effect being to improve and almost heal the ulcer, and to diminish considerably the size of the tumour, probably by absorption of inflammatory products. A mass of stony hardness was now left. The present specimen was prepared by Mr. Aslett Baldwin, and the patient was also seen in consultation by Mr. George Cheatle and Sir Felix Semon, who all regarded the case as hopeless, and advised against an operation except as a desperate attempt to prolong life for a while. The patient, having heard of Dr. Otto Schmidt's cancer culture, was desirous of trying it, and Drs. Schmidt and Jossé Johnson were communicated with. On the clear understanding on the part of the patient that this treatment was still in the experimental stage, it was commenced on November 13th, being the first case treated in England. A 1 per cent. solution of the culture was used, and of this 0.2 milligramme was at first tried, the reason for so small a dose being that the amount of fresh-formed secondary deposit in the body was unknown, and one had to guard against a violent reaction, perhaps in the neighbourhood of vital structures. No reaction followed until the fifth day, when 3 mgms. were given, and a marked local but no febrile reaction took place in about sixteen hours after the injection. The growth swelled up to the size it had attained before the iodide was administered, but became much softer. The patient, who had been completely free from pain during the whole course of his disease, now complained of pain in the growth itself, radiating from it up to the head, into the ear, and along the right side of the tongue and towards the shoulder. There was a corresponding swelling of the right faucial pillar and right side of velum and uvula. The treatment was suspended for four days, and resumed on the 22nd of November, beginning with 1 mgm., the dose being gradually increased to 4 mgms. on the 25th, when he was seen in consultation by Dr. Otto Schmidt, who considered the case a very favourable one for the exhibition of the culture, the cancerous deposit being so recent. He ordered a second dose of 7.5 mgms. within fourteen hours of the preceding, when a very marked local reaction occurred. The dose was now steadily increased to 3 centigrammes, when there was, for the first time, a slight rise in temperature (99.6° F.).

The reactions in this case occurred at first in from fourteen to sixteen hours, but took longer in appearing the more the culture was pushed. It was claimed that this was due to the increased formation of antibodies and commencing establishment of immunity. It was, of course, impossible to say yet whether this treatment had any curative properties, but that it had a marked selective action on cancerous material must, he thought, be admitted. In this case a supra-clavicular gland, which could not be felt before the injections were given, swelled up and became painful, showing that it was the site of metastasis. It was the only gland so affected, and after about a week of the treatment it gradually subsided. The action of the culture was most marked on the outer limits of the cancerous tissue, where the newest cancerous cells might be expected; it did not appear to have much effect in the older portion, with which the natural antibodies had been dealing longer. From this it might be inferred that the serum would be of most use where the disease was of recent date, and where the constitutional power of producing antibodies had not been exhausted by prolonged cachexia. The condition of this patient, it must be admitted, was greatly improved both generally and locally. Renewed hope, of course, counted for much of the former, but it could not be denied that there was a distinct diminution in the size of the tumour. It was not expected that the tumour would entirely disappear, only that it would be rendered an inert mass of fibrous tissue.

The exhibitor handed in the specimen for the Morbid Growths Committee, and undertook to present a further report of this case.

MACROSCOPIC SPECIMEN OF EPITHELIOMA OF NASAL SEPTUM
REMOVED FROM A MAN AGED FIFTY-FOUR: PATIENT PRESENT.

Shown by Mr. HUNTER TOD. This patient was first seen by Mr. Tod on May 15th. There was a three months' history of nasal obstruction on the left side, accompanied by intermittent lancinating pain in the upper incisor teeth.

The obstruction was due to a firm but indefinite swelling on the left side of the septum, which prevented a view of the in-

terior of the nasal cavity. The post-nasal space was normal. There were no enlarged glands. There was no history of syphilis. To exclude a gummatous infiltration of the septum, potassium iodide was administered in large doses for a week. This caused sufficient diminution of the swelling to permit a large ulcer, with raised everted edges, occupying the anterior and middle portions of the septum, to be defined. The septum alone appeared to be involved. A piece of the edge of the ulcer was removed, and examined microscopically. It was an epithelioma. The growth was removed by operation in the following week. An incision was carried through the soft tissues, beginning at inner third of the lower eyelid, proceeding towards the nose, and thence to the anterior extremity of the left nostril. The soft parts were reflected. The growth was much larger than anterior microscopy seemed to show. Part of the nasal bone and nasal portion of the superior maxilla had to be removed to fully expose the posterior limit of the growth. The septum was removed *in toto*, with the exception of its superior and posterior margin. The outer wall of the nasal fossa appeared normal. The floor also appeared normal, but as a precautionary measure all the mucous membrane of the floor was thoroughly curetted away, leaving the bone quite bare. A five per cent. solution of supra-renal extract prevented all bleeding during the operation. The nose was packed and the skin wound sutured. The patient left the hospital within ten days. Two months ago (three and a half months after the operation) a swelling appeared on the left side of the nose externally, in the line of the operation wound. Within a week this swelling had extended into the interior of the nose, involving the outer wall above the inferior turbinate bone.

Mr. Tod asked if this were a recurrence of the epitheliomatous growth, or merely inflammatory. He presumed it probably was a recurrence, but was puzzled by its situation, owing to the original growth having apparently been limited to the septum. Also the existing swelling had appeared very suddenly, increased rapidly, and several times had diminished appreciably in size, only to increase again.

The PRESIDENT said this was a condition demanding a very complete operation if anything was to be done at all. The opinion of the Society seemed to be in favour of recurrence. He called attention to the fact that the swelling was still limited to the nasal cavity.

Mr. DE SANTI said this was undoubtedly a recurrence, and not an inflammatory process, and that the disease now involved the superior maxillary bone on that side. If anything were to be done, nothing short of a very extensive surgical procedure, such as removal of the upper jaw, would be of any avail.

Mr. TOD, in reply, said he accepted the general opinion expressed that there was a recurrence. He mentioned that he had incised the existing swelling from within the nose, and it was evidently solid.

[Since the meeting, sections taken from portions of the growth proved it definitely to be epitheliomatous.]

LUPUS OF INFERIOR TURBINATES AND CARTILAGINOUS SEPTUM OF NOSE IN WOMAN AGED TWENTY-SIX YEARS.

Shown by Mr. HUNTER TOD. Mr. Tod said he brought this case forward for two reasons. Firstly, because the case had been treated for over a year as being syphilitic; and secondly, owing to the disease being entirely limited to the nasal cavity, which was comparatively uncommon.

Dr. DONELAN said the important question was whether the woman should not be submitted to operation, for a tuberculous septum certainly did remarkably well if widely removed. Had the "light" treatment been tried?

In reply to Dr. Hill, Mr. TOD said that he had only seen the patient once, but he knew that potassium iodide had been given at different periods for a year. Also the nose had been cauterised frequently. He agreed with Dr. Hill that cauterising or the application of lactic acid was comparatively useless. He had had a fair number of such cases transferred to him from the Lupus Department of the London Hospital. If the middle turbinates were affected he removed (under a general anæsthetic) as much as was necessary by the scissors and snare, and curetted freely, by means of Meyer's ring-knife, the septum and inferior turbinates. The patient was then given an alkaline lotion, and told to wash out the nose daily for a month. What little more there was left to do could now be curetted away under cocaine. Several cases where the disease was limited were apparently cured after the second operation. In others one had to repeat the curetting two or three times.

In reply to Dr. Donelan, Mr. TOD said that the "light treatment" had benefited those cases where the disease was limited to the tip of the nose and entrance of the vestibule, but did not affect the deeper parts owing to its lack of penetration.

A CASE FOR DIAGNOSIS—MAN AGED SIXTY-NINE.

Shown by Mr. CRESSWELL BABER. The patient, aged 69, formerly a captain in the merchant service, was first seen on September 7th, 1903.

History.—Roughness inside the cheeks for three or four months. About August 8th last he first noticed extensive white spots in the mouth and throat. He had had no illness; always enjoyed good health, excepting a bad attack of congestion of the liver on a passage to the West Indies forty years before. He had smoked about five pipes daily—not had syphilis. For the last twenty years he had spent a great deal of time gardening in a vinery, and this year he had used for the first time Butcher's manure.

The throat trouble began at the commencement of June with slight pain in swallowing and hoarseness. *Present state.*—Numerous white patches of varying size and shape on the sides of tongue, inside of cheeks, gums, soft palate, and apparently a similar condition in the larynx. These membranes were easily detached, and left a red abraded bleeding surface underneath. The epiglottis appeared thickened, and had white patches on it, and the cords were red and abraded. There was some dysphagia but no dyspepsia. The glands were slightly enlarged on both sides. Examination showed his chest to be normal, liver somewhat enlarged; urine, no sugar or albumen. Numerous specimens of the membrane and also scrapings of the underlying tissues had been examined microscopically. The membrane consisted of epithelial cells, granulation tissue, and fibrinous exudation. Sometimes micrococci and bacilli were present. No diphtheria or tubercle bacilli. In one or two specimens some streptothrix and torulæ had been found, but in almost all the specimens no fungi were to be detected.

The patient had been treated internally with arsenic, iodide of potassium, chlorate of potash, and locally with antiseptics, boracic acid, permanganate of potash, carbolic acid, menthol, salicylic acid, etc.

The patient's condition had on the whole improved, especially so during the last month. There was now comparatively little

of the patches left on the tongue, inside of the mouth, and soft palate. The epiglottis had also improved. There was inter-arytænoid thickening, but no want of movement of cords.

Sir FELIX SEMON thought this a case of pemphigus of the mucous membrane. He had seen several of these cases. They were very rare, but the appearance in this case was so characteristic that it was hardly possible to mistake it for anything else. The diagnostic difficulty was due to the short vitality of these bullæ, which lasted only a few hours, and not even a day. There was one here just rising on the back of the epiglottis on the right side. The only thing that could make one doubtful was the appearance of the inside of the mouth, but one ought to remember that cicatrisation was not uncommon in cases of pemphigus of the mucous membrane. This was particularly characteristic when the affection began on the conjunctiva, causing the condition known to ophthalmologists as "essential shrinking of the conjunctiva." In these cases so much cicatrisation took place that the patient might become totally blind. Again, pemphigus of the mucous membrane of the nose might lead to adhesion between the opposite sides, and total obstruction of that organ. The fact that in this case there was no external manifestation of pemphigus was not in the least proof against the diagnosis. This was the fourth case he had seen. In the first two the affection was entirely limited to the mucous membranes, and only in the third, sent to him by Sir Hermann Weber, which showed a condition internally exactly like Mr. Baber's case, there was in addition pemphigus on the external integument. There was, so far as he knew, no actual cure for the disease, but he recommended the use of *Liquor Opii Sedativus* in increasing doses, which in his third case had improved the condition for a time very materially.

In reply to a question by Dr. Hall he said he had tried arsenic in two of these cases of pemphigus, but he was sorry to say the results had been negative.

Dr. DE HAVILLAND HALL wondered whether arsenic would answer. It might be worth trying five minims of *Liquor Arsenicalis ter die* for two or three weeks. At any rate it could do not harm, and it might possibly be the means of clearing up the case. In the case of children this drug was invaluable; in cases of pemphigus of the skin improvement followed the administration of arsenic.

The CHAIRMAN said it was a question whether they were using the correct term in applying the word pemphigus to this condition, but in its patchy distribution it seemed to resemble pemphigus more than anything else. He remembered showing two cases to the Clinical Society very much like this one. One, under the care of Mr. Higgins, had the conjunctival form to which Sir Felix Semon had referred. On examining the throat he found a patch on the epiglottis and on the pharynx. The other, his own case, was a man of fifty; there were no bullæ, but curious white patches. At that time several cases were shown. It was a most difficult thing to cure, and like pemphigus, it "came and went."

Mr. BABER said that he had watched the case for several months, and on the whole the patient was rather better than otherwise. As regards treatment, the patient had had arsenic in two separate courses, at one time as much as $7\frac{1}{2}$ minims of *Liquor Arsenici ter die*, but it did not do any good. He would try Sir Felix Semon's treatment. Whether or not this ought to be called a case of pemphigus he was not sure, but he thought it was, although there was no affection of the skin.

CASE OF SUBHYOID PHARYNGOTOMY FOR MALIGNANT DISEASE OF
EPIGLOTTIS AND BASE OF TONGUE.

Shown by Dr. LAMBERT LACK. The patient was a man aged about 60, who was first seen in June of this year. He complained of pain and the feeling of a lump in the throat, with some dysphagia. On examination an irregular ulcerating growth was seen involving the epiglottis, the glosso-epiglottidean fossa, and spreading slightly on to the base of the tongue. There were enlarged glands in the anterior triangles of both sides of the neck, those on the right side being small and freely movable, whilst those on the left side formed a mass as large as a bantam's egg, and were somewhat fixed. The man appeared in good health, and there were no other signs of organic disease. He was probably alcoholic, being a publican. The operation consisted in making an incision along the anterior border of the sterno-mastoid on both sides of the neck, and in thoroughly clearing out all glands, fat, and fascia from the anterior triangles on both sides. These incisions were then connected by a cut across the middle line just below the hyoid bone. The thyro-hyoid membrane was divided immediately above the thyroid cartilage, and the epiglottis cut through near its base. This opening was enlarged first on the right side and then on the left, keeping well below and clear of the growth; then the pharynx being well open, the growth was seized and drawn out through the incision, and clipped off the tongue with knife and scissors. Thick catgut sutures were inserted into the base of the tongue and hyoid bone to bring them down to the thyroid cartilage, and to close the opening into the pharynx. The external wound was closed with interrupted sutures, and a drainage-tube placed in the outer angle on each side. The

patient made a good recovery. For the first fortnight it was necessary to feed him with a stomach-tube. He was unable to swallow, as all attempts to drink brought on a violent cough. It is probable that very little fluid entered the air-passages, as the power of effective cough remained; thus there was no danger of suction pneumonia. He regained the power of taking solids before that of drinking. It was now six months since the operation, and there was so far no sign of recurrence.

The CHAIRMAN had done a good many of these cases. The method and the incision adopted by Dr. Lack were very good indeed, and he congratulated him on an excellent piece of surgery.

MR. DE SANTI congratulated Dr. Lack on the excellent result in this particular case. He noticed particularly that the great point of the operation was the excision of the glands on both sides; he had thought for a long while that in the extrinsic variety certainly, and in some cases of intrinsic origin, the excision of the cervical glands should always be done. He felt it was a mistake in a limited intrinsic carcinoma of the larynx to leave the glands alone, unless they were felt to be enlarged, and this was what was more or less commonly done; the glands should be attacked in the same manner as in a case of carcinoma of the breast when the axilla was cleared out, whether glands were felt to be enlarged or not. In carcinoma of the larynx a fair number of recurrences took place in the glands in those cases where they were left alone.

SIR FELIX SEMON absolutely opposed the notion of the previous speaker, *i. e.* that in ordinary cases of intrinsic carcinoma where there was no evidence of affection of the glands these should be removed. Such a proceeding was, in his opinion, absolutely unnecessary. Mr. de Santi's opinion was only one step removed from the extraordinary proposition of Dr. John Mackenzie, that as soon as the diagnosis of cancer of the larynx had been made the whole larynx should be excised, together with its tributary lymphatics and glands. If one operated on a case of intrinsic carcinoma of the larynx in time—that is to say, when it was entirely limited to the larynx—one did not get recurrence. He therefore did not see the least reason for the more extensive operation recommended by Mr. de Santi. His experience was now large enough to enable him to speak with a certain amount of determination on this subject, and he would consider it wrong to listen to such a proposal without at once entering a serious protest against it. His protest, however, of course applied only to cases in which thyrotomy was sufficient, not to cases in which extirpation of half the larynx or even more extensive operations were required.

MAN *ÆT.* 48 WITH GROWTH (? TUBERCULOMA) ON LEFT CORD ;
 WAS INJECTED WITH TUBERCULIN ELEVEN YEARS AGO, AND HAS
 REMAINED WELL SINCE.

Shown by Dr. STCLAIR THOMSON. When Koch's tuberculin first came out in 1893 this man was treated with it by Dr. Heron in the Victoria Park Chest Hospital. The result was so satisfactory that since that date he had carried on the unhygienic occupation of a baker, and at present the chest showed no physical signs beyond a little dulness over the front of one apex, and his sputum was free from tubercle bacilli. For a year he had been getting hoarse, and the anterior third of the left cord showed a sessile growth with a flattened irregular surface. It was difficult to say if this were ulcerated or only covered with shed epithelium. The cord moved freely, and did not appear to be infiltrated. Opinions were invited as to diagnosis and treatment.

Dr. BEALE was particularly interested in this case, as it was one of the first to be injected with tuberculin by his colleague, Dr. Heron—the case was not under his care. There was a remarkable reaction, the patient was exceedingly ill for a long time, and there was a good deal of tuberculosis in his system at that time. But now he was steadily able to pursue his work, and had been doing so since his recovery ; but there was still this condition of the larynx, which he thought a very chronic tubercular process of the left vocal cord on account of its obvious superficial position. It did not interfere with movement. There were no enlarged glands, and the surface was covered over with dry crusts in very much the same way as was the back of the pharynx. If it were possible to clean the surface he should advise this being done, and then a good examination might be made, when possibly it might be found that beneath the crusts was a condition similar to that seen in the case shown by Sir Felix Semon that day.

CASE OF SEVERE PAROXYSM OF SNEEZING.

Shown by Dr. H. J. DAVIS. The patient was a woman *Æt.* 52, very anæmic, who came to the hospital complaining of paroxysms of sneezing of violent character. Directly she arose “she would sneeze forty or fifty times, and the water would spurt

from her nose." Handkerchiefs being mere bagatelles to her, she had recourse "to large aprons," and she would saturate five or six of these in a morning. There was nothing visible in either nostril beyond slight turgescence, as in acute coryza, and she was given iron and an alkaline lotion. The following week she was nearly well, and she stated that on the second day of treatment she syringed "a small ladybird" out of the right nostril. This she thought crawled up her nose when she was in the country; "it was a little larger than a pin's head, with a lot of legs on it."

The woman was now practically well (locally).

Mr. BABER suggested the possibility of the insect having first been in the water that was used for syringing.

Dr. H. J. DAVIS was unable to confirm the patient's statements, but she said she put the insect in a little bottle, which her daughter had thrown away by mistake. It had, she said, a red back with black spots, with small claws and legs. The patient seemed to be much better since its supposed expulsion, and was keeping well.

CASE OF PARALYSIS OF SOFT PALATE AND DEFECTIVE SPEECH (? ORIGIN DIPHTHERITIC).

Shown by Dr. CATHCART. The patient was a boy *æt.* 11. He was unable to continue attendance at school owing to his defective speech. He could pronounce no consonants except m, n, and b; for the others he substituted the sound "uh;" for instance, instead of "so-and-so" he said "uho uho," and for "come," "uh." He had diphtheria when sixteen months old, and the paralysis of the palate, which is almost complete, probably dated from that time. Fluids used to regurgitate through the nose, but for some years this had not been the case.

In spite of the fact that there was a large mass of adenoid growths in the naso-pharynx the respiration was always nasal and never buccal, and there were no signs of deafness.

Dr. BROWN KELLY did not think this a case of paresis, but one of insufficiency of the palate. He thought it especially interesting as probably being the first case of its kind reported in this country. He had met with a very marked case of insufficiency of the palate several years ago, and since then had had four others. In the majority of

these cases the uvula was bifid, and there was notching of the hard palate, *i. e.* a triangular gap in the posterior edge. In this case, however, there was no notch, and in at least one of his five cases it was also absent. The insufficiency which was supposed to be caused by the drawing forward of the soft palate, in consequence of the presence of the notch, was therefore not always due to this cause. In these cases the finger, on examination of the naso-pharynx, was not "gripped" as under normal circumstances; the speech was affected to a varying degree, and there was no trouble with deglutition.

Mr. WAGGETT asked if, in dealing with these cases of palatine insufficiency, which were not so very rare, any members had used paraffin injections in order to create a pad upon the superior aspect of the velum, with the view of improving the efficiency of the organ as an operculum.

Dr. SCANES SPICER remarked that paraffin had been used to complete the cleft palate operation, and was so described in the original paraffin communication of Gersung.

Sir FELIX SEMON said he had heard of paraffin having been injected into the soft palate, but he thought that it was extremely difficult to determine the correct quantity of the mass to be injected, and he was afraid that if, unfortunately, too much were injected, the remedy might turn out worse than the disease.

CASE OF PHARYNGOMYCOSIS INVOLVING THE PHARYNGEAL TONSIL IN A GIRL ÆT. 17.

Shown by Dr. DUNDAS GRANT. K. D—, ÆT. 17, was first seen by Dr. Grant on December 2nd, 1903, complaining of mucus in nose and throat of about seven years' duration, and yellow spots on tonsils, which she had noticed about three weeks ago. Typical spots of pharyngomycosis were found on the fauces. Posterior rhinoscopy showed a small round mass of adenoids with yellowish-white pointed specks on them: there were also spots on the tonsils.

CASE OF PHARYNGOMYCOSIS INVOLVING THE LARYNGEAL SURFACE OF THE EPIGLOTTIS.

Shown by Dr. DUNDAS GRANT. Mr. W. P—, ÆT. 49, was first seen by Dr. Grant on October 17th, 1903, complaining of a feeling of roughness at the root of the tongue and in the throat, and of little white spots in the throat; one spot was first

noticed about three years ago, but the number had increased within the last five or six weeks. There were numerous very typical spots on the tonsils and base of the tongue, and a few small ones on the laryngeal surface of the epiglottis. Dr. Grant showed the case because the occurrence of the disease on the laryngeal surface of the epiglottis was extremely rare, and in his experience unique.

The CHAIRMAN said this was the first time he had seen the surface of the epiglottis affected. He had had four cases, one in a medical man, very widely distributed.

Mr. WAGGETT asked Dr. Grant why he used the term pharyngomycosis in preference to keratosis of the pharynx, which had been adopted almost universally for this condition. The mycelium was not found in the majority of these excrescences.

Mr. SPENCER said the larynx seemed to be involved secondarily from the lingual tonsil, which was very much affected. Some good might come from a thorough scraping of the lingual tonsil.

Sir FELIX SEMON did not think scraping the tonsils would do the least good. He had so often referred to the futility and, what was more important, the superfluity of local treatment in these cases, that he could only reiterate the opinions he had previously expressed on that subject.

Dr. LAW said that some years ago he had shown a case, which was depicted by Mr. Waggett, where the patient had the appearance of an artificial set of teeth at the back of the pharynx, and numerous excrescences in both Rosenmüller's fossæ and in Luschka's tonsil. Scraping and all sorts of treatment were tried, at home and abroad, under many men, also long residence at Margate. At last the patient gave up all treatment, and in three or four months she was quite well.

Dr. HERBERT TILLEY related his own personal experiences of pharyngokeratosis, and described the harassing cough which it sometimes produced. It had no effect on the general health, and in his own case he suffered from the local trouble during the summer months, and endeavoured to check the progress of the malady by playing as much tennis as possible.

Dr. SCANES SPICER considered that this case afforded evidence that mycosis pharyngis was not always and solely a condition of keratosis of lacunæ, but had at least a twofold origin, for there were no lacunæ in the mucous membrane of the anterior face of the epiglottis in the sense in which lacunæ existed in the tonsils. He regarded the patches on the epiglottis, and in part elsewhere, as probably mycelial.

Mr. WAGGETT, in reply to Dr. Scanes Spicer's remarks that no follicles were present on the anterior aspect of the epiglottis to account for the presence of the excrescences seen in the situation in this case, stated that the keratosis nodules had no relation to any anatomical follicles, but that they commenced as small pearls under the surface of the mucous membrane, as had been described by Dr. Brown Kelly.

Dr. BROWN KELLY said that sometimes one could see white spots

under the mucous surface, which when microscopically examined were found to consist of concentrically arranged layers of cells. These burst through the mucous membrane and formed an excrescence. It merely then offered a favourable soil for the growth of the leptothrix, which in certain parts were found more abundantly than in others. In his experience the leptothrix were most numerous in the excrescences situated about the tonsils; they were absent on those in the naso-pharynx, and present only in small numbers on those at the base of the tongue.

Dr. DUNDAS GRANT did not defend the term pharyngomycosis, which he used only because it was so well known and useful for identification. In one of his cases the *Bacillus coli communis* had been found. There was not always a leptothrix, so that this might be omitted altogether as a feature. The chief misfortune about the complaint, as Dr. Tilley inferred, was its discovery by the patient. It worried the patient, whereas the symptoms, so far as keratosis was concerned, seemed to be *nil*. They usually arose from some concomitant catarrhal condition, and when found out gave the patient a tremendous fright. He had seen one case mistaken for syphilis, and very often these cases were mistaken for diphtheria.

PROCEEDINGS
OF THE
LARYNGOLOGICAL SOCIETY OF LONDON.

ANNUAL GENERAL MEETING, *January 15th, 1904.*

P. McBRIDE, M.D., F.R.C.P.Ed., President, in the Chair.

The minutes of the last Annual General Meeting were read and confirmed.

Mr. H. B. Robinson and Dr. Vinrace were appointed scrutineers of the ballot, and the following officers were appointed for the year :

President.—P. McBride, M.D.

Vice-Presidents.—A. Bowlby, F.R.C.S.; Percy Kidd, M.D., F.R.C.P.; Charters J. Symonds, M.S., F.R.C.S.; Wm. Milligan, M.D.

Hon. Treasurer.—W. R. H. Stewart, F.R.C.S.Ed.

Hon. Librarian.—StClair Thomson, M.D.

Hon. Secretaries.—E. Furniss Potter, M.D., M.R.C.P.; P. de Santi, M.B., F.R.C.S.

Council.—Wm. Permewan, M.D., F.R.C.S.; R. Lake, F.R.C.S.; L. A. Lawrence, F.R.C.S.; L. H. Pegler, M.D.; J. Walker Downie, M.B.; James Donelan, M.B.

The report of the Council was then read and unanimously adopted:

REPORT OF COUNCIL FOR YEAR ENDING JANUARY 15TH, 1904.

The Council have much pleasure in reporting that during the past year the increasing success of the Society's meetings was fully maintained as regards the attendance of members, the number of cases shown, many of them of high interest, and in the quality of the discussions. The average attendance was thirty-two.

The meeting of December 4th was devoted to a formal discussion of "The After-treatment of Nasal Operations, excluding Naso-pharyngeal," which was introduced by Sir Felix Semon. A departure was made from the usual practice on this occasion, owing to the number of members who wished to speak, but who were prevented by want of time. Permission was given by the meeting to these members to send their contributions in writing for publication in the 'Proceedings,' and the Council are of opinion that the value of the record was thereby enhanced.

The Librarian's report was then read and adopted.

In presenting the annual report of the Society's Library, I have first to cordially thank Dr. Dundas Grant for so kindly undertaking my duties during my enforced absence from London.

The arrangement by which our books are housed and checked by the officials of the Royal Medical and Chirurgical Society has proved satisfactory to both societies.

Our books are now conveniently lodged on the shelves of the Library at 20, Hanover Square. Here they can readily be consulted or borrowed on any day between the hours of 11 a.m. and 6.30 p.m.

We are now possessed of a complete type-written card catalogue, which can be expanded indefinitely.

Up till recently we have been printing every month 200 copies of the 'Proceedings.' Of these, 140 were circulated to members; 48 were sent to our exchanges; and we had in hand a monthly surplus of 12 copies. As I am frequently receiving applications from libraries and private individuals for back copies or complete sets of past volumes, our surplus stock is becoming rapidly exhausted, and certain numbers are quite out of print. The Council has therefore authorised that each edition of the 'Proceedings' be increased to 250 copies.

In order to house the surplus copies, the Council has accepted an estimate from Messrs. Adlard to rent a half-berth at ten shillings per annum, this charge to include the mailing of extra copies that are required, and the return of an annual stock-taking.

I find that our library does not possess a complete bound set of our own 'Proceedings,' and I hope to be able to remedy this at an early date.

During the past year our 'Proceedings' have been regularly distributed to the following colleges, institutions, societies, and journals:

Royal College of Physicians.
 Royal College of Surgeons.
 King's College.
 University College.
 Guy's Hospital.
 London Hospital.
 Middlesex Hospital.
 St. Bartholomew's Hospital.
 St. George's Hospital.
 St. Mary's Hospital.
 St. Thomas's Hospital.
 Westminster Hospital.
 Birmingham Medical Institute.
 Liverpool Medical Institution.
 The British Museum.
 Aberdeen Medico-Chirurgical Society.
 American Laryngological Association.
 Berlin Laryngological Society.
 Berliner laryngologische Gesellschaft.
 Brighton and Sussex Medical and Chirurgical Society.
 Bristol Medico-Chirurgical Society.
 Cambridge Medical Society.
 Dublin.

Edinburgh Royal Medical Society.
 Gesellschaft der ungarischen Ohren- und Kehlkopfaerzte.
 Glasgow Faculty of Medicine.
 K. K. Gesellschaft der Aerzte.
 Leeds and West Riding Medical and Chirurgical Society.
 Manchester Medical Society.
 Medical Society of London.
 Niederländische Gesellschaft für Hals-, Nasen-, und Ohrenheilkunde.
 Northumberland and Durham Medical Society.
 Oxford.
 Royal Medical and Chirurgical Society.
 Sheffield Medical and Chirurgical Society.
 Ulster Medical Society.
 Wiener laryngologische Gesellschaft.
 Annales des maladies de l'oreille.
 Archives internationales de laryngologie, otologie, et rhinologie.
 Archivii Italiani di Laryngologia.
 Archivio Italiano di Otologia.
 Bollettino delle Malattie dell' Orecchio, etc.
 Journal of Laryngology.
 La Parole.
 The Laryngoscope.
 Monatsschrift für Ohrenheilkunde.
 Revue de Laryngologie.

The following exchanges have been regularly received during the year 1903 :

Archiv für Laryngologie und Rhinologie.
 Archivii Italiani di Laryngologia.
 Archivio Italiano di Otologia.
 Bollettino delle Malattie dell' Orecchio, etc.
 La Parole.
 Archives internationales de laryngologie.
 Revue hebdomadaire de Laryngologie, d'Otologie, et de Rhinologie.
 Journal of Laryngology, Rhinology, and Otology.

The following PROCEEDINGS OF SOCIETIES, etc., have also been added during the year :

Jahrbuch der Gesellschaft der ungarischen Ohren- und Kehlkopfarzte, Band viii (1902), 1903.
 Sitzungsberichte der Wiener laryngologischen Gesellschaft (1902), 1903.
 Transactions of the Twenty-fourth Annual Meeting of the American Laryngological Association, held at Boston, Mass., 1902.
 Brighton and Sussex Medico-Chirurgical Society: Proceedings, 1901-2.
 Niederländische Gesellschaft für Hals-, Nasen-, und Ohrenheilkunde, 1902.
 Catalogue of Accessions to the Library of the Royal College of Physicians of London, 1903.

Several of these have been already bound, and are placed upon the table.

The following work has been presented to the library :

By Sir Felix Semon.

Internationales Centralblatt für Laryngologie for the years 1902 and 1903.

I regret to say that many of our exchanges appear to have lapsed, but trusting that this is due to oversight, I am writing to the various editors to solicit a renewal.

I also regret that donations to the Library have not been as abundant recently as in former years, and venture to take the opportunity of expressing the hope that all members, and perhaps all honorary members, will be kind enough to send us their works, particularly now that they are so well housed, and so much more widely consulted.

The report of the Curator of the Morbid Growths Collection was then read and adopted.

Owing to an increasing interest manifested in the Society's cabinet of microscopic sections since the last report, many valuable additions have been made to it by the members.

The following is the list, with the names of the contributors :

NOSE.

