

TURBINOTOMY IN NASAL STENOSIS:

ANALYSIS & NOTES OF 66 CASES.

THESIS FOR M.D. DEGREE

BY

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TURBINOTOMY IN NASAL STENOSIS.

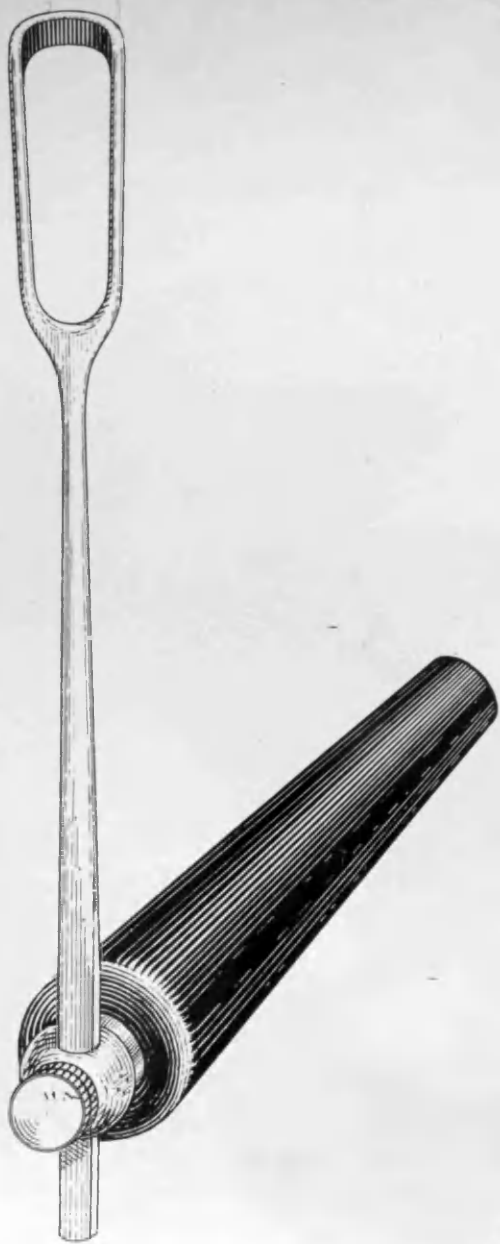
Turbinotomy is the term applied to the operation by means of which part of one or more of the Turbinal bodies of the nose, is removed by cutting. The name is a comparatively new one, as is also the operation, the latter having been practised only within the last half dozen years or so. The instrument used in the operation has been called a Turbinotome; but the name more commonly applied to it is Spokeshave.

So far as I can ascertain, the first surgeon to perform Turbinotomy (as above defined) was Spencer Watson of London, who introduced, in 1888, a kind of ring or draw-knife for the purpose. Mr Carmalt Jones,

Surgeon to the Central London Throat Nose & Ear Hospital, happened to see some of Spencer Watson's instruments exhibited at a Meeting of the Medical Society in London, and he set to work and greatly improved the pattern of the turbinotome. What led Mr Jones to take up the matter was the following incident. One day, at the Hospital, he was attempting to remove, with the snare, a nasal growth, and by accident, part of the Inferior Turbinal was removed as well. And the result was most satisfactory.

Then Mr Jones ordered a set of Spencer Watson's instruments, but they were not to be had anywhere. So he gave the instrument makers a design, from which the first spoke-shave was modelled. Since then, the instrument has been altered and improved twice; so

Photograph of the Spokeshave : pattern now in use.

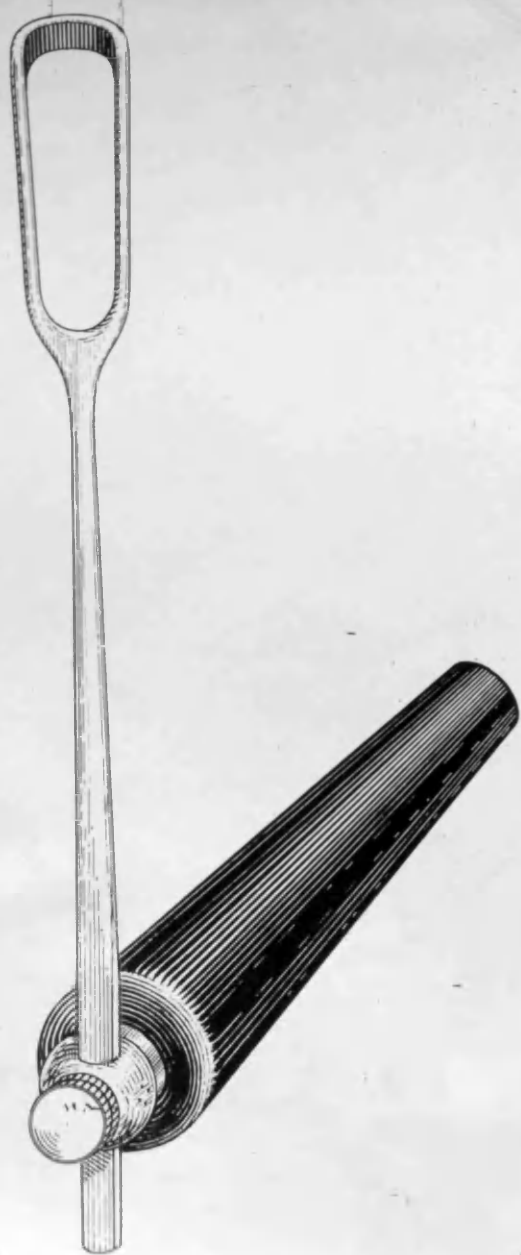


that the one now in use is the third pattern.

It consists of two parts: (1) the handle, made of dark wood, and of a shape most convenient for the hand to grasp; and (2) the steel shaft which bifurcates, the two legs being joined at their ends by the cutting blade. This steel shaft fits into the handle where it is fixed by a screw.

(See photo. opposite.)

In the first pattern, the shaft was cylindrical and fitted into a corresponding aperture in the handle. And the blade was quite flat, and ran straight across from the ends of the bifurcations of the shaft, being bevelled on the inner side only. The first alteration was to make the shaft square instead of cylindrical, and fitting into a square hole in the handle. ~~This gave greater~~



stability to the instrument.

The next change was to make the cutting blade curved, with the convexity outwards; and this is the pattern now in use.

(See photo. opposite.)

The spokeshave is made in three different sizes to suit various sized noses.

Turbinotomy is performed in cases of Nasal Stenosis, where it is expedient to obtain a free passage through the nose for breathing purposes. In the majority of cases this stenosis is caused by a Hypertrophic condition of the Turbinal bodies, mostly the Inferior. But Nasal Polypi, and Septal Spurs may also cause it.

The very great importance of being able to breathe freely through the nostrils, with the mouth closed, is fully recognised now-a-

days. And the evil consequences of habitual mouth-breathing are also very well known.

Nasal Stenosis may be the cause of many troubles; such as deafness, tinnitus and other ear symptoms; various affections of the throat (pharynx and larynx); and, it may be, pulmonary complaints; besides a host of very various reflex morbid states.

The youngest patient Mr Jones has ever operated on was an infant aged 3 months.! In this case, nasal obstruction was so great as to interfere seriously with suckling and respiration. And the result of Turbinotomy in this case was satisfactory.

Seventy one years was the age of the oldest patient on whom the operation was performed. And here also, it was a success. This is one of the cases, the notes of which

I give later on. The case is numbered 59.
(See page 208.).

As regards the use of anaesthetics in Turbinotomy: Nitrous Oxide gas is all sufficient as a general anaesthetic when the administration of such is thought advisable. Cocain was applied up the nostrils on cotton wool (a 10% solution) in many of the cases operated on. In a few only, it seemed to have some effect in lessening the pain of the operation, but in the majority its use did not prove a success.

Mr Carmalt Jones does not think cocain is of much use in Turbinotomy, and consequently, he does not use it much now. He thinks it does not penetrate deeply enough, and does not anaesthetize the bone. Besides, it has this drawback, in his opinion, that it

lessens the hemorrhage at the time of operation, but renders it more copious afterwards.

One might be inclined to think that the local application of cocain would facilitate the introduction of the spokeshave into the nostril, partly from its power of reducing turgescence and so diminishing the degree of stenosis, and partly also on account of its local anaesthetic properties. But in practice, this is found not to be so, at least not to any great extent. As Mr Jones puts it, "cocain only shrivels up soft tissues, which the spokeshave would easily push aside."

The actual operation is performed as follows:-

The patient sits on a chair facing the operator and has his head steadied by an assistant who stands behind him. The nos-

trils ought first of all to be thoroughly cleansed with an antiseptic solution, after which cocain is applied on cotton wool (10% solution). The mouth may be kept open by means of a gag, if necessary. The spokeshave is then introduced into the nostril with the right hand if the left side is being operated on, and with the left hand if the right nostril. Or, the right hand may be used for both nostrils.

The flat side of the cutting blade is directed towards the turbinal to be removed. The instrument is passed directly backwards along the floor of the nasal cavity until it reaches the posterior wall of the pharynx. The ring of the spokeshave is then directed round the posterior end of the inferior turbinal, either with or without the help

of the index finger of the disengaged hand passed into the post-nasal space by way of the mouth.

Whenever the ring of the instrument is properly engaged round the posterior end of the turbinal, it is firmly withdrawn, so that it cuts its way through the turbinal, which latter may escape from the nostril along with the spokeshave, or else be expelled afterwards by the patient blowing down his nose. Should even this not expel it, it is removed with forceps.

It not infrequently happens that the posterior part alone of the inferior turbinal is diseased, the anterior part being normal, and its removal therefore not necessary. In such a case, after the spokeshave is introduced into the nostril and has en-

gaged with the posterior extremity of the turbinal, by carrying the shaft slightly across the middle line of the face, and withdrawing it in that direction, one may remove only the posterior and diseased part of the turbinal and leave the healthy anterior portion. And in this way, the danger of opening the maxillary sinus, (which, as will be seen later, is one of the objections to the operation of Turbinotomy, urged by some,) is reduced to its minimum.

If necessary, the opposite nostril is then treated similarly.

Bleeding always comes on at once, and is generally pretty profuse. Sometimes it stops in a few minutes and gives no more trouble. Not infrequently, as will be seen from the notes of cases given later, more

or less bleeding occurs at intervals for several hours or even days. And occasionally, hemorrhage is so copious and persistent that nothing short of plugging the nostrils anteriorly and posteriorly, has the desired effect. Alarming hemorrhage is extremely rare.

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In one case (No. 35), free secondary hemorrhage occurred on the 14th day after the operation. After the operation, the anterior nares are plugged with cotton wool, and a douche prescribed containing Potassium Chlorate, Borax, & Sodium Bicarbonate with or without Tannic Acid. In cases of severe hemorrhage, the posterior nares are plugged with Bellocq's instrument. Short of this, in troublesome cases of bleeding, a strip of lint about a foot or so long, and an inch

wide, with tannic acid well rubbed into it, is packed into the nostril leaving the free ends at the front of the nose. It is found that a piece of lint that size will completely disappear in a nostril that has been spokeshaved.

As internal Treatment: Bromide of Potassium is frequently prescribed to relieve the intense after-headache which is often so bitterly complained of. Confinement to bed is found to be not absolutely necessary, although I think it is most desirable for a few days. The chances of secondary bleeding are no doubt diminished by a few days' rest in bed, and the hemorrhage following the operation is no doubt thus lessened.

Mr Carmalt Jones is of opinion that

altogether he has spokeshaved about 500
turbinals! In some patients only one side
was operated on; but in most of the cases
both sides were done.

Septic absorption following the operation is one of the complications to be guarded against. Mr Jones says that he has never come across it.

I have seen one case in Hospital however, where a few days after Turbinotomy on the left side, [REDACTED], great swelling of the nose and left eyelids, with marked chemosis of the left eye, and exophthalmos with absolute blindness in that eye, occurred. The symptoms subsided in the course of a few days, and the blindness was completely recovered from.

Several of the patients I wrote to,

state that, as a result of the operation, they had swelling of the nose and eyes, pain, and symptoms of a febrile reaction more or less severe, in all probability due to some septic mischief. And what suggests itself, I think, as a preventive of such unfavourable symptoms, is thorough cleansing of the nostrils immediately before operating. I don't think that this is sufficiently attended to in Hospital practice. Also, after the operation, frequent and thorough cleansing of the nostrils ought to be carried out. If, in general Surgery, it is a sine qua non to thoroughly cleanse the skin of the part to be operated on, before making the incision, surely it is all the more necessary to make certain that a mucous membrane about to be operated on, is perfectly clean, before

any breach of surface is made. In all probability, from the fact that bone is cut through in Turbinotomy, septic absorption occurs here more readily than in most other operations, through the medium of the gaping mouths of the veins in the turbinal bone.

In Hospital practice, it is not the rule to wash out the nostrils just before operating, but I think it ought to be so.

Mr Jones has only come across two cases where there was Pharyngitis Sicca present after Turbinotomy, and presumably resulting from that operation; but in both of these cases, the patients admitted that even with that, they were much more comfortable than before the operation with their noses blocked up.

Might it not have been in these cases, that there was present at the time of operation, an early stage of Atrophic mischief which escaped recognition, and that the Pharyngitis Sicca following, was a further development of the same condition?

One of the objections to the operation of Turbinotomy is that it may result in Atrophic Rhinitis. And this, if it can be proved to be so, is a most serious objection indeed. But I do not think that this has been proved. Possibly some degree of atrophy of the nasal and neighbouring mucous membranes may follow Turbinotomy; but, may not this be explained by assuming that the patient was the subject of atrophic rhinitis in an early stage, which condition was not recognised at the time of operation, and for

which treatment short of spokeshaving might have sufficed?

And this view is borne out by the fact that Mr Wyatt Wingrave in his microscopical examination of over 200 turbinals, came across a few in which there were distinct evidences of atrophic changes present.

The whole question of Turbinotomy, and especially from the pathological point of view, is admirably treated in a valuable paper by Mr Wyatt Wingrave, Assistant Surgeon to the Central London Throat Nose & Ear Hospital, which he calls "Turbinal Varix", and ~~which was~~ published in the Journal of Laryngology; and also in the Medical Press of 7. November, 1894.

Another objection urged against Turbinotomy is that it may open up the Maxillary

Sinus and lead to supperation in that cavity.

Possibly the operation may cause enlargement of the hiatus maxillaris, in some cases, especially where part of the turbinal in its whole length is removed. But, even if this be so, serious consequences surely do not of necessity follow. At any rate, in Hospital practice there is no note of any such occurring in a single case. And if spokeshaving be confined to the posterior part of the turbinal, which is the part most often diseased, this objection does not exist.

The anterior part of the inferior turbinal, if necessary, can then be reduced by the application of the galvanic cautery.

Still another objection has been brought forward against the operation of Turbinotomy.

It is that it causes the nostrils to fall in, and results in nasal deformity. This has never been seen, not even in the smallest degree, in any case operated on at our Hospital: rather the reverse indeed. Mr Wingrave considers this to be "a phantom". Personally, I have never seen anything approaching nasal deformity, as a result of the operation, and I have seen over a hundred cases now myself.

Some time after spokeshaving, the nostrils may, on examination, present an appearance like atrophy; but with no foetor and no crusts, and with no difficulty in breathing. It is not uncommon to find, after a time, in a nostril that has been spokeshaved, a kind of reproduction of the mucous membrane as it were, quite healthy-looking in appear-

ance, and not unlike a normal inferior turbinal. In one case especially this was so to a marked extent; and Mr Jones removed a piece of the new turbinal, so to speak, and had it microscopically examined by Mr Wingrave. It was found to consist of perfectly healthy and normal mucous membrane, "complete in its details", and with no appearances either of atrophy or hypertrophy. This reproduction of tissue may go still further, and result in a kind of fungoid mass; in one case such a mass had to be removed with the snare; in other two it required reduction with the galvanic cautery.

