questions here set out. The disability was certainly contracted in the Service, and as certainly was it aggravated by service. But I do not think it is attributable to military service. Dr. Grant has summed the case up correctly, but the percentage I would award would be 15. If the man says he will not be operated upon, and as he has the right to refuse, his refusal should not influence the Board in determining his pension claim.

Mr. J. F. O'Malley (in reply): The only difference of opinion expressed by speakers relates to the question of an operation. We seem all agreed that the man had disease in the ear prior to two years ago, and also that the condition has been aggravated by military service. The fact of an antecedent discharge would enable one to exclude the heading "Due to military service alone," and one would assess the disability lower than if it had been entirely due to military service. The man showed no objection whatever to an operation. He came to me and said he could not sleep. After questioning him pretty thoroughly I put the question to him, "Are you bad enough to undergo a severe operation?" He did not hesitate, but at once said he would like it very much. One can see a distinct focus of chronic inflammation, with caries in the attic, and a fairly large mass of granulations, dependent from the meatal roof. I think he has sepsis and granulation trouble in the aditus also, and possibly in the antrum. I should operate to get rid of it. I asked the last question because, apart from function, I wanted to know if others agreed with me as to the site of the lesion. A localised lesion in these cases enables one to give a more promising prognosis, for one is likely to be able to remove the whole of the disease.

ABSTRACTS.

Abstracts Editor—W. Douglas Harmer, 9, Park Crescent, London, W. 1.

Authors of Original Communications on Oto-laryngology in other Journals are invited to send a copy, or two reprints, to the Journal of Laryngology. *If they are willing, at the same time, to submit their own abstract (in English, French, Italian or German) it will be welcomed.*

NOSE.

On the Modifications of the Nasal Flora from Plugging.—Caldera and Santi. "Arch. Ital. di Otol.," vol. xxx, No. 3.

The nasal cavities of a number of dogs were plugged under aseptic conditions with sterilised gauze, and the secretions obtained from the nose after twenty-four or forty-eight hours' plugging were injected subcutaneously into young rabbits. It was found that the numbers of bacteria in the nose increased enormously, especially the anaërobic types. The nasal secretions after plugging are able to produce when inoculated into young rabbits local inflammatory reactions which the secretions from normal dogs do not produce.

Plugging with iodoform gauze does not cause the notable increase in the numbers and varieties of bacteria which results when sterile gauze is used. For this reason the authors recommend that all nasal packing should be with medicated and preferably iodoformised gauze rather than plain sterile gauze. *J. K. Milne Dickie.*

On the Modifications of the Bacterial Flora of the Nose in Relation to the Atmosphere.—Caldera and Desderi. "Arch. Ital. di Otol.," vol. xxx, No. 3.

The authors have carried out an interesting series of experiments, the results of which are given below. The subjects were the same in all the experiments and had been ascertained to be healthy by previous rhinoscopic examination. Plate cultures were made from the nose under very varying atmospheric conditions. As was expected, cultures from the nose in city air yielded large numbers of colonies. Some of the main conclusions drawn are as follows.

"The nose represents a cleansing organ for the inspired air and the number of organisms diminishes from without inwards, the maximum number being found in the vestibule.

"The hygrometric state of the atmosphere has an influence on the nasal flora. More germs are found after a prolonged period of dryness."

The bacterial flora diminishes gradually in the same subjects in ascending to high altitudes. At 2000 metres very few organisms are found in the nose, while at 3000 metres the nose is almost absolutely sterile. The differences between the effects of town and mountain air on the nasal flora are not so marked in winter as in summer.

J. K. Milne Dickie.

TONSILS.

Tonsillectomy versus Helio-electric Methods. — Thos. M. Stewart (Cincinnati). "New York Med. Journ.," January 4, 1919.

This paper deals with the results of fulguration and ultra-violet rays as an adequate method by which to reduce enlarged tonsils, and diathermy as an effective measure in causing a resolution in the tonsil from an unhealthy to a healthy condition. A consideration is also given of various other methods of tonsillar reduction, but reference to the work of British laryngologists is noticeably absent.

The following data were obtained by the author in correspondence with 1000 physicians in Ohio, Indiana and Kentucky:

Total number of operations, 10,756; deaths, 15; deaths in five out of seventy-one large cities written to, 18; primary hæmorrhages, 432, secondary 79; ligations for hæmorrhage at the time of operation, 488; hæmophiliacs, 26; prolonged coagulation, 54; voices lost 4, voices regained 2; septic cases before operation 252, after operation 9; fatalities from ether 2, bromoform 1, oxygen and ether 12; diphtheria after operation, 8; pulmonary abscess after operation, 1; hyperpyrexia, 14; emphysema of face, 1; skin rashes, 8. Definite replies as to dryness of the throat, adhesions of pillars, difficulty in swallowing, and ear infection were not elicited.

The author's conclusions were as follows:

(1) That tonsillectomy does not insure against future attacks of sore throat nor of other diseases and infections for which the operation was performed.

(2) That tonsillar tissue is present in nearly one-half the cases after operation, and not always to the detriment of the patient nor a reflection on the operator.

(3) That helio-electric, fulguration and diathermic methods do not accomplish more than the cutting operation, their value being equally to be obtained in selected cases in comparison with the cutting methods

less risk to the voice, and of death from anæsthesia or uncontrolled hæmorrhage, and without shock to the patient from undue hemorrhage when the latter is controlled.

(4) That badly diseased tonsils should be enucleated, whether large or small, unless some unusual factor contra-indicates the use of general or local anæsthesia, in which case secure the best results possible by helio-electric methods. *Perry Goldsmith.*

EAR.