1. Recurrent Nasal Growth, November, 1898, vol. vi, p. 16. R. Lake.
2. Benign Growth of Nasal Floor and Outer Wall, June, 1896, vol. vi, p. 109. Cresswell Baber.
3. Nasal Myeloma, February, 1902, vol. ix, p. 62. E. B. Waggett.
4. Large Round-celled Sarcoma of Inferior Turbinal, January, 1903, vol. x, p. 52. R. Lake.
5. Carcinoma of Inferior Turbinal following Lupus, January, 1903, vol. x, p. 52. R. Lake.
6. Sarcoma with Tendency to Myxomatous Degeneration, January, 1903, vol. x, p. 52. R. Lake.
7. Simple Inflammatory Growth from Vestibule, March, 1903, vol. x, p. 85. Cresswell Baber.
8. Bleeding Polypus from Region of Superior Turbinate, March, 1903, vol. x, p. 81. W. H. Kelson.
9. Gumma of the Septum, June, 1903, vol. x, p. 137. L. H. Pegler.
10. Primary Tuberculous Ulceration of the Septum, May, 1903, vol. x, p. 125. E. B. Waggett.
11. Papilloma from Region of Inferior Turbinal, March, 1903, vol. x, p. 124. R. Lake.
12. Bleeding Polypus of Septum (Type of Angioma), February, 1903, vol. x, p. 66. A. Brown Kelly.
13. Bleeding Polypus of Septum (Type of Soft Fibroma), February, 1903, vol. x, p. 66. A. Brown Kelly.
14. Bleeding Polypus (Alar, from Vestibule), February, 1903, vol. x, p. 66. A. Brown Kelly.
15. Bleeding Polypus of Septum (Sarcomatoid Type), February, 1903, vol. x, p. 66. A. Brown Kelly.
16. Psorospermiosis of Septal Mucous Membrane, April, 1903, vol. x, p. 109. Capt. O'Kinealy.
17. Polypoid Tumour of Septum, February, 1903, vol. x, p. 72. Hunter Tod.

NASO-PHARYNX.

18. Sarcoma of Naso-pharynx, November, 1899, vol. vii, p. 11. E. B. Waggett.
19. Sarcoma of Naso-pharynx involving Septum and Inferior Turbinals, January, 1903, vol. x, p. 52. R. Lake.

PHARYNX.

20. Round-celled Sarcoma of Tonsil, Palate, and Fauces, vol. vii, pp. 72, 114. E. F. Potter.
21. Mucous Patch of Tonsil, March, 1903, vol. x, p. 94. H. Lambert Lack.

LARYNX.

22. Malignant Growth of Right Vocal Cord, January 12th, 1898, vol. v, pp. 9, 35. H. Tilley.
23. Lupus of Epiglottis, November, 1898, vol. vi, p. 1. Professor Massei.
24. Mixed-celled Sarcoma from Posterior Surface of Cricoid, April and May, 1903, pp. 116, 128. H. Lambert Lack.
25. Cyst of Ventricle of Larynx, January, 1903, vol. x, p. 51. H. Lambert Lack.
26. Oedematous Thickening of Epiglottis, March, 1903, vol. x, p. 93. H. Lambert Lack.
27. Squamous Epithelioma under Treatment by Schmidt's Serum, December, 1903, p. 59. Jas. Donelan.

THYROID GLAND.

28. Thyro-hyoid Cysts, November, 1897, vol. v, p. 10. Wyatt Wingrave.
- [The above list includes a few post-dated slides that have come to hand since last report.]

SUPPLEMENTARY COLLECTION.

The following additional slides have been kindly contributed to this collection by the under-mentioned members :

NOSE.

1. William Milligan, Tubercular Growth of Septum.
2. Wyatt Wingrave, Sarcoma of the Nose (labelled Carender).
3. Wyatt Wingrave, Sarcoma of the Nose (labelled Crundle).
4. E. B. Waggett, Lupus of Inferior Turbinal.

PHARYNX.

5. William Milligan, Papilloma of Uvula.
6. William Milligan, Papilloma of Uvula (Transverse Section).

LARYNX.

7. W. G. Spencer, Subglottic Polypus (Case of Laryngotomy).
8. W. G. Spencer, Chronic Oedema of Larynx (Case of Thyrotomy).
9. R. Lake, Tubercular Nodules of Larynx (labelled Karolyski).
10. R. Lake, Tubercular Nodule of Larynx (labelled Gee).
11. E. B. Waggett, Intrinsic Epithelioma of Larynx.
12. William Milligan, Papilloma of Larynx (two slides).
13. William Milligan, Lymphangioma of Vocal Cord.
14. William Milligan, Angioma of Vocal Cord.

THYROID GLAND.

15. R. Lake, Thyroid Gland in Graves' Disease.

The Curator hopes shortly to place at the disposal of the Council an epitome of the exhibits, both macroscopic and microscopic, that have been made in the Society during the first decade of its existence.

The meeting then adjourned.

EIGHTY-SIXTH ORDINARY MEETING, *January 15th, 1904.*

P. McBRIDE, M.D., F.R.C.P.Ed., President, in the Chair.

E. FURNISS POTTER, M.D., M.R.C.P., } Secretaries.
P. DE SANTI, F.R.C.S., }

Present—31 members.

The minutes of the preceding meeting were read and confirmed.

The ballot was taken for the following gentlemen, who were unanimously elected :

Henry Smurthwaite (M.D.Durh.), Newcastle-on-Tyne.
H. P. Birkett, M.D., Montreal, Canada.
McKay MacDonald, M.B.Cantab., London.
William Smith Syme, M.D.Ed., Glasgow.

The following gentleman was nominated for election as an Ordinary Member of the Society :

Herman Stolte, M.D.(Berlin), Suite 513, Goldsmith Buildings,
Milwaukee, Wisconsin, U.S.A.

The following cases and specimens were shown :

A CASE OF DEFORMITY OF THE FAUCES IN A WOMAN *ÆT.* 38.

Shown by Dr. W. H. KELSON. The patient came complaining of a suppurating middle ear. On examining the throat it was found that the posterior pillars of the fauces appeared to be represented by two bands which, instead of passing down to the root of the tongue on either side, pass backwards to the middle line of the pharynx, forming a sharp curved margin. She only complained of slight dryness in the throat, and was not aware of anything wrong there. It seems probable that both throat and ear conditions are due to a severe attack of scarlet fever when a child.

The PRESIDENT had seen a case exactly similar in every respect, the result of scarlet fever. Curiously enough, the patient had been brought to him for examination of the ears only.

PATIENT WITH ŒDEMA AND INFILTRATION OF UVULA, LEFT HALF OF SOFT PALATE, AND LEFT LATERAL WALL OF PHARYNX; INFILTRATION OF EPIGLOTTIS AND BOTH ARYTENOID REGIONS.

Shown by Dr. LOGAN TURNER. Patient, a male æt. 44, unmarried, is a well-developed, healthy individual. He denies ever having had syphilis; he has no cough or expectoration, and examination of the chest shows that the lungs are apparently healthy. The urine is normal. He has never lived outside the British Islands. He has never suffered from any throat affection until the end of June, 1903, when an opportunity was offered of observing the present condition owing to the sudden onset of serious respiratory symptoms.

During the last two or three days of June the patient had suffered from a "sore throat." On July 1st, 1903, he called in his physician, Dr. Brown Darling, who found œdema of the uvula and left side of soft palate, but without any evidence of false membrane; there was some elevation of temperature, and the patient felt ill, but at that time neither the voice nor respiration were interfered with. On the following day, however, he experienced some difficulty in breathing, and at 5 a.m. on July 3rd the difficulty became intensified, and Dr. Darling was again sent for. Steam inhalations were ordered, and preparations were made for possible tracheotomy. At 9 a.m. the breathing became much worse, and I was telephoned for; but just before my arrival Dr. Darling found it necessary to open the trachea. Neither at the time of the operation nor later was any membrane seen, nor was any coughed up.

Two days later I examined the larynx. There was still œdema of the uvula and soft palate; the epiglottis was markedly swollen and rigid, reddened, and curved backwards upon itself; both arytoid regions were swollen, and no view could be obtained of the interior of the larynx; no membrane was visible. The diagnosis made at this time was that of acute septic infection of the pharynx and larynx. The tracheotomy

tube was removed on the tenth day, respiration then being comfortable. Dr. Darling reported that there was still considerable swelling of the upper laryngeal aperture.

The patient spent August and part of September in the country enjoying his holiday, and was only conscious of slight inspiratory difficulty occasionally during exercise. His voice was never affected. On October 9th I again examined him, and found a pale œdematous-like infiltration of the uvula and left side of the soft palate; the epiglottis swollen and curved backwards, narrowing the upper laryngeal aperture; both arytenoid regions, especially the left, were swollen and of a pale colour; the posterior end of the right vocal cord, presenting a natural appearance, could just be seen with difficulty. There was no evidence of any laryngeal ulceration. In other words, the local appearances were still very similar to those observed in July, with the absence, however, of the acute inflammatory signs. The voice was normal; there was no pain on swallowing, and occasionally only some slight respiratory embarrassment. There were no enlarged cervical glands.

Further consultation was now held with Dr. McBride, who recommended a course of antisyphilitic treatment. Potassium iodide was administered internally, and mercury by inunction. Treatment was carried on very consistently for two months, and I again examined the larynx on December 8th, 1903. The local condition was very much the same as at the previous examination, but apparently the left lateral wall of the pharynx had become swollen, and presented an appearance very similar to that of the soft palate. The patient felt better—he was able to go about his daily work; sometimes he experienced a little difficulty in swallowing, and in foggy weather he was conscious of a choking sensation. A small piece of tissue was removed from the infiltration on the lateral pharyngeal wall, and treatment was discontinued. Microscopic sections of the piece of tissue removed showed no evidence either of tuberculous or malignant disease. The connective-tissue spaces were œdematous, the blood-vessels, arterial and venous, were much engorged, and there were areas of small-cell infiltration. The appearances suggested somewhat the existence of lymphatic obstruction.

The appearances observed in this case and its progress recall the description of the patients shown and referred to by Sir Felix Semon at the meeting of the Society held on November 7th, 1902. In these cases, as in this, the difficulty of diagnosis presented itself. In the present instance I have never observed the peculiar yellow colour of the infiltration to which Sir Felix Semon drew attention, but otherwise the similarity appears fairly well marked. Malignant disease may be excluded on the ground that such marked local infiltration of a malignant nature could not be present without ulceration, dysphagia, enlargement of glands, and general cachexia. Tubercle, I think, may also be excluded on account of the absence of evidence of tuberculous disease elsewhere, while the patient is free from cough and expectoration, and enjoys otherwise excellent health. The condition has, so far at any rate, not proved amenable to potassium iodide and mercury, in spite of a thorough trial of these drugs. It is impossible to say definitely whether the present condition dates from the acute illness in June, 1903, or whether that was merely superimposed upon a chronic infiltration such as at present exists.

The PRESIDENT said it seemed a case of great interest, and Dr. Turner was anxious to have opinions upon it. Dr. Turner had brought the case to him to see, and after consultation they had difficulty in arriving at a definite conclusion. It seemed to him from the history that the case must be either specific or some form of infiltration associated with obstruction of the lymphatics, the nature of which he was unable to recognise. Antispecific treatment had no definite effect in diminishing the condition; it seemed as marked as when first seen. He would be glad to have the opinions of those who had seen similar cases.

Sir FELIX SEMON said, as regards the reference which Dr. Turner had made to a case he had shown, he confessed that he could not agree that this case now under discussion was very similar to his own. As a matter of fact, unless Dr. Turner had mentioned the connection, the thought of these cases would hardly have occurred to him. In all his cases the infiltration was much more marked and general and the yellowish colour much more pronounced. Here certainly the uvula had a somewhat infiltrated aspect and was yellowish in colour, and a similar condition, though in a minor degree, was to be seen on the epiglottis, but there was not nearly so much infiltration and peculiar yellowish colour as in his own cases; but what differentiated it more particularly was that the infiltration was not nearly so universal. If the explanation of the case lay in its being due to some particular

obstruction of the lymphatic glands, the infiltration should be more general. He was not prepared to give any opinion as to the nature of the case.

Dr. DUNDAS GRANT had under his care a case somewhat resembling this, but very chronic in its course. He took the opportunity of showing the case to Dr. Hajek, who thought it extremely rare, and had only seen one or two cases. In his opinion it was a kind of lymphadenoma, which was due in reality to infiltration with small-cells. The Society was now getting a considerable collection of these cases of what might be roughly called chronic œdema. In one case which he had shown to the Society great improvement was taking place under mercurial inunctions, and it was probably tertiary syphilis. Other cases which had been reported turned out to be tuberculous. It would be interesting if the after-history of this case could be brought before them.

In reply, Dr. LOGAN TURNER said he would certainly keep the patient under observation, and if any definite diagnosis was arrived at he would let the Society know. The microscopical sections practically revealed nothing. The connective-tissue spaces were somewhat loose and œdematous. The blood-vessels were a little thickened here and there, and round about them there was a certain amount of small-cell infiltration, suggestive of a chronic inflammatory condition, but there was nothing very definite. As regards the question of tuberculosis, looking at the laryngeal condition, the pale œdematous inflammation of the arytenoids was certainly suggestive.

A CASE OF EPITHELIOMA IN THE CRICOID PLATE REGION IN A WOMAN *ÆT.* 30.

Shown by Dr. KELSON. Patient, first seen a week ago, came complaining of difficulty in swallowing of six months' duration; these symptoms had been previously attributed to nervousness and hysteria. On examination there is seen to be at the back of the arytenoids a whitish-looking mass, hard to touch; and a piece removed, on microscopical examination, pointed clearly to epithelioma. There are a few enlarged glands in the right supra-clavicular region. Advice as to treatment was requested.

MALIGNANT DISEASE OF THE NOSE IN A MAN *ÆT.* 70.

Shown by Mr. ATWOOD THORNE. The man was first seen at the London Throat Hospital about January 1st. He then complained of blocking of the right nostril. On examination it was found that the nostril was blocked by a soft granular mass

arising from the outer and also inner walls of the vestibule. A small portion was removed by the snare for microscopic examination, and proved to be epithelioma. When next seen, some three days later, he could breathe through his nose, and a further portion was removed, partly to relieve and partly for further investigation. The man can now breathe freely through the nostril, but the vestibule still contains much soft granular material; the mucous membrane on the right side has become everted, the whole nose is increased in size, and malignant disease is undoubtedly present; there are, however, no enlarged glands. What treatment is to be adopted? Should the whole nose be removed, the upper jaw split, and part of the septum be removed; or what? The patient says he is seventy years old, but looks more.

SYPHILITIC NECROSIS OF SPHENOID.

Shown by Mr. H. BETHAM ROBINSON. L. R—, æt. 26, contracted syphilis in India six years ago. Three years ago he received a blow on the head. In November, 1902, noticed swelling in right temporal region accompanied by pain in the head, and in February was discharged the service. First came under my care in May last for swelling over the right upper jaw and in the right temporal fossa; there was a purulent nasal discharge, especially from the right side. There was neuralgic pain over the right side of the face. Examination showed pus far back in the right nasal cavity, especially on the mesial aspect of the middle turbinate; with the rhinoscope granulations and polypi covered with pus could be seen on the roof and right wall of the naso-pharynx, extending into and partially blocking the right posterior choana. With the finger it could be made out that the root of the internal pterygoid plate was necrosed, but this bone was quite firmly fixed. Transillumination showed no pus in maxillary or frontal sinuses. Iodide of potassium reduced the swelling and pain considerably. Since this date examination has shown that gradual separation is taking place of a necrosed portion of the sphenoid, which is now getting loose. As the extent of the sequestrum is doubtful, no forcible measures have

so far been attempted to remove it. The separating fragment in the midst of granulations can now be distinctly seen with the rhinoscope.

Dr. WATSON WILLIAMS asked Mr. Robinson how he confirmed the diagnosis; the mere rhinoscopic appearance alone was only sufficient to suggest the sphenoid cavity as the source of the purulent secretion.

Sir FELIX SEMON had recently had an exactly analogous case in private practice. The necrosed bone, when he touched it, seemed to be absolutely fixed. Dr. Lieven, of Aix-la-Chapelle, had already advised that nothing forcible should be done, and, as he entirely agreed with that view, he waited till the bone should become more loose. A week after probing it it came away spontaneously, leaving hardly any scar. In his case the necrosis was in exactly the same position as in this case of Mr. Robinson's.

The PRESIDENT had had a case practically the same in every detail, except that the disease begun in the frontal sinuses, which he opened. There were obviously areas of necrosed bone, which were immobile, and only came away a long time afterwards. In the same patient there was also ulceration going on in the region of the sphenoid, and a very large part of the sphenoid bone was brought away after having been first *loosened* from its original *fixed* position by hawking on the part of the patient.

Mr. ROBINSON, in reply to Dr. Williams, said he had confirmed the diagnosis by his finger, which he had introduced several times to feel the state of affairs and to what extent it went; the base of the internal pterygoid plate was chiefly involved. The chronic periostitis went right through the sphenoid to the outer side, and there was still marked swelling in the temporal fossa.

LEFT ABDUCTOR PARALYSIS.

Shown by Mr. H. BETHAM ROBINSON. Female *æt.* 31, married, with indefinite history of syphilis. Left cord in mid-line with good tension; no local explanation why; nothing to be detected in the chest; no evidence of involvement of other nerves, and no sensory defects.

Dr. WATSON WILLIAMS referred to several points of great interest in the said case. Thus, he observed that there was great increase of the pulse-rate, which was 124 when they counted it. From examination of the larynx he did not think there was any very obvious laryngeal cause for the paralysis. But the patient had Romberg's symptom, and could not stand up with the feet together. He considered that whenever there was persistent and increased frequency of the pulse without obvious cause (such as febrile temperature or lung

disease), associated with abductor paralysis of the larynx, it was extremely suggestive of some bulbar implication. He would suggest that this case of paralysis might be due to some incomplete form of tabes dorsalis or other bulbar complication of the central nervous system.

Mr. PERMEWAN thought the cord was in the cadaveric position.

Dr. D. GRANT asked whether the term abductor paralysis was the best to be employed in this case. It was more like a case of complete recurrent paralysis with the vocal cord in the cadaveric position.

In reply, Mr. ROBINSON could not agree with Dr. Grant's last statement; in his opinion it was a case of left abductor paralysis. The voice was practically unaltered. The left cord was exactly in the middle line and of good tension.

A CASE OF CRUMPLED SEPTUM IN WHICH, THE HARD STRUCTURES
HAVING BEEN FREELY EXCISED NEARLY FOUR YEARS AGO,
THE INTACT MUCO-PERICHONDRIMUM REMAINS UNSTIFFENED.

Shown by Dr. PEGLER. The patient, a gentleman *æt.* 61, sought relief on account of deafness and right-sided nasal obstruction in December, 1899.

The right nasal chamber was stenosed by a deflection of the septum to that side, commencing near the roof and descending to make contact with the right inferior turbinal, leaving a small space above the floor, which allowed a probe to pass. Examination under cocaine showed that the deflection visible from in front was separated by an intermediate space from a posterior deviation in the region of the vomer and ethmoid plate, and that the acutely angular horizontal concavity visible on the left side was correspondingly interrupted. These conditions prevented the patient from clearing his nose on the right side as well as impeding respiration, and moist secretion persistently hung between the closely apposed surfaces.

In May, 1900, he requested to be relieved of the chronic catarrhal symptoms and constant stuffiness. Under cocaine anaesthesia the operation was commenced by excising the projecting cartilage of the right side, firstly with the septum knife, and afterwards with the saw when ossification rendered this necessary. In this manner the deflected area was removed in two large and one smaller fragments, the muco-perichondrium of the left side remaining intact, its white, glistening surface

showing conspicuously. About a quarter of an inch of the vestibular septal cartilage was left standing, and still remains. Some of its free edge as well as of the anterior free edge of the posterior segment required trimming with punch forceps, as they tended to project too much towards the lumen of the chamber. The clearance thus made brought a rather large polypus into view, depending from the border of the right middle turbinal; three were eventually removed, and have not recurred. An india-rubber splint was worn on the right side for some time, which kept the proximal and distant extremities of the remains of the cartilage in line and prevented adhesions.

Examination of the patient to-day shows the muco-perichondrium of the left side imperforate and quite mobile and limp when palpated with a probe. The horizontal grooving is to some extent preserved, but breathing on the right side is perfect, and there are no symptoms. The hearing, which was most affected on the stenosed side, has greatly improved for conversation.

Dr. STCLAIR THOMSON said that pathologically the case was of interest to them not only *per se*, but also in connection with those septal operations which were coming into vogue. The point was that the muco-periosteum of one side did not appear sufficient to reproduce cartilage. He would like to hear from Mr. Tod whether there was re-formation of cartilage in any of his cases. This case had an intact muco-periosteum on one side, yet it was not enough to manufacture any cartilage.

Mr. H. TOD said that from the cases he had seen he would not like to say definitely whether there was or was not any re-formation of cartilage; but six months after the operation the septum was more stiff than immediately after it, although not absolutely hard; on touching it one could feel it was stiff, but could make an impression on it with a probe.

Dr. PEGLEE hoped Mr. Hunter Tod would allow the Society to see a case of his in which a deposition of stiffening material, whatever it might be, had taken place after a Krieg-Bönninghaus operation. There was no trace of anything of the kind in his own case, but this might happen perhaps when both mucous surfaces were preserved.

MAN WITH LARYNGEAL VERTIGO.

Shown by Mr. DE SANTI. This patient, a man *æt.* 55, was shown at the Laryngological Society, March, 1899, as a case of

laryngeal vertigo, by Mr. Atwood Thorne. He was then under Mr. William Hill's care at St. Mary's Hospital, and complained of severe attacks of coughing, followed by giddiness and lurching towards his right front. He had had these attacks of coughing on and off for two years, but the condition had been gradually getting worse. He was slightly deaf, had polypoid hypertrophy of both middle turbinals, some lymphoid hypertrophy at the base of the tongue, and some swelling in the interarytenoid space.

At the meeting some members were of opinion that the vertigo was of aural origin, and Dr. StClair Thomson suggested cardiac syncope. I was asked to see the man about the end of December, 1903, he being an in-patient at Westminster Hospital, under Dr. Purves Stewart. I found that he gave a history of similar attacks of coughing, vertigo, and semi-consciousness, and at such times his breathing was very embarrassed.

On examination I came to the conclusion that the mobility of his cords was impaired, the right not moving well in abduction. This seems to vary, and on writing to Dr. Hill about the case he told me that when the patient was under his care the amount of mobility of the cords varied, abduction never being good on either side, and that he suffered from hypertrophic laryngitis, with hoarseness and occasional attacks of spasm and loss of consciousness. On several occasions the breathing was so bad that Mr. Hill was on the point of doing tracheotomy. I bring the case before the Society again, as it is now some years since the members saw him, and the patient has remained, as regards the attacks of spasm and semi-consciousness, very much *in statu quo*, and because it is interesting to note that though he has had severe suffocative attacks, they have always passed off safely; and Mr. Hill's judgment that tracheotomy should be avoided if possible, seeing the serious drawbacks to wage earning which a patient with a tube labours under, has been perfectly justified.

The PRESIDENT said the man had the attacks chiefly after coughing; this fact confirmed the view he took years ago that it was really backward pressure on the thoracic organs which caused the attacks.

Dr. D. GRANT said the pulse was extremely soft.

MAN WITH TERTIARY SYPHILIS OF THE LARYNX CAUSING STENOSIS;
 THYROTOMY FOUR YEARS AGO.

Shown by Mr. DE SANTI. This patient was brought before the Society by Mr. W. G. Spencer some four years ago as a case of tertiary syphilis of the larynx causing so much stenosis as to necessitate thyrotomy.

At the time there was some expression of opinion to the effect that thyrotomy and removal of the cicatricial tissue would be of no permanent benefit, and that the use of a tracheotomy tube would be the only safe line of treatment.

He is now brought before the meeting to show that although for the last four weeks he has begun to have a little difficulty in breathing, yet for close on four years since the thyrotomy and removal of the diseased tissue was performed he has been perfectly well, and has had not the slightest trouble with his breathing. He has been able to perform his work, and his condition, if a permanent tracheotomy tube had been used, would have been such as to prevent him from doing his work, to say nothing of the general distress its use would have entailed.

It is true he has within the last four weeks had a renewal, though only a slight one, of his breathing difficulties, but for over two and a half years he has failed to carry out the instructions given him, namely, to take a course of iodide of potassium for at least six weeks once a year.

He has now been given by me 20-grain doses of iodide, and after only ten days' treatment has already begun to improve.

Mr. W. G. SPENCER was greatly obliged to Mr. de Santi for bringing the case up for him. When he first showed the case to the Society some doubt was expressed whether such an operation was indicated, and whether one was not in danger thereby of spoiling the cords, and all to no purpose, as sooner or later tracheotomy would have to be done, followed by removal of one cord and the scarred tissue and consequent impairment of the voice. When he showed the man his condition was stationary, and had remained so since, barring one or two attacks, which were relieved by iodide of potassium. The point to be noted now was (1) that the cartilages—both thyroid and cricoid—were *still* sound, and that was the indication for this operation; and (2) that the patient was not subject to relapses, provided that iodide of potassium was occasionally taken.

COMPLETE PARALYSIS OF LEFT VOCAL CORD IN A WOMAN ET. 36.

Shown by Dr. STCLAIR THOMSON. The patient reported that her weak voice came on quite suddenly about two years ago. It would be seen that the left vocal cord was quite immobile in the cadaveric position. The right cord crossed the middle line in its effort to make complete apposition, but the voice was feeble and toneless, as the inner border of the paralysed cord was excavated and without tension. The case showed in a marked way how the ary-epiglottic fold flapped over the glottis in respiration, and was pushed backwards on phonation by the opposite active cord. The patient complained of nothing beyond voice fatigue after talking. There were no symptoms in the eyes, neck, thorax, or reflexes to explain the condition. No history of syphilis. Suggestions were invited as to the nature of the lesion.

Dr. DUNDAS GRANT thought the position was not a typical one for a nerve-lesion, and that the extreme abduction of the cord was more likely to have been produced by some sort of fixation. There was some thickening around the arytenoid cartilage.

Sir FELIX SEMON was not sure from Dr. Grant's remarks whether he had been really speaking of "extreme abduction" as being present. If so, all he could say was that he did not see it, and that the expression, in his opinion, did not at all fit the actual condition. He himself should certainly have spoken of the position of the paralysed cord as "cadaveric."

Mr. PERMEWAN thought the appearance of abduction was due to the ary-epiglottic fold "flopping" over the cord. One certainly did not see much of the vocal cord.

In reply, Dr. STCLAIR THOMSON said, with regard to the case of paralysis of the left vocal cord, he was anxious to know why his patient had such a poor voice and Mr. Robinson's case such a good voice, the two cases being very similar—the cords in both being fixed in the cadaveric position. The left cord in his case crossed freely in the middle line, but not sufficiently to close the glottis, whereas in Mr. Robinson's case the cord crossed the middle line so successfully that the woman's voice was hardly distinguishable from the normal. He would be glad to hear the explanation of the difference in the voices of these two patients, whether or not it depended on the completeness of the paralysis.

TWO CASES OF "BLEEDING POLYPUS OF THE SEPTUM."

Shown by Dr. STCLAIR THOMSON. In the first case a tumour the size of a cherry-stone was found almost sessile in the usual site in the centre of the cartilaginous septum. It was removed with the snare, and the base, which bled freely, was seared with the galvano-cautery. The patient was a hospital case, and was lost sight of. A section from the growth was exhibited, and was considered a fibro-angioma, although some observers might suggest some sarcomatous elements. The second case was from a female aged about 25. In this case the tumour was the size of a small pea, had a most distinct narrow pedicle, about a quarter of an inch long, at the end of which the growth was easily moved about. It was removed with a snare, and, warned by previous experience, the base was at once freely cauterised with the galvano-cautery. The case was seen three months later, when there was not the slightest suspicion of recurrence, and there was only a small star-shaped white cicatrix to mark where the pedicle had been attached to the septum. A section showed the growth to be a decided fibro-angioma.

These were formerly regarded as rare growths up to the time Natier published his article on "Les polypes saignants de la cloison," but Dr. Thomson had now shown three cases before the Society. His first case was shown in January, 1896, and on glancing through the 'Proceedings' he noticed that Dr. Bond had shown one in November, 1896, Dr. Spicer one in December, 1897, Dr. Tilley one in March, 1900, and Dr. Brown Kelly one in February, 1903. Possibly other cases had escaped his notice. It was right to remark that Dr. Spicer's case had not been confirmed by a microscopic examination, and in Dr. Tilley's case it was reported that the section showed a sarcomatous character. Perhaps Dr. Tilley could tell the Society the after-history of his case? Dr. Thomson's first case was considered by some members to be sarcomatous, but there had been no recurrence in eight years.

Mr. H. TOD said he had also shown a case of the same nature to the Society, the section of which was now in Dr. Pegler's care. He saw

the patient some three months afterwards and there was no sign of recurrence. The septum was quite smooth.

Dr. HERBERT TILLEY said that the case he had shown before the Society was quite well twelve months after he had removed the polypus, and it had shown no signs of recurrence. He thought these "bleeding polypi of the septum" were not very uncommon. Dr. Thomson had brought notes of two cases to the meeting, and he (the speaker) had operated upon one within the last ten days, and was waiting to hear the pathologist's report on the same. The growth was red, vascular, pedunculated, and about the size of a horse-bean. It grew from the mucous membrane covering the cartilaginous septum near the junction of the latter with the ethmoid bone. He removed it with a cold wire snare and applied the galvano-cautery to the base from which the polypoid mass had grown.

The PRESIDENT thought that these cases were not so rare as the opening remarks of Dr. Thomson might lead some to think. His recollection of the first literature on the subject was either two or three papers, describing these tumours, published in 'Archiv für Laryngologie.' He remembered quite well the first typical case he saw, and it was a rather curious one in some respects. The patient was a girl who came to him and he removed a typical bleeding polypus, which he sent to a pathologist, who described it as an adenoma. The girl came back again within a relatively short time with a growth exactly as large as she had had before. This he also removed, and the pathologist to whom it was sent reported it to be a sarcoma. The growth did not recur. He had seen several cases since.

Dr. W. H. KELSON had shown a case of a similar polypus, he mentioned it as showing that they do not always originate from the septum, as this one grew from the floor of the nose close to the anterior end of the inferior turbinate.

Dr. D. GRANT said that he had removed a polypus from a case of this kind some years ago; the pathologist reported that it was a form of sarcoma, but there was not the slightest sign of recurrence.

Dr. PEGLER said the angiomatous type of polypus that Dr. StClair Thomson had exhibited had been well represented by the remarkable series of sections of bleeding polypus shown by Dr. Brown Kelly last year, and which were in the cabinet on view in the next room.

Dr. MILLIGAN had a case five years ago in which he removed the polypus and cauterised it, and there was no tendency to recurrence at all.

In reply, Dr. STCLAIR THOMSON said: As regards the two septal polypus cases, he did not think he could accept Dr. Kelson's case in the group. They ought to include only those cases clinically described as "bleeding polypi of the septum" until they had determined whether they were all of one pathological nature, or whether various pathological conditions grew there and produced "bleeding polypi." There was still great diversity of opinion as to the pathology of these cases. In the first case he had had to remove a recurrence, and the patient was well five years afterwards. The section was considered by some

to be a sarcoma. The subject, in his opinion, was open to discussion. Though not common, these cases were not so very rare; in fact, he had quoted six cases to show that they were not uncommon. When Natier collected his cases some years ago they were then looked upon as very rare.

EPITHELIOMA OF THE CRICOID PLATE AND OF THE ŒSOPHAGUS
REMOVED BY OPERATION.

Shown by Mr. BUTLIN. Mr. K—, æt. 44, was brought to see me on August 14th of last year (1903), suffering from what had been diagnosed in Canada as inoperable malignant disease at the back of the larynx. There was a large, smooth, red tumour at the back of the larynx, almost confined to the left side, involving the whole of the ary-epiglottic fold, but not encroaching to any extent on the interior of the larynx. The left side of the neck was occupied by a very large mass of glands, chiefly on a level with the cricoid cartilage, and so intimately associated with the sterno-mastoid muscle that it was evident that they could only be removed by cutting away almost the whole of the muscle.

The first symptoms of disease had been noticed some ten months previously in a curious catch in speaking and in a sense of malaise. Then, there was expectoration of phlegm, which by-and-by became purulent. For four months there had been difficulty in swallowing; and when I saw him he could only swallow with pain, and his voice had just become husky. There was no spontaneous pain, but he had lost about 20 lbs. in weight.