The immediate effect of turbinotomy is to obtain a freer passage of air through the nostrils: and patients often remark on the great comfort this is to them, after endur-

ing a period of nasal stenosis with all its miseries.

In the case of some children, from whom Tonsils, Adenoids and Inferior Turbinals were removed, at one sitting, the effect was rather curious. They seemed quite puzzled at their new condition, and could not be made to blow through their noses, because, never having been able to do so before, they did not understand how to do it.

As regards the remote results of Turbino-
tomy : the patient breathes easily through the nose in a natural fashion, instead of through the mouth, as he did before: there is less strain put on the respiratory muscles, the di^aaphragm and intercostals especially: the nostrils, being stimulated by the passage of air through them become more active

and patent, with the result that the nose becomes larger, and instead of being a small deformed and useless organ it becomes of a good size and shape, and has its function restored.

Spokeshaving is best suited to cases of Nasal Obstruction resulting from Hypertrophy of the Inferior Turbinals; but it may also be used to clear the nostrils of polypi, and to remove septal spurs.

I myself have seen the instrument break twice during the operation and I believe it has occurred at least one other time. The fracture takes place near the junction of the cutting blade with the 2 legs of the shaft.

Once I saw it break thus on being withdrawn from the nose: the broken piece was

easily removed from the nose: another time it broke on introduction into the nose.

Mr Jones tells me that once the cutting blade broke off just as the operation was finished and came away with the turbinal in the forceps. Twice the instrument was found to be cracked through on its removal from the nose, just at the junction of the blade with the side of the operculum.

In cases of aural tinnitus, where there is enlargement of the posterior part of the Inferior Turbinal and where such is believed to be the cause of the tinnitus, Mr Jones sometimes spokeshaves only the posterior part. But not for cases of Nasal Stenosis: here he removes as much as he can, in order to secure a proper breathing passage through the blocked nostril. Where the anterior

part only of the Inferior Turbinal requires reduction, the galvano-cautery is used.

When Nasal Spurs from the septum are to be removed by spokeshave, the following is Mr Jones' method of procedure :- First of all with the nasal saw the spur is notched above and below, and the saw incisions thus made are made to meet posteriorly. The operation is then completed with the spokeshave, the cutting blade being fitted into the junction of the two notches at the back.

The spokeshave is not adapted for operating on the middle turbinal; diseases of that body may be attacked with the snare, the forceps or the galvano-cautery.

For clearing the nose of polypi, Mr Jones sometimes employs the spokeshave, and with

good effect. In a bad case of nasal polypi, he begins with the spokeshave, and so obtains a free passage through at the first sitting. This, Mr Jones considers most important, as, he says, such cases "lose their pluck" and will not allow so much to be done the second time, and still less the third, and so on. Afterwards, when a passage is established, the snare and forceps are employed to enlarge it.

Middle Ear trouble sometimes follows Turbinotomy. Suppurative Median Otitis is rare. A few cases have occurred however, but not any more than occur after the scraping of Adenoids.

In both instances, probably the cause is some blood or clot being forced into the mouth of the Eustachian Tube by the Valsalva-

like action of blowing the nose. Hence the very great importance of instructing the patient not to blow down the nose in the ordinary way by first of all compressing the nostrils. He ought to snort rather, and so clear his nostrils. In no case was any permanent damage done to the ear as a result of mischief there following turbinotomy.

In one of these cases, the course of events is pretty much as follows :- Intense pain in the ear ("earache"), due to acute inflammation in the middle ear, with exudation there going on to suppuration, and perforating^{on} of the membrana tympani. This last brings relief to the patient's sufferings; there is discharge from the ear for a few days; the perforation soon heals up, and in the course of a few weeks its site cannot

be detected even. And the hearing power is regained.

The term Hypertrophic Rhinitis is a convenient one to employ, although it is not very definite in its signification. It is a comprehensive name including several distinct pathological conditions, all of which, however, are characterised by hypertrophy, by enlargement. There is nasal catarrh and nasal obstruction present in all the forms of Hypertrophic Rhinitis which latter may vary in degree from a simple thickening of the mucous membrane to regular polypoid growths.

Perhaps the most frequent form of Hypertrophic Rhinitis is what has been called "Turbinal Varix" by Mr Wyatt Wingrave. This is an enlarged condition of the Inferior

This photograph represents the septal aspect of these pairs of Inferior Turbinals, after preservation in spirit for several weeks.

No. 1.
(α).

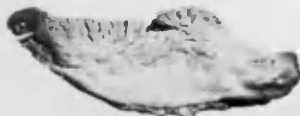


No. 1.
(β).



} Right & Left Inferior Turbinals, from an adult male patient; removed with the spokeshave.

No. 2.
(α).



No. 2.
(β).



} Right & Left Inf. Turbs. from the nose of a boy, aged 12 yrs removed with the spokeshave. The upper of the two shows the cerebral appearance of "Turbinal Varix".

No. 3.
(α).



No. 3.
(β).



} Right & Left Inf. Turbs. from the nose of a male child aged 2 1/2 years: removed by the spokeshave.

Turbinal in its posterior part chiefly, due to distension of the venous sinuses which exist there normally. The presence of these venous sinuses in the posterior part of the inferior turbinal accounts for that part being wrinkled and brain-like in appearance. And this contrasts with the anterior smooth part which contains glandular and lymphoid structures chiefly.

Mr Wingrave has recently shown that the venous sinuses mentioned above are surrounded by "several layers of visceral muscle fibres", and that the distension of these blood spaces is primarily due to degenerative changes in the muscle fibres.

I have had several specimens of Inferior Turbinals removed by the spokeshave photographed; (See opposite) but none of them

This represents the other aspect (the outer surface; on which is seen the line of section made by the spokeshave) of the same 3 pairs of Inferior Turbinals.

No. 1.
(a).



No. 1.
(b).



} From male adult.

No. 2.
(a).



No. 2.
(b).



} From boy of 12 yrs.

No. 3.
(a).



No. 3.
(b).



} From male child, aet. 2 1/2 yrs.

show well the wrinkled appearance of Turbinar Varix.

In spite of the adverse criticism which the operation of Turbinotomy has received at the hands of some specialists, it has secured for itself a place among the recognised operations of Rhinology. And deservedly so, I think, if one only considers the great relief it has afforded to many patients; as will be seen from a perusal of the 66 cases I give notes of, later on.

In suitable cases it is a most successful proceeding, I am convinced. Since collecting the notes of the 66 cases, above referred to, I have had the opportunity of seeing and questioning at the Hospital quite a number of patients who have had the operation performed (in some cases over 3 years

ago), and in every case so interrogated, without exception, benefit had resulted from the treatment. On inspecting the nostrils of these patients, nothing unfavourable was detected. In several the reproduced inferior turbinal, so to speak, was seen, running from before back as a ledge projecting from the outer wall of the nostril. Not a few of these patients were quite enthusiastic in their praise of the operation.

Altogether, I have been forced to the conclusion that Turbinotomy is a most valuable operation in many cases; and that it is not only justifiable in suitable cases, but is a highly desirable operative proceeding.

The following is a copy of the letter and questions which I sent to 127 patients who had been spokeshaved at our Hospital :-

10 Coburg Place,
Bayswater Road, W.

,"

Dear

I am, at present, making enquiries with regard to a certain operation, which I see from our Hospital Records, was performed on your nose by Mr Carmalt Jones, on the day of at the Central London Throat Nose & Ear Hospital; and I take the liberty of writing you to ask if you will be so good as do me the very great favour of answering the questions which follow.

Please write your replies on this paper, in the blank spaces for the purpose, at your leisure, and return it to me in the stamped envelope which I enclose. Apologizing for troubling you so, and thanking you in anticipation,

Believe me,

Yours very truly,

Peter H. Abercrombie M.B.
Assistant Registrar at the Central
London Throat Nose & Ear Hospital.

QUESTIONS.

What were you complaining of when you sought relief at our Hospital?

Was it obstruction of the nose, deafness (in one or both ears), noises or sounds in the ears, dry throat, discharge from the nose (one or both nostrils), or what?

How long had you suffered from the above, as near as you can tell?

Was your nose completely obstructed on one side, or on both sides?

Could you, with your mouth shut, breathe through one or both nostrils?

Were you in the habit of sleeping with your mouth open?

Did you snore in your sleep, or breathe noisily?

Was your mouth dry when you wakened in the morning, and did you then feel thirsty?

Did you have horrible or unpleasant dreams?

Was your sleep disturbed at all, or did you sleep well all night through?

Had you any discharge from the nose? For how long? If so, on one or both sides, and which side, if one only?

Were you deaf at all? In one or both ears; if one only, which? And for how long?

Had you any discharge from the ear? If so, for how long, and from one or both ears, and which one, if only one?

Had you any noises in the ears? One or both ears? If one only, which side? And for how long? What were the noises like? Was the sound continuous like a humming, or hissing, or was it intermittent, say like the ticking of a watch?

Had you any affection of the throat? Any dryness of the throat? Any disagreeable taste in the mouth? Had you any headache (before the operation, I mean?) Was it slight only, or very bad, if present at all? And at which part of the head?

Had you any other treatment prior to the operation, either local or by internal remedies, at our Hospital, and if so what was it?

And if so, did your condition improve any, under such treatment, or not?

The Operation :-

Were both nostrils operated on, or one only?
If one only, which side?

Were the tonsils, or one of them, removed at the same time?

Was the back of the throat and nose operated on at the same time?

Did you have Gas administered, or Ether, or was cocain applied locally?

Was the actual operation itself acutely painful, or was it only slightly painful, or what?

Was there very much bleeding at the time of the operation?

Did you faint, or feel faintish during or after the operation?

Was there much pain after the operation in the nose or elsewhere? If so, for how long, and at what time after the operation?

What after-treatment was prescribed? Any lotion to wash out the nostrils with? any powder to use as snuff? any ointment for the nostrils? any plugging of the nostrils? any medicine to take?

Did the bleeding immediately after the operation soon stop?

Was there any return of the bleeding after leaving Hospital? If so, how long after the operation?

Were you resident in the Hospital after the operation, or did you return to your home the same day?

Were you confined to bed at all after the operation, and if so for how long?

How long were you compelled to be absent from your ordinary work?

If you were an out-patient, how did you return home? By cab, bus, car or train? And how far, roughly, was your home from the Hospital?

Did the operation afford you relief or not?

If beneficial, was the relief obtained, immediate, or only after some time (and how long after)? And was the relief very marked, or only slight in degree?

Following after the operation, had you any of the following symptoms:- cold shiverings, hot flushes, feverishness, thirst, pains and aches, loss of appetite, high coloured water, constipation, pain or swelling about the nose or eyes?

How long, after the operation, was it before your nose felt comfortable?

Have you had any trouble since the operation, in your throat, or nose or ears? such as dry throat, nasal discharge, (dry greenish crusts, with offensive smell), deafness, noises in ears, ear discharge, &c? And in your opinion, were such symptoms, if present, the result of the operation? And, if present, were they to be preferred to the state of matters (such as blocked nose &c.) before the operation?

Did you suffer from headache at all after the operation, and if so, was it intense or only slight? What part of the head was so affected?

On the whole, what is your own candid opinion with regard to the operation as a means of treatment in your own case?

Is there anything else, which you think might be of interest to let me know?

I shall now give a short Analysis of Cases founded on the replies received from 66 patients, in answer to the above questions.

ANALYSIS OF CASES.

After searching through the Hospital letters of Mr Carmalt Jones' patients, for the years 1890, 1891, 1892, 1893, 1894 and part of the present year, 1895, I collected altogether 127 cases in which there was a note made of Turbinotomy being performed.

To each one of these, I sent a copy of the list of questions, which I have given in toto, above. And I received 66 replies; a percentage of almost 52. Out of these 66 cases, relief was afforded by the operation of Turbinotomy in 62 cases: that is, in

almost 94 per cent of the cases was the operation successful, more or less.

Only 4 cases of the 66 were not benefited by the operation; i.e., a percentage of little over 6. The 4 unsuccessful cases will be found in detail, numbered respectively 2, 39, 52 and 65. In No. 2. a case of Hypertrophic Rhinitis in the right nostril, with a Septal Spur on that side, the patient writes with regard to the operation, that it was "no good at all."

In case No. 39, also with Hypertrophic Rhinitis, but on both sides here, and in addition Polypi in the right nostril, patient's opinion of the operation is, that it was "of no use whatever."

Case No. 52, also Hypertrophic Rhinitis on both sides, together with Granular Pharynx.

gitis and enlarged Right Tonsil, writes, "I have not felt any benefit from the operation."

And in Case 65, when^{re} the chief complaint was of "deafness" and the diagnosis, Hypertrophic Rhinitis Right, and Chronic Dry Median Otitis, the patient writes "I think the operation the cause of my deafness being worse."

Of the 62 successful cases, the relief afforded by the operation was very marked in 21 instances, (See Cases Nos. 14, 16, 17, 19, 20, 21, 23, 25, 27, 31, 32, 43, 45, 46, 47, 54, 58, 59, 62, 64, & 66.) and especially so in 4 of these, viz :- Nos, 23, 32, 59, & 66. (which see).

In 14 cases, marked relief followed the operation, viz :- in cases 1, 5, 8, 10,

12, 13, 22, 33, 41, 42, 44, 55, 60 & 63

(which see.)

And in 27 cases, Turbinotomy resulted in slight relief to the patient only; see cases Nos. 3, 4, 6, 7, 9, 11, 15, 18, 24, 26, 28, 29, 30, 34, 35, 36, 37, 38, 40, 48, 49, 50, 51, 53, 56, 57, & 61.

As regards sex; 41 males were operated on, and 25 Females.

The oldest patient operated on was 71 years of age; an old lady, in whose case the result was most satisfactory indeed. (See case 59.)

The youngest was 6 years of age, (See Case 18) a little girl, where slight relief was afforded by the operation. The large majority of the patients were young adults.

In the great majority of the cases,

practically in all, the nasal stenosis was the result of Hypertrophic Rhinitis, to a greater or less extent. Over and above this condition;

In 8 cases there was a Septal Spur ~~in addition to the above~~; in 3, a Deviated Septum existed; in 10 cases, Nasal Polypi were present; in 7, Enlarged Tonsils and Adenoids; Chronic ~~and~~ Dry Median Otitis, in 8 cases; Adenoids in 4 cases; and in 6 cases there was Chronic Suppurative Disease of the Middle Ear.

Most of the patients complained of the nose being blocked, although a few, in whom nasal stenosis was distinctly present, did not seem to suffer much from it.

In most of the cases mouth breathing was a prominent feature, and the effects of

such an abnormal state of matters were very common and well marked in the majority of instances. Fourteen patients made complaint as to hearing. Dryness of the throat was extremely common, as a result of nasal stenosis leading to oral respiration. One patient (Case 66.) was a very anaemic girl.

In 17 cases, one side only was operated on; in the remaining 49 both sides were spokeshaved. Turbinotomy alone was performed in most of the cases; but in a few, tonsils were removed as well; or Adenoids scraped in addition to Turbinotomy; or both the above and Turbinotomy. In most of the Nasal Polypi cases, in addition to the spokeshave, the forceps or snare was used. The spokeshave was found useful in clearing the nostril of polypi, in several cases.

In 5 cases, Nitrous Oxide gas was administered to the patient before operating, and was found to be quite effective, no pain being felt by the patient, during the few seconds occupied by the operation.

In 31 cases, a 10% solution of Cocain was applied locally in cotton wool plugs. But in spite of this, pain was felt in every case, more or less, and in not a few, great pain indeed was complained of. In the remaining ⁵30 cases no anæsthetic, general or local, was used at all, and the pain was very great, though momentary. Most of the patients describe the operation as being "very painful", "acutely painful", &c. even those who had cocain applied. But a few don't seem to regard the operation as a very painful proceeding.

The bleeding, in every case, without exception, was pretty profuse, but, in no case was there alarming hemorrhage at the time of operation. More or less bleeding occurred from the nose for several days afterwards, in most of the cases.

In one case (No. 35), secondary hemorrhage occurred 14 days after the operation, so much so indeed that patient went to Hospital and was received as an In-Patient for 2 weeks.

Most of the patients returned to their homes on the day of the operation; some of them on foot. In only one case did the patient actually faint after the operation. (See Case 66: a very anaemic girl). Many felt faintish after it. A good many of the patients stayed in bed for a few days, or

at any rate indoors. But not a few were not confined to bed or the house at all. Several returned to work the following day!

After-headache, chiefly frontal, was present in most of the cases.

In very few cases indeed were there any unfavourable symptoms following the operation, and in those few nothing alarming occurred.

Slight swelling about the nose and eyes was not very uncommon for a few days.

In no case, so far as I can gather from patients' letters, has anything like Atrophic Rhinitis resulted from the operation.

In contrast to the 4 unsuccessful cases mentioned above, (notes of which will be found among the Cases given further on,

under Nos. 2, 39, 52 & 65) let me make the following quotations from the letters of patients who have benefitted from the operation.

(1) "The operation was more successful than we had hoped for, and I cannot speak too highly of the result, and of my gratitude for what Mr Carmalt Jones has done for me. For 2 or 3 years before the operation if I took cold, I had a horrible rack-ing cough sometimes lasting 6 weeks, and preventing my getting to sleep until 4 or 5 in the morning, night after night, until I felt as though I could not bear it any more. Since the operation that cough has never returned." (See Case 23.)

(2) "I was under treatment for the eyes at the London Ophthalmic Hospital,

Moorfields, and they found out there was a stoppage in the nose which affected the sight, and advised me to go to the Central London Throat Nose & Ear Hospital, which I did, and there had an operation performed on my nose by Mr Carmalt Jones; and since that operation, I have never felt better in my life, and have entirely regained my sight, sleep well, and have given up snoring, and don't feel as if I could do a drink in the mornings as I used to, and I feel very grateful to you for what you have done for me. It affords me the greatest pleasure to fill up the enclosed, and trusting it will meet with your approval, I remain, &c." (See Case 32)

(3) (Case 59). "I am thankful for the comfort and relief since the operation. No operation could have been more successful."

(This patient was 71 years of age.)

(4) (Case 66). This patient is delighted with the result and writes me as follows :- "The operation was the best that could be done for me: it was most successful. I feel better in my health than I have for some long time." Prior to the operation this patient, a young woman of 22 years, was extremely anaemic, and she fainted twice after it. Soon after the operation she began to improve; the operation seems almost to have had something to do with the improvement as regards the blood condition. When last I saw her, at Hospital, some few weeks ago, there was not a trace of anaemia present, and the nose was quite healthy looking, the respiratory passages being ample.

As regards ^{after-}treatment, in all the cases

nearly, cotton wool plugs were packed up the nostrils to arrest hemorrhage. A lotion, containing Potassium Chlorate, Borax and Bicarbonate of Sodium alone or with Tannic Acid, was prescribed for most of the cases. Some were ordered Unguentum Acidi Boracici to apply up the nostrils. And for the headache following the operation, Potassium Bromide was usually ordered.

As a rule, for a week or so before operating, the patient used an alkaline antiseptic nasal lotion, as a cleansing agent.

What follows, contains the notes of the 66 Cases of Turbinotomy, mentioned above. As far as possible I have quoted from the patients' letters.

Cases.

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Case I. A.M., aged 24 years. Shop Assistant.

This patient, when he sought relief at the Hospital, complained of a "bad throat" and "stiffness of the nostrils, chiefly the left", of about 2 years' duration. Neither nostril was completely obstructed. With the mouth closed, he could breathe through the nose, though not freely.

He has been told that he snored in his sleep. On waking in the morning his mouth often felt "very dry." His sleep was not much disturbed; nor did he have unpleasant dreams.

There was no nasal discharge, patient states, more than what he considered normal. There was no deafness, nor any other symptom of ear trouble.

There was "dryness" of the throat.

Before being operated on, patient's throat was "painted" once a week; and he used a lotion to syringe up his nostrils. Under this treatment his condition improved somewhat.

After examination, the following diagnosis was arrived at:- Nasal stenosis, chiefly on the left side where there was a Septal Spur; also Post Nasal Catarrh.

On the 12th August, 1890, the operation of Turbinotomy was performed,

on the left side only. The Inferior Turbinal on the left side was removed with the spokeshave, after a 10 per cent solution of cocain had been applied locally for some minutes on cotton wool.

patient describes the operation as "painful" only, no doubt the cocain rendering the operation less painful than it otherwise would have been: for, many patients operated on without cocain, say it was extremely painful.

The bleeding immediately after the operation was not very great, patient states.

He "felt dazed for a moment, but not faintish." "For a few days" after-

wards, the nose felt "rather painful", "chiefly the root of the nose." The nostril was plugged with cotton wool, and an "ointment" was given him to apply locally. The bleeding "continued more or less for two or three days."

This patient was treated from beginning to end as an Out patient: he returned to his house on the day of the operation, and he resumed work the same evening, he says! His home is about four miles from the Hospital, and he returned there by train. The operation afforded him great relief.

Following the operation he experienced "cold shiverings" at times, and he noticed that his water was "high

coloured."

In "about a week" his nose felt quite comfortable.

"For a time" after the operation he suffered from frontal headache.

On being asked his opinion as to the operative treatment in his own case, patient writes: "I certainly think it is a success."

Since the operation he has had occasionally what he calls "irritable throat", and "stuffy nose", and "dry throat", but these he does not attribute to the operative measures employed for the relief of his nasal condition.

Case 2. H.H. Aged 22 years. Clerk.

This is not such a satisfactory case as the last, from a medical point of view, as the patient states that he did not derive any benefit from the operation.

The complaint here was "discharge from the nose", with "partial" nasal obstruction, lasting for "about a year." The right nostril was the worse. Sleep was not at all disturbed.

The diagnosis was:- Hypertrophic Rhinitis, with Septal Spur on the right side.

The right side only was operated on, the Inferior Turbinal being removed with the spokeshave on 10th October,

1890. Ether was administered to this patient; consequently no pain was felt. The bleeding was "not much", to use the patient's own words. There was no complaint of after pain in the nose.

A lotion and ointment and medicine were prescribed here.

There was more or less bleeding from the nose for "about a day."

patient returned home the same day, and was not confined to bed at all, nor was he absent from his work for a single day. He walked home from the Hospital, a distance of about 2 miles.

The operation, he says, did not afford him relief. He did not suffer from after headache, nor from any other

bad symptom.

Case 3. H.W.V. Aged 19 years. Mechanic.

This was a case of Hypertrophic Rhinitis most marked on the left side, with old Suppurative Catarrh of the left middle ear.

Patient's complaint was - "deafness and blockage of the nostrils"; the latter "had been coming on for many months."

The degree of nasal obstruction varied at different times. Sometimes it was complete; at others only partial. There was no nasal discharge, he thinks. Occasionally patient suffered from "hoarseness."

Prior to the operation of turbi-

notomy, other treatment was used: for the ear, drops and a lotion, the use of which resulted in improved hearing.

On the 30th of December, 1890, left turbinotomy was performed with the spokeshave, after cocain had been applied locally. Patient describes the operation as "decidedly painful; as nearly as I can describe it, like having a tooth extracted, though worse, of course."

The hæmorrhage was pretty free, but patient did not faint nor did he feel faintish. And so persistent was the bleeding, that plugging of both the anterior and posterior nares had to be resorted to. The plugs were re-

moved 24 hours later.

Patient was resident in the Hospital after the operation, and was confined to bed for two days. The result was that nasal respiration was rendered much "easier", and the relief afforded after a few days was "marked." "Much headache" was experienced after the operation, chiefly frontal.

There was considerable febrile reaction in this case with acute Median Otitis, consequent on the operation.

The plugging of the nose, patient says, was much worse than the operation itself. It was some considerable time before the nose felt comfortable. At times it felt "irritable", and hoarse-

ness still troubled him.

The operation certainly relieved the nasal stenosis from which the patient suffered, and enabled him to breathe through the nose, which before he could not comfortably do. But the deafness was not improved by the operation.

A few days after the operation, acute pain in the left ear was felt, which resulted in perforation of the membrana tympani and profuse suppuration from the middle ear. And on the second day after the operation, patient took "Influenza": the ear mischief he considered the result of the operation, and not of the Influenza.

Case 4. C.H. Aged 25 years. Cook.

"Deafness" was the complaint for which this patient sought relief at the Hospital. But, in addition, she had nasal obstruction from Hypertrophic Rhinitis on both sides, and also noises in the ears. For about 7 years patient had suffered from the above.

She was a mouth breather: she slept with the mouth open, and she snored in her sleep: on waking her mouth was dry and she felt thirsty. There was no nasal discharge.

The diagnosis in this case was: Hypertrophic Rhinitis on both sides, and Chronic dry Median Otitis. The ears were always "very dry"; the

tininnitus was "a kind of rushing noise."

Before being operated on, this patient was treated in the usual way with nasal lotions, inhalation for the ears, &c, and under such treatment her condition somewhat improved.

In January, 1891, both Inferior Turbinals were removed by spokeshaving. No anaesthetic, general or local, was employed. Patient writes that the operation was "acutely painful", and that the nose bled "freely", with the result that she felt faintish.

An "aching pain in the nose" remained after the operation. The nostrils were plugged with cotton wool.

Slight bleeding continued, more

or less, for 2 or 3 days after the operation.

Patient returned to her home from the Hospital the same day (by train: half an hour's run), and remained in bed for a day.

The operation at once afforded relief: she could "breathe better through the nose as soon as it was done."

A few days after the operation, patient's "limbs ached dreadfully."

No after headache was experienced in this case.

By the operation, the nose was greatly benefitted and the tinnitus lessened considerably, and also the

hearing was slightly improved.

Case 5. M.L. Aged 13 years.

This young girl complained of "deafness" chiefly: she also suffered from obstruction of the nose, which interfered with nasal respiration.

The diagnosis on her Hospital letter was Hypertrophic Rhinitis (left); Adenoids, Eustachian Obstruction. For "about 3 or 4 years" she had been suffering from the above. Both nostrils were partially obstructed; the left more so. Patient was a mouth breather; respiration during sleep was noisy. There was some nasal discharge on both sides, of about a year's duration. After blowing the nose patient used to

experience for a short time a kind of "bursting sound" in the ears. There was some "slight soreness" of the throat, but no dryness there. Often a disagreeable taste in the mouth was complained of, and frontal headache gave her some trouble:

Prior to the operation, there was no treatment used to relieve patient's symptoms.

On the 27th January 1891, the operation was performed. The left Inferior Turbinal was removed with the spokeshave. No anaesthetic was used. The operation was "painful", patient writes, and the bleeding was "very much indeed." She did not faint, nor

did she feel faintish, only "very unstrung."

The nose felt very sore after the operation, and remained so for about a fortnight.

The nostril was plugged directly after the operation: a lotion was prescribed for syringing the nose, and ointment to apply locally. There was more or less bleeding for 3 days, during which time she stopped in bed. She was an Out Patient, and returned home after the operation, by train, a distance of "about 5 miles."

In answer to the question - "Did the operation afford you relief or not?" she writes - "Yes, certainly." She

further states that she was "greatly relieved" by it. Shortly after the operation she suffered from cold shiverings and swelling about the eyes.

After about two weeks, the nose felt quite comfortable. Even after the operation she had some nasal discharge, but her after condition was much preferable to her former state. Frontal headache gave her much trouble after the operation.

patient's opinion of the treatment in her own case is -"Certainly very beneficial." She adds at the end of her letter to me, "The other nostril seems to be affected in the same way."

Case 6. R.E. Aged 17 years. Barman.

This patient complained of "deafness" in both ears, obstruction of nose, discharge from both nostrils, and noises in the ears." There were hypertrophic changes in both nostrils, leading to nasal stenosis, and he had suffered from the above "ever since childhood." The blocking was practically complete in both nostrils and nasal respiration out of the question. Consequently he had the symptoms of a mouth breather: he snored during sleep, his mouth was dry and he felt thirsty on waking in the morning, he had horrible dreams and his sleep was otherwise disturbed.

Patient was "very deaf". There

had been some discharge from the right ear for three weeks before the operation, and there was a "humming" in this ear. Dryness of the throat was complained of.

The usual remedies were employed first of all, with slight benefit.

Then Turbinotomy was performed on the 15th of March 1891. Both nostrils were operated on. It was "painful at the time" of the operation, patient writes. There was a good deal of bleeding. There was very little after pain in the nose. The nostrils were plugged with cotton wool to stop the bleeding. patient returned home the same day, by car and train, a distance of 6 miles,

and on reaching home bleeding began again. He was not confined to bed at all, but was absent from his work for a fortnight.

The operation only afforded him "slight" relief. Some days after the operation, there was some "swelling about the nose."

The nose felt quite comfortable a week after the operation. There was no after headache in this case.

Patient's own opinion with regard to the operation in his own case is, "not very effectual."

Case 7. F.K. Aged 20. Clerk.

This patient suffered from "a straw coloured mucus running incessantly

from both nostrils", when he came to the Hospital to seek relief. He had been troubled for about 3 years with this nasal discharge.

The diagnosis arrived at here was, Hypertrophic Rhinitis: Granular Pharyngitis: Nasal Discharge. There was Cerumen in one ear.

Patient was a mouth-breather: he slept with his mouth open, which felt very dry on waking in the morning. Sleep was often disturbed. There was some slight "huskiness" of the voice, and patient used to spit up "black phlegm."

Before attending the Central London Throat, Nose & Ear Hospital, patient

went to Golden Square Hospital, where he "had a piece taken out from the left nostril by Dr. Macdonald." This, however, did not result in any improvement to his nasal stenosis or discharge.

On the 10th of February, 1891, turbinotomy was performed on both nostrils; both Inferior Turbinals being removed with the spokeshave. Cocain was applied locally in this case.

The operation was, in patient's own words, "very painful indeed", in spite of the local anaesthetic.

The bleeding immediately following upon the operation was not very profuse in patient's opinion; but about one hour later the nose bled very much

indeed, and it continued to bleed for about 12 hours pretty badly, and did not stop entirely for 2 days.

patient "felt faint" after the operation.

The nose was "painful for 3 or 4 days." The nostrils were plugged with cotton wool.

Patient returned home by car the same evening, a distance of 2 miles, but was not confined to bed at all, although he was absent from his work for 5 days. Some relief was afforded by the operation, though not very much.

In 4 or 5 days the nose felt comfortable. Even after the operation some nasal discharge continued, with dry throat and huskiness of the voice. There was practically no headache either before or after the operation.

Case 8. L.P. a girl of 12 years of age.

This little patient suffered from deafness and blocked nose. There were Adenoid Vegetations, Hypertrophic Rhinitis in both nostrils, Cerumen in one ear, and Chronic Dry Median Otitis.