Under ordinary circumstances I should have regarded the case as beyond the reach of operation, not so much on account of the situation of the primary disease and its long duration, which made it certain that it was much more extensive than it looked to be, but on account of the extent and condition of the glandular disease. But, seeing the age and immense strength of the patient, and having in mind the success of Professor Gluck's operations for what would have appeared to be hopeless conditions of malignant disease of the throat and neck, I placed the matter before the patient, and asked him whether he would care to undergo an operation of very considerable magnitude,

which might itself be fatal, and which I did not myself think would be successful. He decided in favour of operation.

On August 19th the operation was performed, with the help of Mr. Donald Armour, who had brought the patient to me on the 14th. An incision was made in the middle line from the hyoid bone to the third ring of the trachea, and from about the middle of the thyroid cartilage a transverse incision, which allowed two flaps to be turned aside. The muscles were separated from the left ala of the thyroid cartilage until the larynx could be twisted on its own axis to such an extent that the back presented on the left side. A free incision was made through the wall of the pharynx and œsophagus, through which the disease could be seen and felt. The smooth, red tumour was found to be the upper border of an ulcerated surface, which extended down the front and left side of the œsophagus to a point which I could just reach with the end of my finger. The whole circumference of the alimentary canal was not involved, so that there was little or no fear of a ring-formed stricture after removal; but several square inches of the wall of the lower pharynx and œsophagus were involved in the ulceration.

As the removal of the disease was evidently feasible, the trachea was opened and Hahn's tube was introduced. The operation wound was opened up, and the disease was quite easily cut out with a pair of scissors. It was not adherent to the posterior parts of the larynx, so that the excision of the larynx never came into question. The vessels were tied with catgut; an india-rubber tube was introduced through the wound by the side of the larynx for feeding, the rest of the wound was carefully packed with gauze, and a drainage-tube was inserted. The lower part of the incision was not brought together, and Hahn's tube was at once removed. The operation lasted two hours, but there was really very little loss of blood.

On August 26th the larynx was examined with the laryngoscope, and the left vocal cord was found to be quite paralysed; also there was considerable deep red swelling of the left ventricular band. The patient was in wonderfully good condition, and was still fed through the india-rubber tube.

On the 28th of August the glands were removed by the most extensive operation I have ever practised on the neck. Almost

the whole of the contents of the anterior triangle, all the contents of the upper and middle parts of the posterior triangle, the whole of the sterno-mastoid muscle, the entire length of the internal jugular vein were removed. The contents of the sub-clavian triangle were not involved, and were not interfered with. After the operation there appeared to be nothing left on that side of the neck, with the exception of the carotid arteries and the pneumogastric and sympathetic nerves. The involvement of the muscle was largely due to inflammation and suppuration of breaking-down malignant glands. The wound was freely drained.

The patient never exhibited the least distress from the severity of these two operations, but made an uninterrupted recovery.

In the course of three or four weeks the voice was good and strong, although the cord remained paralysed. The feeding-tube was not removed until the middle or end of September, when it had been found possible to pass a small bougie through the mouth down the œsophagus. This treatment by bougies was continued for two or three weeks, by which time the patient could take soft solid food and even soft meat quite easily.

At the beginning of November a sinus opened in front of the neck, and a gland appeared below the jaw on the right side of the neck. On the 13th of November the sinus was opened up, and was found to be full of recurrent malignant disease. The gland on the right side, which had developed into an epitheliomatous cyst, was dissected out with difficulty, on account of its adherence to the large vessels.

In December Mr. K— was sufficiently recovered to return to Canada, but suffering from recurrent disease.

This is the second case in which Mr. Butlin has operated for malignant disease on the cricoid plate. In the first case the patient was a lady between forty and fifty years of age. It appeared to be limited in extent. An incision was made along the anterior border of the sterno-mastoid muscle on the left side; as for œsophagotomy, one or two enlarged and diseased glands were removed. The wall of the lower pharynx and œsophagus was cut through, and the disease was examined. It was found to be too extensive and too diffused for removal, although per-

haps it might have been successfully dealt with by excision of the larynx. But the glandular disease was also extensive and diffused. The wound was closed except at the lower part, where an india-rubber tube was inserted and passed down into the œsophagus for feeding. The patient was much relieved by this. All went well for a week, when, during one night, there occurred a sudden profuse hæmorrhage, apparently from the carotid artery, and in a moment she was dead.

Mr. Butlin has also operated on one case of epithelioma of the back wall and side of the lower pharynx, where the ulcer was just visible above the level of the back of the larynx. The ulcer was judged to be of small extent, and, indeed, it was so. It was approached by a similar incision to that practised in the case of the lady. It was found to be only about an inch in diameter. But below it, and running down the œsophagus much farther than the finger could reach, were flat plaques of cancer in the wall of the gullet. The ulcer and posterior wall of the œsophagus for a long distance below were cut out, but the patient was not much relieved by the operation, and was discharged to his home in the country, wearing a tube through the wound in his neck, through which he was regularly and easily fed.

It must be pointed out that the œsophagotomy incision was not nearly so convenient as that which was employed in the case of Mr. K—. It did not offer nearly so great facilities for examination and removal. The incision in the case of Mr. K— was, on the other hand, most satisfactory, and would be adopted by the author in all subsequent attempts to remove disease at the back of the larynx. It is practically the incision of Professor Gluck.

The author's object in publishing these cases is to show that even the largest operations for malignant disease of the cricoid plate and upper œsophagus are very hopeless; and that the best hope for the future is not in huge operations, but in earlier diagnosis. The rapidity with which the disease spreads, and the early and extensive affection of the lymphatic glands, generally on both sides of the neck, render these cases peculiarly unsuitable for operation when the disease is advanced.

The PRESIDENT said the Society was indebted to Mr. Butlin for telling them about the case and specimen.

Sir FELIX SEMON did not like Mr. Butlin's final observation to pass without saying what he thought they all felt when they had these cases before them. He had had a similar case that very morning—a patient with malignant disease of the posterior plate of the cricoid, with some involvement of the cervical glands. He of course did not urge operation, as his own feeling had been throughout the development of this question that, even if the operation was successful, the after-life of the patient was more or less miserable. In addition, the operation was very dangerous, particularly when the cervical glands were already extensively affected, and there was a very great probability of recurrence, however radically the glands were removed. Still, if the patient or his friends said to one, "Can nothing be done?" he considered that one was not justified, with Gluck's cases at the Swansea Meeting of the British Medical Association in one's mind, in answering "No." One always ought to remember that the feelings of the patient with regard to the after-existence after these operations might differ from those of his doctor. So he put the matter when pressed perfectly frankly before the patient or his relations, and told them such an operation was possible, and might be successful; but, on the other hand, it was a dangerous one, that life after its successful performance was often miserable, and that recurrence took place but too often. He then let them decide on their course.

Dr. WATSON WILLIAMS said he thought they would be sorry if Mr. Butlin's failure to relieve this patient discouraged him and others from attempting to relieve these more advanced cases when the opportunity presented itself in the future. Such cases might sometimes be attended with relief by operation, and those who were able to see the patients and specimens brought before the meeting of the British Medical Association at Swansea by Professor Gluck would agree that a bold procedure on the part of the surgeon had sometimes given relief, and that there was some hope for a certain proportion of even advanced cases.

CASE OF OUTGROWTH FROM THE ANTERIOR END OF THE LEFT VOCAL CORD.

Shown by F. C. SHRUBSALL, M.D., for PERCY KIDD, M.D. Alfred P—, *æt.* 31, police constable, has suffered from hoarseness for the last eighteen months; cough for eight months. No marked wasting. Lungs, signs of limited tuberculous infiltration of the right apex. Larynx, slight swelling of both ary-epiglottic folds; attached to the anterior third of the left vocal cord is a smooth, yellowish, conical outgrowth; the posterior part of the left cord not visible.

Dr. STCLAIR THOMSON said, with regard to the inquiry for treatment, that he feared any treatment would be of no use. Both ary-epiglottic folds showed a pseudo-cedematous condition; there was sub-glottic ulceration on the left side, and on the right the greater part of the ventricular band had already gone. Local treatment could only be sedative and antiseptic.

Mr. F. C. SHRUBSALL said the only question in his mind was whether part of this projection could be snipped off, and so relieve the man's cough and hoarseness, which were preventing him at present from following his occupation.

CASE OF SESSILE FIBROMATA AT THE ANTERIOR EXTREMITY OF THE LEFT VOCAL CORD, PARTIALLY REMOVED BY MEANS OF FORCEPS AND COMPLETELY EXTIRPATED BY THE GALVANO-CAUTERY.

Shown by Dr. DUNDAS GRANT. The patient was a widow, æt. 51, who had suffered from loss of voice of nearly three years' duration. The anterior commissure was occupied by pink sessile growths, originating on the edge of the left vocal cord. In July, 1903, these were in part removed by means of Grant's intra-laryngeal forceps and Lack's forceps with recurved tips; the voice was slightly improved, but it was found by the exhibitor impossible to remove the growth completely by means of any forceps. One and 2 per cent. solutions of salicylic acid were applied, then a solution of perchloride of iron, also chloride of zinc, but without result. In October the galvano-cautery was applied for a moment, with the result of making a slight diminution. At this time there was a nodular growth with a depression in the centre, the latter apparently due to the cautery. Each of the little remaining nodules were separately cauterised at intervals of about a fortnight, and at the end of December the voice was perfectly restored. As could be seen, the vocal cord, although somewhat congested, was quite normal in outline.

The patient was a stout person, and the cavity of the mouth was small in its vertical diameter, so that the introduction of instruments, even for the purpose of inspection, was more difficult than in the average case. The epiglottis was so pendulous that only the posterior half of the cords was visible. The use of Escat's epiglottis-lifter greatly facilitated inspection and the introduction of instruments. The point of the galvano-

cautery instrument was sharpened by means of a file, so that an extremely minute portion of it became instantly heated and cooled. The application was made as lightly as possible and quite superficially. Dr. Grant trusted to the subsequent cicatricial contraction to bring about the diminution of the growth without being sufficient to cause an undesirable degree of scarring of the cord itself. He had used the galvano-cautery in two other cases for the same purpose, and he asked whether the method found favour at the hands of other members of the Society.

CASE OF ATROPHY AND COLLAPSE OF ALÆ NASI TREATED BY
MEANS OF THE SUBCUTANEOUS INJECTION OF PARAFFIN.

Shown by Dr. DUNDAS GRANT. The patient was a female teacher, æt. 29, and the thinness of the alæ was extremely marked, the tip of the nose having an unsightly pinched appearance. The nares were reduced almost to linear slits, and the indrawing of the alæ on inspiration was most pronounced. An injection of paraffin was made by means of a needle introduced about the middle of the edge of each ala, the finger being kept inside the nares, so that any bulging of the tissues into the cavity could be detected. The paraffin was driven in a forward direction, and kept as close under the skin as possible. Injections were made at the same time into the tissues at the tip of the nose and as far as possible underneath the lining of the most anterior portion of the vestibule, with a view of propping out the alæ after the manner of the small roll of skin recommended for this purpose by the late Mr. Walsham. This portion of the injection might perhaps with advantage have been pushed to a still further degree. The pinched appearance of the tip of the nose was quite removed, and the alæ were rendered much firmer. The orifices of the nares were enlarged, though not to the average size, but the in-suction during ordinary inspiration was quite overcome, and was hardly produced even during powerful inspiratory effort.

The PRESIDENT asked if much paraffin had been injected in this case. Sir FELIX SEMON wished to ask Dr. Grant a practical question:

Was it within the operator's power, with regard to these injections of paraffin, to precisely say where the proper limit had been reached? The reason of his question was that it seemed so obvious that the injection of but a little too much paraffin might actually cause encroachment on the passage instead of obtaining the desired purpose. This question seemed to him the more important, as, according to all reports, it was so difficult, if not impossible, to remove paraffin injected into living tissues.

Mr. BUTLIN said that he had not yet been rash enough to inject paraffin; so far his experience in this subject consisted in the taking out of paraffin which had been injected, and it was a most troublesome operation. A little more experience was required in these cases before this operation could be regarded as a useful one.

Dr. HERBERT TILLEY said that his experience coincided with Mr. Butlin's in one of the respects which he had mentioned. Last summer he (the speaker) was asked to operate upon a frontal sinus which had been already operated upon by a surgeon, who had apparently injected paraffin into the sinus before it had completely healed from his first operation. When the sinus was operated on by Dr. Tilley he found it a small one, and performed a modified Kundt's operation. Under ordinary circumstances he should have expected the wound to heal in three to five weeks, but in this case it took ten weeks, and the slow progress seemed to be due to the fact that the tissues were impregnated with paraffin. He had used the method of paraffin injection for remedying a depressed scar in the case of a radical frontal sinus operation in a female patient, and the result twelve months after the operation was excellent.

Dr. MILLIGAN said that when a surgeon undertook these paraffin-injection operations he incurred very grave responsibility, as there was no justification for presuming that the result would be good. He had brought a communication on the subject before the Manchester Medical Society, after having done several injections. One member who took part in the discussion said that he had once injected paraffin to make up a woman's breast after it had been amputated, and he found it in the groin a few months afterwards. The first case he did was in a little girl with saddle-back nose. He obtained a beautiful result at the time, and a few months after the operation the result was still good; but only last week he heard that the paraffin had moved its position and was now lying outside the ala nasi. He called the attention of the Society to the serious result recorded by Dr. Hurd (America), where paraffin had been injected into the nose and was now lying in the central artery of the retina, causing permanent blindness. He considered the injection of paraffin a very delicate operation, the seriousness of which was not even yet fully understood by the profession.

Dr. BENNETT said that although the criticism had generally been directed against the use of paraffin injections, the results in this particular case had not been unsatisfactory. He should be very pleased if he could see this patient again, to see if the good result was permanent. All these cases ought to be very closely watched for a long time after the operation.

Dr. DUNDAS GRANT, in reply to the President, said it was very difficult to say how much paraffin he injected. He thought about 2 c.c. He injected it into the middle of each ala nasi and then just inside the anterior part of each vestibule, to try and prop out the alæ. The space was not big, and if he had used more paraffin it would have been encroached upon. The paraffin solidified the alæ so that they stuck where they were instead of being sucked in at each inspiration.

In reply to Sir Felix Semon, he said that he had erred on the side of being a little over-cautious, so as not to make too great a thickening to bulge into the air-spaces. He kept very close under the skin and on the outer surface, and kept his finger inside the nostril. His personal experience could not go for much, as this was his only case. Several cases had been published in the 'Münchener medizinische Wochenschrift;' in one case a sort of cushion was produced on the inner surface of the alæ nasi, which defeated the object in view. The operator then resected the excess paraffin, and got a good result. He was very afraid of producing that "bulging" into the alæ nasi, so that he injected perhaps a little less than he might have done.

PHOTOGRAPHS OF A CASE OF FLAT AND SUNKEN NOSE TREATED
BY PARAFFIN INJECTIONS.

Shown by Dr. DUNDAS GRANT. The depression on the bridge of the nose was removed to a sufficient extent by injections in that part in the way which is now well known, but in order to diminish the flattening a considerable amount of paraffin was injected into the soft tissues forming the columella. In this way he tip of the nose was projected forwards, and the extreme flattening and width of the organ considerably diminished. The patient's personal appearance was very greatly improved. The exhibitor did not know whether the injection into the columella had been practised by others, but he considered it a valuable process.

SOFT FIBROMA OF THE LEFT VOCAL CORD IN A WOMAN *ÆT.* 31.

Shown by Mr. HUNTER F. TOD. There had been hoarseness for seven years, and occasionally attacks of spasmodic dyspnoea during the night. The growth was freely movable, and was sucked up and down during forced respiration.

SARCOMA OF POST-NASAL SPACE, PROBABLY INVOLVING THE ETHMOIDAL REGION, WITH ENLARGEMENT OF CERVICAL GLANDS ON THE RIGHT SIDE, IN A MAN *ET.* 51.

Shown by Mr. HUNTER F. TOD. Six months ago the patient noticed slight enlargement of the glands on the right side of the neck, which was thought to be due to carious teeth. Mr. Tod first saw the case in December last, when the mass of gland was about as large as an egg. Examination showed a small, hard, irregular growth in the post-nasal space on right side, abutting on the Eustachian tube and roof of the naso-pharynx and upper part of the choana. The growth bled freely on digital examination. On transillumination there was a marked opacity of the right side of the face just below the orbit, and there was no pupillary light reflex.

The patient suffered greatly from headaches, which were unrelieved by ordinary drugs.

Mr. Todd was anxious to know if an operation was justifiable. He had already told the patient that he thought operation impossible.

Dr. LOGAN TURNER said that he had read the report of a case from America in which sarcoma of the naso-pharynx had been successfully removed. He did not get a good view of the naso-pharynx.

Mr. BUTLIN said that to undertake an operation from a curative point of view was absolutely out of the question. There was a mass of glands fixed to the spine. It might be possible to cut out the disease in the naso-pharynx, but it would not be worth doing.

Dr. HERBERT TILLEY said he had made a digital examination of the naso-pharynx and found the growth fixed to the vertebral column and invading the Eustachian tube and posterior choana on the right side. With an experience of two similar cases in his mind, he thought operative interference was out of the question.

Dr. KELSON said in Mr. Tod's case anterior rhinoscopic examination did not show any definite intra-nasal infiltration, nor was there any facial deformity. He wondered if Mr. Tod would entertain the idea of trying to remove the primary growth in this case.

In reply, Mr. H. TOD said he agreed entirely with Mr. Butlin. He brought the patient here as a "last chance." He thought the growth was probably even more extensive than it appeared to be.

OBSTRUCTION IN LOWER PHARYNX FROM THE FORMATION OF A
DIAPHRAGM ADHESION BETWEEN THE POSTERIOR PART OF THE
TONGUE AND THE POSTERIOR PHARYNGEAL WALL.

Shown by Mr. H. BETHAM ROBINSON. Female, *æt.* 32, who soon after marriage, six years ago, developed syphilis, now shows extensive pharyngeal synechiæ, the result of widespread ulceration. For the last four months she has had difficulty in swallowing. As well as very marked scarring on the posterior pharyngeal wall, the soft palate is so adherent as to completely shut off the naso-pharyngeal cavity, except for a small opening on the right side.

What is of greater interest is an almost horizontally placed membrane, due to cicatrisation, which passes from the back of the tongue at the level of the upper part of the vallecular fossæ to the posterior pharyngeal wall, leaving an opening in the centre whose area hardly exceeds that of a sixpence. This diaphragm-like structure has a free inner margin; this latter is in relation with the edge of the epiglottis about the junction of its upper and middle thirds, and then at the back hides from view the posterior part of the larynx. Both the opening into the pharynx posteriorly and the pyriform sinuses are completely hidden. The result of this curious formation is that any fair sized bolus of food must inevitably lodge on this shelf.

Dr. P. WATSON WILLIAMS showed a patient, a lady *æt.* 42, with an intra-laryngeal new growth, apparently arising from a broad base attached to the base of the epiglottis at its junction with the right ventricular band of the aryteno-epiglottidean fold. It was smooth and semiglobular, covered with pink mucous membrane, which was very vascular.

The only symptoms were alteration of the voice and cough on exertion. There was no secondary glandular enlargement, and he considered it was either a cyst or a fibroma, probably the former, as in this region fibromata were rare. But six years ago he had removed a fibroma from much the same

region, and it was therefore very possible that this would prove to be a similar new growth. There was no evidence pointing to malignancy. Dr. Watson Williams exhibited his forceps with the adjustable ends working in the position which he proposed to use in the removal of the neoplasm.

PROCEEDINGS
OF THE
LARYNGOLOGICAL SOCIETY OF LONDON.

EIGHTY-SEVENTH ORDINARY MEETING, *February 5th*, 1904.

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

E. FURNISS POTTER, M.D., } Secretaries.
P. DE SANTI, F.R.C.S., }

Present—26 members and 1 visitor.

The minutes of the previous meeting were read and confirmed.

The following gentleman was elected an ordinary member of the Society :

Herman Stolte, M.D. (Berlin), Suite 513, Goldsmith Buildings,
Milwaukee, U.S.A.

The following cases and apparatus were shown :

PROFESSOR MEYER'S APPARATUS FOR DEMONSTRATING THE LARYNGEAL
IMAGE AND INTRA-LARYNGEAL MANIPULATIONS.

Shown by Dr. EUGENE YONGE. This apparatus was constructed from a model invented by Professor Meyer, of Berlin. With the exception of a modification in the lamp, by which its illuminating power was increased, the original idea has been closely adhered to. Any one who has had the pleasure of working with Professor Meyer will probably have noticed that he possesses, in addition to many admirable qualities, a distinct

genius for demonstrating the phenomena observed in connection with his *specialité*; and the apparatus exhibited is by no means the only successful effort in this direction which he has accomplished. It would serve no useful purpose to minutely describe the appliance; it was better, for its proper comprehension, to see it in action. Stated in general terms, however, the essential part of the contrivance was a device by which the laryngeal image was illuminated in such a way that, by an adjustment of reflectors, images of the larynx, practically identical in every respect, were severally capable of being observed by the examiner and four other persons. Moreover, the four observers could be disposed at convenient distances from the examiner, from the patient, and from each other. It appears to me, indeed, to be quite feasible to modify the apparatus in such a manner that six or eight observers (in addition to the examiner) could be enabled to obtain simultaneously a good view of the larynx; I am at present making some experiments on this point. A special advantage of the apparatus is that any intra-laryngeal manipulations can be as clearly seen by the observers as by the individual who is carrying out the manipulations.

My friend and colleague, Dr. S. Moritz, of Manchester, has suggested a modification of the machine which will, I think, greatly reduce its cost and at the same time render it more portable; but this modification is not yet quite ready for exhibition. The present apparatus was made for me by Mr. Edwards, 7, Dalton Street, Chorlton Road, Manchester.

Mr. SYMONDS thanked Dr. Yonge, on behalf of the Society, for showing them the apparatus, which had been greatly appreciated.

Mr. F. J. STEWARD asked where the apparatus could be obtained.

Dr. E. S. YONGE, in reply, said the apparatus could be obtained from Hirschmann's, in Berlin. If any member thought of using it, he would advise him to adopt the modification he himself used, *i. e.* the lamp should not be put in the slot that was made for it; it was better to pull it up until it reached a point above the pin in a bayonet joint. The light, as used by Meyer, was pushed down to the base and then fixed, but this position did not give so good a light as when the lamp was pulled up until it got beyond the pin. The cost was £6. He was making a modification which could be fixed on to an ordinary laryngoscopic bracket, which would be much cheaper and handier, as it would be portable, and could be easily taken from one room to another for hospital work, etc.

MICROSCOPIC SECTIONS OF BONE AND SOFT TISSUES FROM CASE OF
EARLY POLYPUS.

Shown by Dr. EUGENE YONGE. The specimens were obtained, *post mortem*, from a man, æt. 52, who had died from cirrhosis of the liver. When the nasal cavities were opened (for the purpose of obtaining sections of normal nasal mucous membrane) it was observed that there was a polypus attached to the anterior end of each middle turbinal, and these growths were accordingly removed, together with a piece of underlying bone. A microscopic examination showed that the soft structures exhibited the characteristics of a nasal polypus, but that in the subjacent structures there was neither periostitis nor bone disease, rarefying or condensing.

Mr. SYMONDS said it was open to question whether the bone was thickened. He would be glad to hear any criticisms.

Dr. LACK agreed with the President that the bone appeared to be thickened and sclerosed. There was therefore nothing in this case contradictory to the opinion he had expressed that nasal polypus was simply a localised œdema of the nasal mucous membrane, and was due to osteitis in the underlying bone. He had always added that in many cases of single polypi of long standing which did not recur on removal the active bone disease had passed off and had merely resulted in bony thickening, the polypus in this case being merely a relic of former disease. But he had also another criticism to make. This specimen had been obtained from the *post-mortem* room, and there seemed to be something very fallacious about the pathology of the nose as determined from *post-mortem* specimens. They all knew that the *post-mortem* evidence as to the frequency of suppuration in the accessory cavities was entirely contrary to clinical evidence, and was, in fact, incredible. In a similar way Zuckerkandl stated that he found nasal polypus present in no less than one case in every nine *post-mortem* examinations. Now, clinically, he (the speaker) would say that nasal polypus was not present in more than one in 500 or possibly one in 1000 patients. It was not surprising, therefore, that Zuckerkandl should say that in the few specimens in which he had examined the bone he had found no evidence of osteitis, although he had occasionally seen definite sclerosis. œdema of the nasal mucous membrane was often both macroscopically and microscopically indistinguishable from polypus of the nose, and might arise from various different conditions. It might be due to malignant disease of the nose, to acute inflammation, to syphilis, etc. As was well known, packing the antrum tightly with strips of gauze would, in twenty-four hours, produce a polypoid condition of the lower lip of

the ostium maxillare. In definite clinical cases of nasal polypus he was sure osteitis would be found. It was impossible to regard these *post-mortem* cases of Dr. Yonge's and of Zuckerkandl in the absence of all clinical history as cases of definite nasal polypus.

Dr. E. S. YONGE said that in the opinion of a pathologist to whom the sections were submitted the bone was not diseased. Dr. Yonge also thought the bone was normal. In reply to Dr. Lack, as regarded the thickening of the bone, he said the bone was not thickened in the sense which he had been taught to associate with sclerosing osteitis, because he had always believed that the lacunæ were separated by wide gaps, which were not apparent in this case. Also, he had believed that osteitis—whether rarefying or sclerosing—was always associated with periostitis, but this was absent here. The periosteum might be thicker in some places than in others, but that in his experience was not sufficient to constitute periostitis. With regard to *post-mortem* evidence, it was surprising that Zuckerkandl found that in one out of every nine cases polypus was present, whereas clinically, in one's hospital and private practice, there was not such a large percentage. Was it to be inferred from this that these were *post-mortem* changes which Zuckerkandl had found and which he himself had found in this case which looked like polypus, because, if so, how was it that a definite change had taken place (presumably after death), showing signs of inflammation? In the polypus, which was present under the microscope, in this case there were definite signs of inflammation: there were numerous round-cells scattered about the vessels and glands, the vessels were thickened, and there were other signs of inflammatory action. Thus, whatever the curious contrasting evidence to be obtained by comparing the clinical and *post-mortem* results, he could not think that they were *post-mortem* changes which Zuckerkandl had found, and which were present in this case.

A CASE OF QUESTIONABLE MILD GLANDERS IN A MAN ÆT. 49 .

Shown by Mr. BURT. Patient had a kick on the nose from a horse twenty years ago, since when he has had frequent outbreaks at the seat of injury, with discharge of a brownish matter. Syphilis twenty years ago. In January, 1903, he was bitten by an apparently healthy horse across the wrist and right hand; this was followed by abscesses on the hand and forearm, and later on other parts of the body. He also had drowsiness and general lassitude.

His nose became affected in May, being obstructed; there was also an ichorous discharge from both nostrils. On examination there was general swelling of the interior of the nose, œdema of the posterior pharyngeal wall, soft palate, and

tonsils, and in the naso-pharynx a large dirty yellowish slough. Later, the patient had an attack of erysipelas, and also an acute attack of otorrhœa. Swabs of the discharge from both the ear and nose were sent to the Clinical Laboratory in Queen Anne Street, but the report was negative as to the presence of the *Bacillus mallei*.

Nevertheless Mr. Burt considered the case to be probably one of mild glanders on account of the nature of the abscesses, their distribution, and the formation of vesicles around the scars; the nature of the discharges from the nose and the changes which they underwent; and the nature of the ulceration. The patient is now well, and examination of his nose and naso-pharynx shows nothing.

MR. SYMONDS said that Mr. Burt's own suggestion was one of chronic glanders. He did not have an opportunity of examining the man's larynx, Was there anything to be seen?

CASE OF EPITHELIOMA OF TONSIL; OPERATION; RECOVERY.

Shown by Dr. LAMBERT LACK. The patient is a man, æt. 63, who first came under my care in March, 1903. The patient was thin, and looked much older than his years. He had great pain on swallowing, and could only take liquids. He had lived many years in India, and suffered from malaria and chronic alcoholism. There was extensive superficial ulceration in the region of the left tonsil extending on to the palate. The affection was looked upon as tertiary syphilis until, medicinal treatment failing, a piece was removed for microscopic examination. The sections showed that the ulcer was epitheliomatous. The growth involved the pillars of the fauces on the left side, and extended on to the soft palate as far as the median line. It was soft to the touch, and had no definite margin. In spite of the patient's general condition, it was decided to remove the growth, chiefly because of the severity of the local symptoms. The operation was performed in four stages. This method I have now employed in several cases and found very advantageous. (1) The anterior triangle of the neck was opened up, the enlarged glands, fat, and fascia removed, and temporary ligatures placed

around all the large vessels; (2) laryngotomy was performed; (3) the cheek was slit back from the angle of the mouth to the ascending ramus of the jaw, and (4) the growth, including a good margin of healthy tissue, was snipped out through the mouth with scissors. The operation presented no difficulty, and, immediately it was completed, the temporary ligatures were removed from the vessels and the wound in the neck closed; the laryngotomy tube was also removed. The patient made an uneventful recovery, and eight months later still remains well. It is too early to speak of a cure, but increased experience leads me to believe that the method of operation adopted is the one best suited for these cases.

Mr. SYMONDS said this was an admirable surgical success.

CASE OF ENDOTHELIOMA OF THE LARYNX AND MICROSCOPIC SPECIMENS.

Shown by Dr. LAMBERT LACK. The patient, a woman *æt.* about 50, came under my care suffering from tertiary syphilis of the tongue, soft palate, and larynx. There was extensive thickening, induration, and scarring of these parts. The epiglottis was partially destroyed, the stump being thickened and *œdematous*. Both arytenoids were swollen, and from the anterior surface of the left a large *œdematous* mass bulged in the cavity of the larynx. Antisyphilitic treatment effected some improvement, but the *dyspnœa* increasing it was decided to attempt removal of the *œdematous* mass attached to the left arytenoid. This failed, and laryngotomy had to be hurriedly performed. A week later I performed a tracheotomy, and then decided to do thyrotomy to remove the growth, and thus to do away with the necessity of wearing the tracheal tube permanently. On getting down on to the thyroid cartilage a mass of new growth was seen outside it. This, apparently, was malignant; a piece was therefore removed for microscopical examination and the wound closed. The sections exhibited the typical structure of an endothelioma. The wound healed readily and remains healed. The patient on the whole has improved during the last three

months. The case, so far as I am aware, is a unique one, and the question now is whether anything further should be attempted in the way of treatment. It seems unwise to remove the larynx, as it is impossible to tell how far the disease extends, and it is already outside the laryngeal cartilages.

Dr. LACK said he had not recommended operative treatment, as he could not tell the limits of the new growth. Laryngoscopically it was indistinguishable from the syphilitic changes. The only piece that he was certain was endothelioma was the part of the growth which extended outside the larynx, the part from which the sections had been cut. The patient also seemed to be improving; and the growth being definitely outside the larynx, it was doubtful if it could be thoroughly removed.

MICROSCOPIC SECTIONS OF ENDOTHELIOMA OF THE MAXILLARY ANTRUM.

Shown by Dr. LAMBERT LACK. This patient, a man *æt.* 50, came under my care with tertiary syphilis of the hard palate and nose. There was a perforation in the posterior part of the hard palate communicating with the antrum. A sequestrum was removed from the nose, and the patient was put upon potassium iodide and rapidly improved. Three months later he came under my care again, complaining of pain and swelling in the canine fossæ on the right side. The perforation in the palate remained patent, with healed edges. There was a pale irregular mass projecting into the right nasal fossa under the inferior turbinate, which bled readily on pressure. Anticipating that necrosis of the upper jaw and probably a sequestrum was present in the antrum, this cavity was freely opened through the canine fossa. It was found that the wall of the antrum in this situation had disappeared, and the antral cavity was packed with soft gelatinous growth. A piece was removed for microscopical examination, and showed the typical structure of an endothelioma. The upper jaw was then removed by my colleague, Mr. Barnard. The growths in both of the above cases were microscopically identical, consisting of cubical cells in places tightly packed together; in others the centre of the columns of cells had degenerated, leaving an alveolar space surrounded by two or, in

many cases, a single layer of cubical cells; the centre of this space was filled with mucin. Both sections much resembled normal specimens of the thyroid gland.