She was quite unable to breathe through the nose, and respiration during sleep was very noisy. She often had "horrible dreams." There was a feeling of "dryness in the throat" and often

thirst.

On 9th June. 1891, Turbinotomy was performed on both nostrils: and it was "very painful." No anaesthetic was used. The nose "poured with blood" and she felt very faint.

Patient returned home the same day, being an Out Patient. Some relief was afforded her by the operation. She was not confined to bed at all, though she was absent from her everyday duties for a few weeks.

Following the operation patient experienced some "cold shiverings, thirst, pains and aches, loss of appetite, and pain and swelling about the nose and eyes." When her monthly ill-

ness came on shortly afterwards she felt very much better.

Case 9. M.L. Aged 27 years. Dressmaker.

This patient's Hospital letter was marked Hypertrophic Rhinitis, both sides; and her complaint was deafness and noises in the ears, of about 7 years' duration.

There was some nasal obstruction present. The respiration was largely oral. She used to dream unpleasant dreams, and her sleep was much disturbed. On waking in the morning she often had a bad taste in her mouth.

The noises in the ears were like "water rushing." There was "a little dryness of the throat", and headache

chiefly on vertex.

Both nostrils were operated on (Turbinotomy) on the 27th October 1891. No anaesthetic was used, and the operation was "very painful indeed." There was free bleeding and patient "felt very bad, but did not faint." The after pain in the nose was not very great. Patient had medicine prescribed and a Lotion to syringe the nose with. There was more or less bleeding for 4 days.

patient returned home the same day and stopped in bed a day. She was absent from her work for 2 weeks. It took her about 40 minutes to get home from the Hospital, partly walking,

partly by train. The relief obtained from the operation was slight only, and the nose did not feel comfortable for nearly 3 weeks. There were symptoms of some febrile reaction after the operation, with pain and swelling of the nose and eyes. The after-headache was very bad here for about a week, chiefly on the top of the head.

Case 10. T.C. Aged 14 years.

This boy had a Hypertrophic condition of the Turbinals in both nostrils, together with a Deviated Nasal Septum, which caused considerable nasal stenosis chiefly on the left side. He also had enlarged cervical lymphatic glands.

His complaint was "hard lumps in

the neck" of about 4 years' duration.

The nose was completely obstructed on the left side. He was a mouth-breather: he snored in his sleep, which was very much disturbed. There was some slight nasal discharge. There was no complaint of deafness. "Sore throat" gave some trouble, and a "bad taste in the mouth", also "bad headache", chiefly "in front." He was treated at first with the ordinary remedies, and some "slight improvement" was effected thereby.

The left side only was operated on, on the 26th January, 1892.

No anaesthetic was employed, yet patient describes the operation as

being only "slightly painful!" The bleeding he says was "moderate"! He felt "slight faintness during the operation."

Pain in the nose lasted for three days. A lotion to syringe the nose was prescribed, also some medicine to take. Patient returned to his home the same day, a distance of about 1 mile, and was confined to bed for 24 hours.

The operation afforded "great relief", which was "immediate." It was not until after nearly 6 weeks that the nose felt quite comfortable. There was slight headache afterwards. Some swelling of the nose occurred

after the operation.

The result, patient considers to be "very good." He adds, "I still suffer from the lumps in my neck."

Case 11. H.L. Aged 22 years. Shop Assistant.

This patient's complaint was "deafness", of about 10 years' duration. The right ear was affected with Chronic Suppurative Catarrh. In the nose there was Hypertrophic Rhinitis on the right side, and on the left side a septal spur. But patient did not complain of his nose at all.

There was no tinnitus , and no throat symptoms.

Prior to the operation (Turbinotomy) patient had no treatment.

Right Turbinotomy was performed on the 22nd of March, 1892. Cocain was previously applied to the nose on cotton wool, and evidently successfully, because patient describes the actual operation as "not painful!" But, he continues, "there was plenty of blood"! He did not feel faint however.

He had no after pain in his nose. A lotion was prescribed for the nose, and an inhalation, in addition to drops for the discharging ear.

Patient returned home the same day, a distance of about 10 minutes' walk.

There were no bad symptoms following the operation. In about a fortnight his nose felt quite comfortable. And

there was no after headache.

patient writes, "the hearing seems to be a little better", and he adds that he cured his ear discharge in about 3 weeks, "by introducing P. Acid Boric with Camel hair pencil twice a day."

Case 12. E.C. Aged 31 years.

This patient's case was diagnosed as, Adenoids, Granular Pharyngitis, Chronic Dry Median Otitis, and Hypertrophic Rhinitis (right), and she complained of "noises in the head and deafness in both ears - right ear most defective", also "dryness of throat, and slight discharge from right nostril." The deafness had lasted for "about 2 years."

The right nostril was blocked: she writes she "could never breathe properly with mouth closed." She slept with the mouth open. In the morning, on waking, the mouth was dry and she felt thirsty. And she often suffered from horrible dreams.

At no time was there ever ear discharge. The noise in the head was a "humming" sound, and it was "continuous."

The throat felt dry, and there was a degree of "hoarseness."

Previous to Turbinotomy, patient attended the Hospital for over a year, and was treated with medicine internally, inhalation, gargle and nose wash, but with no improvement at all.

On the 24th of May, 1892, right turbinotomy was performed. Cocain was used here, locally, and patient writes that "the actual operation was not acutely painful", but that she suffered from "fearful neuralgic pains all over the head."

The bleeding was profuse, and patient "felt faint after the operation."

There was not much after-pain in the nose. A "nose wash" alone was prescribed in this case. The nose "bled freely till the following day", patient says. She returned home the same day, by train, a distance of about 4 miles.

She could not afford to stop in bed at all, but was not able to work

for about 2 weeks. The operation certainly afforded some relief, but was "only partially successful", patient says. There were no bad after symptoms. The nose is still somewhat troublesome: the deafness is not much improved, though it is a little.

After the operation, patient suffered from "intense headache across the forehead."

Case 13. J.F. Aged 27 years. Mechanic.

This was a case of Hypertrophic Rhinitis on both sides; the left especially so.

patient complained of a "small hard substance and swelling in the left nostril," which had been present,

he states, "for about 13 years."

The left nostril was partially obstructed. There was a certain amount of nasal respiration possible, although mouth breathing was the rule. Sleep was not much disturbed. There was no nasal discharge to speak of. The ears were healthy in every respect. There were no throat symptoms.

Patient had no treatment prior to the operation, which was performed on the 14th of June 1892, the left inferior turbinal being removed with the spoke-shave.

No anaesthetic was used. The operation, to quote patient's words, was "very painful, but momentary, like

trying to draw a tooth." There was "very much" bleeding, which caused patient to feel a "little faint."

The after-pain in the nose was not great, but he suffered from "awful headache" and was "very weak for 2 days."

A lotion was prescribed for the nose, and some medicine to take (quinine).

Bleeding continued more or less for about 2 days. Patient returned home the same day, and was confined to bed for 2 days. He walked home, a distance of over a mile. The nostril was plugged with cotton wool.

Slight relief only was the result of the operation in this case.

Case 14. W.B. Aged 30 years. Butcher.

The notes on the Hospital letter of this patient state that both nostrils were blocked with Polypi and a Hypertrophic condition of the turbinals on both sides. The complaint made was (in the patient's own words) that there was "obstruction of both nostrils", "sounds in the ear", "dry throat", and "discharge from both nostrils", of about 10 years' duration. At first, only the right nostril was obstructed, but later on, the left became blocked also. Nasal respiration was quite out of the question here. He was a mouth-breather in the extreme. He slept with his mouth wide open, and "snored very

hard" in his sleep. In the mornings when he awakened, his mouth was very dry, and he felt very thirsty. He often had horrible dreams.

Sleep was very much disturbed; so much so that often in the morning he felt quite "tired and fatigued", and not refreshed at all by his night's rest. For the last 3 or 4 years he had nasal discharge on both sides. Sometimes there was slight deafness; but never any ear discharge. At times there was a "hissing" in the right ear; at others a sound like the "tick of a watch."

The throat felt "very dry", and patient was "husky in the morning"; no doubt from his mouth breathing.

He often experienced a "very disagreeable taste in the mouth," in the mornings. Severe headaches he suffered from.

Three separate times, and by three different doctors was the nose operated on, before Turbinotomy was performed. And relief was afforded by the clearing of the nostrils thus effected.

On the 27th June, 1892, Turbinotomy was performed on both sides.

No anaesthetic was used: the operation was "very painful; just as though they were pulling my eyes in my head", as patient describes it. The bleeding was free. The nose continued painful "For a long time after," about three

weeks or a month he says, and "often used to start bleeding in the night."

Patient returned home the day of the operation. He was not confined to bed at all, although he "used to feel very bad at times."

He did not miss a day's work. His home was about 4 miles from the Hospital, and he returned there by train.

The operation gave relief at once: he was able to "breathe more freely."

Following the operation, patient had symptoms of febrile reaction, and had some swelling about the nose and eyes. The nose felt quite comfortable in about a month.

The throat condition has improved

since the operation. After headache was pretty severe, "right across the eyes."

The following is patient's private opinion, in his own words, as to the operation in his own case:-

"The operation is, in my opinion, a grand one, providing you have a man like Mr Carmalt Jones. But I think it is no good without a man can thoroughly do it. No local doctor should ever touch me again, when I can come to your Hospital and be treated by such a man as Mr Carmalt Jones"!

Case 15. J.S. Aged 18 years. Clerk.

"Stoppage in the nose and soreness" was what this lad complained of when he

sought relief at the Hospital. He had suffered from the above for "about 3 years." Both nostrils were affected with stenosis. He was a mouth-breather: he snored in his sleep, he awakened with a dry mouth and feeling thirsty in the morning; he often had unpleasant dreams. There was no nasal discharge.

"Dryness of the throat" was complained of, with a "disagreeable taste" in the mouth, and "very bad headache." He was treated by a "local doctor" with some "snuff", and the affection was called by him "ulcerated nose"; but little benefit was derived from this.

Turbinotomy was performed on both sides on the 2nd July, 1892. Cocain

was applied locally on cotton wool.

The pain of the actual operation was

"slight", patient writes, also there

was a "numbed feeling", the result of the cocain. Bleeding was free, and he

felt faint afterwards. Lotion, ointment and medicine were prescribed.

For 2 days, more or less, bleeding continued. Patient returned home the same day, by cab, a distance of about 2 miles. He was not at all confined to bed.

Relief was afforded by the operation.

The nose swelled somewhat a few days after the operation: and it has not felt quite right since, patient says. There was no after headache in this case.

Patient writes, "I was not cured by the treatment", but he states that his symptoms were relieved by the operation. In this case, mucous membrane chiefly was removed with the spokeshave.

Case 16. J.R. Aged 24 years. Miner.

This patient's nasal stenosis was due to Hypertrophic Rhinitis on the right side, and nasal polypus on the left. His complaint was, in his own words, "blockage of the nose." This had existed for "about 2 years." He snored in his sleep. There was discharge from the left nostril, the one with the polypus, for about 12 months. There was no deafness. A "disagreeable taste in the mouth" was complained of,

and headache frequently.

Patient had no treatment prior to the operation, which was performed on the 5th of July, 1892; the right nostril being cleared with the spokeshave of its enlarged Inferior Turbinal, and the left of its polypus, with the snare. No anaesthetic was used here.

The operation was very painful, and the bleeding was profuse. Patient felt faintish afterwards. The nose was painful, and there was headache for about 9 days after the operation.

The nostrils were plugged with cotton wool, and a lotion for syringing the nose was ordered.

"The bleeding continued for a week

or 9 days", patient writes.

Patient returned to his home, shortly after the operation, by bus, a distance of about 2 miles. He was not confined to bed at all, but writes that he "ought to have been." He was absent from his work for three weeks. The operation afforded immediate and marked relief: in patient's own words, "the breathing was improved at once so far as freedom went, but owing to the bleeding there was great discomfort for a week: the relief was then very great."

Following the operation, patient suffered from swelling of the nose, and febrile symptoms. In about a fort-

night the nose felt quite comfortable.

patient concludes by writing, "I am certain that I have derived great benefit from the operation."

Case 17. E.H. Aged 25. Clerk.

A case of Hypertrophic Rhinitis, chiefly on the left side, Nasal Polypi on the right side, Granular Pharyngitis, and Suppurative Catarrh of the Left Middle Ear. Patient's complaint was of the discharge from his left ear, with impaired hearing in that ear. His nostrils were more or less blocked, but of this he did not complain much. He had difficulty in blowing his nose. The very slightest cold blocked his

nostrils completely.

He was a mouth-breather: he slept with his mouth open. There was no nasal discharge. There were no noises in the ears.

Now and again he used to have slight headaches.

Patient attended the Hospital about 3 years before he was operated on, for his ear only.

On the 5th July, 1892, this patient was operated on. Polypi were removed from the right nostril with the spokeshave, and on the left side the Inferior Turbinal was spokeshaved.

Cocain was applied locally. The operation was "acutely painful, though of short duration." The bleeding was

very free, and patient felt somewhat faint after. He "experienced slight pain and inconvenience for about 3 days after", in the nose. A lotion was prescribed to syringe the nostrils with. A week later, the "roots" of the polypi were cauterised. The bleeding did not stop for 2 hours. Cotton wool had to be used as plugs for the nostrils.

Patient returned home the same day, by train, about 8 miles. As the result of the operation, there was "decided relief, especially after the nose was burnt." The relief obtained was "immediate." There were no bad symptoms following the operation. In about 2 weeks' time the nose felt

comfortable.

Patient writes, "My only complaint now is that my ear has never properly stopped discharging, but that, I am sure, is not the result of the operation on the nose, but rather I should say, through my not being able, through travelling, to attend at the Hospital on more than 5 occasions since the operation." There was no after-head-ache in this case. Patient concludes his letter to me ^{as} ~~as~~ follows, "I am perfectly satisfied with the operation in my case, and at present can breathe freely through both nostrils, and have no sign of any return of the polypi; to prevent which, the burning afterwards, I believe, had a great deal to do."

Case 18. F.H. Aged 6 years.

This little girl suffered from Hypertrophic Rhinitis in both nostrils, Adenoids, and Eustachian Obstruction. Her complaint was deafness, in both ears, and noises in the ears. There was ^also some discharge from the nose, chiefly the left side. The little patient snored in her sleep, which latter was disturbed. The duration of the above was "about a month." There was no ear discharge. The tinnitus was of a "whistling" nature. There was no throat complaint.

Patient had¹no treatment at the Hospital prior to the operation (Turbinotomy) which was performed on both nostrils, on the 19th of July, 1892. The

operation was very painful: no anaesthetic was used.

As regards bleeding, patient's father states that there was "very much", and that she felt "prostrate" afterwards. There was complaint of pain in the nose for only 2 or 3 days after.

The nostrils were plugged with cotton wool, and a lotion was prescribed for syringing the nose. The bleeding continued more or less for 2 days. patient was taken "home directly" by car, and she remained at home from school for a week. The operation afforded slight relief only to the deafness. The nose swelled after the operation, but soon got well again. In about

2 weeks' time the nose felt quite comfortable. There is still some deafness and still some nasal discharge.

Case 19. E.A. Aged 23 years.

This patient complained of "something in her nose." There was found to be present on examination, Hypertrophic Rhinitis on both sides, Adenoids, and enlarged Tonsils. There was complete nasal stenosis here: patient could not breathe at all through her nose. This state of matters had existed for about a year. She was a mouth-breather in the extreme. Unpleasant dreams were complained of, and many of the usual symptoms of mouth breathing.

There was no nasal discharge, and no deafness. "Very bad headache" was often present, at the vertex: the throat felt "very dry", and there was "always a very bad taste" in the mouth.

Prior to the operation, patient had no treatment. Turbinotomy was performed on both nostrils, on the 19th of July, 1892.

The operation, patient states, was "very painful" and there was "great loss of blood." No anaesthetic was used. For a long time afterwards, patient felt faint. There was "not a great deal" of after-pain in the nose. The nose was plugged with cotton wool, and a lotion and ointment were prescribed. There was more or less bleed-

ing for 3 days. Patient went home the same day from the Hospital, a distance of about a mile, part of which she walked. She went to bed as soon as she got home, but got up the next morning, although she was "feeling bad." For about a month she was absent from her work.

The operation afforded "very great relief"; it was "very beneficial", and a month afterwards, the relief was "very marked."

The nose swelled after the operation and there were symptoms of a febrile reaction present for some days. These all passed off in due course. In about a month, the nose felt quite comfortable.

There was intense after-headache here, especially at the vertex and temples. Patient's opinion of the operation in her own case is as follows:-

"For the comfort you get after it, it is worth having it done." And she concludes her letter thus: "I shall be ever grateful to Mr Jones."

Case 20. E.C. Aged 53 years. Dressmaker.

The nose of this patient was blocked with polypi, on both sides. She complained of "headache." There were no ear symptoms at all. The throat was "dry" and there was discharge from both nostrils.

Patient had suffered for "some years."

She snored in her sleep: her mouth was dry on waking. The headache was "very bad" and was chiefly felt about the "right temple."

This patient's nose was operated on, on three different occasions.

1st. on the 9th of August 1892, when the right nostril was "cleared" with spokeshave, snare and forceps. 2nd. on the 23rd of August, 1892. when the left side was similarly treated; and 3rd on the 11th of October, 1892, when the left nostril was further cleared out, as above.

Cocain was applied on cotton wool.

The operations, in spite of this, were "very painful". "There was much bleeding for a week after", patient

writes. She "felt faint" afterwards. There was no after pain in the nose. A lotion and medicine were prescribed; the latter "for debility."

Patient returned home the same day, by bus, a distance of about $3\frac{1}{2}$ miles. She was not confined to bed, and was "able to go to Greenwich the next day." The operation afforded "great relief", which was "immediate." It resulted in a "decided improvement." But patient adds, "the nose is getting bad again."

Case 21. W.H. Aged 29 years. Plumber.

A case of Hypertrophic Rhinitis on both sides, with a septal spur on the left side.

The complaint made was "stoppage in the nose", for about 2 or 3 years. "Both" nostrils were "completely obstructed", patient writes: nasal respiration was quite impossible through either nostril alone, or both together. Patient was a mouth breather, in consequence; he snored very much in sleep, his mouth felt very dry when he awakened in the morning, and he was very thirsty then. Occasionally he was troubled with horrible dreams, but on the whole he "slept fairly well." There was no discharge from the nose. No ear symptoms were complained of. Often there was a disagreeable taste in the mouth. He was free from headache. Patient

received no treatment prior to the operation. This was performed on the 30th of August 1892. Cocain was employed, with the result that patient describes the operation as being only "slightly painful." There was pretty free bleeding. After the operation patient states there was "no pain whatever." The nostrils were plugged with cotton wool. Bleeding continued more or less for "about 8 hours."

Patient returned home on the day of the operation, on foot, a distance of about $1\frac{1}{2}$ miles. He was not confined to bed at all after the operation, nor was he absent from his work. The relief obtained was immediate and very

marked. No unfavourable symptoms appeared after the operation, and in about 24 hours or so, the nose felt quite comfortable. There was no after-headache here.

Patient writes, "I think the treatment was very successful." On the 6th of September, a week after the operation, it was noticed that there was "profuse fungation" in the right nostril. This "fungoid mass" was removed on the 13th September, successfully.

Case 22. G.S. Aged 22 years. Artist.

This was a case of Hypertrophic Rhinitis, together with Septal Spur. Patient complained of "obstruction of

the nose, and much discharge from both nostrils," of about 3 or 4 years' duration. Mouth breathing was the rule here: in sleep, the mouth was kept open, and the breathing was noisy. Other results of mouth-breathing were present. There was "dryness of the throat when waking up in the morning, and nearly always a very disagreeable taste on awaking." No treatment was tried other than operative measures.

Mr Wyatt Wingrave operated on this case. He used cocain, as a local anaesthetic. Still, the operation was painful, and patient fainted after it. There was "no actual pain afterwards, but of course a very uncomfortable

feeling for a day or two." A lotion, a snuff and an ointment were prescribed in this case. Bleeding continued for some time after the operation.

Patient returned home soon after the operation, by car and bus, a distance of "about $3\frac{1}{2}$ miles." He was not confined to bed at all, and he was only absent 2 days from work. The operation certainly gave relief. In about 2 or 3 weeks the nose felt comfortable.

Since the operation, patient has had "dry throat and nasal discharge, not the result of the operation" he thinks, and "much preferable" to his condition before operation. There was

no after headache in this case. In patient's own words, he "certainly had decided benefit" from the operation, and he considers "the treatment good."

He concludes however by saying that he is "shortly going to the hospital again," as his "nose is gradually getting into its former state."

Case 23. J.R. Aged 43 years. Housekeeper.

This was a case of Nasal Stenosis from Hypertrophic Rhinitis on both sides, and Septal Spur: there was also Chronic Pharyngitis, and Varicose Veins at the root of the tongue ("throat piles"). Patient complained of "obstruction to breathing through the nose", "discharge of humour and blood

from the nose, dry throat, slight deafness occasionally in both ears, with noises." These symptoms had been present for about 4 or 5 years. Patient was, of necessity, a mouth-breather. She breathed noisily in her sleep, and on waking had a very dry mouth and felt thirsty. Often she had horrible dreams, and used to "start up in bed" in a fright.

The throat felt very dry, and there was a bad taste in the mouth. Headaches were present often, across the forehead and the back of the head.

For a fortnight before the operation, patient was treated with a lotion and ointment for the nose, and medicine to take. This improved slightly the nasal

condition.

Both nostrils were spokeshaved by Mr Carmalt Jones on the 15th of October 1892. Cocain was applied up the nostrils previously on cotton wool.

The operation was "very painful" in spite of this. Bleeding was pretty free and lasted more or less for 6 hours, and patient felt exhausted afterwards. After the operation there was "not much pain", and patient continues, "my suffering seemed to be more from nervous shock, and I had no pain from the result of the operation, the nose healing quickly." A lotion was prescribed for the nose, and medicine to take as well.

Patient came to the hospital at 2 p.m. and reached home again in a cab, a distance of about a mile from hospital, about 6 p.m. the same day. The operation gave "great relief." The relief was "immediate and very marked."

In about a fortnight the nose was comfortable. Since the operation patient has had a "slight discharge of humour and blood from the nose before the monthly illness came on, not the result of the operation, and sometimes a slight noise in the ear; but my present condition is far preferable to my condition before operation." The following is patient's opinion of the operation in her own case, quoted from her letter

to me: "The operation was more successful than we had hoped for, and I cannot speak too highly of the result, and of my gratitude for what Mr Carmalt Jones has done for me." Then she continues: "For 2 or 3 years before the operation, if I took cold, I had a horrible racking cough sometimes lasting 6 weeks, and preventing my getting to sleep until 4 or 5 in the morning, night after night, until I felt as though I could not bear it any more. Since the operation that cough has never returned."

Case 24. C.A. Aged 43 years. Clerk.

A case of Hypertrophic Rhinitis
on both sides, chiefly the right:
Elongated Uvula, and Post Nasal Catarrh.

"Sensitive throat and partial stoppage of the nose, chiefly the right side", was what the patient complained of, when he sought relief at the hospital. For about 20 years, more or less, he had suffered from the above. There was some nasal discharge; also dryness of the throat.

Before being operated on, patient used a lotion to syringe his nose with, but no improvement resulted from this. On the 1st of November 1892 right turbinotomy was performed by Mr Carmalt Jones. (The uvula had been shortened before; on the 1st October, 1892). Cocain was used: but patient describes the operation as "most acutely painful."

The bleeding was profuse, and did not cease entirely for 2 or 3 days. After a few minutes, there was not much pain in the nose, but on the second day there was a "fearful pain in the forehead" which persisted for about a week. A lotion and medicine were prescribed, and plugging of the nostrils with cotton wool to stop the bleeding. Patient left the hospital soon after the operation, and returned home by train, a distance of about 3 miles. He was not confined to bed at all, but was absent from his work for about a week. When the nose healed, relief was experienced, and it was "very marked." Not till

after some "4 or 6 weeks" did the nose feel comfortable. As mentioned above, there was intense after-headache in this case over the right eye, from about the 2nd till the 8th day. Patient writes that the operation "cured him of stoppage of the nose."

Case 25. A.S. Aged 16 years. Messenger.

Hypertrophic Rhinitis on both sides: "obstruction of the nose" being patient's complaint. This had lasted for about 6 or 8 months. Nasal stenosis was practically complete here on both sides. Most of the symptoms of mouth-breathing were present. There was "very little discharge" from the nose: and there was very slight deafness in the

left ear. On waking in the morning, patient had a "dryness in the throat" and a "very disagreeable taste in the mouth." There was no treatment prior to the operation, which was performed on the 20th of November, 1892, and consisted in removing both Inferior Turbinals with the spokeshave. Some general anaesthetic was used in this case: patient does not know what it was: probably gas. He "did not notice any pain at the time", but he "felt faintish after the operation." Afterwards there was "a little pain, and that lasted for about a day and a half." A lotion was prescribed to syringe the nose with. Bleeding did not cease for about 5 hours.

Patient walked home from the Hospital after the operation, a distance of about a mile.

Immediately after the operation, relief was afforded. The nose felt quite comfortable at the end of 2 days. There was only slight after-headache. Patient concludes his letter to me as follows:- "Ever since I went under the operation, I have never had any pains whatever, and have always been quite easy ever since."

Case 26. S.C. Aged 19 years. Shop Assistant.

The nasal stenosis in this case was due to Hypertrophic Rhinitis on both sides: there was also Post Nasal Catarrh present. There was also nasal discharge,

and "dry throat." For about 5 years the above state of matters had existed. Some of the symptoms of mouth breathing were present here.

Headache, chiefly vertical in situation, often troubled patient. Before being operated on, patient was treated with a nasal lotion, a gargle, a snuff, and ointment for the nose. But this did not improve matters any.

Turbinotomy was performed on both sides, on the 7th of December 1892. Cocain was applied locally. The operation was "painful" and there was "very much" bleeding, causing patient to feel "faintish." The nose remained painful for "about a fortnight" after the operation.

As after-treatment, a snuff was prescribed, also ointment and medicine. Patient returned home the same evening by train, a distance of "about 2 miles." He was confined to bed for 4 days, owing to the bleeding, which began again about $1\frac{1}{2}$ hours after leaving the hospital, and which continued in spite of treatment until patient was "nearly a corpse" to quote his letter. For 8 days he was absent from his work. "Slight relief" only was afforded by the operation, and following it, there was some swelling, about the nose and eyes.

It was a long time before the nose felt comfortable. There was rather severe after-headache, on the top of

the head. Patient's opinion of the operation is, that it afforded him "slight relief", and that "indoor treatment in the Hospital was required at least for a day or two."

Case 27. H.R. Aged 16 years. Apprentice.

suffered from nasal stenosis in both nostrils of about 2 years' duration, due to Hypertrophic Rhinitis, Polypus and Deviated Septum. Patient writes - "I could not breathe through my nose": there was "a little hissing in both ears", a "dry and parched throat", and "discharge from both nostrils." Patient was a mouth breather in the extreme, and had most of the symptoms common in such cases. He had "electrical treatment"

at St. Bartholomew's Hospital, but with little good effect. There was headache, chiefly on the top of the head. Both nostrils were operated on, on the 13th of December 1892, cocain being used locally. The operation, patient states, was "acutely painful" in spite of this, and the bleeding was profuse, patient feeling "faintish" after it. The nose was "a little painful" for a few days afterwards.

As after treatment, a lotion, snuff, and ointment were prescribed, and the nostrils were plugged with cotton wool. The bleeding soon stopped in this case. Patient returned home the same day, a distance of about a mile, which he

walked. He was not confined to bed, but was absent from work for a week. Great benefit was derived from the operation, but not at once: only afterwards was there "great relief." The nose and eyes swelled after the operation, and there were febrile symptoms in addition. Even now, patient has a dry throat, and discharge from the nose with obstruction there; "but not so bad as it was before the operation."

There was no after-headache here.

patient writes me that the operation did him "a great deal of good", but he adds, "I am afraid it is getting bad again."

Case 28. A.C. Aged 17 years. Servant.

This was a case of Hypertrophic Rhinitis on both sides; Adenoids, and Chronic Median Otitis (left). patient complained of "deafness", and "sounds in the ears", chiefly the left, of about 4 years' duration. Nasal Stenosis existed on both sides, although no complaint of this was made.

Respiration was to a large extent oral, many of the common symptoms of mouth breathing being present. There was discharge from both nostrils, and patient states that there was discharge from the left ear as well.

The tinnitus was like the "ticking of a watch". There was no throat com-

plaint, and only at times was there headache, which was very slight and at the back of the head.

There was no treatment prior to operation. Both nostrils were operated on, on the 25th of February 1893, no anaesthetic being used.

The operation was "very painful" and the bleeding was free, causing patient to feel faintish afterwards.

For "some weeks" afterwards, there was more or less pain in the nose.

Lotion for the nose and medicine to take were prescribed. The bleeding did not finally stop for "about 12 hours." Patient returned home after the operation, and was confined to bed

for 4 days. Her home was 4 miles from the Hospital, and she journeyed there by train and car.

Relief followed the operation, gradually and by degrees and not immediately. There was some swelling about the nose and eyes, with thirst, for a few days afterwards. In 2 months' time the nose felt quite comfortable, patient states.

Since the operation she has had no trouble with her ears, except that she has deafness when she has a cold; there is no discharge now and no throat symptoms. There was some after-headache at the back of the head. Patient concludes her letter thus: "The operation

was quickly done, and I feel indebted to Mr Carmalt Jones for the relief I have received."

case 29. A.B. Aged 21 years. Dressmaker.

Hypertrophic Rhinitis on both sides, Chronic Dry Median Otitis in both ears, Cerumen impacted in one ear. Patient complained of "deafness" in both ears of about 10 years' duration. She made no complaint of blocked nose, although such was present. There was never any discharge from the ear, but a slight "humming" tinnitus existed.

No throat symptoms were complained of. Before operating, a lotion was prescribed for syringing the nose, but

this did not improve the state of matters.

Both nostrils were operated on (Turbinotomy) on the 14th of March, 1893. The operation was "very painful": no anaesthetic was used. There was a "great deal" of bleeding, which caused patient to feel "very faint." The nose felt "very sore afterwards." Both nostrils were plugged with cotton wool, and a lotion was prescribed for syringing the nose with. The bleeding did not stop for 48 hours. Patient resided in the Hospital for 3 weeks, and was confined to bed for 4 days. For 4 weeks she was absent from her work. The operation was beneficial to a "slight" extent

only. In two months' time the nose felt quite comfortable. No unfavourable symptoms followed the operation.

Patient had "dry pieces" coming from the nose for about a year, the result of the operation she thinks. There was "for a few days" headache on the "right side of head."

A month after the operation, the tinnitus had disappeared and the hearing was found to be improved a little.

Patient's sister is deaf and so is her mother.

Case 30. D.M. Aged 51 years. Turner.