SPECIMEN OF EXOSTOSIS FROM THE ETHMOIDAL REGION OF THE NOSE,
WITH NASAL POLYPUS.

Shown by Dr. LAMBERT LACK. This patient, a girl *æt.* about 22, had been in Moorfields under Mr. Lang, who kindly referred her to me. The early symptom was proptosis, which gradually increased until a large hard swelling made its appearance on the inner wall of the orbit and pushed the eye outwards. The sight was considerably impaired. On examination a large, hard, irregular tumour was felt on the inner wall of the orbit. The right nasal fossa was obstructed by ordinary nasal polypi, amidst which some pus was seen. A diagnosis was made of empyema of one or more of the ethmoidal cells, with obstruction of the ostium and dilatation of the sinus. An incision was made along the inner wall of the orbit from the supra-orbital notch below the line of the eyebrow, curving downwards and inwards and finally outwards, to end just below the inner canthus. The periosteum was detached from the inner wall of the orbit, and a bony growth exposed. This turning out to be solid bone of ivory consistence, the lachrymal plate of the ethmoid was cut away, and the growth separated and drawn out through the wound. It consisted of a solid, irregular mass of bone of ivory hardness, nearly two inches long and an inch in thickness; to the nasal surface two or three typical nasal polypi were attached.

CASE OF RECURRING PAPILOMATA OF LARYNX.

Shown by Dr. FURNESS POTTER. The patient, a man *æt.* 28, came under observation about four years ago. When first seen the interior of the larynx was filled with a dense shaggy mass of papillomata, the vocal cords being completely hidden. The voice was feeble and husky. The bulk of the growth was removed with forceps in three or four sittings, during the process

of which the patient became aphonic; but on the removal of the growths being completed the voice returned. Although the larynx had been thoroughly cleared of papillomata, there had persisted up to the present time an obstinate tendency to return, which had necessitated frequent use of the forceps—about every four or five weeks. If this was not done, loss of vocal power soon became evident; in fact, the only way in which a fairly useful voice could be maintained was by frequent pruning of the excrescences on the cords. Applications of salicylic and chromic acids in various strengths had been applied, but with no appreciable benefit. The exhibitor was not sure that such frequent instrumentation was desirable, but he was sure that if it were not done recurrence would certainly take place, and the patient would be in danger of relapsing into the extreme condition in which he was when first seen four years ago.

The case was brought before the Society in the hope that some suggestions for further treatment might be obtained which would prove to be more efficacious than that which had been hitherto adopted.

Mr. SYMONDS said that information was required on two points: (1) as to a better mode of treatment; (2) whether any evil tendency would be determined by frequent removals.

Dr. GRANT reminded Dr. Potter that Dr. Bronner had derived advantage from the application of formalin in these cases. In some cases he had been convinced himself that the recurrence was prevented by the application of a solution of salicylic in increasing strength. He asked the strength of the solution of chromic acid that was applied.

Dr. POWELL said that in his experience nothing had any effect as regards the prevention of the recurrence of papillomata of the larynx. The only thing was to remove them. This could only be effected by repeated operations. It was a curious fact that sometimes they spontaneously ceased to grow.

Dr. POTTER said, in reply to Dr. Dundas Grant, that on one occasion he applied a saturated solution, which undoubtedly had a very good effect, but it gave rise to a considerable reaction, and the patient suffered a good deal of pain. Since that he had used 20 to 30 per cent. solutions.

MAN, *ÆT.* 32, WITH COMPLETE IMMOBILITY OF THE LEFT VOCAL CORD.

Shown by Mr. ATWOOD THORNE. The man came to the London Throat Hospital complaining of hoarseness, and on examining

the larynx the left cord was seen to be rigid almost in the middle line; there was slight swelling over the left arytenoid. On looking for a cause "tracheal tugging" was noticed, but no other sign of aneurysm, and there was nothing pointing definitely to tubercle. Dr. Caley kindly saw the case for me, and pointed out that there was an area of dulness at the right apex behind, but found no more signs of aneurysm than I had. Arrangements were made to examine the chest by X rays and to examine the sputum, but the man did not keep his appointment.

Dr. J. DONELAN had shown to the Society a drawing from a man who died from aortic aneurysm, in whom there were no thoracic signs during life. The history in some respects resembled that of this case in the gradual onset and in the inequality of the radial pulses. He took this man into the dark room not for radiography, which might be tried, but for auscultation, and it seemed to him there was a slight systolic *bruit* at the left border of the sternum. He thought the case was one of recurrent paralysis due to aortic aneurysm. The fixation of the arytenoid was probably due to perichondritis.

Dr. HERBERT TILLEY thought that all cases of recurrent laryngeal paralysis in which the ordinary methods for detecting abnormal physical signs in the lungs had failed should be submitted to the X rays before concluding that intra-thoracic lesions were absent. The value of such a procedure had recently been forcibly impressed upon him. The patient was a middle-aged man suffering from chronic hoarseness and cough. The left vocal cord was paralysed (abductors only). A careful examination of the chest by an expert failed to detect any physical signs which could throw any definite light upon the laryngeal paralysis, but by means of the X rays a small aneurysm in the arch of the aorta was easily detected, and had since become evident to the more usual physical signs, which had at first failed to detect it.

Dr. POWELL said the man showed scars on the neck, apparently the result of operation for broken-down tubercular glands. Possibly there were some tubercular glands in the mediastinum. He thought it was a case of total recurrent paralysis.

Mr. CARSON said not only was there paralysis of the left vocal cord, but there was also paralysis of the left side of the soft palate and tongue, which was pushed to the left side. This made the case much more complicated than members seemed to think. He did not think the case purely one of recurrent paralysis, as the facial and hypoglossal were affected. The patient also had glands in the neck and scars; this combination was not impossible where the paralysis was of central origin. He thought the case might be improved by iodide.

Mr. DE SANTI regarded the scars as being of specific origin and not tubercular. It would be a good thing to radiograph the man. He had shown a woman exactly similar, as regards the condition of the larynx, to the Society—a case in which no diagnosis was made as to the cause.

Two physicians failed to find any signs of aneurysm, but on employing the X rays well-marked signs were found. Eventually the patient was admitted to hospital, and died of aneurysm. He thought this a case of aneurysm, and that the ulcers were specific; these two conditions were common enough as the result of syphilis.

Mr. A. THORNE said that, feeling a doubt as to the examination of the chest, he sent the man to Dr. Caley, who found a doubtful dull patch on the right side, but he could find no definite sign of aneurysm. He, however, arranged to take a skiagram, but the man failed to turn up at the hospital. He had, however, made another appointment for the next day (February 6th), when he hoped the matter would be settled. He would be pleased to give the Society the benefit of any further observations on the case.

A MAN, *ÆT.* 35, WITH PAROXYSMAL PAIN STARTING FROM THE
LARYNX.

Shown by Mr. ATWOOD THORNE. This patient came to the London Throat Hospital complaining that he had swallowed a bone a week ago, and that since then he had had severe attacks of pain starting from the throat (he referred to the region of the larynx), which doubled him up and sometimes stopped him working; he is a builder's foreman. On examining the larynx nothing abnormal was discovered, but while doing so a paroxysm of pain was caused, apparently by touching a spot just behind the right tonsil. The man is healthy looking, and with no signs of neurasthenia. He was given a mixture of potassium bromide and was slightly better, but had had a few attacks.

Mr. SYMONDS said he had given the man a spasm unintentionally when he touched the tonsil on that side. It occurred to him that the pain might originate in the tonsils and be reflected downwards. He would like to hear any suggestion on that point or as regards the treatment. The patient told him he was much better than he had been.

Dr. POWELL thought this was probably a case of neuritis, the result of a granular patch on the lateral wall of the pharynx acting as an irritant and setting up neuritis. On touching a certain spot behind the posterior pillar the spasm seemed to come into action. He could see nothing else to account for the pain.

TUMOUR OF THE LARYNX IN A WOMAN *ÆT.* 45.

Shown by Mr. ATWOOD THORNE. This patient came to the London Throat Hospital only four days ago, complaining of

hoarseness. On examining the larynx the right cord was almost hidden by a mass springing apparently from the false cord on that side. The mass was of a dirty grey colour, and could be partially lifted from the cord by a probe, there was a similar but smaller mass in the anterior commissure preventing the cord meeting, but except for this the cords moved well. The hoarseness had been getting worse for seven months. Two years ago she had had right-sided paralysis and aphasia. History of syphilis doubtful; no definite evidence of tubercle.

Dr. STCLAIR THOMSON said this was a very interesting growth. The age of the patient made it possible that it might be malignant, and this was also suggested by the white surface. But, on the other hand, a malignant tumour could not have attained such a size without more infiltration. He thought the whiteness of the surface was really due to ulceration. There was another separate little growth lower down between the cords. He concluded that the growth was a tuberculoma in spite of the negative evidence of pulmonary tuberculosis. If it was necessary to at once establish the diagnosis, this could be done by removing a portion and placing it under the microscope. The evolution of the case would doubtless show that this was a tuberculoma.

Dr. SMURTHWAITE said that to his mind this was a case of tuberculosis. There was a growth in the centre of the right cord and another small one directly above that; there was some ulceration of the surface of the growth. On a similar growth on the right side there was ulceration taking place, probably one of the forms of tubercular papilloma. The mucous membrane was also affected. He remembered seeing a rather similar case in Vienna two years ago: it was taken for an ordinary papilloma at first, but after a time the surface became inflamed by rubbing against the opposite cord and further growths sprang up; a piece of one was removed and found to be tubercular. The arytenoid space became infected, and later on the epiglottis, which was forced up. The patient died of phthisis three months later.

Dr. FURNISS POTTER said he thought it would be well to examine the growth with a probe in order to ascertain if it were simply lying on the cord and could be lifted off it, or whether it had infiltrated the cord. He was of opinion that there certainly was an ulcer near the anterior commissure on the right side. He thought the case would probably prove to be tuberculous.

Mr. SYMONDS said he understood Mr. Thorne proposed removing a piece for microscopical examination with the curette. This would be a desirable step, and it would not be a difficult case to operate on if necessary.

Mr. A. THORNE thought there was no doubt that there was an ulceration of the mass in the anterior commissure. He examined the larger mass with a probe, and was able to lift it up from the cord.

He was surprised that every one "plumped" for tuberculoma; he thought that syphiloma and simple growth were not yet excluded.

LARYNGEAL ULCERATION IN A PHTHISICAL SUBJECT.

Shown by Mr. CARSON. The patient is a man, *æt.* 59, who has complained of hoarseness for sixteen months. For the last nine months he has had cough and expectoration. Six weeks ago pain occurred on swallowing, and there is now constant pain radiating to the right ear. He has been losing weight steadily; emaciated man. Voice reduced to a hoarse whisper. An ulcer occupies the centre of the false vocal cord and the upper surface of the true vocal cord on the right side. There is no limitation of movement, and the area of disease is strictly localised. An enlarged gland is present behind the right ala of the thyroid cartilage. The apices of the lungs are tuberculous, and tubercle bacilli are present in the sputum. The diagnosis lies between tubercular ulceration and malignant disease.

Mr. CARSON said that tubercular ulcer of the larynx was so natural to think of that he was a little inclined to disbelieve it was tubercular—for that reason, and also because the patient was suffering from a degree of pain inconsistent with that diagnosis. The pain was typical of malignant disease of the pharynx and larynx, extending as it did right up to the ear.

YOUTH, *ÆT.* 19, WITH FRACTURE OF SEPTUM AND DEPRESSED NOSE, IMPROVED BY OPERATION AND PARAFFIN INJECTION.

Shown by Dr. DONELAN. The patient had fallen on the handle of a garden fork, which was stuck in the ground in such a manner that the end of his nose was turned upwards, the septum being smashed into fragments, and great disfigurement resulted.

An attempt was made to replace the septum by lateral compressions and the use of splints, and, considering the amount of displacement, was very successful. Subsequently the external deformity was treated by paraffin injection, and the patient considers that a great improvement has been effected.

Dr. GRANT asked what the melting-point of the paraffin was in this case.

Dr. DONELAN said he had used a low melting-point (105° F.), with a view to the paraffin being probably more easily replaced later by fibrous tissue.

CASE OF FIXATION OF VOCAL CORD WITH EXTREME PAIN IN SWALLOWING—(?) TUBERCULOUS PERICHONDRITIS—IN A FEMALE PATIENT *ÆT.* 45.

Shown by Dr. DUNDAS GRANT. Mrs. S. C—, *æt.* 43, was first seen in January, 1904 when she complained of her throat, with difficulty in swallowing and hoarseness of twelve months' duration. The mucous membrane of the pharynx was very anæmic; there was a large amount of secretion in the larynx and infiltration of both aryepiglottic folds, much more marked on the right side, the vocal cord on that side being in a state of complete fixation. There were signs of consolidation at the right apex. In addition to general treatment she was ordered a powder of orthoform and resorcin to inhale through a glass tube. Her pain in swallowing has in spite of this continued extremely severe, and she can only take liquid food. The condition is probably one of tuberculous perichondritis of the right arytenoid cartilage, and the exhibitor would be glad of any suggestion for treatment. The case answers very much to the description of those which the late Dr. Gougenheim, of Paris, treated by removal, by means of large punch forceps, of the great mass of the swelling. Moritz Schmitz used to recommend deep incision by means of powerful scissors, and the exhibitor would be glad if the members of the Society would place their experience of these methods of operation before him.

Mr. SYMONDS asked Dr. Grant if he had made an examination of the cricoid region of the œsophagus to see if there were any stricture there. The patient was unable to take food, so that possibly there was some malignant disease interfering with the movement of the right cord. He suggested this as an alternative explanation.

Dr. GRANT said he would be glad of any suggestions for the purpose of relieving the pain in swallowing, which was rapidly wasting the patient. In reply to Mr. Symonds, he had not examined the cricoid region of the œsophagus.

CASE OF CHRONIC ŒDEMA OF THE LARYNX (FORMERLY SHOWN FEBRUARY 6TH, 1903) IN A MIDDLE-AGED FEMALE PATIENT, PROBABLY TERTIARY SPECIFIC INFILTRATION, GREATLY IMPROVED UNDER MERCURIAL INUNCTION.

Shown by Dr. DUNDAS GRANT. Up till the end of July of last year the patient took with considerable regularity a mixture containing 1 drachm of the solution of perchloride of mercury and 5 grains of iodide of potassium. The œdema diminished slightly, and she then stopped treatment until the middle of September, when she returned complaining of soreness of the left side of the throat of about a fortnight's duration, with pain on swallowing and a cough. There was found to be some infiltration of the left anterior pillar, with a slightly excavating ulcer. Under a repetition of the treatment this improved, and at the end of October she was admitted into the hospital for inunction. This was carried out nightly for about a month, and since then she has been taking at intervals the iodide of potash and mercury. At the present time the infiltration has steadily been getting less, so that the vocal cords can be seen in their entirety. The great improvement under mercury seems to indicate that the supposition that the case was one of gummatous infiltration was probably correct, but no evidence, either direct or indirect, has been available.

CASE OF ULCERATION OF THE PHARYNX WITH CERVICAL FISTULA AND SECONDARY ŒDEMA OF THE RIGHT HALF OF THE LARYNX—
? SPECIFIC PERICHONDritis OF ARYTENOIDS—IN A MIDDLE-AGED FEMALE PATIENT.

Shown by Dr. DUNDAS GRANT. Mrs. E. K—, æt. 31, wife of a policeman, was referred to me on December 15th, 1903, by my colleague, Dr. Wingrave, on account of difficulty in swallowing and infiltration of the tissues of the right side of the neck, pushing the larynx over to the left side. There was seen a deep excavated ulcer on the pharyngeal aspect of the larynx and on the right side of the pharynx at a considerable depth. The

right arytenoid region was the site of very considerable infiltration, the mucous membrane being tightly stretched and smooth, but of the red colour of inflammatory rather than dropsical oedema. The right vocal cord was very sluggish as compared with the left one. The examination of the sputum revealed no tubercle bacilli. The probability seemed to be that there was gummatous infiltration of the tissues of the neck, tertiary ulceration of the laryngo-pharynx, and probably specific perichondritis of the right arytenoid cartilage.

Apparently there was no history of injury. She was in good health until the middle of the year 1902, when a slight difficulty in swallowing began to trouble her. About a year before she came under notice she had suffered from some uterine disease, from which she says she has completely recovered. About the end of 1902 she had an eruption on her face which lasted for some weeks, but she noticed nothing of the kind in any other part of her body; she was not conscious of having had a persistent sore throat. She has had five children and three miscarriages, but those of her children that are alive alternated with the miscarriages, so that the evidence of a specific cause is not clear.

She was at first ordered iodide of potassium and perchloride of mercury, and was then taken into the hospital to be submitted to mercurial inunctions, under the action of which her symptoms improved slightly, so that on December 20th it was noted that she said that she swallowed milk "beautifully," as also some rice pudding, in a way she had not been able to do for several weeks. Her temperature on admission was 102.6° ; it fluctuated slightly, and on December 23rd fell to 99° , when she had a rigor and it sprung up to 105.6° . During this time the side of the neck had become more swollen, deep-seated fluctuation could be detected, and there was some dyspnoea. Mr. Nunn saw the case with us, and it was decided that incision should be made. I made an incision over the most prominent part of the swelling close to the anterior border of the sterno-mastoid, when a quantity of pus with shreds of necrosed tissue of the most foetid description came away. Instantly the patient's breathing became very much embarrassed, an intubation tube was introduced and artificial respiration proceed with; the patient was brought

round, and fortunately without the necessity for tracheotomy having arisen. An opening in the trachea, or even in the crico-thyroid space, would almost inevitably have led to septic pneumonia. A counter-opening was made to the left side of the trachea and also behind the right sterno-mastoid muscle. The temperature remained about 100° , only rising over 101° on one occasion—four days later; for a week it continued normal, with scarcely any fluctuation, but during the last four weeks has been fluctuating between 98° and 100° . On January 27th iodide of potassium was again administered, and a small projecting portion of the margin of the pharyngeal ulcer was removed by means of punch forceps for examination and for the elimination of the possibility of it being epitheliomatous in nature. It was found to consist simply of granulomatous tissue covered with a ragged stratified epithelium, presenting none of the characters of epithelioma and containing no tubercle bacilli nor giant-cells. On February 2nd liquid food escaped through the incision in the neck.

The exhibitor would be glad to have any suggestions with regard to diagnosis and treatment.

Mr. SYMONDS said he understood that the swelling had gone down, and that the infiltration was greatly diminished.

Dr. GRANT thought at first it was a gumma, and that any incision was to be avoided; but it seemed to have broken down, and he had to incise it. An immense quantity of fetid pus and sloughy tissue came away.

PROCEEDINGS
OF THE
LARYNGOLOGICAL SOCIETY OF LONDON.

EIGHTY-EIGHTH ORDINARY MEETING, *March 4th*, 1904.

P. McBRIDE, M.D., F.R.C.P.Edin., President, in the Chair.

E. FURNISS POTTER, M.D., } Secretaries.
P. DE SANTI, F.R.C.S., }

Present—32 members and 1 visitor.

The minutes of the previous meeting were read and confirmed.

The following cases and instruments were shown :

The PRESIDENT showed a knife for slitting up the tonsillar lacunæ.

The PRESIDENT also showed a nasal forceps specially designed for removal of remnants of polypoidal tissue.

CASE OF IMMOBILE RIGHT VOCAL CORD IN A YOUTH *ÆT.* 19.

Shown by Dr. FURNISS POTTER. The patient came under observation complaining of symptoms of giddiness and stuffiness in the nose. The detection of slight huskiness led to examination of the larynx, which showed that the right cord was fixed in the middle line. The arytenoid was swollen and red, the mucous membrane of the nose and naso-pharynx swollen and hyperæmic, and there was much thick muco-pus adhering to

the posterior pharyngeal wall. The tonsils were enlarged, and presented the appearance of superficial ulceration. There was an enlarged gland in the right side of the neck, and glands could be felt in both groins. The patient had a cough, and thought he had become thinner recently. On examination of chest no definite sign of disease was discovered—sputum examined, but no tubercle bacilli found. The exhibitor was of opinion that the immobility of the cord was due to infiltration, most probably tuberculous, involving the crico-arytenoid articulation. The swelling in the arytenoid region had increased during the last month.

CASE OF INFILTRATION OF LARYNX INVOLVING BOTH CRICO-ARYTENOID JOINTS, WITH INDURATED ULCER ON TONGUE.

Shown by Dr. FURNESS POTTER. The patient, a man *æt.* 60, began to suffer some difficulty of breathing about Christmas, 1902; the voice became husky about the same time. He had some difficulty in swallowing on several occasions. When first seen a month ago he complained of painful sensations on right side of throat.

On examination a hard, ulcerated swelling was seen on the edge of the tongue, far back. The right vocal cord was fixed in the middle line (or a little external to this) and almost invisible, being obscured by the swollen ventricular band. The arytenoid region was involved in a mass of infiltration, which included right ary-epiglottic fold and right ventricular band. The left cord was markedly hampered in abduction, the excursion outwards on deep inspiration being very limited in extent. On phonation the left came into apposition with the right cord. The size of the glottic aperture was much diminished, and there was marked stridor on inspiration. As the patient had had attacks of severe dyspnoea, it was considered unsafe to allow him to go about in this condition, and accordingly tracheotomy was performed. No glands were detectable in the neck. He had had a "sore" about forty years ago; but had no trouble, as far as he could remember, which would lead to a suspicion of constitutional infection.

A section had been taken from the ulcer on the tongue and submitted to microscopic examination. However, Dr. Kelson, who had kindly examined it, reported that though suggestive of epithelioma, the appearance was not conclusive owing to the fact that the sample removed was too superficial.

The patient had been treated with iodide of potassium and perchloride of mercury, but with no beneficial result; in fact, the laryngeal swelling had increased during the period the patient had been under observation.

Dr. DUNDAS GRANT said he thought there would be general agreement with Dr. Potter's diagnosis in both this and the preceding case, *i. e.* that the former was tubercular and the latter malignant.

The PRESIDENT said that in his opinion this and the previous case were well worthy of notice, especially this case. It seemed to him, though, a very doubtful question whether this could be looked upon positively, or anything like positively, as a malignant condition. The appearance, in the first place, of the ulcer on the tongue, putting aside the question of the laryngeal disease, did not point to malignancy. In the second place, there was a smooth swelling of the right ventricular band, and then on the left side there was a pure white vocal cord. Under these circumstances it was excessively difficult to understand the form of malignant disease which would produce such a state of affairs. On the other hand, he was not prepared with an alternative diagnosis, nor was he altogether inclined to reject the possibility of malignancy. He would, however, rather incline to the specific theory.

Mr. P. DE SANTI thought there was a considerable amount of difficulty as to the diagnosis. Taking all the facts into consideration, he rather inclined to the opinion that the laryngeal condition was one of malignant disease, though there were certain points about it which made him very doubtful. The absence of enlargement of the glands was marked, and if the disease was malignant there should by now most certainly be glandular infection, although one did see cases of extrinsic origin where the glands did not become involved until a late stage of the disease. The condition of the tongue was not like malignant disease, and still further lent doubt to the case. On the whole he was inclined to advise the man to have an exploratory thyrotomy done, and in that way one might come to a conclusion as to the condition of the disease itself, and then, if it was thought necessary, the thyrotomy could be turned into a more extensive operation, such as partial or complete extirpation of the larynx, if found to be malignant. There would be no harm in a thyrotomy if carefully performed; indeed, in some of these cases of doubtful malignancy he was of opinion that laryngologists erred in not performing an exploratory thyrotomy more frequently. In grave cases of doubt exploratory thyrotomy would clear up the diagnosis, and if malignant disease were present a suitable operation would give the patient the last chance, in fact the only chance, of cure. In doubtful abdominal cases a surgeon did not

hesitate to explore the abdomen, and why should he hesitate with the larynx? If properly performed, an exploratory thyrotomy was a safe operation, and should not affect the voice subsequently.

SPECIMEN OF TUBERCULOSIS OF LARYNX AND TRACHEA OF RAPID COURSE IN A MAN ÆT. 67.

Shown by Dr. H. SMURTHWAITE. The first laryngeal symptom—slight huskiness of voice, later followed by dysphagia—only appeared some nine weeks before death. In this period weight fell from 12 to 9 st.

Throughout dysphagia was the most distressing symptom—dreaded taking food in any form.

When first seen on December 2nd, 1903, the epiglottis was markedly infiltrated, showing a pseudo-œdematous condition; owing to the pendulous position and swelling a view of the interior of the larynx was not possible, and only the arytenoid cartilages and ary-epiglottic folds could be partially seen; these also showed signs of infiltration.

Superficial necrosis of the lining membrane of the epiglottis and arytenoid cartilages was noted on December 21st, 1904, and rapid destruction of submucous tissues now followed, allowing a full view of the interior of the larynx ten days later. The cords and false cords were now seen to be studded with tubercles. Death took place January 13th, 1904.

Paintings illustrating above changes were also exhibited.

PATIENT UPON WHOM RADICAL OPERATIONS FOR EMPYEMATA OF LEFT FRONTAL, ETHMOIDAL, AND BOTH MAXILLARY SINUSES HAVE BEEN CARRIED OUT.

Shown by Dr. HERBERT TILLEY. Miss E—, æt. 20, was first seen in consultation, May 22nd, 1902. She complained of a constant nasal catarrh often associated with violent cough. The discharge from the nose was profuse, and as a rule was clear rather than purulent; but after a fresh cold it became purulent. The intonation of the voice was very characteristic of nasal obstruction.

Examination revealed swollen nasal mucosa in both nostrils, a few small polypi growing from the left middle meatal region, an œdematous condition of the corresponding region on the right side. The discharge in the nasal cavities was mucopurulent. Both tonsils were enlarged, and there was also present a considerable adenoid growth.

The tonsils, adenoids, left middle turbinal, and neighbouring polypi were removed on May 29th, 1902.

On December 15th, 1902, patient was again seen on account of a continuation of the nasal discharge, some headache, and the persistence of cough and bronchial catarrh.

Nasal examination revealed a return of the nasal polypi on the left side, and the discharge in both middle meati was more purulent. It was now easy to pass a cannula into the left frontal sinus and to syringe out a small quantity of pus. There was tenderness to pressure upon the floor of the sinus. Both antra were dark upon transillumination, and by intra-nasal exploration were proved to be secreting pus.

January 28th, 1903.—The left frontal sinus was operated upon, the whole of the anterior wall being removed, and a large opening made into the nose, the suppurating anterior ethmoidal cells being destroyed at the same time. Both antra were also drained through the alveoli in the hope that the antral mucosa would recover themselves if the sinus-cavities were drained and frequently irrigated.

On June 5th, owing to continuation of discharge from both antra, the Caldwell-Luc operation was carried out on each side. The sinus-cavities were filled with large polypoid granulations, which were carefully curetted away, the cavities disinfected, and the bucco-antral wound allowed to close. No packing of the antra was carried out.

The results have been entirely satisfactory. The scar on the eyebrow is scarcely noticeable, and examination by means of a suitably curved probe will demonstrate that the original antral cavities are very much diminished in size owing to the growth of granulation tissue, which has become organised and (since there is no purulent discharge) covered with epithelium.

CASE OF BILATERAL, FRONTAL ETHMOIDAL, SPHENOIDAL, AND MAXILLARY EMPYEMATA OPERATED UPON BY RADICAL METHODS.

Shown by Dr. HERBERT TILLEY. Patient, male *æt.* 58, first seen October 23rd, 1901, complaining of some neuralgia over left forehead of six months' duration. The pain was always worse in the morning. There was a profuse purulent discharge of a "fishy" odour from both nostrils, necessitating the use of fifty handkerchiefs a week. He had had polypi removed on a few previous occasions. Examination of the nose showed the middle meati full of polypi and profuse suppuration everywhere. Having cleansed the nostrils of discharge, pus was then washed out of both antra and then again out of the right frontal sinuses. It was impossible to gain access to the left sinus because of the presence of a large nasal spur on the left side of the septum. Finally it could be demonstrated that the ethmoidal cells and sphenoidal cavities were full of pus, the bony labyrinth of the former being very thin and friable. The patient would submit to no radical operation (as was advised) beyond drainage of both antra through the alveoli. Drainage-tubes were therefore inserted, and for nearly two years the patient continued to irrigate the antra daily with various mild antiseptic lotions, while from time to time polypi were removed from the higher nasal regions. An increase in the severity and frequency of the headache, as well as a general feeling of ill-health, led him to assent to radical operation last year. On June 2nd both frontal sinuses were opened and the whole of the anterior walls removed, the septic contents curetted away, and large communications made with the nose through the ethmoidal regions, which were simultaneously destroyed with ring knives. Great difficulty was experienced with the left ethmoidal region because of the presence of a large obstructing spur on the left side of septum, and added to this the patient was very faint and collapsed from the beginning of anæsthesia, and the operation was a very anxious and hurried one.

The interesting features in the after-treatment of the case were two.

1. From the day of the operation no pus could ever be

syringed from the antra, showing that they were only acting as reservoirs of pus.

2. The right sinus healed rapidly and the left a great part, but there always remained some discharge issuing externally from its inner and lower angle, while a small amount of pus could always be syringed from the higher posterior region of the nose.

I concluded this came from the ethmoidal and sphenoidal region, and in September, 1903, under general anæsthesia, the external incision was continued downwards in front of the lachrymal sac to the infra-orbital margin (Killian's incision). Pushing aside the soft parts, the nasal process of the superior maxillary bone was exposed and removed. This at once exposed the anterior end of the lateral mass of ethmoidal cells and provided a splendid view of the diseased cells, which were easily and safely curetted away until the anterior wall of the sphenoid-cavity was reached. The patient made an uninterrupted recovery, and is now free from all traces of disease in the nose. His headaches have entirely disappeared, and his general health is better than it has been for years.

The case illustrates the difficulties which may be offered by an obstructing septal spur and a means of overcoming them.

The scar left by Killian's incision is scarcely noticeable, and the advantages of the method in selected cases are extremely great.

It furthermore shows that a sinus antrum may act for years as a reservoir of pus without becoming itself a generator of discharge, and furnishes an additional argument in favour of opening the higher sinuses before the lower ones when one is dealing with a multiple chronic infection of these cavities.

CHRONIC EMPYEMA OF LEFT FRONTAL, ETHMOIDAL, AND MAXILLARY SINUSES TREATED BY RADICAL OPERATION.

Shown by Dr. HERBERT TILLEY. Mrs. B—, æt. 33, was first seen March 17th, 1903, complaining of temporary attacks of deafness and ringing in the ears, marked nasal obstruction, and

an oppressive feeling over the forehead, which rendered her unable to work or enjoy life at all.

Examination revealed purulent discharge from left middle meatus, polypi in same situation, and pus was syringed from the left antrum and left frontal sinus.

March 27th.—The anterior wall of the left frontal sinus was completely removed and the Caldwell-Luc operation performed on the antrum, which was full of diseased mucous membrane.

Excepting for a temporary diplopia lasting ten days, the patient made an excellent and perfect recovery, and is now free from all nasal symptoms. The scar on the frontal sinus is very slight.

The PRESIDENT congratulated Dr. Tilley on the great success of all these cases, more especially since there was no appreciable deformity resulting from the operations.

Dr. VINRACE congratulated Dr. Tilley on the result of the operation in these cases, and on their suitability for the treatment. It seemed to him that there were some cases where this radical operation was required, and these were cases in point. He felt sure that the patient would admit that he was the debtor of Dr. Tilley, and he thought the Society would endorse that view. There was one point to call attention to, and that was that the excellent results might fairly be put down to the operative measures and not to incidental causes, for the circumstances before the operation, as far as he could ascertain, were practically the same as those afterwards. The case had been followed up by ordinary treatment of the mildest nature to start with. Operation had only been resorted to as a last measure, and with desirable results.

Dr. FITZGERALD POWELL congratulated Dr. Tilley on the present good results he had obtained in these cases. There was one point, however, to which he was inclined to take exception in Dr. Tilley's remarks, namely, the suggestion he understood him to make that in cases of multiple sinusitis the frontal sinus should be operated on and dealt with first, and afterwards the maxillary antrum, as the latter was only the reservoir for the pus from the frontal sinus, and not itself the seat of suppurative inflammation. In his opinion not infrequently certain conditions existed which made it doubtful as to the seat of the suppuration, and he thought it much better to begin by exploring the maxillary sinus first, and if necessary go on to the operation on the frontal sinus later.