A case of Hypertrophic Rhinitis in both nostrils, and Chronic Dry Median Otitis in both ears. Complaint made by

patient was of "deafness" and noises in the ears like steam blowing off. Also there was blocking of the nose with discharge, so that nasal respiration was interfered with, leading to the common results of mouth-breathing.

This patient was operated on twice: once and firstly on the 24th March 1891, when both sides were spokeshaved; and again on the 14th of March 1893, when the right side was done again.

Cocain was applied locally, on cotton wool. The operation was "very painful", "as if the back of the head were being crushed through", as patient expresses it. The bleeding was profuse, and did not stop for 4 days. Patient felt slightly

faint as a result of the loss of blood.

As to the after pain in the nose he writes

"I took no particular notice as anyone must expect some after any operation."

A gargle was prescribed, also a nose lotion, and some medicine to take.

Patient returned home the same day of the operation by train, about 9 miles.

He was confined to the house, but not to bed, for a few days. The nose swelled for a few days, and there was some loss of appetite after the operation.

In about a fortnight the nose felt quite comfortable. The operation certainly gave relief, patient writes. He has still though, a "thin discharge from the right side of the nose" and some

blocking of that side at times. There was no after headache here. patient states that he never had a headache in all his life!

The following is patient's opinion of the operation in his own case:-

"I think for the breathing, it is good; but for deafness it has not been so good as I expected."

Case 31. G.H. Aged 18 years. Clerk.

"Stoppage in the nose", was this patient's complaint. Both nostrils were obstructed from a hypertrophic condition of the inferior turbinals. For about 18 months this state of matters had existed. Nasal respiration was

practicably impossible, so many of the signs of mouth breathing were present. There was discharge from both nostrils. There were no symptoms of ear mischief at all. "Dryness in the throat" and a "bad taste in the mouth" were complained of. There was no headache. Before turbinotomy was performed "the nose was cauterized", but with no good result.

On the 1st of April, 1893, both nostrils were spokeshaved, after cocain had been applied on cotton wool. The operation was "painful at first", and there was much bleeding, which caused patient to feel faint. The nose continued painful "only for about 2 or 3 days after." A lotion was prescribed to

syringe the nose with, and a powder to use as a snuff. Bleeding did not finally cease for "about 8 hours."

Patient was not resident in the Hospital, but returned home the same day, by train, a distance of about 2 miles.

The operation gave great relief: "the nose was stopped by thick mucus for about a week, and then got clear", when it felt quite comfortable. There was "only slight" headache after the operation. With regard to the operation, patient writes, "It afforded me a great deal of relief."

Case 32. H.F. aged 18 years. Apprentice.

This was a case of Hypertrophic Rhinitis on both sides, causing pretty complete nasal stenosis. Patient complained of "stoppage of the nose, and bad eyesight," of about 2 years' duration. Mouth breathing was the rule here, many of the signs of that abnormal condition being present. He was "a little deaf in both ears, for about 18 months." For about 2 weeks, there was slight discharge from the right ear; and at times there were "humming" noises in both ears. On this patient's Hospital letter, there is no note of any abnormal ear condition. Very often he had "a disagreeable taste in the mouth on awakening in the morning,"

and the mouth and throat then felt very dry.

Before coming to our Throat Hospital, he had been attending at Moorfields Eye Hospital for "bad eyesight," and the surgeon who attended to him there, recommended him to go to the Central London Throat, Nose and Ear Hospital, and have his nose seen to.

On the 2nd of May, 1893, both Inferior Turbinals were removed with the spokeshave, by Mr Carmalt Jones. No anæsthetic was used. The actual operation was "very painful for the minute" and the bleeding was profuse, causing patient to feel "very faint afterwards."

There was no after pain in the nose at all in this case. A nasal lotion only was prescribed here. There was more or less bleeding for "about 4 days."

Patient returned home the same day, in a cab, a distance of about 2 miles. He was not confined to bed at all afterwards, but he was absent from his work for "about 8 days."

The operation gave "great relief," and "almost immediately." The relief was "very marked" patient writes, and "especially to my sight."

No unfavourable symptoms followed the operation. In about 2 or 3 weeks the nose felt quite comfortable. Patient has had "no trouble at all

since the operation." There was no after headache. With regard to the operation in his own case, patient writes "It could not have been more successful."

In addition to answering my questions as above, patient wrote me a letter, from which I have thought fit to quote as follows :-

"I may add to enclosed by saying I was under treatment for the eyes at the London Ophthalmic Hospital, Moorfields, and they found out there was a stoppage in the nose which affected the sight, and advised me to go to the Central London Throat, Nose and Ear Hospital, which I did, and there had an operation performed on my nose by

Mr Carmalt Jones; and since that operation, I have never felt better in my life, and have entirely regained my sight, sleep well, and have given up snoring and don't feel as if I could do a drink in the mornings as I used to, and I feel very grateful to you for what you have done for me. It affords me the greatest pleasure to fill up the enclosed, and trusting it will meet with your approval,

I remain, &c."

Case 33. C.E. aged 29 years. Housewife.

A case of Nasal Stenosis on both sides, due to Hypertrophic condition of both Inferior Turbinals. In her own words, patient complained of,

"obstruction of the nose on both sides," of "about 2 years'" duration. There was no nasal discharge. Respiration was oral, almost entirely, and most of the symptoms of mouth breathing were present, such as, sleeping with mouth wide open, snoring in sleep, dry mouth and throat on waking, disturbed sleep, unpleasant dreams, &c.

From childhood until she was married, 10 years ago, patient suffered with her ears, being deaf, and having discharge from both ears, and a humming noise in the ears. "Dry throat" and "bad taste in mouth" and severe headache, chiefly frontal, she often had before the operation.

No other treatment was tried

before the operation, which was performed on the 9th of May, 1893, both Inferior Turbinals being spokeshaved.

Cocain was applied locally, yet the operation, patient states, was "very painful." There was "very much" bleeding, causing a feeling of faintness afterwards. And for about three months, there was pain in the nose. A lotion to syringe the nose with, was prescribed, and also medicine to take.

The bleeding did not stop entirely for about 5 hours. Patient returned home the same day, by car, a distance of 2 miles. She was not confined to bed at all, but was unable for her daily duties for about a week. The result of the operation was, "very

marked and immediate" relief. Following the operation, there were pain and swelling of the nose, and cold shiverings, for a few days, which however soon passed off. There was also some "slight" headache afterwards, chiefly frontal.

Patient writes, "It afforded great relief at the time, but I think they are forming again," also, she continues "after the operation, something ought to be done to stop the bleeding: every time the nose was blown, clotted blood and pieces of flesh like fibre or roots, came down, and this lasted about a month."

Case 34. W.B., aged 24 years. Clerk.

This patient complained of "obstruction in the left nostril," of about 6 months' duration. In the right nostril, there was found, on examination, a hypertrophic condition of the Inferior Turbinal, and in the left side, polypi were present, which latter completely blocked up the left nostril, the right one being only slightly stenosed. There was some little discharge from the left nostril only. Respiration was largely oral. There was no deafness. Headache was very bad at times.

He had a polypus removed by Dr Woakes some time before Mr Carmalt Jones operated on him.

Mr Jones operated on the 23rd of

May, 1893, removing with the spokeshave the Right Inferior Turbinal, and the Polypi from the left nostril. Cocain was used, "but it did not seem to deaden the pain at all", patient writes, as the operation was "acutely painful." The bleeding was very free: so much so that he almost fainted: and it did not cease for several hours. There was very great after-headache. Lotion and ointment were prescribed.

Patient returned home after the operation, by train, a distance of 5 or 6 miles. He was not confined to bed at all, although he suffered very much from headache for a week afterwards. He was absent from work for a week.

The operation certainly afforded

relief: especially so after a time.

There were no unfavourable symptoms after the operation. In 2 or 3 weeks, the nose felt quite comfortable again.

Patient considers the operation a "very rough" one, although it certainly improved his condition.

Case 35. E.G. aged 17 years. Clerk.

This patient was operated on for Hypertrophic Rhinitis of both nostrils, on the 23rd of May, 1893. Both Inferior Turbinals were removed, by the spokeshave. Patient's complaint was "a thick discharge from both nostrils." The throat was "rather dry."

For almost a year, the above condition had existed. The nasal stenosis

was not very extreme; the left side being the worse. Signs of mouth-breathing were present, however. There was no deafness. A "fishy taste in the mouth" was sometimes experienced, and "bad headaches" gave much trouble. Previous to operating, Mr Jones prescribed a lotion to syringe the nostrils with; but this had no good effect.

Cocain was applied before operating, but in spite of this, patient described the operation as "very painful." There was not very much bleeding, patient writes, at the time of the operation, but there was an hour afterwards. He felt faintish at the time of the operation, and

actually did faint after reaching home. The nose was painful for some days afterwards.

Lotion, ointment and powder as snuff, were prescribed in this case. Patient walked home after the operation (about 5 minutes' walk), and remained indoors for a week, though not confined to bed. On reaching home, bleeding started afresh; about an hour after the operation.

Relief, though not very marked, was afforded at the time; but later on, to a greater extent. Fourteen days after the operation, at 11 p.m. one night, bleeding broke out afresh; and patient went straight to the Hospital and was received as an In-patient

where he stayed 2 weeks.

Plugging of the nostrils was resorted to, and the bleeding controlled in this way. After leaving Hospital, he was absent from work for about 2 months. All went well, till July, 1894, when he went to Hospital again, and on the 10th, had a Polypus removed from the left nostril. Again, on Oct. 23., another polypus was removed; and on 1 Dec. still another. And then on Dec. 11th, the bases of the polypi were cauterised, and after that he had a free nasal passage.

Case 36. J.M. aged 32 years. Compositor.

This was a case of Vascular
Hypertrophy of the right Inferior Tur-

binal (Turbinal Varix); Enlarged Lingual Tonsil; Varicose Veins at the root of the tongue ("Throat piles" of Mr Lennox Browne); Chronic Dry Median Otitis, with Tinnitus. Patient's complaint was of the ear: "deafness with noises." His slight nasal obstruction did not trouble him much. About 18 months was the duration of his complaint. There was no nasal discharge and none of the signs of mouth breathing. The tinnitus was continuous, and of a "buzzing" or "humming" character. There was no throat affection. No treatment was prescribed before Turbinotomy was performed. On the 13th of June, the right Inferior Turbinal was removed with ^{the} a spokeshave. No

anæsthetic was used, and the operation was "very painful". The bleeding was "copious". After a day or two, there was "very little pain" in the nose. The right nostril was plugged with cotton wool; and a lotion to syringe the nose, was prescribed. "Bleeding continued more or less for a week," patient writes.

Patient walked home (about a mile) after the operation; he was not confined to bed at all, and he only lost half a day's work.

Relief to breathing through the nose followed the operation; but the hearing was not improved, nor yet the tinnitus. There were no bad symptoms after the operation.

Case 37. L.S. aged 21 years. Laundress.

In this case, the right nostril was quite blocked owing to hypertrophy of the Inferior Turbinal; so much so that it was quite impossible to pass the Eustachian Catheter in the treatment of the ear condition. There was present also, chronic Dry Medium Otitis on both sides, with tinnitus "like the sound of a steam engine." Patient complained of the above for about 6 months. Symptoms of mouth breathing were present. There was slight deafness. Very often there were "bad headaches on the top of the head." Treatment previous to her attending at our Hospital, resulted in no improvement. The operation was performed

on the 13th of June, 1893, the right nostril only being spokeshaved. Cocain was used; still the operation was "acutely painful", patient writes. There was "a good deal" of bleeding, with a feeling of fainting afterwards. For about 8 days afterwards, the nose was painful. Lotion, ointment and snuff were prescribed in this case. The bleeding stopped entirely after 24 hours. Patient returned home the same day, by train, a journey of about half an hour. She was not confined to bed at all, and was only absent from her work for two days. The relief afforded by the operation was "immediate." The nose felt comfortable after about a week. There was only

"slight" after-headache. Unfortunately the operation"only gave relief for the time," patient writes.

Case 38. S.C. aged 19 years. Servant.

A case of Nasal Stenosis on both sides, from Hypertrophic Rhinitis, with discharge; and deafness in the left ear with discharge for about 9 years; also "beating" noises in the right ear, and a "dry throat." Patients sleep was much disturbed, and she often had "horrible"dreams. Frontal headache was often "very bad"; and "disagreeable taste in the mouth" was common. Prior to operation, she was treated in the usual way with ear lotion and drops, nose lotion, &c.,

but with no good results. On the 17th June 1893, both Inferior Turbinals were spokeshaved: the operation was "acutely painful", and the bleeding copious, causing patient to "feel faint" afterwards. She was an in-patient, from the 17th of June until the 8th of July, 1893. There was no bleeding after the second day. She was confined to bed for 3 days, and was absent from work for a month. The operation "gave relief for a time."

There was some slight febrile reaction with pain and swelling about the nose for a few days after the operation. But soon the nose felt quite comfortable. There was "intense" after headache over the eyes. Relief in this

case, unfortunately was only temporary.

Case 39. T.D. aged 32 years. Shop Assistant.

The result in this case is unsatisfactory, as patient writes that the operation was "of no use whatever" and that "the whole of his symptoms returned within 6 months." The morbid condition here was as follows:-

Hypertrophic Rhinitis: and Nasal Polypus (right). The symptoms complained of were, "obstruction in, and discharge from, both nostrils" of about 6 years' duration.

Nasal Stenosis was complete on both sides; consequently oral respiration was the rule with its accompanying symptoms. There was no ear com-

plaint. There was "bad taste in the mouth" and "fearful frontal headache". "About 4½ years previously", patient had had "nasal polypus removed by Dr Dundas Grant," which resulted in some relief.

Double Turbinotomy was performed here, on the 20th of June, 1893. Cocain was used, yet the operation was "extremely painful", and the nose bled "a very great deal", causing him to feel "rather faint." There was "a great deal of pain in the nose for 18 hours after the operation." The nostrils were plugged; and a lotion was prescribed. Patient returned home after the operation, by train, a distance of "about 7 miles". The

operation afforded no relief according to patient. In 3 or 4 days the nose felt comfortable. There was "severe frontal headache" after the operation.

Patient concludes his letter to me as follows:- "I am now under treatment at the Homœopathic Hospital Great Ormond Street, and have received great relief therefrom!"

Case 40. D.S. aged 14 years. Tailoress.

This case is a little more encouraging than the last. There was Hypertrophic Rhinitis together with a Septal Spur on the right side causing stenosis in the right nostril. Respiration was largely oral. Headaches were frequent. The right nostril only

was operated on; on the 14th of June, 1893. The operation patient describes as being "slightly painful", and as causing a "choking sensation." Bleeding was pretty ^{free}, and she "felt faintish" after it. The nose felt "slightly sore" for some time afterwards. Lotion, ointment and snuff were prescribed. - The Spur in this case was removed with the Spokeshave.

The nose "bled slightly, the rest of the day."

Patient returned home by cab the same day. She stopped in bed for one day only.

Patient "obtained relief directly after the operation." There was some swelling about the nose, following the

operation, together with febrile symptoms, for a few days.

Case 41. L.M, aged 26 years. Boot Finisher

This was a case of Hypertrophic Rhinitis in both nostrils, causing nasal sten^sosis; together with Enlarged Tonsils and Adenoid Vegetations.

Patient complained of the nasal obstruction, and it had existed as long as he could remember, he says. There was no discharge from the nose.