Dr. STCLAIR THOMSON, having congratulated Dr. Tilley on his successful operations, asked him what was the condition of the sphenoidal sinus before it was opened. Was it, as he had found on the cadaver, easy to reach with Killian's incision from the ascending process of the superior maxilla? Was there much difficulty in dealing with the hæmorrhage? The Killian operation was straightforward

when performed on the cadaver, but frequently in the living subject the amount of hæmorrhage made it difficult. This hæmorrhage might be considerably controlled by packing from time to time with strips of gauze saturated with peroxide of hydrogen. He noted that no attempt had been made in these cases to preserve the Killian bridge, and yet the result was æsthetically nearly as complete as Killian himself could obtain. Still, he thought Dr. Tilley had been lucky in these three cases, because no one knew better the irregularities of the frontal sinuses, and yet in all these cases the sinus did not extend far towards the outer orbital angle. These cases also showed that the frontal sinus itself was not a complicated matter to deal with. It was the attendant ethmoidal condition which gave trouble. In some cases large fronto-ethmoidal cells ran outwards in the roof of the orbit, forming a sort of double roof to that cavity; while in others they penetrated far inwards in different directions below the true frontal sinus. It was when one had the misfortune to overlook any of these that complications or inadequate results were apt to follow.

Dr. HERBERT TILLEY, in replying to Dr. Powell's remarks, said that all operative procedures presumed that an accurate diagnosis had been made, and in most cases of nasal accessory sinus suppuration this was quite possible. In cases of multiple suppuration the nasal cavities should be first cleansed from all pus, then the antra should be explored, and finally the ethmoid and frontal sinus. In this way it was possible to arrive at an accurate diagnosis of the various foci of suppuration. He was in complete accord with Dr. Thomson's experience as to the value of oxygenated water as a hæmostatic when dealing with the ethmoid-cells, and also as to the great importance in the radical operation of breaking down these ethmoidal cells, which spread outwards below the floor of the frontal sinus, and are often separated from the latter cavity by a very thin septum of bone. Dr. Tilley thought that the overlooking of these cells accounted for many cases of recurring suppuration.

CASE OF NASAL SINUS IN A GIRL.

Shown by Dr. W. H. KELSON. A girl, æt. 20, had suffered for about eighteen months from a sinus situated about an inch from the tip of the nose in the middle line. A probe could be passed upwards for about half an inch; but no bare bone could be felt, nor did the sinus appear to communicate with the nasal cavity. There was the history of a severe injury to the nose at three and a half years of age. The discharge was scanty, but appeared to be pus.

The PRESIDENT remarked on the interest of the case. Had a probe been passed and anything been felt?

Dr. KELSON said that he had passed a probe, which went half an inch upwards. It did not strike bone or enter any cavity.

CASE OF ULCER OF THE TONSIL, PROBABLY THE PRIMARY LESION,
IN A YOUNG WOMAN WITH WELL-MARKED CUTANEOUS
SYPHILIDE.

Shown by Dr. DUNDAS GRANT. A. P—, æt. 19, the wife of a policeman, suffering from sore throat of six weeks' duration, was first seen on February 25th at the Central London Throat and Ear Hospital, having been four weeks under treatment elsewhere for diphtheria. The right tonsil was the site of an excavated ulcer on an inflamed, slightly indurated base. The floor of the ulcer was of a light greyish colour tending to opalescence, irregular and shiny; the margins were also opalescent. On the left tonsil, which was not enlarged, there was an indistinct mucous patch. The glands at the angle of the right jaw were greatly enlarged, the corresponding ones on the left side to a very much less extent. When seen there was a well-marked rash, characteristic syphilide, on the arms and other parts of the body; there was a history of ulceration on the labia. The specific nature of the affection seems undoubted, and the nature of the ulceration on the right tonsil with the bubonic enlargement of glands at the right angle of the jaw seems to indicate that the lesion in this region is a primary one.

Mr. P. DE SANTI said that the woman was suffering from syphilis. There was nothing in the tonsil at present to indicate a chancre—its condition was certainly not typical of Hunterian sore. How long was it since the trouble came? [Dr. Grant: "Six weeks ago, not six months as mentioned."] It might have looked so before the appearance of the case altered. [Dr. Grant said that the case had improved under a course of mercury.]

Dr. KELSON thought there might be a different interpretation, viz. that the enlarged glands and tonsillar ulcer were connected with the severe attack of diphtheria patient had recently passed through, and that the syphilis from which she was suffering might have been acquired in the usual way.

CASE OF EXTREME LARYNGEAL ŒDEMA IN A MALE ADULT, PROBABLY
SECONDARY TO TERTIARY SPECIFIC LESION ; TREATED BY
MERCURIAL INUNCTION AND LOCAL INCISION ; NEARLY RE-
COVERED.

Shown by Dr. DUNDAS GRANT. Robert G—, æt. 28, a policeman, first seen on January 28th, 1904, on account of hoarseness and soreness of the throat. The voice suggested the presence of a swelling in the throat. There was fulness in the submaxillary region ; the affection was of fourteen days' duration ; the voice was hoarse ; there was very little pain. On laryngoscopic examination there was found the most enormous œdema of the right ary-epiglottic fold, extending from there on to the corresponding wall of the pharynx and involving the right half of the epiglottis ; this was of a pale white tint. The right vocal cord was seen only to a very small extent, and was quite immovable. From the absence of constitutional disturbance it was assumed that the œdema was secondary to some other lesion. A history of primary specific infection six years previously was elicited, and the diagnosis made of gummatous perichondritis with consecutive œdema. For a week he was ordered simply a vapour of creasote, but after that time a mixture containing biniodide of mercury. He was ordered to come into the hospital for inunction. This was carried out, and at the end of a week the patient was more comfortable, but the œdema was still very extensive. A portion of the œdematous tissue was nipped out to relieve tension. Microscopical examination revealed infiltration with small round-cells. Rapid diminution followed this, although the inunction had to be interrupted on account of a certain amount of stomatitis having taken place.

Dr. GRANT said that his second case, in its enormous degree of œdema, resembled Dr. Thomson's case. The œdematous tissue formed a big "floppy" mass. With regard to the first case—the young woman with the tonsillar ulcer,—there was no question as to secondary syphilis. It would be difficult to account for those enlarged glands on the right side at the angle of the jaw unless they were buboes connected with a primary lesion in the tonsil. That led him to form the idea that the great crater on the tonsil was a primary syphilitic ulcer. Were we

to expect such a degree of induration as in a Hunterian chancre of the prepuce? On the lip the induration might be very slight indeed, and he did not think they must expect the same degree of induration on the tonsil as would be found in typical chancres in some other parts.

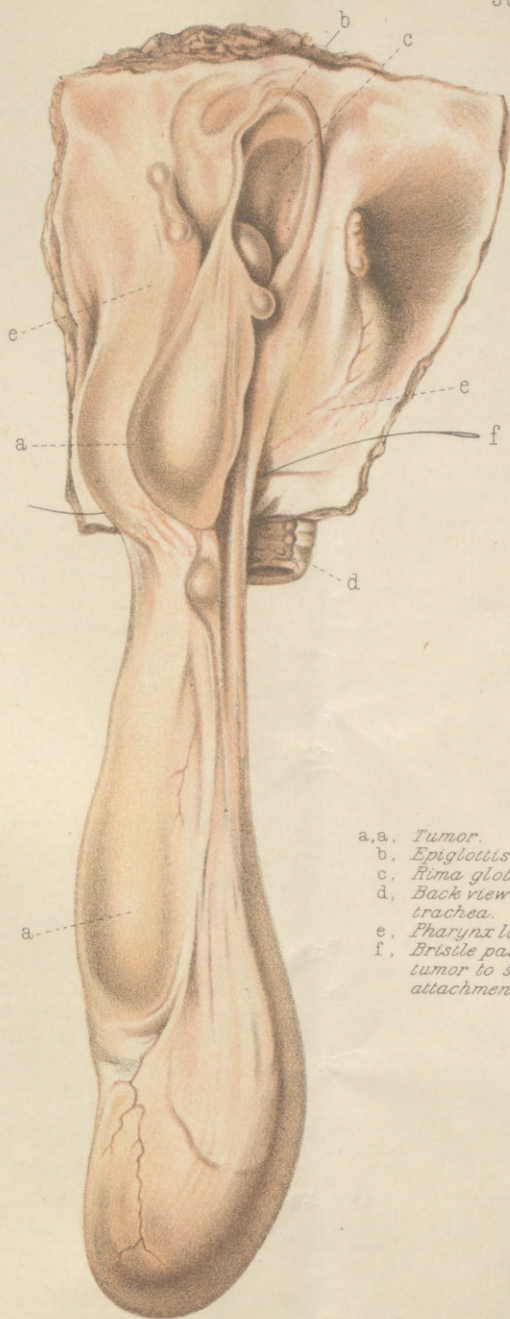
MAN, ÆT. 32, WITH ADHESIONS OF THE SOFT PALATE TO THE
POSTERIOR PHARYNGEAL WALL.

Shown by Mr. ATWOOD THORNE. The case was first seen two years ago, when there was only a pin-hole opening between the mouth and the naso-pharynx. The history at the time was that the man had been under treatment for three years, that during all that time he had been taking iodide and mercury because whenever an attempt was made to dispense with these he suffered from a superficial ulceration involving the gums, inside of the cheeks, and tongue. For the same reason, antisyphilitic treatment has been obliged to be continued all the time he has been under Mr. Thorne's care. The great interest of the case is this: when first seen the opening in the adhesions was a mere pin-hole, and various methods of operation were discussed; instead of closing the opening has without operative interference got larger month by month, apparently by contraction of the adhesions towards their fixed points in the periphery.

The PRESIDENT said Mr. Thorne wished to know whether it was desirable to interfere with the condition.

MR. DE SANTI thought there was no necessity for any operation in this case. The patient seemed quite comfortable, and it had now been laid down that any operation for the separation of adhesions of the soft palate to the pharynx, which were very extensive, should be done under special circumstances, such as intense pain round the mastoid region. Two cases of this particular operation of separating the soft palate and pharynx with good results had been shown to the Society. The first was described and shown by Mr. Spencer, and he himself had shown the second case. In every case on record of this operation the indications were vastly greater than any that were present in this case. It was best to leave the patient alone.

Dr. F. POWELL also thought it best to leave the patient alone. So far as these cases were concerned, he had an idea that none of them were very successful, owing to retraction having taken place and the palate receding to its old position. [Mr. de Santi expressed his willingness to bring his case forward to convince Dr. Powell of his misunderstanding.] He remembered that at a previous meeting of



- a, a. Tumor.
- b. Epiglottis.
- c. Rima glottidis.
- d. Back view of portion of trachea.
- e. Pharynx laid open.
- f. Triside passed beneath tumor to show limit of attachment.

FIBRO-LIPOMA OF LARYNX.

Reproduction of Plate 7, Vol. V.
Pathological Society's Transactions.

the Society it was generally considered that these were never satisfactory cases for operation, retraction always taking place sooner or later.

Mr. A. THORNE said he had no idea now of operating. He showed the case as illustrating a form of centrifugal dilatation. The opening was at first as small as a pin's point and had now become large enough to admit the tip of the little finger.

CASE OF CORDITIS TUBEROSA IN A YOUNG WOMAN NOT A SINGER
OR PROFESSIONAL VOICE USER.

Shown by Mr. R. LAKE.

Dr. STCLAIR THOMSON said it was very interesting to see the condition of singer's nodule in a woman who was not a singer nor much of a speaker. The only point worth mentioning was that the patient was in daily contact with someone who was deaf, and she consequently had to raise her voice, though not to any great extent. These two nodules were similar to those which occurred sometimes with those who overused or misused the voice, and it was rare for them to occur in a person not a professional voice user.

CASE OF TUBERCULAR ULCER OF LEFT VOCAL CORD.

Shown by Mr. R. LAKE. The patient, a young woman *æt.* 23, was exhibited to show a peculiar ulcer on the left vocal cord. This was situated at its extreme edge, and came to a sharp point at either end, with its widest part in the middle. She had been treated in a hospital for other laryngeal trouble, and had more or less recovered before she left. At one time a large swelling of the left arytenoid yielded rapidly to frequent paintings with 10 per cent. iodine vasogene.

Dr. HERBERT TILLEY asked Mr. Lake if he still used applications of lactic acid for superficial tuberculous ulceration of the larynx.

Mr. LAKE, in reply to Dr. Tilley, said that he had for a long time given up using lactic acid except as a vehicle; this patient was, as an in-patient, almost cured with injections. Now, as an out-patient, she could only be treated once a week. The following solution was one he had used for two years for cases with ulceration:—10 parts of carbolic acid, 10 parts of commercial formalin, 50 parts of lactic acid, 30 parts of water.

CASE OF SWELLING OF RIGHT VENTRICULAR BAND IN A MALE
ÆT. 34.

Shown by Dr. FITZGERALD POWELL. This man came under observation on February 2nd. He complains that ten weeks

ago he lost his voice; this has continued more or less up to the present. He has no pain. There is no loss of flesh; no night-sweats. No history of syphilis. No evidence of tubercle in his chest.

On examination the right ventricular band is seen red and swollen, and on the anterior margin of the right cord a small papillomatous-like growth is observed on phonation.

Dr. STCLAIR THOMSON suggested that it was syphilitic.

Dr. POWELL said he had put the patient on antisyphilitic treatment for a fortnight—iodide of potash and mercury,—but no improvement resulted. At present he was having simple soothing remedies.

CASE OF SEQUESTRUM FROM THE NOSE IN A MAN ÆT. 38.

Shown by Dr. FITZGERALD POWELL. Male, æt. 28, tailor. This man came to the hospital complaining of discharges and offensive odour from the nose, especially the right nostril. He had syphilis in 1900, and was invalided from South Africa.

In February of 1900 he noticed a swelling on outside of nose, and both nostrils were completely blocked.

In May, 1902, was treated at the London Hospital, he thinks, for abscess of nasal septum for about two months. From August to November, 1902, he had enteric fever.

On examination a large sequestrum of dead bone was seen in right nostril. The nose had fallen in somewhat, and the septum was perforated. Dr. Powell made an attempt to remove the sequestrum, but had to desist, as it was too painful; and on February 13th he had a general anæsthetic, and the specimen now shown was removed from his nostril.

Professor A. Robinson, of King's College, who kindly examined the specimen, pronounces it to be the "premaxilla," the grooves for the incisor teeth being apparent.

It is interesting to observe that the patient's incisor teeth are still present and firmly fixed, evidently in callus or new bone thrown out to replace the sequestrum.

Dr. WILLIAM HILL said he had no doubt when this specimen was first passed round that it was generally accepted as a sequestrum

formed of the premaxillæ. As a matter of fact, it was nothing of the kind, for on examination of the patient it was seen that the *incisive* or premaxillary portions of the maxillæ were present and normal, and carrying firmly fixed teeth. It was probably evident to all that the sequestrum shown was shed from the palate posterior to the premaxillary area, from the region of the anterior palatine canal. This area, a favourite spot for syphilitic necrosis and perforation, might be conveniently described as the Stenonian segment, and it was interesting to remember that a separate centre of ossification was now described for this region (vide Cunningham's 'Anatomy,' 1902). He (the speaker) had shown a real case of a premaxillary sequestrum before the Society some years ago in a child, and it was scarcely necessary to add that the sequestrum was removed through the mouth. How a true premaxillary fragment could wander into the nose was somewhat difficult to imagine.

Mr. THORNE asked if the so-called tooth-sockets were really the sockets of teeth or not? He understood that the premaxilla bore the four incisor teeth, and in this case we are shown what purports to be the premaxilla while the teeth are firmly fixed in the mouth.

Dr. HERBERT TILLEY said he was entirely in accord with Dr. Hill's remarks. Last year a patient applied to him with very swollen upper lip, great inflammation and swelling of the gums around the upper central incisors, and a fetid purulent discharge from the nose. The incisor teeth were so loose they could be removed with the fingers, and under a general anæsthetic a sequestrum corresponding to the sockets of the incisor teeth was easily removed.

Dr. FITZGERALD POWELL thanked Dr. Hill for the interest he had taken in the cases and his determination to clear up the origin of the specimen shown. He had been himself rather doubtful on this point, and had shown it to several anatomists, who gave various opinions. Professor Robinson, of King's College Hospital, was good enough to examine it, and pronounced it to be the premaxilla. He took this opinion without question, the more so as it coincided with his own. The specimen carried the grooves for the two upper incisors, and he had seen cases of mal-development in children in which this premaxilla, carrying the incisors, had not joined the superior maxillary bones, but protruded forward, and had to be removed or pushed back into position. It appeared to him that it did not make matters clearer to say "it was not the premaxilla, but the Stenonian section of it." He could not quite follow Dr. Hill's description as obtained from the 'Anatomy' he was quoting, but he was not prepared to deny its accuracy.

CASE OF ŒDEMA AND STENOSIS OF THE LARYNX FOR DIAGNOSIS.

Shown by Dr. H. J. DAVIS. This man, æt. 28, has œdema and stenosis of the larynx, the glottis at one time being a mere chink, and the œdema extreme. He was admitted into the Middlesex

Hospital three weeks ago with urgent dyspnoea, but this has subsided. The arytenoids and epiglottis are still enormously swollen, and between the arytenoids a translucent, oedematous mass of raised mucous membrane "flaps up and down" during inspiration. It has a peculiar appearance, and resembles a large mucous polypus; it extends below the cords.

Ten months ago the patient had primary syphilis, and he was still undergoing treatment when these urgent symptoms supervened.

Is this a case of acute oedema resulting from syphilis alone? or is it a case of mixed infection (tubercular and syphilitic)? There are no physical signs in the chest indicative of phthisis.

The PRESIDENT said the case was specially noteworthy considering the relatively short time the symptoms had been present. He presumed the kidneys and heart were all right, and that there was no evidence of any circulatory obstruction about the neck.

Dr. D. GRANT said that this case was comparable to the first case shown by Dr. Powell at that meeting. In the case he himself had shown the oedema was more unilateral, but it had the same "floppy" character, and he should think that this case, like his, was one of oedema consecutive to a syphilitic lesion, probably perichondritis. A nip with punch-forceps out of the middle of the mass in his own case seemed to hasten the improvement enormously.

Dr. H. L. LACK agreed that it was almost certainly a case of syphilis. A patient he had shown at the last meeting of the Society with undoubted syphilitic lesions had similar great oedema of the larynx, and there was a large flapping mass attached to the arytenoid. As regards treatment, he should recommend the immediate removal with cutting forceps of the large movable piece of oedematous mucous membrane. This would probably reduce the whole of the oedema.

PROCEEDINGS
OF THE
LARYNGOLOGICAL SOCIETY OF LONDON.

EIGHTY-NINTH ORDINARY MEETING, *April 8th*, 1904.

P. McBRIDE, M.D., F.R.C.P.Edin., President, in the Chair.

E. FURNISS POTTER, M.D., } Secretaries.
P. DE SANTI, F.R.C.S., }

Present—26 members and 2 visitors.

The minutes of the previous meeting were read and confirmed.

The following cases and instruments were shown :

MEMBRANOUS ULCERATION OF FAUCES IN A WOMAN *ÆT.* 36 OF
SIX WEEKS' DURATION.

Shown by Dr. STCLAIR THOMSON. Over the upper part of the tonsil on each side was a well-defined ulcer, with sharp edges and coated with an easily detached pultaceous membrane. This resembled diphtheritic membrane so much that the patient had been sent in the first instance to the Fever Hospital, and it was only after leaving there and on the persistence of the condition that she came under observation.

The glands were enlarged and only slightly tender. There was no marked dysphagia and no fever. There was a somewhat similar condition on the lingual and pharyngeal tonsil. There was no history of syphilis.

At first it was thought that it might be a case of Vincent's

angina, but a search for the fusiform bacilli and the spirilla had been negative. A week ago some coppery spots had been noticed, and the patient was given specific treatment. Since then the ulcers had commenced to clear, and a mucous patch had come out on the soft palate. It was therefore thought that the case would prove to be one of syphilis.

Mr. BABER thought from the appearance this was a case of syphilis.

Dr. BALL said he was able to see a few reddish-brown papules, which seemed to him confirmatory of a syphilitic diagnosis.

Dr. THOMSON said that under specific treatment the case had improved during the last week, although for five weeks previously the condition had remained stationary. There were some papules on the shoulders and on the side of the nose which looked coppery. There was a condition similar to that on the fauces on Luschka's tonsil and on the lingual tonsil.

CASE OF CHRONIC LARYNGITIS (PACHYDERMIA).

Shown by Mr. DE SANTI. A woman, *æt.* 43, who gave the history of continuous hoarseness of fifteen years' duration. She was a married woman with several children, and there was no history or evidence of syphilis or tubercle. She suffered from winter cough, and lately had been troubled with breathlessness. She also complained of a numbing sensation in the left arm and left side of the head of four years' duration.

Examination of the larynx revealed considerable general thickening and infiltration, particularly of the inter-arytenoid space.

There was also a small nodule on the right processus vocalis, with a slight corresponding depression on the opposite side. The left cord did not move so freely outwards in deep inspiration as the right one.

The patient was brought before the Society to ascertain the opinion of members as to the question of treatment. Mr. de Santi personally considered the best thing to be to leave the patient alone.

Dr. HERBERT TILLEY reminded the Society of a similar case which he had brought forward, and in which after several times removing the inter-arytenoid hyperplasia and then rubbing in strong nitrate of

silver (grs. 80 ad ʒj) the condition had practically disappeared, and the patient's voice was now excellent.

In his (the speaker's) case the patient was not addicted to alcohol, neither was there catarrhal or suppurative lesions in the nose.

Dr. LACK was rather surprised to hear the remarks on this case. He had shown one case at the Society, and his own—and he thought the general—experience was that, however much one might punch out the hoarseness always recurred, the relief obtained being only temporary. He thought Dr. Tilley was taking an unduly optimistic view which was not warranted by the facts. The only treatment which seemed to do good was to treat the upper air passages, and to remove any disease in the nose or post-nasal space. In any case the result of treatment would not be very great.

Dr. THOMSON said he had watched a similar case five years ago in an alcoholic bus-driver, who once every year had a piece punched out of the inter-arytenoid space, and this kept him going for twelve months. This man was undoubtedly suffering from syphilitic disease.

Dr. DUNDAS GRANT said that the treatment of the nasal discharge was most important. At the present time he had under observation a woman in a similar condition. She was under the care of his late colleague Mr. Lennox Browne for twenty years, who was under the impression that the patient was suffering from syphilis. She always benefited by having a big swab forced down the larynx moistened with a solution of sulphate of copper. He himself had introduced the nasal treatment with great benefit in her case, and he had substituted salicylic acid for the cupric sulphate. He believed, however, the introduction of the nasal treatment had been *the* means of improving the patient's condition.

The PRESIDENT said one point of interest in the case had particularly struck him. Pachydermia laryngis, so far as he knew, was confined to the inter-arytenoid space and vocal processes, but in this case there was also a similar appearance at the anterior commissure. He would like to hear from Mr. de Santi whether he had met with this condition in cases of pure pachydermia laryngis?

Mr. DE SANTI was much obliged to the various members for the remarks on this case, but he thought the proposed methods of treatment were useless himself, and he quite agreed with Dr. Lack that these cases should be left alone. His reason for bringing the patient before the Society was in case he had made an error in diagnosis, and something in that case might have been done. As regarded iodide of potassium, he had used it from the beginning of the case, *i.e.* for three weeks, and it only made the patient extremely uncomfortable. He did not intend to continue it. He could not account for the stenosis of which the patient was complaining. In reply to Dr. McBride he had not noticed the thickening in the anterior commissure. Doubtless he had missed it, but was very interested in hearing from Dr. McBride of its existence. He would keep an eye on the woman and see if anything further happened. He would give her some nasal wash, but there was no gross nasal lesion.

CASE OF DOUBLE ABDUCTOR PARALYSIS OF TRAUMATIC ORIGIN.

Shown by Dr. LAMBERT LACK. The patient cut his throat eighteen months ago, almost completely dividing the trachea at its junction with the larynx. Apparently both recurrent nerves were injured, as there has since been complete bilateral paralysis. The wound in the trachea was followed by considerable cicatricial contraction. This was partially overcome by the introduction of a T-shaped tracheotomy tube. The present condition is as follows:—There is an external opening into the trachea large enough to admit the tip of the little finger. The edges of this opening are healed, and it shows no signs of contracting. Just above it there is a narrowing of the lumen of the windpipe. There is bilateral abductor paralysis complete on the left side, with but slight movement of the right cord. The patient for the past three months has been able to breathe through the mouth, the opening in the trachea being closed by broad bands of strapping. He is quite comfortable while quiet or on gentle exertion, but suffers from dyspnoea when he works, walks fast, etc. The dyspnoea apparently depends on the obstruction produced by the abductor paralysis and is not due to the stenosis of the trachea.

Dr. Lack asked could anything be done in the way of operation extra- or intra-laryngeal to relieve the slight obstruction that remained.

Would it be safe in the patient's present condition to close the external fistula, which he was very anxious to have done?

Dr. WATSON WILLIAMS asked if at the onset there was complete paralysis on both sides, before the present condition of bilateral abductor paralysis supervened. He presumed that the condition of the glottis was now that of considerable narrowness compared to what it was at the time of the so-called accident, for the bilateral abductor fibres might have re-united, and under these circumstances he thought it possible that one might eventually get more complete restoration of movement by the return of abductor power, in which case it was important not to do anything which would interfere with the activity of the glottis.

Sir FELIX SEMON was particularly interested in the question of the cause of the bilateral abductor paralysis in this case. Surely it must have been a very extensive cut which could have reached both the

recurrent laryngeal-nerve, and it was not easy to see why the other neighbouring structures should have escaped. Probably the most plausible explanation was that there was a good deal of new formation of cicatricial connective-tissue in the neighbourhood of the recurrent laryngeal nerves which gradually compressed the nerves. Concerning the question of treatment he should feel inclined to leave matters *in statu quo*. Although the man could breathe if the opening was closed, he should advise the latter to be left as it was, otherwise he would be in constant danger of sudden stenosis in the event of occasional catarrhal swelling of the parts. As to intra-laryngeal operations, experience in similar cases had clearly shown that they were not very useful. He would remind them of the fact that when a vocal cord was removed in malignant disease of the larynx a cicatricial band usually formed in the region of its former situation, so that extirpation of a cord was likely to be followed by at least as great, if not greater, amount of stenosis than at present existed.

Dr. McBRIDE asked Dr. LACK if there had always been in this case greater movement of the right cord than of the left. The former moved to an appreciable extent—outwards and inwards—whereas the left cord was perfectly at rest. This condition was best seen when the patient attempted to laugh.

Dr. LACK supposed it was best to leave the patient alone, but he had shown the case in the hope of getting some suggestion. The patient was very anxious to have something done.

CASE OF TUBERCULAR LARYNGITIS IN A GIRL ÆT. 13, WHO WAS
ALSO SUFFERING FROM PULMONARY PHTHISIS.

Shown by Mr. TOD. This patient was under the care of Dr. Guthrie at the Paddington Green Children's Hospital. There was distinct evidence of tubercular disease of the left apex, which was improving under treatment. The mother had noticed that the voice was getting hoarse during the last two months. An examination of the larynx showed extensive papillomatous infiltration of the arytenoid space, and the left vocal cord was hidden by a red swelling which projected from the ventricle, and which was presumably tuberculous infiltrated mucous membrane. Mr. Tod said he showed this case owing to the rare association of tubercular disease of the larynx with pulmonary phthisis in a child of that age.

THREE CASES IN WHICH RESECTION OF THE SEPTUM HAD BEEN
PERFORMED TO REMEDY DEVIATION OF THE NASAL SEPTUM.

Shown by Mr. HUNTER TOD. These cases were operated on, one eight weeks ago, and the other two five weeks ago. They all had complete obstruction of one side of the nose, and in one case there was tilting of the nose to the opposite side, producing external deformity. One of these cases had only been in the hospital twenty-four hours, and the other two forty-eight hours, after which period they were able to return to their ordinary occupation of life. Mr. Tod, in describing the operation, said that he first plugged the nose on the obstructed side with a very strong solution of suprarenal and cocaine. The patient was then anæsthetised in a recumbent position. By the time the patient was ready for operation the suprarenal-cocaine solution had so constricted the vessels that a very good view of the nasal cavity could be obtained, and the operation was rendered bloodless—a point of great importance. The mucous membrane was incised by a curved incision along the floor of the nose as far forward as possible, and was pushed back in order to expose the cartilage. The cartilage was then incised obliquely through its substance, care being taken not to pierce the mucous membrane on the opposite side. This was the only difficult part of the operation, and was best prevented by prising up the cartilage with the knife whilst cutting it through. The cartilage was easily separated from the mucous membrane on the opposite side by means of a blunt probe or the handle of a scalpel. The cartilage with the mucous membrane on the obstructed side was then punched away with a special pair of forceps which Mr. Tod had made for his use by Mayer and Meltzer. As much of the septum was removed as permitted a good view of the middle turbinate and the nasal pharynx, and if necessary part of the vomer and ethmoidal plate were also removed. The septum now to a great extent consisted of the single layer of mucous membrane of the opposite side which could be seen flapping to and fro during respiration. The operated side was now plugged with gauze to prevent hæmor-

rhage, which, after the use of suprarenal extract, might be very severe. The plugging was removed in twenty-four to thirty-six hours. If the operation was successful the patient could now breathe freely through the previously obstructed side. The after treatment consisted in the daily douching of the nose with a simple alkaline lotion, and if there was any formation of crusts on the wound surface it was advisable to spray the nose with an oily fluid. Mr. Tod said that he brought forward these cases owing to the interest the Society appeared to have taken in the Krieg-Bonninghaus operation, of which this operation was a modification.

The PRESIDENT said that the Society was greatly indebted to Mr. Tod for showing these cases. They were the first series shown in this country, so far as he knew, and they seemed most satisfactory results.

His only regret was that the patients were not provided with probes, as it would have been interesting to feel the consistence of the tissues. It looked as if there were more than one layer of membrane and as if some regeneration of cartilage had occurred.

Mr. BABER said he was very interested in these cases, and asked whether Mr. Tod had only removed the cartilage or also some of the bone. In one of the cases behind the portion removed there appeared to be a ridge, probably bony. In that case it was a question whether a further operation was required to make that side clearer.

Dr. PEGLER said there seemed to be no question as to the simplicity of the after-treatment in the method exemplified by Mr. Hunter Tod's cases: he felt bound to admit on the other hand that in the method of Moure, examples of which he hoped to show at the next meeting, considerable care in the after-management was necessary, especially in the use of the splint. At the same time the sphere of application in Moure's operation was larger; he had employed it in almost every conceivable form and degree of deflection, and even when the latter was extended back to the osseous area in the posterior third of the vomer—the most difficult variety of all—a successful result might be relied upon. In Mr. Tod's cases the stiffening of the mucous membrane was very marked, and one could not help being astonished at the degree of deposition that had taken place in the period that had elapsed since the resection.

Dr. SCANES SPICER said that the class of cases for which Moure's, Asch's and similar operations were best suited and the ones for which the fenster operation was suited, were quite different. This latter operation had been done in England for at least the last ten years for those cases in which the cartilage projects into the vestibule at its most anterior margin, *i.e.*, where the obstruction was in the vestibule itself, and it had been a common practice with many British rhinologists to make a longitudinal incision over the edge which projected

and to detach the projecting and obstructing front of the cartilage from the surrounding tissues—often a matter of some difficulty—and resect as much of the septum as was necessary in order to completely clear the obstruction. He had not thought it necessary to publicly exhibit such well-accepted proceedings, but apparently their exhibition met a want. He congratulated Mr. Tod on these successful instances of a sound procedure. Moure's operation was suitable for those cases where the greatest "bulge" was much farther back.