Patient was a mouth-breather. There was no deafness. "Slight headache" he suffered from at times: also "dryness of the throat." He had no treatment prior to the operation, which was performed on the 27th of June, 1893 both nostrils being spokeshaved. (Two

weeks before this, the tonsils and adenoids were removed.) No anæsthetic was used, and the operation was "painful at the time". The nose bled "a good deal", but patient did not feel at all faint. There was "no particular pain" in the nose afterwards.

Lotion and medicine were prescribed here. Patient returned home the same day by train and was absent from his work about 4 days, although he was not confined to bed at all. The operation "gave relief almost directly, to the throat and nose." No bad symptoms followed the operation at all. In 4 or 5 days the nose was quite comfortable. Patient writes, "I am better through the operation, and prefer to

be as I am now," to the condition before. There was only slight after head ache here. Patient concludes his letter to me as follows:- "Again I say I am very satisfied with the operation, and think Mr Carmalt Jones treated me with every kindness and the greatest consideration, which I was thankful for."

Case 42. C.C. aged 40 years. Housewife.

"Violent sneezing, pain in the head and running at the nose" was what this patient sought relief for. For about 18 months the above symptoms had troubled her. There was nasal stenosis in both nostrils, chiefly the left; the discharge was like "a constant cold", and was from both sides

especially the left. There was no deafness. There were symptoms of mouth-breathing: throat dry and sore, bad taste in mouth, headache, unpleasant dreams, &c.

Turbinotomy was performed on both sides, on the 4th of July, 1893. No cocain was used. The operation was "very painful". And the bleeding was very free, and did not quite stop till next day. The after pain in the nose was not very bad. Lotion, snuff, ointment and medicine were prescribed. Patient stopped in Hospital one day and night, and then returned home by 'bus, a distance of about 3 miles. Great relief was afforded by the operation, but patient says she was

"not cured" by it, as she still sneezes and has slight nasal discharge.

Case 43. M.C. aged 25 years. Tailoress.

The complaint made in this case was "dry throat", and "discharge from both nostrils," for about 7 years. Nasal stenosis was pretty complete here on both sides, due to Hypertrophic Rhinitis. Patient was very decidedly a mouth-breather; nasal respiration being quite out of the question. There were no ear symptoms at all. The throat felt dry, and the mouth had often a bad taste. There was frontal headache. Before operating, Mr Jones prescribed a lotion to syringe the nose with, and this improved her

condition somewhat.

Turbinotomy on both sides was performed on the 14th of Oct. 1893, by Mr Jones, and I administered nitrous oxide gas to the patient for him. No pain was felt at all; the bleeding was free, and patient felt "very faint". After recovering from the effects of the gas, a pain was felt in the nose between the eyes, and this continued for 5 days.

The nostrils were plugged: a lotion and medicine were prescribed. The bleeding did not cease entirely for about 30 hours.

Patient returned home after the operation, by train and car, a distance of 4 miles. She was confined to bed

for 4 days, and was absent from work for a week.

The operation gave "great relief" patient writes. The nose did not feel quite comfortable for nearly 2 months. Patient concludes her letter thus:

"The operation was quickly done and I feel indebted to Mr Carmalt Jones for the benefit I have received."

Case 44. E.W. aged 22 years. Machinist.

This patient suffered from Nasal Stenosis on both sides, the result of Hypertrophic Rhinitis in both nostrils. Her complaint was "stoppage in both nostrils," of about 8 years' duration. She was a mouth-breather; extremely so. There was no nasal discharge; and no deafness, although there was "boom-

ing" tinnitus. The throat was "frequently very sore and dry", but she never had headache. There was no treatment prior to the operation which was performed on the 4th of Nov. 1893, both nostrils being spokeshaved.

The operation was "very painful," and the bleeding free, causing her to feel faint. The nose "ached for about 2 weeks" afterwards.

The nostrils were plugged; and Lotion, snuff and ointment were prescribed. The bleeding did not cease entirely until 10 days after the operation.

Patient returned home the same day, by car, about 3 miles. "Great relief" was afforded by the operation,

which was "immediate and very marked" patient adds. In about 3 weeks' time the nose felt quite comfortable. There was intense after headache here.

Patient concludes thus: "I was relieved and the Doctors and Nurses were very kind."

Case 45. G.F. aged 24. Policeman.

"Accumulation of phlegm in the nose and throat," of about 3 years' duration, was this patient's complaint. Nasal respiration was not so free as it should have been. Cerumen was impacted in both ears: otherwise the ears were all right. No throat complaint was made. For about a month previous to the operation, patient was treated by nasal lotion, ointment and

snuff; and with good effect.

The operation was performed on the 12th of Dec. 1893. Both nostrils were spokeshaved. Cocain was used, but in spite of this a sharp pang of pain was felt. Bleeding was free, and patient felt faint from loss of blood. Lotion, snuff, ointment and medicine were prescribed here. Bleeding was pretty free for about 2 hours, and slightly for 3 days.

Patient returned home the same day, by cab and rail, a distance of 10 miles. He was not confined to bed, but was absent from work for 28 days. In this case the spokeshave removed mucous membrane only, to a great extent. In answer to the ques-

tion "Did the operation afford you relief or not?" patient writes "Emphatically, yes." In a week's time the relief was very marked. No bad symptoms followed the operation, and in about a week the nose felt quite comfortable. In cold weather, patient had some nasal discharge, like what he had before operation, "but not so bad and certainly vastly preferable to the prior condition" he writes.

Patient regards the operation as "successful."

Case 46. G.G. aged 23 years. Plate layer.

This patient's nose was blocked on both sides, due to Polypi in both nostrils, as well as a Hypertrophic

condition of both Inferior Turbinals.

For about 6 months this state of matters had troubled him. There was a discharge of "slime and blood from the back of the nose through the mouth." Patient was a mouth-breather in the extreme, and had many of the symptoms of that condition. There was no deafness. There was "very bad headache" at times; only on the top of the head.

Patient's nose was operated on on the 9th of Jan. 1894. Both nostrils were cleared with the spokeshave and forceps; the polypi being removed as well as the Inferior Turbinals.

No anæsthetic was used, and the operation was "very painful". Bleeding was profuse, and did not finally

cease for 2 or 3 days. There was not much pain in the nose afterwards.

There was a slight feeling of faintness after the operation. A lotion was prescribed to syringe the nose with.

Patient returned home after being operated on, by 'bus and train, some 7 miles. The operation was "very successful", the nose felt "quite free the day after", and in about a week, the nose was quite comfortable.

After headache was pretty bad, on the top of the head.

Case 47. T.T. aged 31 years. Telegraph Worker.

The result of Turbinotomy in this case is described by the patient him-

self, as a "grand success." Both nostrils were completely blocked by Polypi, causing anosmia.

For about 8 years this had been so, Mouth-breathing was the rule here, and its symptoms were almost all present. "Horrible" dreams especially were complained of. The throat was very dry. There were no ear symptoms.

Sometimes there was "slight headache between the eyes." The operation was performed on the 16th of Jan. 1894, on both nostrils. No anæsthetic was used and the operation was "very painful." The bleeding was profuse, but no faintness was felt. The nose was "slightly painful afterwards," and there was "bad headache."

Lotion and ointment and snuff were prescribed.

The nose bled more or less until the following morning. Patient returned home the same day, by train and on foot, about 4 miles, and he was absent from work only 1 day, not being confined to his bed at all. The operation afforded "immediate and very marked relief". There was some slight swelling and pain about the bridge of the nose. On the 22nd of Jan. (a week later) more polypi were removed from the nose, and still more on the 26th of Feb. In about 6 weeks after the first and main operation, the nose felt comfortable. Since the operation, there has been "no trouble to breathe":

the sense of smell has not returned yet, but patient writes, "I fancy that it will, in time."

Case 48. G.W. aged 22 years. Clerk.

"Obstruction of the nose, slight deafness and dry throat" of about 4 years' duration, was what this patient complained of when he came to the Hospital. As a consequence of this, he was a mouth-breather. Hypertrophic Rhinitis on both sides was the cause of the blocking.

There was some deafness in the right ear for about 6 years, with discharge from that ear for 3 years. There was also "singing noise" in that ear. The throat was very dry, and a

bad taste was often felt in the mouth. There was no headache. For 2 years patient attended at the "Royal Ear Hospital, Soho", for deafness, but was not benefitted at all by treatment there.

On 27th Jan. 1894, Turbinotomy was performed on both sides. Cocain was used, but the operation was "very painful indeed." And the nose bled a "great deal." He did not feel faint, however. There was some pain in the nose for about 2 weeks afterwards.

Lotion was prescribed to cleanse the nostrils with. There was more or less bleeding for a week afterwards. Patient returned home the day of the

operation, by car, about 3 miles, and he remained at home for 4 days, but was not confined to bed. The operation gave "immediate and very marked relief" No bad symptoms followed the operation. In about a fortnight the nose felt quite comfortable.

Patient still "suffers", he sais, "with his throat, and deafness, but not so bad as before operation." There was after headache in this case.

Patient concludes his letter to me thus: "I derived much benefit from the operation, but it did not cure the deafness, or congested throat, as I thought it would."

Case 49. W.S. aged 22 years. Piano Worker.

A case of Hypertrophic Rhinitis on both sides, with relaxed throat, causing pain at root of nose, deafness and noises in the ears, of about 3 years' duration. The nasal stenosis prevented breathing through the nose. so patient was a mouth-breather. There was no ear discharge but a "humming" tinnitus was present.

There was "dryness" of the throat, and headache just over the nose.

The operation was performed on the 27th of Jan. 1894, on both nostrils.

No cocain was used, and the operation, patient writes, was "painful". The bleeding was free, and he felt faintish after it. The after

pain in the nose was not very great, nor did it continue long. Lotion and medicine were prescribed here. For a week there was more or less bleeding. Patient returned home the same day, by 'bus, about 1 mile, and stopped in bed for 2 days. The operation gave relief at once, and no unfavourable symptoms followed. In 3 weeks' time, the nose felt comfortable. There was ^{slight} ~~no~~ after headache on the top of the head. Patient's opinion of the operation in his own case, he expresses by "All right"!

Case 50. B.A. aged 14 years. Apprentice.

Anosmia was the complaint this patient made; he writes me he had "no smell at all."

There was Hypertrophic Rhinitis in both nostrils. He had suffered for about 2 years. The nasal stenosis necessitated oral respiration and as a result he slept with his mouth wide open and snored, and he had a dry mouth and throat on waking, when he felt thirsty. There were no ear symptoms.

Double Turbinotomy was performed on the 30th of Jan. 1894, cocain being applied to both nostrils on cotton wool previously.

The operation was "slightly" painful only, according to patient, and the bleeding was free, causing him to feel faintish. There was a "pain between the nose and the eyes for about

half an hour," afterwards. Lotion and medicine were prescribed. The nose bled more or less for about 4 days.

Patient returned home the same day, by cab, about a mile and a half.

The operation afforded much relief, and especially so after about a week's time.

In about a week the nose felt quite comfortable. The anosmia was not cured by the operation, but nasal respiration was restored. Patient concludes his letter to me as follows:-
"I can breathe through the nostrils now: I could not before I came to the Hospital."

Case 51. G.B. aged 26 years. Soldier.

This patient complained of "Itching, and at times, severe pain in both nostrils, the latter especially when water came in contact with them; disagreeable nasal discharge at times, and deafness in both ears." The above symptoms had lasted "about 2 years". There was almost complete nasal obstruction on both sides. Patient was a mouth-breather.

The diagnosis marked on this patient's Hospital letter was: Hypertrophic Rhinitis (both); Eczema (nostrils): Cerumen.

"Sore throat" he had occasionally: but "never headache". Before being operated on, he was treated by a nasal lotion and ointment and with slight

benefit.

Turbhinotomy was performed on both nostrils on the 10th of Feb. 1894. Cocain was used, and patient states the operation was "only slightly" painful. The bleeding was not very copious at the time, but in about half an hour it was so. There was "not much" after pain in the nose.

Lotion and ointment were prescribed here; and the nostrils were plugged with cotton wool. Bleeding continued "on and off for about 20 hours". Patient was resident in Hospital for 3 days: he was confined to bed for 36 hours, and was absent from work for 4 days. As a result of the operation, patient writes that there

was "great relief in breathing", but not much otherwise. Following the operation, patient had "pain and swelling about the nose and eyes" for a few days. In about a fortnight, the nose felt comfortable.

The nose still gives trouble, but on the whole is much better, the discharge being less, [&] ~~the~~ nasal breathing being possible now. The deafness has not improved any. There was "intense" headache after the operation, "over and round the eyes". Patient concludes his letter to me thus: "I am glad I had it performed. It has not cured me of the complaint for which I sought relief; but my throat, which was often sore before, is seldom so

now, owing I presume to the fact that I always breathe through my nose now, whereas I never did so before."

Case 52. L.P. aged 27 years. Housewife.

According to this patient, "there seemed to be a growing of some sort at the back of the throat," which had troubled her for about 6 years.

The case was one of Hypertrophic Rhinitis in both nostrils, Granular Pharyngitis, and Enlarged Tonsil on the right side. Patient states that the nose was not much obstructed: but she often had a dry mouth and throat and for years "did not know what it was to have a good night's rest."

Greenish crusts with a foul

smell, were often expelled from the back of the throat and nose. There was very little discharge from the nose before the operation, but since then she says there has been more. The operation was not a success here, as patient had not derived any benefit from it, she says. There were no ear symptoms here. She often had headaches.

On the 13th of Feb, 1894, the operation was performed, both sides being spokeshaved. Cocain was previously applied, still the operation was "very painful indeed", The bleeding was profuse, and patient "felt very bad, but did not faint." The nose remained painful for a fortnight

afterwards. The nostrils were plugged; and lotion and medicine were prescribed. For three days, there was more or less bleeding. Patient drove home in a cab (after the operation,) which took about 10 minutes. She was not confined to bed at all, but felt unable for her ordinary work for a week or so. She writes, "I have not felt any better since the operation:" also, "I have had trouble with my throat since the operation, continually throwing up greenish crusts with very offensive smell, also continual discharge from nose, the latter I did not suffer much from before operation." There was severe after headache here, "at the top of the head."

Patient concludes her letter as follows: "I have not felt any benefit from the operation as it did not stop me throwing up the greenish crusts that seem to form at the back of the nose and throat, and which I showed to the Doctor once."

Case 53. L.M. aged 9 years. Schoolboy.

This little boy was an In-patient for nearly 2 weeks. He suffered from Hypertrophic Rhinitis in both nostrils, Enlarged Tonsils, and Adenoid Vegetations. The complaint made was "Deafness in both ears," for about 2 years. There was no nasal discharge. About 2 years prior to the operation there had been some discharge from the

left ear, for about 3 weeks. There was tinnitus "like the ticking of a watch". Headache, "over the eyes" gave trouble. Before operation, he was treated with nasal lotion, &c., and this gave some relief. He was operated on on the 17th of Feb. 1894, when his tonsils were removed, the adenoids scraped away, and turbinotomy performed on both sides. No anæsthetic was administered and the operation was "very painful". There was very considerable bleeding, but patient did not faint, nor did he feel faintish afterwards.

There was "pain in the throat and nose for about 10 days after the operation." The bleeding did not

stop entirely for 2 days. He was confined to bed for 10 days. The operation improved the hearing, which gets worse when he has a cold.

Four days after the operation, the temperature reached 101.6° F: and this was the highest point it attained. It about 2 weeks the nose was quite comfortable.

Case 54. F.L. aged 34 years. Brass Moulder, also an In-Patient for 2 weeks.

This patient complained of "inflammation of the throat, and stoppage of the nostrils", with "deafness in both ears and noises like ringing of bells." For about 7 years he had

suffered from the above.

Hypertrophic Rhinitis was present in both nostrils and there was a discharge from the nose, which was "thick like glue".

"A choking sensation and a burning of the throat and nose" were "very bad" and there was frontal headache. He attended at the Great Northern Hospital and was treated there, but with no benefit. Turbinotomy on both sides was performed on the 24th of Feb. 1894. Patient says the operation was only "slightly painful."

Lotion and snuff were prescribed in this case.

Patient intended returning home after the operation, and had left the

Hospital, when the bleeding started afresh; so he returned to Hospital and was received as an In-Patient. He was confined to bed for 4 days, and was absent from his work for 3 weeks. Three days after the operation there was some Acute Median Otitis in the left ear. Patient writes that the operation afforded him "great relief" immediately; "very marked" relief. Whenever the bleeding stopped the nose felt comfortable. There was "slight" frontal headache after the operation, and "slight ringing noise in the left ear at night."

He concludes thus: "I haven't had so much relief for many years as I have had since the operation. In my

case it is a perfect success."

During childhood he was once kicked on the nose by a pony, and : another time struck on the nose with a thick stick; and still another, received a kick from a man on his nose! Patient thinks that his nasal ^{mp}systems arose from these injuries.

Case 55. L.C. aged 11 years.

This little girl's complaint was "earache", and "deafness" in the right ear; and noises in the ears. There was also blocking of the nostrils from Hypertrophic Rhinitis. The duration of the above was about 2 years, There was no nasal discharge.

Breathing through the nose was

impossible; mouth-breathing was present here in the extreme, with the usual symptoms. There was no ear discharge, and the deafness was in the right ear; on lying down, there was a "beating" tinnitus in both ears. The throat was "dry and sore", and a nasty taste in the mouth was often complained of. Frontal headache was often very bad. There was no treatment prescribed prior to the operation; and this latter was performed on the 3rd of March, 1894, when both nostrils were spokeshaved. The operation was "very painful": no anaesthetic was used. There was "very much bleeding", but the little

patient wore it all very well. For "several hours afterwards" there was pain in the nose, also sore throat, earache and headache.

Lotion, ointment and medicine were prescribed.

The bleeding "stopped within a few hours".

This little patient was taken home in a cab, some 4 or 5 miles, and was kept from school for 3 days, but was not confined to bed at all, In about a fortnight the nose was quite comfortable. There was rather severe after headache, frontal in position. "Dry throat" only was complained of, after the operation. Patient's mother writes, with regard to the operation

in her daughter's case:- "It has been successful to a very large extent but not what I should call an effectual cure."

P.S. I wrote again to the parents of this patient respecting the deafness and tinnitus after the operation, and got the following reply:- "The operation on her nose appears to have removed the deafness and the noises in the ears, but there is still a tendency to sniffing in the nose."

Case 56. H.R. aged 7 years.

This little boy had "difficulty in breathing, and was restless at night," for about a year. He was the subject of Hypertrophic Rhinitis on both sides (left especially) and of

Adenoid Vegetations. There was also impacted cerumen in the ears. "Pains in the head" were complained of. He was a mouth-breather; very markedly so. No ear complaint was made. There was frontal headache. Patient was operated on on the 14th of April, 1894, the Adenoid growths being scraped away, and the left Inferior Turbinal being spokeshaved. The operation was painful and the bleeding pretty free. No anaesthetic was used. **N**ose lotion, mouth wash and medicine were prescribed. The bleeding stopped after 6 hours. Patient was taken home by car, after the operation, a distance of about 3 miles: and he was confined to bed for about

24 hours.

In about 2 weeks' time, the nose felt comfortable. There was after headache, across the forehead. The operation afforded relief. Patient's mother writes with regard to it, as follows:- "A success at the time, but I am afraid the same is reforming, as he makes a noise at night again."

Case 57. A.L. Aged 12 years.

A case of Hypertrophic Rhinitis, chiefly on the left side, Enlarged Tonsils, Adenoid growths, and Suppurative Catarrh of both middle ears, of about 2 years' duration altogether. The complaint made here was of "deafness in the right ear." patient breathed

through the mouth chiefly, slept with his mouth open, was restless at night, and had a dry mouth and throat on waking after sleep. Prior to the operation there was no treatment.

Gas was administered here, on the 12th of May, 1894, when the Tonsils were removed, the adenoids scraped, and turbinotomy performed. Patient felt "faintish" after the operation.

A nose lotion, and an ear lotion and ear drops were prescribed here. The bleeding was pretty free at the time, but soon stopped and did not return. Patient was taken home the same day by car, about $2\frac{1}{2}$ miles, and was confined to bed for one day. He was absent from school one week. "Slight relief" only, resulted from the

operation, patient's mother writes.

Case 58. E.M. aged 14 years. Mechanic.

This was a case of Hypertrophic Rhinitis in both nostrils, Enlarged Tonsils, and Adenoid Vegetations, and the complaint made was of "not being able to breathe through the nose freely." He had noises in the ears at times, and his throat often felt dry. For 5 or 6 years he suffered from the above. He was a mouth-breather. There was no discharge from the nose, and no deafness. There was "slight headache above the eyes." On the 5th of May, 1894, patient was operated on: his tonsils were removed, the adenoids scraped, and both nostrils were spoke-shaved; all at one and the same time.

No anaesthetic was used, and the operation was "very painful." There was a "great deal" of bleeding. Patient felt "Giddy" after the operation. For about 2 days there was much pain in the nose. Lotion, gargle, and medicine were prescribed here. Bleeding continued more or less for 2 or 3 hours. Patient returned home the same day, by car, about 2 miles: and was confined to bed for 2 days, being absent from work 4 days.

The operation gave "decided relief"; especially did he notice this when he returned to work: then he found "very marked" benefit indeed. In about a week, the nose felt comfortable. Since the operation, patient has had at times

some discharge from his nose, but his present state is preferable he says to his condition before operation. He had slight after headache, across the forehead. Patient writes at the end of his letter: "I have received great relief."

Case 59. M.F. aged 71 years.

This old lady suffered from Nasal Polypi, causing "stoppage in the nose." There was no deafness, and no noises in the ears. Dry throat was experienced from sleeping with the mouth open. There was slight discharge from one nostril, the left.

For about six months, the above symptoms had given trouble. The right

nostril was quite stopped up. There was frequent headache, temporal in site. Syringing the nose was ordered by the local doctor, but this did "no good whatever." The right nostril only was operated on, with the spokeshave and forceps, on the 12th of June 1894. Cocain was previously applied to the nostril on cotton; ^{wool:} still the operation was "acutely painful", and the bleeding was very free. However, patient did not feel faint after it. The nose was very painful for a week or 10 days. Lotion and medicine were prescribed. Bleeding continued more or less for 2 or 3 days. Patient returned to Epsom after the operation, by bus and train, about 15 miles, and she was not confined

to bed, although unable to work for a week.

The operation gave "great relief." The nose, patient states, was comfortable the very night of the operation! There were no unfavourable symptoms following the operation. There was no after-headache even.

Patient writes: "I am thankful for the comfort and relief since the operation. No operation could have been more successful."

Case 60. W.W. aged 19 years. Clerk.

"Stoppage in the nose" and slight discharge was what this patient complained of when he came to the Hospital. For about 2 years he had been troubled

so. On examination the state of matters^{211.}
was as follows : Hypertrophic Rhinitis
in both nostrils; and Septal Spur in
the right. Patient was a mouth-breather.
There was slight discharge from both
nostrils. There were no ear symptoms.
Dryness of the mouth and throat, and
bad taste in the mouth were experienced.

There was no treatment prior to
operation, which was performed on the
19th of June, 1894, and which con-
sisted in spokeshaving both Inferior
Turbinals. No anæsthetic was used,
and it was "very painful during the
operation." There was free bleeding,
but no faintness on patient's part.

"Directly after the operation",
patient writes, "I had a fearful aching

pain about the eyes."

The nostrils were plugged, and a lotion prescribed. In a few hours the bleeding stopped, but a few days later, slight bleeding again occurred.

Patient stayed in London the same night as the operation, and returned home next day, to Kent. He was a week absent from work, but was not confined to bed at all.

The operation proved beneficial in this case. After some time, in about 6 weeks, the relief obtained was very marked.

No bad symptoms followed the operation: but the nose did not feel comfortable for 6 or 7 weeks. The throat is still dry at times, but not ^{so} ~~as~~ bad

as it used to be before the operation.

There was slight frontal headache for a day or two. In patient's opinion, the operation was successful, though only partially so.

Case 61. G.S., aged 20 years. Piano-worker.

Hypertrophic Rhinitis on both sides was the abnormal condition of this patient's nose, and what he complained of was "obstruction of the nose", the right side especially. The duration of the above was about a year. Mouth-breathing was the rule here. There was slight deafness with hissing noises in the ears. At times there was a very bad taste in the mouth.

On 17th July, 1894, Turbinotomy

was performed on both sides. Cocain was used, still the operation was "painful." There was much bleeding, and patient felt faint afterwards. The nostrils were plugged, and lotion and ointment prescribed. Bleeding did not stop altogether for a week. Patient returned home the day of the operation, * by bus, about $1\frac{1}{2}$ miles. He was confined to bed for 4 days, and was 14 days absent from work.

Immediately after the operation, there was relief felt, but later on it got less in degree.

Nasal discharge followed the operation, patient states, and offensive smell. There was after-headache here. In this case, the operation was only

partially successful.

Case 62. W.B. aged 15 years.

This patient had Hypertrophic Rhinitis in both nostrils; Enlarged tonsils and Adenoid Vegetations: and his complaint was "Partial Deafness", and "obstruction of nose", for 8 or 9 years. Nasal respiration was by no means free here. There was a little discharge from both ears for about 12 months.

Prior to Turbinotomy, patient had no treatment. Both nostrils were spoke-shaved on the 24th of July, 1894; and the Tonsils and Adenoids were removed at the same time. No anaesthetic was used, and the operation was "painful"

patient writes. The bleeding was free, and patient felt faintish afterwards. There was "not much pain" in the nose after the operation. The nostrils were plugged, and a lotion was prescribed. The bleeding very soon stopped in this case, and did not recur. Patient resided in Hospital for 3 days, 2 of which he spent in bed. In his opinion, the operation was "very successful"; the relief obtained from it was "gradual" and in the course of a month, there was "decided improvement." In a week or two, the nose felt quite comfortable. No bad symptoms followed the operation..

Case 63. F.S. aged 8 years. In-Patient.

This little girl benefitted "very considerably" from Turbinotomy. She was a mouth-breather, due to blocking of the nose from Hypertrophic Rhinitis on both sides. "Her breath was very bad at night; her breathing was very hard."

There was slight deafness in the left ear, and when she had a cold, that ear ached. "She talked a great deal in her sleep." "Her throat seemed to be dry."

Turbinotomy was performed on the 13th of Oct. 1894, both nostrils being operated on. Gas was administered, and the little patient did not feel any pain. The nose bled a good deal, and felt sore for several days afterwards. Medicine to take, and lotion to wash

out the nostrils with, were prescribed.

She resided in Hospital for 8 days, and her temperature, only twice, reached 100.4° F. The little patient's mother writes me, "She is much better since the operation, and breathes freely. She has considerably benefitted by the operation and enjoys better health than she has done for a considerable time; and at present she can breathe very freely."

Case 64. R.G. aged 14 years. Schoolgirl.

In-Patient.

A case of Nasal Stenosis from a Hypertrophic condition of the Inferior Turbinals in both nostrils; the complaint made being "loss of voice" and

"difficulty in breathing", of about 9 months' duration. There was no nasal discharge. Respiration was chiefly oral, owing to the nasal obstruction. There was no deafness, or other ear symptom.

Smarting of the throat, with dryness there, a bad taste in the mouth, and frontal headache were complained of. Lotion and ointment were prescribed for a time before operation, and with slight improvement, as a result.

On the 14th of Oct. 1894, Turbino-tomy was performed on both nostrils, without any anaesthetic. The operation was "very painful indeed." There was "a great deal" of bleeding, and patient

felt faint. Following the operation, the nose was painful, the head ached, and the throat felt sore for several days.

The nostrils were plugged, and lotion and medicine were prescribed.

Bleeding continued for "about 2 days."

Patient resided in Hospital for 2 weeks, and was confined to bed for 6 days. After the bleeding stopped, patient felt relief, and could breathe freely. "In a fortnight after the operation the nose felt all right." Still, some "smarting" of the throat is felt at times, just as before operation. Three days after the operation a rash appeared on the face, chest,

arms and hands, and was very irritable for 2 days, when it disappeared. Patient writes, with reference to the operation: "It has done me a great deal of good, and I am not troubled with inability to breathe through the nose at all."

Case 65. Aged 25 years. Clerk.

(This patient and the next, only replied to my letter a few days ago, so that I was unable to record their cases in their proper places.)

This was a case of Granular Pharyngitis, Hypertrophic Rhinitis on the right side, and Chronic Dry Median Otitis of the right side. Patient complained of "deafness" in the right ear of 5 years' duration. There was no

nasal discharge. Some of the symptoms of mouth-breathing were present. There never was any discharge from the ear, but there was an "occasional humming in both ears." There was dryness of the throat, and a bad taste in the mouth. The ordinary measures were used before operating, but with no good effect. On the 1st of July, 1890, Right Turbinotomy was performed. No anæsthetic was used, and the operation was "acutely painful." The bleeding was pretty free, and patient felt faintish. For "a few weeks" the nose felt painful more or less. Ointment was prescribed for the nose. Patient walked home after the operation, a distance of about 2 miles, and was not

confined to bed at all, nor did he miss a single day's work through the operation. Unfortunately, the operation afforded no relief in this case. Patient, indeed, is of the opinion that his deafness was made worse by the operation. One of the patient's sisters became deaf when she was 20 years of age, the same age as he was when he became deaf: this sister was operated on (her nose) at the Great Northern Hospital without any benefit. Patient's parents are not deaf. The only thing that did patient any good was the Chloride of Ammonium Inhaler, from the use of which he derived some benefit.

Case 66. A.P. aged 22 years. Machinist.

This patient, when she sought relief at the Hospital was very anaemic, and complained of "sore throat" of about 6 weeks' duration. She did not know there was anything the matter with her nose.

There was nasal stenosis in both sides, due to Hypertrophic Rhinitis. She was a mouth-breather. Sleep was very much disturbed. There were no ear symptoms. Dry throat and disagreeable taste in the mouth were experienced, also headache, "over the temples." For a week before the operation, patient used a lotion for her nose, which did it good.

On the 3rd of Nov. 1894, Turbino-

tomy was performed by Mr Jones on both sides. No anaesthetic was used, and the operation was "very painful." The bleeding was pretty free, and patient fainted twice (she was very anaemic to begin with). Afterwards there was a great deal of pain in the nose and head for about 3 weeks.

The nostrils were plugged: and lotion and medicine were prescribed. The bleeding did not stop for about 8 hours. Patient returned home in a cab after the operation, $\frac{1}{4}$ hour's drive, and remained in bed for 3 days. "Much relief" was afforded by the operation: it was immediate and very marked. In three weeks' time, the nose felt quite comfortable. No bad symptoms followed.

There was only slight after-headache. Patient considers the operation "the best that could be done" for her: "a most successful operation" she continues, "and I feel better in my health than I have for some long time." The anaemia greatly improved after the operation.

I had an opportunity of examining this patient's nose some few weeks ago, and found the nostrils healthy in every respect. The ledge of inferior turbinal left was covered with healthy-looking mucous membrane; the breathing passage was free; and there was no trace of anaemia left.

Peter H. Abercrombie M.B.

March, 1895.

F I N I S.