Dr. WATSON WILLIAMS was extremely interested in these cases. He had done these operations himself and the results had been satisfactory in most of them. There were one or two questions he would like to ask: firstly, was there any objection to resorting to this procedure in the case of young children, or would it materially interfere with the development of cartilage subsequently and thus cause serious deformity? He had a small boy of twelve the other day, on whom he did the operation, as being the best available procedure, but he did as little as possible, owing to his anxiety as to the result in later years. With regard to the cases under discussion, he had taken the opportunity of improvising a probe with which to test their solidity. The "new" septum seemed very firm indeed, as it had been in several cases of his own. He also wished to know whether any of those members who had done the operation had commenced with the removal of the cartilage absolutely from the anterior free border, and, if so, had the results been unfortunate. He asked this because it seemed to him very tempting to start at that border and so avoid the difficulties that are met with in getting a free edge farther back.

Dr. HILL asked Mr. Tod if he would vouch for it that the after-troubles due to excessive repair, which were so emphasized recently by Sir Felix Semon as occurring in septal operations, were less in his method of resection than in the more crude operations which they usually performed. That in itself would be a good reason for adopting it, although it was a little more lengthy and perhaps more difficult. He agreed with Dr. Spicer that an operation somewhat similar in principle had been carried out for many years in this country, but he contended that these slight resections, even when they involved the whole thickness of the septal cartilage, differed most markedly in extensiveness and technique from the "fenster" operation under discussion.

Dr. D. GRANT asked, with regard to the case in which Mr. Tod thought the result was least good, if he was able to detach the muco-periosteum from the very deep groove on the right side of the septum. This was one of those septums which he called by the name of "crumpled" as the result of severe traumatism. There was a round convexity on the one side and a deep groove on the other, and it was difficult to take off sufficient of the side with the single convexity without making a perforation. His plan was to take away as little as possible to produce sufficient breathing space. But if one could feel certain that the muco-periosteum could be detached sufficiently from the side on which was the deep groove, one might go more boldly to work than had hitherto been his habit in these cases. It was a matter for regret that Dr. Spicer had not brought forward within the last ten years his results. He must say that in some of his cases

where disappointment was his chief feeling at the time of the operation, these very same cases had been reported to him months and years afterwards as being amongst his most brilliant successes, whereas in other cases the results seemed splendid at the time but were disappointing in their later history.

Mr. THORNE said he congratulated Mr. Hunter Tod; any operation which did away with the use of splints and reduced the length of after-treatment was to be commended.

Dr. FITZGERALD POWELL said that Mr. Tod's cases certainly showed good results, upon which he congratulated him, but the operation could in no sense be described as a new one. No doubt many of the members had practised it, and he had done so himself for a long time. He considered it most useful in those cases of deviations or spurs near the anterior portion of the septum. He thought it would be more interesting if the patients were shown before and after the operation.

Dr. BALL agreed with Dr. Scanes Spicer that this operation had been done pretty frequently in this country for the last ten or twelve years. At any rate, he had employed this method in dealing with many cases of deformed septum for several years, and he had no idea until lately that there was supposed to be any novelty in the method. He first incised the mucous membrane on the convex side, and then, if the cartilage was not already split, which it often was at the site of a sharp bend, he incised the cartilage, taking care not to perforate the mucous membrane on the opposite side. He then separated the mucous membrane of the opposite side with a blunt periosteum elevator. In some cases the mucous membrane of the convex side could be turned back and preserved. The cartilage was removed bit by bit with a punch forceps as far as was necessary to restore the patency of the passage. Where the anterior end of the cartilage was deviated he removed the cartilage right down to the free edge. No deformity or ill effect resulted from this proceeding. It was occasionally possible to stitch up the mucous membrane on the convex side, but this was mostly impracticable, and was unnecessary.

Dr. THOMSON said he had performed a similar operation, but with complete submucous resection of the deviated septum, extending from a few millimetres within the orifice to the bony vomer. He had separated the two mucous membranes, taken out the divided portion of the septum, and then put the two muco-perichondria together again. In a case in private practice operated one week the patient was able the following week to go to a ball—so rapid was the recovery by this method. There was no scabbing, except along three little stitches which he had put in in front to secure the edges to the muco-periosteum. These deviations were so extensive that one patient could not inspire at all through one nostril, with the result that she breathed through one side of the nose only. He had not yet shown or published his cases. In them the septum consisted only of muco-periosteum, and in forced respiration it fluttered like a sail in the wind and had done so for three months now. One case was done at the end of November, and the septum could even now be seen quivering, but there was no disfigurement, and the patient seemed none the worse

for it. This mode of operation introduced several great improvements—(1) Thoroughness of removal of stenosis; (2) impossibility of recurrence; (3) abbreviation of after-treatment; and (4) avoidance of risks of adhesions or atrophy and scabbing.

Mr. Tod, in reply, said he was pleased his cases had afforded so good a discussion. He was well aware that resection of the septum was not a new operation, but, so far as he knew, it had not been done in this country. He had first seen it performed four years ago in Berlin by Tansen, who operated under the local anæsthesia of cocaine, the patient sitting in a chair. He thought the operations described by Mr. Ball and Dr. Scanes Spicer could hardly be considered a resection of the nasal septum: they appeared to be the mere cutting away of a cartilaginous projection of the anterior part of the septum. He agreed with Dr. Spicer that the more anterior the deviation, the simpler became the operation, and that this operation was eminently adapted for cases of deviation of the anterior part of the cartilage, but at the same time the resection of the cartilage could be carried back as far as might be necessary, even removing part of the vomer and ethmoidal plate. In those cases referred to by Dr. Dundas Grant, where there was a "kink" in the septum, and where, after an injury or cauterising of the septum, the mucous membrane was adherent to the cartilage, it was sometimes quite impossible to prevent a perforation. In answer to Dr. Hill, Mr. Tod said that the after results were excellent as a rule. In one of the cases shown to-night a slight adhesion had occurred between the inferior turbinate and the raw surface of the septum, but three weeks after the operation this had been removed and the patient, as could be seen, now had plenty of breathing room on both sides of the nose. In answer to Mr. Pegler, who suggested that all the cartilage had not been removed, he could state with certainty that he had done so. After the operation the mucous membrane of the opposite side could be seen flapping to and fro during respiration. A month or so after the operation, owing to the stiffening of the septum, it was difficult to tell how much of the cartilage had been removed; it always appeared as if far less had been removed than had actually been the case. With regard to removing the mucous membrane, if the nose was narrow, it gave more room. In some cases the mucous membrane was very thick, and if it was removed and eventually replaced by scar tissue the amount of room gained was considerable. The chief objection was the tendency for crusts to collect on the wound surface. In the worst cases the patient might not get rid of this trouble for nearly two months: in other cases the healing was rapid and there was no discomfort. He had not done this operation on children, partly because he thought the smallness of the nose would make the operation very difficult, partly from fear of producing some external deformity from arresting the development of the septum. He had removed the whole of the cartilage in several cases where the septum had been dislocated anteriorly, but afterwards, in two cases, there was a slight dipping in and extreme mobility of the tip of the nose; in consequence he thought it would be wiser not to remove the anterior margin of the cartilage. Mr. Tod, in conclusion, said he would be

very pleased to show some cases to the Society before operation and again after the operation had been performed.

CASE ILLUSTRATING THE PERMANENCE OF A SUCCESSFUL OPERATION
IN THE CASE OF EXTENSIVE ADHESIONS OF SOFT PALATE TO
THE POSTERIOR PHARYNGEAL WALL.

(For full notes of case *vide* 'Proceedings Laryngological Society,' March, 1903.)

The PRESIDENT said the Society was obliged to Dr. Tilley for showing the case, which seemed to illustrate all that was claimed for it.

Dr. POWELL said that he was rather inclined to question the utility of this operation at their last meeting, and in taking up this attitude he was supported by the fact that at a former meeting the opinion of the Society was strongly expressed to the effect that these operations were not desirable owing to the poor results generally obtained. This opinion was just as strongly contradicted by the result of operation in this case, which was excellent. He would like to know whether the operation was done simply to give the woman breathing space or to relieve any of the other severe symptoms that occurred, such as pain in the occiput or back of the neck.

Mr. DE SANTI said the case of his to which Dr. Tilley had referred in his opening remarks was done six years ago, and the result was as good as that seen in this patient. He saw his patient once a year, and next time he saw her she should be brought to the Society again.

Dr. HERBERT TILLEY brought the case forward again because at the last meeting of the Society a member had expressed some doubt as to whether any operative interference was of real permanent value in these cases. The operation was performed thirteen months ago, and in place of a small opening between the naso-and oro-pharynx which would only admit a probe, there was now a large, permanent, and free communication. The chief symptom before the operation was the accumulation and discharge of mucus from the anterior nares.

DISEASE OF FAUCES SIMULATING SYPHILIS.

Shown by Dr. KELSON. (a) A man *æt.* 25, who for eighteen months had been suffering from whitish patches on a red, inflamed-looking base on tonsil and palate; also (b) a man *æt.* 40 who had similar patches in a similar position for thirteen months. These cases, together with that of a girl shown in May, 1903, had the following points in common:—

1. There was no history of syphilis or any other sign of it to be found after careful search.
2. The disease was of over a year's duration, getting almost well, then reappearing.
3. It was superficial in character, leaving no cicatrices, and the nose and larynx were not affected.
4. Antisyphilitic remedies had no effect on any of them.

CASE OF MELANOTIC SARCOMA OF THE SOFT PALATE.

Shown by Dr. Ball. The patient, a man *æt.* 53, had noticed some black patches on the palate about two years ago. Some seven or eight months ago a growth commenced on the soft palate, but as it gave him no inconvenience he took little notice of it until three weeks ago, when it bled. He then showed it to his doctor. There is now a dark-looking, flattened, somewhat mushroom-like growth on the middle of the soft palate, covering an area about the size of a shilling. There are numerous black patches on the hard and soft palate and on the upper gums. There is some slight glandular enlargement under the chin near the middle line. He has lost about a stone in weight during the last twelve months.

DR. DUNDAS GRANT thought this case well worth the expense of reproduction by an illustration, as it was such a beautiful and rare case. He did not think it would be beyond the means of the Society.

Sir FELIX SEMON seconded Dr. Grant's motion.

MR. DE SANTI said the question before the Society was whether any operation could with benefit be undertaken. Any one with experience of melanotic sarcoma knew that it was the most malignant form of sarcoma. He had always taught that if a melanotic sarcoma in any part of the body had reached the size of a filbert nut there was an almost certainty of numerous secondary growths being present in some part of the body. He should say that the prognosis was a very poor one indeed, taking the nature and size of the tumour into consideration, but he thought it would be right to give the man some chance by doing an extensive operation on the palate and removing the new growth freely. The question was whether any operation could be done with regard to the patches scattered on the palate and gums. Personally he should leave these and tackle only (and freely) the growth in the palate. It would be interesting to hear the result of operation and

the future progress of the case. Melanotic sarcoma was far from common in any part of the body, but particularly rare in the palate.

The PRESIDENT had not seen a case like this before.

SHEARS FOR DIVISION OF THE THYROID CARTILAGE.

Mr. WAGGETT showed a pair of laryngotomy shears for division of the thyroid cartilage without damage to the vocal cords. The shears have strong thick blades set at a right angle to the handles. The inner blade is inserted from below through an incision in the cricothyroid membrane. The outer blade is provided with a projecting tooth at its distal end. This tooth enables the surgeon to fix the blade exactly in the mid-line of the larynx before cutting through the thyroid cartilage. It was impossible to injure the vocal cords with this instrument, which had been found very efficient in half a dozen cases.

Mr. DE SANTI said that in the last edition of Treves' 'Operative Surgery' he saw that it was laid down that no form of bone forceps whatever should be used in doing the operation of thyrotomy, but that a saw should be used. He thought this must be an error or an entire oversight on the part of the author. It was the general custom to use some form of cutting forceps to divide the thyroid cartilage in the middle line, except in those cases—and they were a majority—in which the thyroid cartilage was ossified, in which case a suitable saw might be used.

Sir FELIX SEMON said that in a certain number of cases to which Mr. de Santi had referred, and their number was great, one was not able to cut with any scissors. The late Dr. Eugen Hahn had presented him with an excellent pair of bone scissors, with which he had done a good many cases, but they had proved insufficient in other cases. If one used too much force, particularly in operations for malignant disease in elderly people, one ran considerable risks of fracturing the thyroid, owing to the ossification of the cartilages. With regard to the saw, it was sometimes quite a difficult thing, owing to the mobility of the larynx, to saw through an ossified cartilage, even when the larynx was fixed by the fingers of an assistant. Mr. Waggett's instrument seemed to him a very useful one, and he should give it a trial in his next operation.

ASEPTIC FOREHEAD MIRROR HANDLE.

Mr. WAGGETT showed an aseptic forehead mirror handle, easily detached so as to be sterilised between two operations, and

thus enabling the surgeon to adjust his mirror without needing to recleanse his fingers during an operation.

Mr. BABER thought that clips for attaching to the reflector were in common use; he had himself used them for a long time—a little piece of sheet zinc bent double and clipped on to the edge of the mirror. This could be sterilised, and saved touching a dirty reflector during an operation.

PROCEEDINGS
OF THE
LARYNGOLOGICAL SOCIETY OF LONDON.

NINETIETH ORDINARY MEETING, *May 6th*, 1904.

CHARTERS J. SYMONDS, M.S., Vice-President, in the Chair.

E. FURNISS POTTER, M.D., } Secretaries.
P. DE SANTI, F.R.C.S., }

Present—37 members and 5 visitors.

The minutes of the preceding meeting were read and confirmed.

The following gentlemen were nominated for election at the next meeting of the Society :

Whitehead, Arthur Longley, M.B., B.S., Leeds.
Moritz, Siegmund, M.D., M.R.C.P., Manchester.
MacGavin, Laurie Hugh, F.R.C.S., London.
Peters, Edwin Arthur, M.D., F.R.C.S., London.
Lloyd, William, F.R.C.S.Ed., London.
Fox, H. Clayton, F.R.C.S.I., London.
Barwell, Harold Shuttleworth, F.R.C.S., London.
Ling, Maurice E., M.D., London.

The following cases and specimens were shown :

CASE OF COMPLETE SUBMUCOUS RESECTION OF DEFLECTED SEPTUM.

Shown by Dr. STCLAIR THOMSON. Through the kindness of a private patient, I am able to show a case in which a large deviation of the septum has been completely excised, but with preservation of the muco-perichondrium on each side.

The operation performed in the case presented to-day differs, I think, to a considerable extent from any other previously described or exhibited in this country.

It is impossible to give anything like an adequate description of the operation in the short time at my command, but, briefly stated, it is as follows:—

An incision is made through the perichondrium, on the convex side, and the membrane reflected. The cartilage is then divided through to the under surface of the mucous membrane on the opposite side, which is not incised. The two layers of mucous membrane are separated as far back as necessary, and the deviated portion is then excised.

From the specimen which I hand round, it is easily seen what a large and extensive deviation with part of the bony septum can thus be removed, and it will also be observed that hardly any other method of operation could have satisfactorily relieved the case. The two mucous membranes come in apposition; the healing is rapid; and as the mucous surface, with its ciliated epithelium, is thus preserved, there is no risk of any atrophic condition, and the period of healing is reduced to a few days.

Mr. SYMONDS said he did not understand from the introductory remarks made by Dr. Thomson whether the deflection was confined to the cartilage or involved the bone. He heartily congratulated him on the excellent result. He thought the man's nose was altered in shape, and he asked the patient, who said that if anything it was straighter than it was before.

Mr. BABER congratulated Dr. Thomson on the successful operation in this case. He noticed there was a little prominence left in the lower part of the vestibule on the right side. He would like to ask whether Dr. Thomson found this operation more difficult in young persons. Once, in operating on a boy of 15, he found great difficulty in separating the periosteum from the cartilage. He thought it might be advisable to limit the operation to older persons. As far as memory served him, the youngest patient in the series of cases given by Menzel, in describing the operation with successful results, was 18 years old.

Dr. GRANT said the result was ideal, and re-echoed the approbations expressed by Mr. Baber. What knife was used? What precautions were taken to minimise the risk of buttonholing the muco-periosteum on the other side?

Dr. PEGLER asked Dr. Thomson whether he had also done the operation of which Mr. Tod had shown examples at the last meeting, and, if so, he would be glad to have the benefit of his experience as regards the merits of the two operations, and the time relatively occupied.

Mr. TOD asked how long it took to perform this submucous resection. He had himself attempted it, but had found it extremely difficult, especially when working far back in the nose, and for this reason he now removed the mucous membrane on the obstructed side. He usually had to perform this operation in the out-patient department, where time was of value. The great disadvantage of the submucous resection was the long time it took to perform; its great advantage, which was well shown in Dr. StClair Thomson's case, was the rapidity of healing.

Dr. SCANES SPICER asked what were the points in which these recently discussed operations differed from the older operations of submucous resection. In 1851 Chassaignac resected the septum submucously. Several years after Hartman and Petersen's names were associated with the same procedure. It was mentioned in Mackenzie's, McBride's, Macdonald's and Ball's text-books of ten years ago and more, and indeed the procedure was by no means a new or uncommon one. Greville Macdonald read a paper at the Glasgow meeting of the British Medical Association in 1888 on this point, and he called it a "new operation." The speaker remembered making some remarks on that occasion. He knew that both Macdonald and himself had been doing the operation ever since. It had been said that the new operation was more extensive, and took cognisance of the bone, but Macdonald's operation was not confined to the cartilage, because he removed the bone with a saw, if necessary, submucously. Since so much had been said at the Society's meetings about microscopic spurs and their removal from the nose, and as this operation was one of those adapted for cases of what had in the past often been dubbed microscopic spurs, he was exceedingly anxious that the work of those rhinologists who had been doing this well-recognised operation in suitable cases for some years should not now, after having been gravely questioned, be ignored. He congratulated Dr. Thomson very considerably on the result of his case. He had not the slightest doubt that there was very great improvement in respiration, and the patient expressed himself as satisfied. There was, however, some sinking of the tip of the nose and the columella was widened at the base. Having himself experienced the difficulties of these cases, he desired not to be hypercritical, but he was very chary of cutting away much from the antero-superior border and tip of the septal cartilage.

Dr. SMURTHWAITE had shown a similar case eight months ago, to the Northumberland and Durham Medical Society, a description of which appeared in the journal of that Society. He removed the whole of the cartilaginous portion of the septum, reflecting the muco-perichondrium on the convex side, and after the removal of the cartilage bringing the membrane back and stitching the same. This operation took a long time—one and a half to two hours. The patient sat in a chair under local anaesthesia of eucaïne and adrenalin to prevent hæmorrhage; there was no pain and no bleeding, and at the end of the operation the patient was able to walk out of the consulting room. He had got the idea first in Vienna from Hajek; the latter used to do this operation for straightening saddle-back nose, his opinion being that in certain cases of saddle-back nose one had a deflection of the septum either to

the one side or to the other, which pulled in the bridge of the lower part of the nose. If one resected the cartilage, the membrane was allowed to slip up again and the nose to straighten. He had seen this operation done only a fortnight before leaving Vienna, consequently could not speak as to the result of the saddle-back nose. He himself experimented first on a number of cadavera, and a year ago last January did his first case on the living subject, afterwards showing it as a good result to the above-mentioned society. He had done five others, all under local anæsthesia—one last week with a perfect result.

Dr. STCLAIR THOMSON, in reply, said that some of the bony septum was removed; it could be seen in the specimen. There was much difficulty in getting at the spine of the superior maxilla, of which, as Mr. Baber had rightly noticed, part still remained. This spine lay below the level of the vestibule, and was difficult to follow down. He took a good portion off, as could be felt amongst the *débris*. The knife he had made was one which cut all round the point. With it he made an incision on the convex side about five millimetres inside the junction of the skin and mucous membrane. The precautions to avoid buttonholing are simply patience and perseverance; and were particularly required when cutting through the cartilage, to avoid going through the mucous membrane on the opposite side. He did it by watching from time to time the opposite nostril to make sure of not puncturing the mucosa. He did not find the difficulty in avoiding making punctures when cutting the cartilage as much as in separating the mucosa from the concavity, as was mentioned at the last meeting. In this region there seemed to have been repeated attacks of a chronic inflammatory nature, which rendered it very adherent to the cartilage. He had never done the "fenster-resection" operation recommended by Mr. Tod at the last meeting, because he thought the preservation of the mucous membrane was so important, the healing much quicker, there was no possibility of atrophic rhinitis, and the outside appearance was as good. This method on all these points seemed to have a great superiority. As to the appearance, he had had his case photographed before the operation, and it would now be seen that the patient's appearance was decidedly improved. The patient himself was well pleased with it. As to the length of time taken, the patient was two hours under the anæsthetic. He had taken three hours in the case of a patient, whom he would show at the next meeting, in whom a long spur went as far back as the vomer. The time taken was the great drawback to the method. He had seen the operation performed in Germany by Professor Killian, who took one to one and a half hours under cocaine. As to the "novelty" of the operation, the question of priority was not of very great importance; the useful thing was to establish the method as the best known at present for marked deviation of the septum. Dr. Thomson said that he himself at the last meeting had quoted Dr. Greville Macdonald as describing a similar method in his book published in 1890. But that method, although saving the mucous membrane, only aimed at removing superabundant cartilage, and could not for a minute compare with the complete excision of the deflected septum. As to the hæmorrhage in the earlier cases, he used a submucous injection of cocaine and adrenalin, but in the later cases

he had only plugged the nose for twenty minutes with adrenalin and cocaine, and not a teaspoonful of blood was lost. The operation was practically bloodless. He put no sponge in the postnasal space, and it was not even necessary to sponge out the mouth once. After incising with the knife he had shown them the muco-periosteum was reflected as described. He then took out a large piece of the deviation with an ordinary pair of nasal scissors. As he worked farther back, he contented himself with punching out. The forceps used differed from Grünwald's in that the male blade was not fenestrated. He had adopted the needle holder (shown) for stitching, as he had great difficulty with others; possibly it was not original. With it he used Arbuthnot Lane's needles for cleft palates, and very fine silk. The great advantage of the sutures lay in the doing away with nose plugging, the patient being comfortable from the moment of operation.

A GROUP OF CASES OF DEFLECTION OF THE SEPTUM RECTIFIED BY
MOURE'S OPERATION.

Shown by Dr. PEGLER. Five patients were present holding cards in their hands containing rough details, and numbered in their precise order and sequence of operation. Two were polypus cases, and each one differed from another in particulars of treatment.

CASE 1.—T. W—, æt. 48. Case of ethmoidal disease with numerous polypi blocking the expanded right fossa, some also in the left, but only just visible owing to exaggerated left deviation commencing in the vomer near the choanæ where the bone was deeply indented, and involving the ethmoid plate and triangular cartilage, the latter chiefly in the region of the middle meatus. This case, therefore, was beset with unusual difficulties, and not yet quite out of hand. After polypus removal and curettement in the right fossa, Moure's operation was done, enabling a number of polypi to be snared from the left fossa, into which they had quickly descended on removal of the splint. Subsequent tumefaction of the so-called tubercle required a shaving to be taken off, and the raw surface had not yet healed. The breath-way through the left side had been freely restored, but the fossæ did not present by any means their final appearance. At this stage a fissure was discernible along the maxillary crest, and was likely to remain. Dr. Pegler had not hitherto met with this residuum in a "Moure," but the extent of the deflection rendered it apparently inevitable.

CASE 2.—G. A—, a youth with marked cartilaginous deflection to the left. He had a lisping impediment and high-arched palate. After rectification of the septum, right anterior turbinotomy had been done, and an ample breath-way on either side was the result.

CASE 3.—S. C—, who would be recognised as the Scotsman in the group, an old patient, who six years ago had had anterior turbinotomy performed, and now turned up again dissatisfied with his nasal condition. The fossæ were of an exceedingly narrow type and had always given difficulty, but the patient was importunate. Moure's operation left really little to be desired in the case, but a bony exostosis had been brought into view far back in the right fossa which still remained to be dealt with.

CASE 4.—H. G—. Long antero-posterior deflection to the left. Numerous polypi removed from right fossa and spur sawn from stenosed left fossa last autumn. Found still attending amongst the old patients in March last complaining of left-sided obstruction. Moure's operation done. Patient returned to work in a week; septum now quite level both sides and free breathing.

CASE 5.—W. P—. Strong deflection to the left. As in Case 2, after Moure's operation the encroachment upon the neighbouring fossa required something more. A shaving taken from the triangular cartilage anteriorly to the deflection gave excellent ultimate result.

Mr. WAGGETT said, with regard to Moure's operation, that a great advantage it possessed was the rapidity with which it could be done, *i. e.* 60 seconds under nitrous oxide anæsthesia. The results here spoke for themselves as being good. Moure's was a scientifically conceived operation, and the splints which had to be used for from five to eight days did not infringe on any raw surface, the cuts being placed above and below the area afterwards covered by the splint.

Dr. GRANT said he was in complete accord with regard to Mr. Waggett's remarks upon Moure's operation. He had made a simplification in it which he had put into practice in one or two cases. In the first place, Moure's operation was entirely for those cases in which the deflection was in the cartilage. This could be obliterated for the moment by putting a needle in from the concave side and taking it out through the convex side, straightening the septum, and then bringing the needle out again to the original side behind the concavity. After this Moure's incisions could be made. The whole operation could thus be very quickly performed. One of his cases developed scarlet fever within two days after the operation, and he had to pull out the needle. In that case a small perforation remained in the

septum, but in no others had perforation occurred. He thought this method was well worthy of consideration, especially in the typical cases of deflection of the cartilaginous septum.

Mr. BABER thought these results very satisfactory on the whole. As regards the question of the needle, he remembered thirteen or fourteen years ago operating on several cases by making an incision through the cartilage above and below, pushing it across and retaining it in position by means of a steel pin passed through it on the previously concave side. The head of the pin rested in the vestibule and the point on the septum behind the deflection. If kept *in situ* long enough the pin retained the cartilage in position. It might be worth while trying this method after the use of Dr. Pegler's shears.

Dr. LACK said he was pleased to hear Mr. Waggett's remarks, because he thought some member ought to enter a strong protest. The majority of cases of deflected septum could be quite satisfactorily treated by a small short operation involving no very great risk, and he doubted very much whether operations requiring two to three hours' anæsthesia were really justifiable.

Dr. SMURTHWAITE said with regard to the two operations that one ought to select one's cases. He would not think of doing a long operation on a nervous patient under local anæsthesia. If there was plenty of room on the opposite side one could do Moure's operation. On the other hand, if the lumen of the opposite nostril was inclined to be narrow, then he would advise submucous resection.

Dr. SCANES SPICER suggested *the* paramount necessity of having a thoroughly reliable anæsthetist.

Dr. HERBERT TILLEY could thoroughly endorse the remarks made by Dr. Pegler with reference to the obstruction caused by over-correction of a deviated septum. For a long while past he (the speaker) had made a rule always to commence the operation for deflected septum by removal of the anterior half of the inferior turbinal on the free side, otherwise this side invariably became the obstructed side after the septal deviation was corrected.

Dr. PEGLER, in reply, thanked the Society for the interest exhibited in his cases. Touching Dr. Grant's and Mr. Cresswell Baber's observations upon the pinning of the convexity as an aid, he had no doubt of its value in their hands, but he had never had occasion to try it. He had, however, long advocated anterior turbinotomy as a frequently indispensable adjunct, and the cases he was then showing exemplified the fact. The time taken up was infinitesimal in comparison with submucous resection methods. A week ago he completed a Moure operation in a minute or two under cocaine, as one of his friends now present would testify; the patient was leaving hospital quite healed that day.

1. ULCERATION OF EPIGLOTTIS AND VOCAL CORD IN A BOY OF 12.

Shown by Dr. KELSON. A boy æt. 12, who for eight months had suffered from hoarseness; both vocal cord and the epiglottis

were ulcerated. There were no signs of hereditary syphilis. There was a family history of phthisis, but no changes were to be found in the boy's lungs, nor tubercule bacilli in his sputa. The disease was thought to be lupus.

2. PAROTID SWELLING IN A BOY \AA T. 14.

Shown by Dr. KELSON. A boy suffering from a soft semi-fluctuating swelling in the right parotid region. Said to have existed for two years: it is not tender or painful, and is slowly increasing in size.

Mr. VINRACE suggested the possibility of this being a lipoma or mucous cyst, and pointed out that its clinical characters were not in harmony with parotid gland tissue.

The PRESIDENT said views of members as to the diagnosis were desired. He thought it arose in a fetal relic of the branchial cleft in that position. He had seen such a tumour in front of the ear and it was translucent. He himself did not think it was an obstruction of the parotid duct from the fact that there was no history of any alteration in size during meals.

Mr. DE SANTI came to the conclusion that this condition was connected with some fetal remains, *i. e.* a branchial cleft, and had been present much longer than the patient was evidently aware of. He did not share the opinion of some that it was a fatty tumour; the skin was not adherent at all, it was too soft and not lobulated.

LINEAR PERFORATION OF LEFT VOCAL CORD.

Shown by Dr. H. J. DAVIS. This woman, \AA t. 39, has swollen granular cords, and there are physical signs of consolidation in the right apex; hoarseness has persisted nine months. There is a small nodule on the left cord, and during phonation an elliptical opening is momentarily visible in the middle third of the cord. The perforation is in the cord, and it is not, I think, the result of any previous ulceration.

Sir FELIX SEMON thought this laryngeal appearance a very unusual one, and had not seen anything like it before. It was not easy to see the slit, but it could be noticed at occasional moments when the patient phonated. Once he had a distinct glimpse of it. He had no

opinion to offer as to its nature, and its pathology was very difficult to understand. He had certainly not met with any tubercular ulceration leaving a slit such as this behind.

The PRESIDENT said that he understood that there were signs of tuberculosis in the right chest. The margins of the slit were so parallel to one another that the opening resembled a congenital defect.

Dr. DONELAN said he remembered seeing a case under the care of the late Sir Morell Mackenzie in which a vocal cord had a longitudinal slit separating a thin slip on the inner edge of the cord. It was thought to be congenital.

WOMAN WITH CHRONIC COUGH.

Shown by Dr. DAVIS. This woman, *æt.* 40, has been attending various hospitals for a chronic and persistent cough for eight years. She came to the medical out-patient department at the West London Hospital and asked "for some cough mixture, though it never did her any good." There were no physical signs in the chest, but the uvula is elongated, and the pharyngeal mucous membrane shows atrophy to an extreme degree, and the pallor of the atrophied parts is accentuated by the presence of two vertical bands of red, hypertrophied mucous membrane, extending downwards. The appearance at first suggests healed ulceration, but the condition is, I think, that of atrophic pharyngitis only. Both turbinates are enlarged, and there is nasal obstruction. The patient does not complain of any throat symptoms, and she has never had any trouble with her throat to her knowledge; she has had two miscarriages, and five children healthy.

Dr. FITZGERALD POWELL thought there was not much doubt about this being a case of specific ulceration of the posterior wall. There was present undoubted cicatricial tissue and granulations which were in all probability syphilitic. One could make out the "puckering" of the cicatricial tissue when she retched quite plainly, and the granulations caused the cough.

Dr. BRADY asked whether the aural reflex might not be the cause of the cough. There was chronic middle-ear suppuration on both sides and a hard accumulation in the left ear. He had often noticed in these cases that the cough arose from such a cause. The patient had a very elongated uvula, but as she was not supplied with a mirror, he had not examined the naso-pharynx.

Mr. ATWOOD THORNE asked if the case could be shown again. Both nostrils were blocked and there was nasal discharge. In his opinion it was simply a case of atrophic pharyngitis due to discharge from the nose, not a case of ozæna.

Dr. SMURTHWAITE said both nostrils seemed to be blocked, and the patient during the night was probably a mouth-breather; if the nose were treated, he thought the pharyngitis would gradually disappear.

Sir FELIX SEMON endorsed the opinion given by Dr. Powell on the condition of the pharynx. He did not examine the nose because Dr. Davis told him the point of interest in the case was the pharynx only. He had no doubt of there having been a broken-down gumma on the posterior wall of the pharynx, and they were now seeing the results of it.

Dr. PEGLER said there was an obstetric history of some importance—the woman was married and had six children; the eldest was dead, and she had had two miscarriages. He thought it a case of tertiary syphilis.

Dr. DAVIS said at first the appearance struck him as that of an old healed ulcer, but he thought the two bands were too symmetrical. The patient never had a sore throat or complained of her throat, and it was impossible that so great a surface of ulceration could have existed without the patient being aware of it. The cough had persisted about eight years and nothing had ever done it any good. On looking at the nose, there was hypertrophy of both turbinals, and simple chronic pharyngitis had resulted, which gradually became atrophic, and the resulting condition was now to be seen. There was in his opinion nothing in the atrophic condition which could not be due to extreme atrophy of the mucous membrane. Many suggestions had been made with regard to the treatment—he did not think it could be cured with iodide of potassium.

GLOBULAR SWELLING OF RIGHT SIDE OF LARYNX IN A MAN ÆT. 29.
FOR DIAGNOSIS.

Shown by Dr. DAVIS. The patient was shown at this Society last April, 1903, and notes of the case and the discussion thereon were printed in the 'Proceedings' of that date.

The tumour is certainly a little larger, and it now gives rise to some dysphagia, and for seven years the patient has been hoarse. There are no other symptoms. As the patient had some physical signs in the chest, and there was a tubercular family history, the exhibitor was inclined at first to think the condition tuberculous, but it is evidently not this nor sarcomatous (which was the opinion shared by several members), as the condition of the larynx is practically unchanged. He was now in-

clined to think the tumour was an adeno-fibroma, which he believed was the opinion expressed by Mr. Waggett last year. It is too soft for an enchondroma and too vascular, as members will remember that when the growth was punctured with a rectangular palate-needle hæmorrhage was profuse. The patient has not been attending the hospital for twelve months.

The opinion of members at the first meeting was against any operative interference.

Mr. SYMONDS said not only was the diagnosis important, but suggestions for treatment were required. Was it getting larger, and was there greater difficulty in speaking?

Sir FELIX SEMON reminded the Society that he had shown a similar case, which had been reproduced with an illustration in the 'Proceedings,' and opinions on which had diverged extremely at the time. It had remained *in statu quo*, and the patient had been unwilling to have any operation. When reading the latest edition of Paul Bruns' 'Surgery of the Larynx,' he came across an absolutely analogous case. The author performed an external operation; the whole thing shelled out, and was found to be fibro-myolipoma. Considering that the outlines of the larynx in this man were so well preserved, although much thickened, he thought it was likely to be something of the same kind.

Dr. LACK had seen a very similar case under the care of one of his colleagues. Thyrotomy was performed, and the tumour turned out to be a fibroma. He thought this was a simple tumour, whatever its exact nature might be.

Dr. FITZGERALD POWELL would not offer an opinion as to the character of this growth, but evidently it was benign. He could not understand the reason for keeping such growths *in situ*, and not removing them by operation before they began to cause trouble by their size and pressure. He remembered the case shown by Sir Felix Semon in which the growth was somewhat similarly situated, and on pressure caused severe retching. He wondered then why he had not removed it, though Sir Felix explained that the patient was very nervous and that the growth was doing no harm, and he did not think it advisable to remove it. He certainly thought in Dr. Davis's case that a thyrotomy should be performed, when the growth would be found to shell out easily.

Mr. SYMONDS remarked that the Society seemed agreed that this was an encapsuled growth, and as to its exact nature there was room for doubt. What was the best way of attacking it? He thought a sub-hyoid laryngotomy would do less damage and be quite sufficient to enable one to obtain full access.

Mr. WAGGETT said its situation was such that it would be readily got out by thyrotomy. It was an operation of very slight consequence, and he would suggest its performance in this case.

Dr. DAVIS said it had become a little larger than formerly. There was no trouble beyond aphonia and hoarseness, and inconvenience in

swallowing. The man did not come up for treatment, and so far he was perfectly safe, though the breathing might at any time be seriously interfered with if it became larger. As regarded his opinion on its nature, first of all he thought it a case of phthisis, as there were physical signs of consolidation, but for the past year there had been no change at all in this condition. He was inclined to think it was what Mr. Waggett suggested, a simple adenomatous tumour. It was hard in parts and soft in others. It was impossible to remove a piece because the swelling was so round that no forceps would get hold of the tissue.

ANGIOMA OF LEFT MAXILLARY ANTRUM.

Shown by Dr. ADOLPH BRONNER. Woman *æt.* 60 complained of left nasal obstruction for two or three weeks and occasional slight hæmorrhage. A grey irregular mass occluded the left nostril. On partial removal there was severe hæmorrhage. Growth is soft, and through it a bent probe can be passed into the antrum. Has every appearance of a malignant growth.

Report of Clinical Research Association.

“The substance of this tumour is so thickly permeated with capillary vessels that it may be called an angioma. The vessels are very thin-walled, and are embedded in myxomatous tissue like that of a gelatinous nasal polypus. On the surface of the growth there is a thick coating of granular exudation.”

Mr. SYMONDS asked whether the case was still under treatment or whether it was proposed to undertake any larger operation.

Dr. BRONNER said he intended to open up the antrum, scrape it, and remove the growth.

CASE OF SOFT VASCULAR GROWTH (“BLEEDING POLYPUS”) ATTACHED TO CARTILAGINOUS SEPTUM NASI IN A WOMAN *ÆT.* 38; RECURRENCE SIX WEEKS AFTER REMOVAL (SECTION OF GROWTH).

Shown by Dr. SCANES SPICER. Dr. Scanes Spicer was informed there had been recurrent epistaxis for seven months, starting whenever the nose was touched. Patient had been told she had a polypus, and it was removed in the provinces about six weeks

ago. Symptoms recurred, and the mass became larger than ever; it is now the size and shape of a large frock-coat button, and almost entirely obstructs the left nostril. Surface lobulated and bright red; suggests a raspberry. Sessile, but with a very limited attachment to septal cartilage about its centre. Small portion cut off for histological examination. Very free bleeding; stopped with cotton-wool plug and pressure.

Prof. Wright and Dr. John Broadbent report the growth to belong to the malignant group, and that the histological structure shows angeiomatous, sarcomatous, and fibromatous tissue.

The treatment proposed is free excision, curettement of site of attachment, and galvano-cautery after freely applying a wad of adrenalin and cocaine.

Dr. GRANT recommended a further removal and scraping followed by galvano-cauterization of the base of the growth. This procedure was very successful in many cases. It certainly was in the case of a patient whom he treated and saw a number of years ago along with a distinguished member of the Society. In this the pathologists had reported the presence of sarcomatous elements, but the treatment adopted resulted in complete absence from recurrence.

Dr. PEGLER said that in spite of the sarcoma-like appearance under the microscope of some cells, he thought they might safely banish the idea of malignancy even of a low grade from their minds. In his opinion it was a fibro-angioma of the septum. He should feel glad if Dr. Spicer would refer a slide to the Morbid Growths Committee.

Dr. SCANES SPICER said he was going to remove the growth again, scrape the base and apply the galvano-cautery.

SPECIMEN OF GROWTHS (WITH MICROSCOPIC SLIDES) FROM A CASE OF
CHRONIC ANTRAL AND ETHMOIDAL DISEASE. FOR DIAGNOSIS.

Shown by Dr. SCANES SPICER. Dr. Scanes Spicer removed these growths from a woman *æt.* 50. She had suffered for many years from chronic nasal obstruction with recurrent bouts of acute head colds, profuse watery rhinorrhœa, and sometimes purulent discharge. These attacks were attended with severe headaches, which prostrated her for days together. In general condition she was thin, anæmic, and highly sensitive—in fact, worn out by her recurrent attacks.

In September, 1903, after a rather longer attack than usual,

she was found to have a marked swelling of the cheek, due to an expansion of the bone over the right maxillary sinus. The right middle turbinated body was represented by a large, thick, fleshy mass filling the upper part of the nose, and between which and the outer wall bright yellow gummy fluid and opaque pus escaped. Transillumination showed blackness over antral region of right cheek, as compared with unusual translucency elsewhere, including frontal sinus region on both sides. Removal of the diseased middle turbinated mass, exploration of antrum, removal of any disease found there, and free drainage into nose were recommended. This was consented to. The antrum and ethmoidal cells were crowded with masses like ordinary polypi. These were evidently under pressure, as they sprung outwards when the middle turbinated ledge was removed and when the antrum was opened. Besides the polypi were large flakes and plugs of putty-like semi-solid matter resembling that seen in cholesteatoma, and other hard, solid yellow masses like pieces of dry gum arabic; also masses of curdy granular pus. The ethmoidal and antral masses seemed identical in character and continuous. At the time of operation the *débris* and gummy masses completely filled a 1-oz. stoppered bottle, and the polypi (of which over eighty were counted) more than filled another. Recovery was uneventful and satisfactory, and was followed by subsidence of all the symptoms and distress.

In April, seven months later, her medical adviser reported that though she had had a severe catarrh, none of the antral symptoms nor general distress had recurred, and that she had no symptoms of antral disease at all; but the patient is in the tropics, and personal rhinoscopic examination had not been made by him (Dr. Scanes Spicer).

Clinically the case, though a very severe and long-standing one, can hardly be said to have any extraordinary features; but the point of interest is—what is the nature of these tumours? The expert report says sarcoma-endothelioma. Clinical experience shows that in many of the growths removed in these chronic antral cases the histological report suggests a treatment and prognosis utterly at variance with the future clinical history. Opinions are solicited as to what weight is to be attributed to the microscopical appearances in this case.

The growth is largely made up of a fibrinous network, embedded in which are rounded cells with one or more nuclei. Some of these cells occupy separate spaces, others lie in extensive clusters and become polygonal in outline from mutual pressure. Islands of inflamed fibro-periosteum are seen studded with cells, rounded and elongated in shape, and much smaller than the clusters above described. No vessels can be seen in this growth, either embryonic or fully formed. In many places the tissue resembles œdematous granulations, but the large cells with prominent nuclei are too big to be regarded as leucocytes, and we are inclined to regard them as sarcomatous in origin.

A further section of several pieces of growth confirms the diagnosis of neoplasm, and we are inclined to regard the cells composing it as belonging to the type of sarcoma now called endothelioma.

Mr. WAGGETT said the microscopic appearance was very interesting, and he thought the Morbid Growths Committee should ask for the slide.

Dr. SPICER said he was perfectly willing to present the Morbid Growths Committee with the two slides.

SPECIMEN AND MICROSCOPIC SLIDE FROM A CASE OF EPITHELIOMA OF SOFT PALATE.

Shown by Dr. SCANES SPICER. Man, æt. 84. Free excision; recovery; freedom from recurrence and perfect comfort for three months; later recurrence in side wall of pharynx and cervical glands.

The growth is an epithelioma which started on the oval aspect of the soft palate. There are numerous cell-nests and much round-celled infiltration in the neighbourhood of the ingrowing processes. The naso-pharyngeal surface shows much leucocytic infiltration deep to the columnar epithelium, and in this there are one or two cystic spaces lined by proliferating columnar epithelium, and the cells here have in a few places destroyed the integrity of their basement membrane and appear ready to proliferate in a centrifugal manner.

The tiny fragment to be specially reported upon is made up

largely of muscle, fibrous tissue, and mucous glands. The surface epithelium is columnar, and deep to it is a broad layer of infiltrated submucosa, but there are no cancer cells in this tissue. But lying free from it there is a mass of malignant epithelial cells.

INFILTRATION OF LEFT ARYTENOID REGION.

Shown by Dr. FURNISS POTTER. The patient was a man *æt.* 62, with a history of syphilis contracted forty years ago, and with cicatrices on the palate and pharynx. When seen in March last a large swelling was observed in the left arytenoid region extending to the aryepiglottic fold, which obscured the posterior part of the left cord, and considerably hampered its movement. There was some difficulty in swallowing, but no pain, and no enlarged glands were detectable. The patient stated that his throat had begun to trouble him in September last. He had been taking iodide of potassium and perchloride of mercury for some weeks previous to being seen by exhibitor. On April 7th, owing to a sudden increase in the laryngeal swelling, the breathing became embarrassed to such an extent that tracheotomy was performed. The swelling, which rapidly subsided—the tube being removed on the ninth day after insertion—was obviously an attack of acute *œdema*: the urine examined from time to time showed small quantities of albumen. The chronic swelling in the arytenoid region remained unaltered. The question was, was this to be regarded as a syphilitic lesion? Anti-syphilitic treatment had had no appreciable effect, and since the attack of *œdema* had not been resumed. The case was shown in the hope of obtaining the opinion of members as to the nature of the infiltration.

Dr. GRANT said the question of the ill-effects of iodide of potassium had been raised in this case. The man seemed to think he was gradually getting better. That would support the idea that it was specific rather than malignant, if there was any suspicion of that sort.

Dr. POTTER said the man had had a long course of iodide of potassium and perchloride of mercury, and had been under observation for a considerable time. He did not think there was any diminution in the size of the infiltration. In view also of the chronic

albuminuria from which the man suffered, and owing to the fact that he had had an attack of acute œdema of the larynx necessitating tracheotomy, he hesitated to resume the administration of anti-syphilitic remedies.

CASE OF EXTENSIVE LUPUS OF THE NOSE (CURED), PALATE, PHARYNX,
AND EPIGLOTTIS.

Shown by Dr. HERBERT TILLEY. The patient, a female æt. 54, was shown in order to elicit the opinion of members of the Society as to how far any local treatment was advisable.

The patient was referred to him a month ago by Dr. Radcliffe Crocker with a view to improving the throat condition by operative interference, but since that time the patient had been in the country and her general and local condition had much improved. In particular the breathing was quite comfortable, whereas a month ago it was a question whether a laryngotomy would not be advisable because of the difficulty of inspiration.

Mr. SYMONDS raised the question whether this was lupus; it was scarcely so hard, lumpy, and cicatricial-looking as ordinary cases of lupus. From the point of view of open-air treatment, tubercular cases were rather more hopeful than the ordinary lupus cases. This case had altered in character and seemed improving.

Dr. THOMSON suggested the great advantage of the galvano-cautery in these cases. He had several cases of lupus of the palate, pharynx, and larynx under observation, and he was very much struck by the way in which they were healing up under the galvano-cautery. He had two cases in hand at the present time, which he purposed showing to the Society, as he possessed drawings of what their condition was before treatment three or four years ago. They were now completely healed.

Sir FELIX SEMON had no doubt as to the case being one of lupus, not only on account of the appearances on the mucous membranes, but also because the external manifestations had been present for years. When he saw the case some weeks ago, the changes in the pharynx and larynx were absolutely characteristic. The patient was now better than when he had seen her. Such temporary improvements were in his experience not very uncommon in lupus. As regards the use of the galvano-cautery in such cases, he wished to mention that one might get very good results indeed. He had shown many years ago the case of a woman to the Clinical Society in whom there was more extensive lupus of the larynx than in this man, and which was ultimately quite cured by means of the galvano-cautery. However, one required an enormous amount of patience in treating these cases, as no doubt Dr. Thomson would duly experience. When one thought one had effected

a cure, one would have to begin again owing to recurrence. Personally in this case of his own he would have given up treatment if the patient, who had more confidence in it than he himself had, had not begged him to continue. The ultimate result justified the continuance, for the larynx was got into a condition which he would not have believed possible when he began treatment. He met the patient fifteen years afterwards at the seaside, and her voice was better than at the time of his demonstrating the case before the Clinical Society. Therefore, if one was prepared to spend the necessary amount of time, encouragement could be held out to treatment by the galvano-cautery.

Dr. HERBERT TILLEY thanked members for their suggestions, and hoped it might be possible to carry them out; the chief difficulty would be the length of time necessary to produce much effect with the galvano-cautery.

PARTIAL PARESIS OF SOFT PALATE; PARALYSIS OF LEFT CORD.

Shown by Dr. DAVIS. This patient is a cabman, æt. 48, and he has been for fifteen years in the United States Mercantile Marine.

He complains of headache, regurgitation of fluids through the nose, general weakness and wasting of the muscles of the right arm, slight cough and hoarseness.

There is complete fixation of the left cord in the middle line, but the voice is not appreciably altered—it is husky and high-pitched, and this he has noticed for six months only. The pupils are unequal, and the knee-jerks exaggerated. The face is somewhat expressionless and the patient a little confused. The pulses are unequal, the left being retarded, but there are no physical signs of aneurysm or any mediastinal growth (the patient has not been examined by the X-rays), and the heart beats are very feeble.

The patient has been a man of fine physique, but he has wasted considerably, and he walks with the body bent forward. I think the case is specific, though the patient is no better under treatment, but the nature and site of the lesion is at present obscure. I should be glad to have the opinion of members on the case.

Patient writes of himself:—"I am very undecided and absent-minded, and at times when I am reading I read the lines of

reading over and over again and fail to understand what I am reading about, especially at the spring and fall of the leaf. I am given to dropping small things, especially bread and butter, when I sit down to eat my food. My finger nails are always breaking short, and I am getting weaker. I have violent pains in the head, and I am exhausted on the least exertion, and I have palpitations of the heart."

The handwriting of the patient is firm and decided, and there are no tremors of the hands.

Dr. HALL said from an examination just carried out hurriedly there was a difference in the pupils and in the pulse. Before excluding aneurysm a careful examination of the chest should be made, and also with the screen. That would not account for the other manifestation, but so far as the vocal cord was concerned he understood Dr. Davis to say he had not made a final diagnosis, but suspected aneurysm.

Mr. SYMONDS said one point had specially interested him, and that was the difference in the voice in these cases of paralysis from pressure in aneurysm and in paralysis from malignant disease of the cesophagus. He had often noticed a very striking difference in the voice, which was high-pitched.

Dr. GRANT said the man complained of headache and some affection of the palate, which did not act well. Liquids came back through the nose. This paresis might be a manifestation of, or produced by, some syphilitic lesion in the cranium. In his opinion, the indications of a correct diagnosis pointed to that direction rather than to the chest.

Dr. DAVIS said that it was unfortunate that his other case of a man with pulsating aneurysm and fixation of the left cord did not turn up for comparison. In the man with aneurysm the voice was extremely hoarse and loud and gruff, but this man, who had the same amount of paralysis precisely, talked perfectly well except for his high-pitched voice. The healthy cord seemed to move across in both cases, but in this man one would not think at first of looking at the cords. He examined the chest very carefully and thought there was no aneurysm; the heart was not enlarged or hypertrophied, though the pupils and pulses were asymmetrical. There was nothing else to lead one to think of aneurysm. He suffered from paresis of the palate, and fluids came back through the nose. In addition, there was weakness down the right side and wasting of the muscles of the arm. It is possible that he might have an aneurysm as well as other trouble—he could not make a diagnosis himself.

TUMOUR OF PALATE IN A WOMAN ÆT. 34.

Shown by Dr. DONELAN. The patient had suffered from carious teeth, especially at the right side of upper jaw, and appeared to have had attacks of antral inflammation, the right antrum being darker on transillumination than the left. There was no nasal discharge, and but little obstruction. The tumour was noticed first about fourteen months ago by Dr. Lavery, of Swindon; he punctured it under cocaine anæsthesia, but no fluid came away. The puncture was made near the middle line, as the tumour then extended over the raphé to the left side. At present it is a rounded flat growth occupying the greater part of the right side of the velum and extending for about half an inch over the hard palate. The exhibitor desired opinions as to the probable nature of the growth and the treatment.

Mr. ATWOOD THORNE thought this a chronic abscess—it seemed to fluctuate quite easily on exertion—in his opinion it was due to carious teeth.

Mr. PAGET said that this tumour probably was encapsuled, and could easily be shelled out. It was a curious fact about tumours of the palate that they could get to a very considerable size without being noticed. One could not go about with an abscess in the palate and not notice it for fifteen months. He thought it would be found under the microscope a very mixed-cell growth, like the tumours of the parotid region, composed of mixed tissue recalling the involution theory of new growths. With a finger behind the soft palate and a raspatory probably it could be easily shelled out and would never recur.

Dr. GRANT said no doubt many of them had read a very interesting paper by Mr. Paget on the subject of growths in the palate. He had seen two growths of the mixed nature referred to by Mr. Paget, but they were further back and rather in the substance of the soft palate. This was a suspicious-looking growth, and its vascularity rather suggested it might be of the nature of a sarcoma.

Dr. FITZGERALD POWELL thought obscure fluctuation could be made out. He thought it might be an abscess. He would suggest Dr. Donelan putting a needle into it—he understood from him that he had not yet done so. Probably an experimental puncture would solve the question.

Mr. DE SANTI said he had elicited from the patient the fact that an exploratory puncture had been made with negative results. He was of the opinion of Dr. Paget that the swelling was a tumour of a mixed character and could easily be removed.

Dr. DONELAN said he had found on further inquiry that the growth had been punctured by Dr. Lavery, of Swindon, under cocaine, and that no fluid came, but that the growth had become smaller near the site of the puncture. He intended to follow the course suggested by Mr. Paget, and hoped to communicate the result to the Society.

Mr. SYMONDS asked if it involved the posterior wall.

Dr. DONELAN said the case was not under his care, and he had seen it only once, a week ago. He understood then that no puncture had been made, and that the tumour was considered to be a sarcoma. As he did not feel justified in immediately undertaking any operation he referred the case to the Society. On posterior rhinoscopy a corresponding swelling could be observed.

PARALYSIS OF THE LEFT VOCAL CORD IN A MAN ÆT. 67.

Shown by Mr. DE SANTI. Mr. de Santi showed a man æt. 67, with paralysis of the left vocal cord. He had been seen by him for the first time the day before, and was found to complain of hoarseness and dysphagia of five weeks' duration. He had also lost much in weight.

On examination the left vocal cord was found to be paralysed, but otherwise the larynx was normal. No glands or tumour were to be felt in the neck, and the diagnosis seemed to rest between aneurysm of the aorta and malignant disease of the œsophagus. Until the patient had been radiographed Mr. de Santi did not intend to pass an œsophagal bougie. Examination of the chest by one of his colleagues had been negative.

Dr. HALL said Mr. de Santi had promised to send the patient to him under his care at the Westminster Hospital. He would examine him with the aid of the X-rays, and report later on. The radial pulses were unequal.

Examination of this patient by means of the X-rays subsequent to the meeting revealed well-marked dilatation of the transverse and descending arch of the aorta.

CASE OF BILATERAL HÆMATOMA OF SEPTUM NASI.

Shown by Mr. DE SANTI. The patient, a child æt. 6, had a severe fall on the nose a week or ten days before being seen by Mr. de Santi. On examination some external swelling and

tenderness of the nose was felt, and both anterior nares were found blocked with bright red swellings, evidently connected with the septum. The case had been seen by Mr. de Santi the day before the meeting, and would have been treated by incision of the swellings, but he thought the members of the Society might be interested to see the case, and so had decided to defer incision until after the meeting.

Dr. GRANT said suppuration was already taking place, and advised this should be opened with as little delay as possible. The pain in the swelling had considerably increased within the last few days. It was over a fortnight since the accident happened. The sudden change he considered due to suppuration. The patient's health was rather disturbed, and the enlarged gland under the maxilla might suppurate.

Subsequent to the meeting the hæmatoma was incised: there was no pus evacuated, only sanious non-purulent fluid.

CASE OF POST-PHARYNGEAL SWELLING.

Shown by Dr. BENNETT. A. W—, æt. 19, maker of brass instruments, was seen first in January, 1904, on account of obstructed nasal respiration. The difficulty of breathing through the nose had been coming on gradually for more than six months, but there had been no other symptom. The posterior wall of the pharynx, especially on the right side, was pushed forward, so that the passage into the naso-pharynx was largely obstructed. The swelling was punctured and pus escaped, though not in large amount. The tissues cut seemed crisp, suggesting the presence of enlarged glands only partially broken down. The progress was slow, but gradually, after several weeks, the swelling materially lessened in size. Very little discharge escaped, and the patient was not seen for four weeks. On May 4th, on examination of the larynx, it was found that there was a considerable swelling of the pharynx at the level of the larynx, especially on the right side, and extending also to the tissues of the larynx externally. There seemed also to be some swelling of the interior of the larynx, but it was difficult to obtain a clear view of this. Most probably the trouble is due to the slow breaking down of tubercular glands, with possibly

some tubercular infiltration of the larynx itself. The general health is excellent, and examination of the lungs has not revealed any signs of tubercle.

Dr. GRANT thought this one of the most interesting cases brought to their notice, and he hoped members would give their views with freedom about it, late though the hour was. Speaking offhand, he was inclined to think of sarcoma. There seemed to be very considerable infiltration round the larynx, and with the aid of a rhinoscopic mirror one could see a large amount of red fleshy-looking tissue. There was, in his opinion, impaired mobility of the right vocal cord, which opinion he would like to hear corroborated. He thought it an infiltrating malignant growth.

Dr. HERBERT TILLEY thought the swelling was of the nature of a chronic abscess, and possibly due to suppuration in a deep cervical gland, and may be of tubercular origin. He thought that it could only be thoroughly dealt with by an external operation, the incision being made behind the sterno-mastoid muscle, and the abscess being approached behind the sheath of the large vessels (Chiene's operation).

Sir FELIX SEMON said he saw the right vocal cord move. Dr. Bennett had asked him to examine the patient, but he was not prepared to say what the swelling on the posterior wall of the pharynx was. It extended to the right side of the larynx, and was particularly visible near the vocal process of the right arytenoid cartilage, but behind that swelling the right cord moved distinctly.

He was not inclined to view this as a new growth, and he suggested that Dr. Bennett should have a swab taken and examined both microscopically and bacteriologically. The idea in his mind was that there was some infection there which had caused the swelling rather than a new growth. Until a swab was taken he would not recommend the heroic procedure advised by Dr. Tilley.

Mr. SYMONDS said he had seen three conditions like this in grown persons. One was a case of gumma which went away entirely, the second proved to be tuberculous, and the third was in a young woman which protruded forward. They opened it, and got down ultimately on the spine—probably a case of spinal disease. He did not think this fluctuated, and there was accordingly no necessity for external operation. He was inclined to consider it a form of tubercular infiltration rather than anything else. In the middle line there was an aperture in which was some pus. The appearance suggested a granuloma to him.

Dr. FITZGERALD POWELL said he was inclined to agree with the opinion expressed by Dr. Tilley. He thought the case was one of "post-pharyngeal abscess," which had been partially evacuated. He noticed a wound at the upper part of the inflammatory swelling, and understood it had been opened by Dr. Bennett.

Dr. BENNETT: After incision of the swelling, ten weeks ago, little discharge escaped. However, it gradually subsided to its present con-

dition, and the patient was not seen for some weeks. Two days ago the swelling was found to extend down to the level of the larynx, and there seemed to be a slight degree of infiltration of the laryngeal tissues. He thanked members for the suggestions as to treatment, which he would carry out, and he would report on the case at a later date.

PROCEEDINGS
OF THE
LARYNGOLOGICAL SOCIETY OF LONDON.

NINETY-FIRST ORDINARY MEETING, *June 3rd*, 1904.

P. McBRIDE, M.D., F.R.C.P., President, in the Chair.

E. FURNISS POTTER, M.D., } Secretaries.
P. DE SANTI, F.R.C.S., }

Present—28 members and 2 visitors.

The minutes of the preceding meeting were read and confirmed.

The ballot was taken for the following gentlemen, who were elected members of the Society.

Whitehead Arthur Longley, M.B., B.S.Lond., 31, Park Square, Leeds.

Siegmund Moritz, M.D.Würzburg, M.R.C.P.Lond., 26, King Street, Manchester.

Laurie Hugh McGavin, F.R.C.S., 6, Mansfield Street, W.

Edwin Arthur Peters, M.D.Cantab., F.R.C.S., 52, Wimpole Street, W.

William Lloyd, F.R.C.S.E., 63, Wimpole Street, W.

H. Clayton Fox, F.R.C.S.I., 6, Devonshire Street, W.

Harold Shuttleworth Barwell, M.B.Lond., F.R.C.S., 55, Wimpole Street, W.

Maurice E. Ling, M.D.Durb., 115, Harley Street, W.

The following cases and specimens were shown :

COMPLETE SUBMUCOUS RESECTION OF SPUR AND DEVIATION OF
SEPTUM.

Shown by Dr. STCLAIR THOMSON. The patient was a gentleman aged 26 who complained of many of the symptoms of nasal

obstruction. He had previously had his adenoids removed at the age of sixteen, and had consulted two leading laryngologists for his nasal stenosis. They had informed him, after ordering nasal douches and using the galvano-cautery, that nothing more could be done for him. His left nostril was so obstructed that he had never been able to blow it, and was therefore compelled to clear it by hawking out through his mouth. The septum was so deviated to the left side that even after the use of cocaine and adrenalin the middle turbinal remained invisible. On this deviation was a long, low horizontal spur pressing into the inferior turbinal so deeply that it was impossible to say whether there might not be an adhesion.

Submucous resection was performed. The spur was found to run far back, and the stenosis was not overcome until the vomer was reached and, in part, clipped away. The right maxillary nasal process, which was prominent, was found difficult of removal. In separating the mucous membrane from the concavity (*i. e.* on the right side) it was found so adherent that a small button-hole was made. However, when the two muco-perichondria were placed in apposition the defect in the right one was made good by the intact condition of the left, so that no button-hole now exists. Three stitches were introduced and no plugs were used. The specimen handed round shows the spur and the fragments of deviated septum. When healing was complete the fleshy septum was found to be quite plumb in the middle line; the left middle turbinal was clearly defined; and even the pharynx on the left side was visible from the front. A fair sized polypus, with some yellow pus around it, now came into view. This was snared away. As the patient still complained of obstruction in the opposite (right) nostril, I had to remove the inferior hypertrophic margin of the inferior turbinal on that side.

It will now be seen that he has a very free air-way, and that this is best on the left—the formerly obstructed side. The explanation doubtless is that the inferior turbinal on that side is small from compression, while the right is still large from the compensatory hypertrophy it had undergone. The fleshy septum is seen to still quaver when the patient sniffs, and members can satisfy themselves with a probe that the cartilaginous and bony septum has been removed to quite far back in the nose.

Dr. PATERSON showed a guarded knife recently introduced by Professor Killian for the removal of the cartilage after the separation of the perichondrium, which considerably facilitated that part of the operation. Local anæsthesia should be employed where practicable, as it gave a better view of the parts and shortened the proceedings. This operation is applicable not only to extreme cases but, in moderate degrees of deviation, a good result may be obtained in a comparatively short sitting under local anæsthesia. He congratulated Dr. Thomson on the excellent result in his case.

Dr. SMURTHWAITE thought that the majority of these cases could be done under local anæsthesia alone, without resorting to chloroform or ether. It reduced the time of the operation. All the cases he had done, some six in number, had been performed with the patient sitting in the consulting-room chair. He first applied a 5 per cent. sol. cocaine to produce a superficial anæsthesia, then rubbed in adrenalin, and finally injected 15 to 20 minims of a 2 per cent. eucaïne β hydrochloride, which has most of the advantages of cocaine and none of its defects. After this procedure the cartilage could be removed practically painlessly, and the patient was able to leave the consulting room feeling comparatively well.

Dr. STCLAIR THOMSON, in reply, said he was very pleased to see Professor Killian's instrument, which appeared to him excellently designed for removing the exposed septum, and so making the operation shorter. As it was at present, after the fatiguing work of carefully turning back the muco-perichondrium on each side a most tedious part of the process was clipping away the deviation in fragments. The plough shown by Dr. Paterson promised to curtail this period. As to local anæsthesia he would be only too pleased to persuade patients to accept it, but unfortunately he had found that many private patients under cocaine anæsthesia were disposed to faint during septum operations—not so much from the cocaine as from the mental impression produced.

COMPLETE SUBMUCOUS RESECTION OF LARGE DEVIATION OF SEPTUM.

Shown by Dr. STCLAIR THOMSON. The patient had been prevented from coming, but the specimen of the removed septum was shown. The right nostril in this case was entirely occluded. The deviation was found to be limited to the cartilaginous septum; there was no bony spur, and consequently the operation in this case was completed in a little over an hour.

IMPAIRED MOVEMENT OF RIGHT VOCAL CORD, CHIEFLY ADDUCTOR,
IN A PROFESSIONAL SINGER AGED THIRTY-THREE.

Shown by Dr. STCLAIR THOMSON. The patient only complained of "catarrh," but his teacher had hazarded the opinion that there was something wrong with his larynx. His speaking voice is high pitched, but clear. The larynx is normal and the cords are clear, but the right one is seen to be sluggish in both closing and opening. Both movements are present, but in adduction the cord never reaches the middle line. It abducts slowly, and generally does not pass beyond the mid position, but when the patient is induced to heave a deep sigh it gets completely abducted. In prolonged phonation the left arytenoid passes very slightly in front of the right one.

The patient has never had rheumatism, lues, or severe influenza. There is nothing to explain the condition in his nose, pharynx, neck, or chest. The reflexes are normal.

He thinks he has had voice trouble all his life, as he always got easily tired, but he is certain that his singing voice is, as he says, twice as big as it was ten years ago. He finds that fatigue tells on it more than anything.

Dr. HERBERT TILLEY said he had carefully examined the case, but was bound to confess he could find nothing abnormal in the patient's larynx. Both cords seemed to possess full power of adduction.

Sir FELIX SEMON said that he confessed he could not see any paresis of the right vocal cord.

Dr. FURNISS POTTER said that he had twice examined this case very carefully, and he failed to detect any impairment of mobility in the right cord. On phonation both cords appeared to him to come into perfect apposition.

Dr. STCLAIR THOMSON, in reply, said that though no one had risen to support his views, several members who had examined the patient agreed that there was a flagging of the right cord. He had seen the patient many times, and at first he himself had failed to detect this difference, which accounted for the patient's occasional hoarseness and voice fatigue. It was slight, but he still held that there was a difference between the adduction of the cords. He did not for a moment suggest that this was due to any nerve lesion, but simply to some impairment with the mobility of the arytenoid joint.

SEQUEL TO CASE OF PEMPHIGUS OF THROAT (shown December 4th, 1903).

Mr. CRESSWELL BABER said that, thanks to Mr. George C. Searle, of Brixham, into whose care the patient passed, he was able to give some details of the subsequent course of the case.

About the middle of January bullæ of various sizes broke out on the skin. They appeared first at the lower part of the abdomen, and afterwards covered the whole integument more or less except the face. When the bullæ burst they left sores like large burns. The throat affection, which, at the onset of the pemphigus on the skin, seemed to improve subsequently, progressed *pari passu* with the latter.

Arsenic was given in large doses, but appeared to do no good; the patient also had opium. He died of exhaustion on March 13th, 1904. There was no eye affection.

Sir FELIX SEMON said he was the more interested in learning that his diagnosis of pemphigus had come true in this case, as, at the time, it had been received with some incredulity on account of the complete absence of manifestations of the disease on the skin. In his experience, however,—which, of course, was limited seeing the rarity of lesions of the mucous membrane in pemphigus—he had repeatedly found that the internal lesions preceded the cutaneous eruption. The end of Mr. Baber's patient, viz. exhaustion, was in keeping with his usual experience.

Mr. CRESSWELL BABER thanked Sir Felix Semon for his opinion on the case, which had been borne out by the subsequent history.

A CASE OF LARYNGEAL ULCERATION AND ARYTENOID SWELLING.

Shown by Dr. KELSON. A man, aged 48, who had for six months suffered from loss of voice, and for the last six weeks had been almost aphonic and spitting up a large quantity of blood-stained mucus. No tubercle bacilli were to be found. No benefit from iodides.

On examination the right arytenoid was found to be swollen and fixed, and there was a large ulcer involving the right ventricular band, ventricle, and cord.

Mr. DE SANTI considered there was but little doubt that Dr. Kelson's patient was suffering from malignant disease of the larynx. In his opinion the ultimate outlook from an operative point of view was not good.

Dr. HERBERT TILLEY thought that the appearances strongly suggested malignant ulceration. The smell of the patient's breath also possessed that curious odour which was so frequently present when epithelial structures were breaking down.

Dr. KELSON concurred in the view that it was probably malignant disease.

PAROTID TUMOUR.

(The case was shown at the previous meeting and elicited a good deal of difference of opinion.)

Shown by Dr. KELSON. The tumour on removal was found to be about the size of a bantam's egg, and, closely incorporated with the parotid gland, it consisted chiefly of cysts, fibrous tissue, and gland tissue resembling the parotid, and was very vascular.

INSTRUMENTS FOR OPENING AND INSPECTING THE ANTRUM OF HIGHMORE.

Shown by Dr. BROWN KELLY. The instruments are two trocars—one sharp, the other blunt-pointed—and several specula. The antrum is opened in the following manner:—The tissues over the canine fossa are anæsthetised by the injection of cocaine. The lower part of the facial wall of the antrum is then exposed in the usual manner. The zygomatic-alveolar ridge, which descends from the malar process to the alveolar border above the first molar, and which is easily felt, is taken as landmark, and the sharp-pointed trocar is applied to the bony surface at a spot about 5 mm. in front of the ridge, and about the same distance above the gingivo-labial fold. A passage is now bored large enough to admit the end of the blunt-pointed trocar by means of which the full-sized opening is made. By completing the operation with a blunt-pointed instrument the danger of injuring the opposite wall is averted. The advantages of using large trocars are the ease, rapidity, and precision with which the opening can be made without, as a rule, any pain.

The specula resemble large elongated ear specula with bevelled

ends. The last provision facilitates their introduction, gives a more extensive field of view, and allows of the freer manipulation of instruments in the antrum. An extra long speculum is useful when the lining membrane is œdematous, and must be pushed aside in order to see the deeper parts of the cavity.

In the manner described the antral lining membrane, excepting on the facial wall, can be minutely inspected as I have proved in a large number of subjects. In the course of my examinations I have met with some interesting conditions including œdema, general thickening, polypi, and cysts of the lining membrane.

I hoped at one time to be able to remedy diseased conditions of the antral lining membrane which did not yield to syringing by direct applications and so avoid the radical operation. A number of medicants, of which chromic acid proved the most useful, were tried with this object in view, but while improvement was almost invariably obtained complete cures were exceptional.

It is, therefore, rather as an easy means of inspecting the antrum when it is desirable to know the state of its lining membrane that I desire to recommend the procedure.

Dr. PATERSON remarked that the procedure, while useful so far as it went, would scarcely permit an inspection of the interior of the antrum sufficiently complete to enable the condition of the pre-lachrymal recess to be examined. Disease often persisted at that point, and it escaped curetting on account of its narrow lumen.

Mr. CRESSWELL BABER said that for some time past, in performing the radical operation on the maxillary antrum, after the use of a small drill, he had employed a large conical drill, which he had had made, for rapidly making a free opening in the anterior wall. This instrument was also serviceable for making a large opening from the antral cavity into the nose.

SPECIMEN (POST-MORTEM) OF LARGE MUCOUS POLYPUS *in situ*,
APPARENTLY HAVING CAUSED COMPLETE ABSORPTION OF SEPTUM
AND TURBINATED BONES.

Shown by Dr. SMURTHWAITE. This specimen he had found by chance when collecting bones of the nasal cavities from the dissecting room. The polypus as now seen was only two thirds of its size when the specimen was first mounted. It then filled

up the whole of the nasal cavity on the right side and also encroached into that of the left, the septum having practically disappeared. The turbinated bodies on the right side were also absent, and those on the left very much atrophied, showing indentation from pressure of the polypus. Whether the polypus had caused the absorption of the septum or the absence of the latter was due to an earlier specific disease he was not prepared to state.

Dr. HILL considered that there was reasonable doubt as to the specimen being a mucous polypus. It seemed to him to partake more of a solid type of tumour.

Dr. SMURTHWAITE, in reply, said it was a mucous polypus, for when cut into mucous fluid partially flowed out.

MICROSCOPIC SLIDE OF PRIMARY TUBERCULAR GROWTH OF SEPTUM
IN A FEMALE AGED THIRTY-FIVE.

Shown by Dr. SMURTHWAITE. The growth involved the anterior portion of the cartilaginous septum on the right side. The patient had suffered from nasal obstruction for about a year. The tumour was of very uneven surface, of bluish-white colour, and readily removed by means of a Volkmann's spoon. The cartilage was scraped bare and lactic acid, 75 per cent., rubbed thoroughly over the surface, and now, three months after above treatment, there were no signs of return. As would be seen in the slide the nature of the growth was undoubtedly tubercular, for though no bacilli were found, a number of giant-cells were seen to be present.

A THICK-WALLED CYST REMOVED FROM THE LEFT NOSTRIL OF A
PATIENT (MALE) AGED SIXTY-FOUR.

Shown by THE PRESIDENT. On inspection a red, globular mass was seen filling the nostril anteriorly. The growth looked and felt firmer than a polypus. The choana was seen to be quite free. An electric cauterizing snare was applied and half the mass was included. As the wire cut into the growth about two drachms of very bright mucoid material came away. On exa-

mination an empty sac was seen hanging from the anterior part of the middle meatus. This was removed in two pieces with the cautery snare.

Sir FELIX SEMON said that he had not so very rarely found in the anterior part of the nose distinctly cystic tumours, *i. e.* apparently ordinary polypi, on removal of which a good deal of sometimes thick and glairy, sometimes thin, fluid escaped; but he confessed he had never paid much attention to the occurrence, being under the belief that the ordinary œdematous fibromata occasionally contained cystic cavities.

Dr. PEGLER said he thought at first these interesting specimens might bear some analogy to his own case shown in February, 1901, but the resemblance was superficial only, and he should be more inclined to regard them as polypi undergoing cystic degeneration. The President had entrusted them to him for sections to be made and reported on by the Morbid Growths Committee.

SPECIMEN OF TUMOUR OF PALATE FROM A WOMAN AGED THIRTY-FOUR (shown at last meeting).

Dr. DONELAN said he had removed the tumour by incision and respiratory, and found that, as suggested by Mr. Stephen Paget, it had shelled out quite easily. He had not had an opportunity of having a slide prepared, but, as some discussion had taken place as to the probable nature of the growth, perhaps the Society would think well of submitting it to the Morbid Growths Committee.

CASE OF PAPILOMA OF THE LARYNX IN A MAN AGED FIFTY-ONE, REMOVED IN GREAT PART BY MEANS OF DUNDAS GRANT'S INTERLARYNGEAL FORCEPS.

Shown by Dr. DUNDAS GRANT. The growth was of the size of half a green pea, situated at the middle of the right vocal cord, white in colour, and slightly papillated on the surface; it appeared to rise both from the upper surface and the edge of the cord; there was no impairment of mobility. The patient stated that a growth in his larynx had been removed at the Central London Throat and Ear Hospital (he thinks by Dr. Grant) about twenty years ago; it returned some years later

and was removed elsewhere, and his voice remained fairly satisfactory till four months ago. Dr. Grant has removed a considerable portion of it by means of his forceps; it was submitted to microscopical examination, and the structure was found to be fibro-papillomatous. The greater part of the remainder was removed yesterday in the same way, and it is proposed to treat any remnants that are not accessible to forceps by means of the galvano-cautery.

CASE OF NODULE ON RIGHT VOCAL CORD IN A MALE COMIC VOCALIST, WITH CHRONIC LARYNGITIS; NODULE REMOVED BY MEANS OF GALVANO-CAUTERY, AND CONGESTION TREATED BY SCARIFICATION AND REST OF VOICE.

Shown by Dr. DUNDAS GRANT. There is no appearance of the nodule and the right vocal cord, on which it was situated, is less congested than the opposite one. The scarification of the left cord has produced improvement in the voice, but the cord itself still remains thickened.†

The patient, aged 28, complained of hoarseness of six months' duration; the cords were both swollen and red, and there was a nodule of about the size of a pin's head on the right vocal cord at the junction of the anterior and middle thirds. He had practised comic singing habitually, without having had any training in music or voice production, and had a history of specific infection five years previously. He was ordered in the first instance to rest his voice, give up smoking, and to take a mixture of biniodide of mercury, but at the end of a week this had not caused the slightest improvement. The nodule on the right cord was then touched with the galvano-cautery, and the left cord was scarified by means of Herrings' knife; when seen again five days later the nodule had disappeared; the scarifications were repeated, and the voice was greatly improved.

CASE OF PARALYSIS OF THE RIGHT HALF OF PALATE, OF RIGHT VOCAL CORD, AND RIGHT HALF OF PHARYNX IN A GIRL AGED TWENTY.

Shown by Dr. DUNDAS GRANT. During phonation the left posterior pillar approaches the middle line, as also does the

lateral band; the right half of the pharynx appears to be drawn to the right; in reality it is probably pushed in that direction by the muscles of the opposite side. The patient complained of choking, hawking, and discomfort in her throat of five weeks' duration, attributed to a "cold." The knee-jerks are active—almost exaggerated. There is no evidence of disease at the right apex of the lung, and presumably it is a lesion high up in the trunk or nucleus of the vagus.

The exhibitor would be glad to have the opinions of the members.

Dr. HERBERT TILLEY thought it would be well if Dr. Grant would have the patient examined by an expert neurologist, who might be able to give the Society definite information as to the site and nature of the lesion. He reminded the Society of a case, which he had shown there, presenting somewhat similar lesions, in addition to others which indicated "syringomyelia."

Dr. DUNDAS GRANT asked specially for opinions with regard to the singular movements of the pharynx, inasmuch as the right half appeared to be vigorously contracting while in reality paralysed. He had not previously seen this feature so pronounced.

In reply to Dr. Tilley he thought the onset was too acute for it to be dependent on syringomyelia, and he hazarded a diagnosis of acute poliomyelitis of the bulb affecting the vago-accessory nucleus.

A CASE OF OBSCURE ULCERATION OF THE LEFT VOCAL CORD OF NEARLY A YEAR AND A HALF'S STANDING IN A GENTLEMAN AGED ABOUT SIXTY (THE PATIENT WAS SHOWN AT THE DECEMBER MEETING, 1903), WHICH HAS SINCE SPONTANEOUSLY DISAPPEARED.

Shown by Sir FELIX SEMON. The case was shown as an extremely obscure one at the December meeting, 1903, when a full description was given, and when the discussion, in which Mr. Charters Symonds, Dr. Scanes Spicer, Dr. Herbert Tilley, Dr. Beale, and Dr. Law took part, revealed considerable differences of opinion. Since then the patient, after an attack of influenza, was extremely ill, and for a considerable time his life was despaired of. He was seen again after an interval of several months at the beginning of May, when it was found that the chronic and troublesome ulceration, which had existed for so long a time, had spontaneously and completely disappeared, and that at

present there was only slight congestion and relaxation of the left vocal cord. This pleasing fact, of course, renders the question as to the nature of this chronic ulceration more obscure than ever.

SPECIMEN OF CASE OF PAPILLIFEROUS COLUMNAR-CELLED CARCINOMA
OF THE NOSE IN A YOUNG MAN AGED TWENTY-FOUR.

Shown by Sir FELIX SEMON. The patient was sent to me by Mr. J. C. Craig, F.R.C.S., of Belfast, on March 2nd, 1904, with the following history :

About ten months ago the patient had a single and fairly profuse attack of epistaxis from the left nostril. In September of that year he began to suffer from watery discharge from the left nostril, which steadily got worse and became rather offensive. Mr. Craig saw him first in November, 1903, when he found the whole region of the middle meatus on the left side occupied by a grey cauliflower-like growth, which came away without effort in the snare, and without hæmorrhage. The discharge from the nose was, at that time, very offensive, but scarcely at all coloured. A portion of the growth was examined by a pathologist with the result that certain tendencies to malignancy were admitted, but without the disease being called cancerous. Mr. Craig, by December 13th, had removed nearly all the growth intra-nasally, and found that it was apparently springing from the septum high up underneath the cribriform plate. After thorough removal of the growth its base was freely curetted and 50 per cent. of lactic acid solution firmly rubbed into the remaining surface. On December 21st the growth was apparently quite removed. On January 5th another application of the curette brought away a few minute threads of granulation tissue. On February 4th there was some suspicion of recurrence. Mr. Craig curetted freely, and submitted two of the scrapings to a pathologist, who pronounced one of them to be purely granulation tissue, whilst the other showed the same structures as the original growth. Another specimen was at the same time examined by the pathologist to University College Hospital, and pronounced carcinomatous. Under these circumstances Mr. Craig wished the patient to have my opinion.

On March 2nd, when I examined him first, I only saw, high up on the septum on the left side, a granulating surface with rather irregular ragged walls. The bottom of this surface looked partly greyish, partly suffused with blood. There was, however, no definite evidence of a new growth. Seeing that the patient had been curetted only a few days previously hardly any other condition of things could be expected. Posterior rhinoscopy showed no abnormal conditions, and there was no enlargement of glands anywhere in the neck or under the chin.

When I saw the patient a week later (March 9th), I found a distinct recurrence of the growth in its upper parts, a warty, reddish, mammillated mass having grown up since I examined the patient a week previously. Meanwhile Mr. Shattock had examined the specimens of the original growth, sent from Belfast, and pronounced the growth without hesitation to be a papilliferous columnar-celled carcinoma. Under these circumstances there could be no doubt that the patient ought to be without delay subjected to a radical operation from within, and the patient and his family having consented, Sir Victor Horsley performed a very radical operation on March 14th. He first ligatured the external carotid, then, after plugging the nasopharyngeal cavity, did a Rouge's operation, and removed the greater part of the bony septum, the left middle turbinate, and the ethmoid on the left side up to the cribriform plate. The operation lasted nearly two hours, but so far as could be judged succeeded in completely removing the growth with a healthy area round it. The patient made an uninterrupted recovery, and left about three weeks afterwards for Belfast. So far, according to information I have received, there has been no recurrence.

The case is put on record (1) on account of the general rarity of malignant disease in the nose; (2) because this particular form of cancer (papilliferous columnar-celled carcinoma) is very rarely indeed found in the nose; and (3) on account of the uncommonly young age of the patient (24).

FURTHER HISTORY (WITH DRAWING) OF THE PATIENT SUFFERING FROM OBSCURE ULCERATION OF THE LEFT TONSIL, TWICE SHOWN (AT THE NOVEMBER MEETING, 1902, AND THE JANUARY MEETING, 1903). *Shown by Sir Felix Tomson.*

It will be remembered that this patient, a clergyman, aged about 70, was shown at the November meeting, 1902, when there was ulceration of the left tonsil with acute and considerable enlargement of numerous cervical lymphatic glands on both sides. The question was whether the disease was malignant. Mr. Shattock at that time considered the disease as inflammatory, whilst according to clinical observation its nature was doubtful. In the discussion Mr. de Santi expressed a very decided opinion to the effect that in spite of Mr. Shattock's opinion the affection was of a malignant nature.

When shown two months afterwards at the January meeting, 1903, the ulceration of the left tonsil had quite disappeared, and the tonsil had become much smaller, whilst the enlargement of the cervical lymphatic glands on both sides of the neck had also considerably diminished. In all probability a septic affection had been at work.

After the last demonstration, according to the description given by Dr. Bolton Tomson, the throat became perfectly normal, and remained so for six weeks or more. He then got an acute inflammation of the right side, very similar in character to the initial inflammation, with which his former trouble commenced, viz. a peritonsillitis (the tonsil itself being but little affected), some glandular swelling, but no ulceration. With oxygen, a spray of chinisol, belladonna to the glands, and iodide of potassium internally, this subsided, but never quite disappeared. All pain and inconvenience ceased, but a swelling about as big as a split pea remained at the upper part of the right anterior pillar, making it bulge forward.

About May, 1903, acute inflammation with tendency to œdema appeared again in the right side, and on the 11th of June, when I saw the patient again, I was fully convinced that the affection was of a septic character; there was follicular tonsillitis in the right tonsil from which a zone of œdematous infiltration affect-

ing particularly the uvula had started. The uvula itself was considerably enlarged, congested, and semi-transparent, and on the anterior right arch of the palate there was a similar condition. There was no extension into the naso-pharyngeal or into the laryngeal region.

The drainage of the patient's house having been repeatedly examined by experts and found perfectly normal, the patient was warned not to visit septic cases in his district, and quinine internally, oxygen inhalations, cold water applications round the neck, bland nutritious diet, and plenty of fresh air, together with applications of peroxide of hydrogen and solution of sulphate of zinc were prescribed.

In October, 1903, I saw the patient again. He then had a considerably enlarged gland in his left groin, near which there were several smaller ones. Fears that the process in spite of the previous negative evidence of the microscopist might be of a sarcomatous or possibly lympho-sarcomatous character were revived, and arsenic was given in gradually increasing doses.

On December 13th Dr. Bolton Tomson wrote that, after first improving under the arsenic, he got cold, that his temperature went up to 101° , that his throat got much worse, that he had acute and most exhausting diarrhoea, violent abdominal pains, and flatulent distension, that the glands in his groin doubled in size, that his throat was much more inflamed on the right side, and covered with "a membrane like one of the mimic diphtheria membranes that one examines to make sure, but knows full well it is not diphtheria," that the glands on the right side of the neck were also slightly enlarged, but not very much. The membranous condition was followed by an ulcerative process, which again improved, and Dr. Tomson thought that the throat was going to get quite well, but about twelve days afterwards the patient caught another cold, and again the throat flared up, getting since then steadily worse. At the date of the letter the condition was as follows:—"The area affected is confined entirely to the right tonsil and immediate neighbourhood. On examination one sees a large pocket between the anterior and posterior pillar of the fauces, always filled with saliva and muco-purulent discharge. On syringing this out a small piece of tonsil is seen, irregular, and with a greyish appearance. This covers the

anterior aspect of the posterior pillar, and the front of the anterior pillar for a sharply-defined crescentic area of a quarter of an inch. Outside this there is a zone of redness also sharply defined, which takes in the adjacent half of the uvula and salpingo-pharyngeal fold." The patient at that time suffered a good deal from sharp lancinating pains when he used his jaw in eating and talking, and could not sleep at a stretch, as saliva or discharge constantly accumulated in the pocket in his right tonsil, and had to be washed out. His temperature was about 98.4° in the morning and about 100° at night. The blood was examined with perfectly negative results.

On January 10th Dr. Tomson wrote as follows:—"You asked me to write you as to Mr. H—'s progress. I enclose an illustration taken about a week ago. At the upper half of the right anterior pillar you will see the remains of the pseudo-membrane I described in my last letter. Outside this is a sharply-defined zone of redness terminating in some ulceration at the base of the uvula. The disease has destroyed the whole of the soft tissue in the tonsillar fossa, fat, connective tissue, sheath of muscle. The external margin of the posterior pillar is well defined. The colouring is intended to indicate the excavation that had occurred. A small piece of tonsil that is left is seen projecting out from the cavity. The whole space around the bit of tonsil was filled with slough which has completely cleared. I gave morphia in addition to the other remedies as you suggested, and with great benefit. The more useful antiseptics I found to be frequent irrigation with weak carbolic before and after food, and keeping the surfaces covered with iodoform in the intervals. I have had to contend against a severe chronic enteritis at the same time, as you know, and although both diseases appear to be arrested, the patient is dying simply from failing strength and natural decay. (He is seventy-four.) Every organ seems to be ceasing to functionate."

In reply to this I at once wrote to Dr. Tomson, begging him to insist when the end came on making a post-mortem examination. Unfortunately, however, the patient died on the same day when Dr. Tomson's letter was sent, and when after arrival of my letter he went to see whether a post-mortem examination could be obtained he found that the body had already been

taken to the church, and that the performance of a post-mortem examination was out of the question.

Thus, in this most interesting and obscure case again, as in many others, we have been deprived by the impossibility of getting an autopsy of the only chance of ultimately finding out what was the cause of the most unusual and varying disease from which the patient suffered. I shall be glad to hear the opinions of the Society as to the nature of the disease, after this further report, which I have curtailed as much as possible in order not to encroach too much upon the time of the Society. The differential diagnosis would of course seem to lie between a chronic septicæmia with occasional exacerbations, and between new growth of the nature of lympho-sarcoma. It deserves to be mentioned expressly that the left tonsil, which was the original seat of the disease when the patient was shown in November, 1902, remained free from disease, after having healed up until the end of the patient's life.

REMOVAL OF THE UNCOMMON LARYNGEAL TUMOUR. DESCRIBED IN
THE 'PROCEEDINGS' OF THE SOCIETY ON MARCH 9TH, 1898.

Shown by Sir FELIX SEMON. The tumour, which was found to exist in 1888 by Dr. Major, of Montreal, in the larynx and neck of a lady, aged at that time 30, and which has been fully described in the Society's 'Proceedings,' gave no rise to discomfort until recently, and the patient, who, in spite of having worn a tracheotomy tube for twelve years, felt perfectly comfortable; refused further operative interference. Quite recently, however, symptoms pointing to irritation of the sympathetic, such as very troublesome salivation and epiphora, made their appearance, the internal tumour was found to have considerably increased in size since I last saw the patient about two years ago, and she at last consented to operation. Meanwhile I had read in Professor Paul von Bruns' chapter on "Malformations, Injuries, and Diseases of the Larynx and Trachea" in the 'Handbuch der Praktischen Chirurgie' (pp. 104 and 105), a case apparently quite analogous to this one, and described by him as a "unicum." In this case Professor von Bruns cut down upon the external

tumour, dissected it out from its vicinity, followed a thin filiform pedicle, which extended from the external tumour underneath the lower edge of the thyroid cartilage into the interior of the larynx, where it expanded in a manner quite similar to my own case, and succeeded in shelling it out without opening the interior of the larynx at all. I followed exactly the same plan with exactly the same result, except that the tumour, being very friable, broke during its removal into three parts, which were removed without difficulty. In this case, which consists of a number of tough yellow lobes and lobules, and, in its entirety, is as big as a medium-sized plum, the tumour entered the larynx not below but above the thyroid cartilage, between it and the hyoid bone. The operation was performed this morning with the assistance of Mr. Stabb, Mr. Tyrrell giving the chloroform, and in the presence of Dr. McBride, Dr. Law, and Mr. Waggett. The mucous membrane forming the internal lateral wall of the big cavity, which remained behind after removal of the tumour, was stitched to the adjoining tissues, as, during inspiration, it was strongly drawn inwards and, as it was feared that it might thus cause fresh obstruction. The wound was then closed in its entire length, only a small drainage-tube being left in its deepest part. After completion of this operation the tracheotomy tube, which the patient had worn so many years, was removed; the wall of the tracheal opening, which was lined with skin for a considerable distance inwards, was pared off entirely ^{by} to a circular incision round the tracheal opening, and subsequently dissected, the funnel thereby resulting being temporarily closed by clamp forceps. Finally, preliminary horsehair ligatures were passed through the openings of the fresh wound, but not closed. The clamp forceps will be left in until to-morrow to ensure in the event of dyspnoea arising the re-introduction of the cannula. Should, as may be justly hoped, no difficulty occur the forceps will be removed to-morrow, and the wound closed in its entirety.

The case being the second on record in the whole laryngological literature a full description will be given when the healing has been completed, and the tumour been microscopically examined.

REMOVAL OF A FOREIGN BODY FROM THE TRACHEA BY DIRECT
LARYNGO-TRACHEOSCOPY.

Shown by Dr. D. R. PATERSON. A girl, *æt.* 8, came to the out-patient department with the laryngeal obstruction of a week's duration. She was not hoarse, and with the laryngeal mirror a glimpse was obtained of a body situated a short distance below the glottis. The difficulty in breathing was said to have come on after teeth extraction, and a radiograph taken strongly suggested a broken tooth as the cause. After admission the breathing suddenly became worse, and it was ascertained that the foreign body had become displaced somewhat downwards. The dyspnoea being very urgent a low tracheotomy was done. The pharynx and larynx having been cocaineised an excellent view was obtained of the body through Killian's tracheoscope, and it was extracted by means of a crocodile forceps, when it proved to be a stay eyelet covered with a calcareous incrustation. A short reference was made to a case of laryngeal papillomata in a child where direct laryngoscopy afforded a good view of the larynx and the growths were easily removed.

Mr. CRESSWELL BABER inquired as to what position the patient was examined in, and what source of illumination was employed.

In reply to Mr. Cresswell Baber, Dr. PATERSON said he used a Kirstein-Killian electric lamp, with the patient placed on the back and the head hanging over the table.

LARYNGEAL CASE OF DOUBTFUL NATURE: FOR DIAGNOSIS.

Shown by Mr. STEPHEN PAGET. The patient was a nurse, who since Christmas, 1903, had suffered from partial loss of voice. No pain, no dysphagia, no cough, no signs of phthisis. The interarytænoid space was partly obstructed by a marked thickening of the mucous membrane, which had a coarse and furrowed surface, but was not granular or ulcerated. The cords were slightly and irregularly congested. The rest of the larynx appeared to be healthy. Mr. Paget raised the question whether, in the absence of physical signs in the chest, the case ought to be regarded as one of early tubercular laryngitis.

Dr. HERBERT TILLEY thought that it must be within the experience of many present that these interarytænoid swellings often occurred in patients in whom there was no sign or suspicion of tubercle. This interarytænoid swelling was a localised form of chronic laryngitis, and due to a hyperplasia of epithelial and subepithelial tissues. When it was present signs of chronic laryngitis were often present in other parts of the larynx, and in Mr. Paget's case it would be noticed that both cords were congested and thickened. The thickening referred to seemed to arise from different causes. He (the speaker) had frequently observed it in chronic alcoholics and gouty individuals, and details were given of a case shown before the Society at a previous meeting in which the interarytænoid swelling was so great that urgent dyspnoea was produced, and the patient was admitted to the hospital for laryngotomy, but the urgent symptoms disappeared with rest, purgation, and a low diet. A week afterwards the patient died suddenly, and at the post-mortem examination well-marked cirrhosis of the liver was found. Microscopic examination of the larynx showed the interarytænoid swelling to be a hyperplasia of the natural tissues in the situation—possibly merely a local evidence of a general fibrosis. In yet other cases nasal and naso-pharyngeal affections, especially when these gave rise to septic discharges, would produce a similar affection of the larynx. The treatment, in addition to dealing with these factors by constitutional and local (nasal and naso-pharyngeal) measures, should consist in the application of solid nitrate of silver to the swelling after having anæsthetised it with 20 per cent. cocaine solution. In some cases preliminary curetting seemed to ensure the caustic having a more rapid and permanent effect.

Mr. WAGGETT drew special attention to the frequent presence of nasal stenosis in these cases, and to the improvement in the laryngeal condition after removal of such stenosis.

Dr. SMURTHWAITE thought the interarytænoid appearance indicated tuberculosis, though he could instance a similar case to the one mentioned by Dr. Tilley. The patient was brought into the Royal Infirmary, Newcastle on-Tyne, late one night suffering from an acute laryngeal stenosis which had come on suddenly a few hours previous to his admission. Tracheotomy was contemplated, but the man's condition improving as the night went on the operation was not resorted to. On a thorough examination of the larynx being made in the morning a marked thickening of the lining membrane of the interarytænoid space was made out, the left cord was diffusely thickened, and a condition of pachydermia verucosa, so-called by Virchow, was present. The man was a heavy drinker. He recovered from his acute symptoms, and left the hospital with only slight huskiness of voice, though the pachydermia more or less still persists now a year later.

In reply, Mr. STEPHEN PAGET said that he would go into the case carefully, and would show the patient again at a later meeting of the Society.

A WOMAN AGED SIXTY-THREE WITH SWELLING OF BOTH ARYTENOIDS AND INFILTRATION OF THE EPIGLOTTIS.

Shown by Mr. DE SANTI. The patient is a single woman aged 63. Her history is that she has had hoarseness, dysphagia, loss of flesh, and pain in the right ear for about two weeks; she has no cough and no difficulty in breathing. There is no history or evidence of syphilis. Examination of the larynx reveals considerable swelling of both arytænoid regions, and ulceration of the right arytænoid region. Also infiltration of the epiglottis, especially on the right side.

The case looks more of a tubercular nature than anything else, and is brought forward for diagnosis. No examination of the lungs or sputum has been made yet.

PARALYSIS OF THE LEFT VOCAL CORD IN A MAN AGED SIXTY-SEVEN.

Shown by Mr. DE SANTI on May 6th. Dr. de Havilland Hall showed the skiagram of this case, which seemed to show dilatation of the transverse and descending arch of the aorta. The patient died a few days after this was taken. At the necropsy the aorta was found healthy. At the level of the bifurcation of the trachea there was malignant disease of the œsophagus, and the growth had ulcerated into the trachea. The pneumogastric and recurrent nerves on the left side were involved in the growth.

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