Brain Abscess: Operation and Recovery.—Wesley Bowers. "The Laryngoscope," September, 1919, p. 556.

Male, aged twenty-one, had had a primary mastoid operation (left) two months before and a secondary operation one month before Bowers saw him. For several weeks he had been unable to flex his right foot. His father stated that his son's disposition had been entirely changed after the first operation. He had formerly been very quiet, and now he had become hard to control and unreasonable. Examination showed a granulating wound over the left mastoid, drum membrane thickened, no meatal discharge, temperature 100·3° F., pulse 80, labyrinth normal, hearing 10/20, no aphasia, severe headache. Third operation: The antrum had not been entered at the former operation. Necrotic bone over the middle fossa. Dura normal. Not having any localising symptoms Bowers decided to wait. Headache continued with mental dulness. On the ninth day he first showed amnesic aphasia. Fourth operation: Temporal decompression. A large abscess found at depth of $1\frac{1}{2}$ in. in an upward and inward direction. Cigarette drain for two weeks. After two months the patient was apparently normal. *J. S. Fraser.*

MISCELLANEOUS.

Surgical Treatment of Facial Paralysis.—George Fenwick. "British Medical Journal," November 29, 1919.

Every large military hospital has had experience of traumatic facial paralysis, where restoration of function by nerve repair or nerve-grafting has not been possible. In cases of comminution of the petrous bone end-to-end repair cannot be effected, although grafting or anastomosis may still remain practicable; in lacerated parotid wounds the main trunk has already broken up into the parotid plexus, and repair of the diverging branches does not come into the realm of practical surgery.

The deformity is a very terrible one, and any treatment that offers hope of cosmetic improvement should be welcome to surgeons.

The treatment is that of grafts from neighbouring muscles.

Preliminary to anæsthesia, the non-paralysed side of the face is inspected, and the position of the lower half of the naso-labial furrow marked in; a second vertical marking is made almost in the centre of the cheek in the position of the dimple that becomes evident when laughing. A third marking is made, beginning below the external canthus and taking the direction of one of the lines of the crowsfoot. The side of the head is shaved.

An incision is made through the skin in the hair line from the zygoma to the upper limit of the temporal fossa, directed slightly backwards so as to be parallel to the underlying fibres of the temporal muscle. The skin is then undermined forwards and backwards to expose the temporal

fascia. Two parallel incisions are then made, again from the zygoma to the limit of the temporal fossa through the fascia and muscle down to the

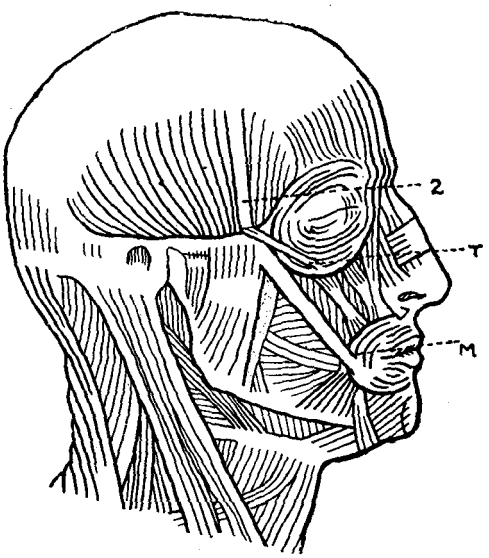

FIG. 1.—2. Denuded area in temporal fossa. T. Slip of temporal muscle inserted into orbicularis palpebrarum. M. Slip of masseter inserted into orbicularis oris.

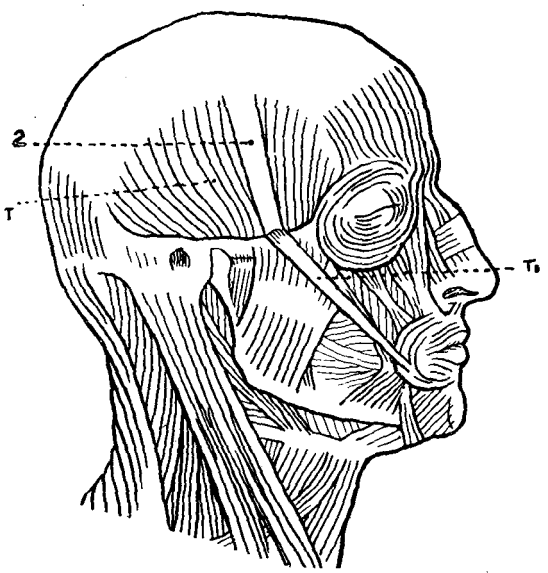

FIG. 2.—2. Denuded area in temporal fossa. T. Temporal muscle. T_1. Slip of temporal muscle inserted into orbicularis oris.

bone. These incisions should run in the direction of the muscular fibres and should include a strip of muscle as thick as a man's thumb; it is

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important for the preservation of the nerve supply and for the cosmetic result that fully this bulk of muscle should be used. A smaller slip anterior to this is similarly isolated, and both are detached from the underlying bone.

An incision is now made under the eyelid in the marking representing one of the lines of the crowsfoot, the skin is undermined, the anterior smaller slip of muscle drawn through, made taut, and sutured to the fibres of the orbicularis palpebrarum with catgut (Fig. 1, T, and Fig. 3, T_1).

Incisions are made in the line of the cheek furrow and the lower half of the naso-labial groove, and the skin tunnelled to make a continuous passage from the temporal wound to the corner of the mouth. The large slip of muscle is then drawn down over the zygoma through the channe', sutured with catgut to the superficial fascia exposed in the cheek wound, and to the muscular fibres of the orbicularis oris below and slightly mesial to the corner of the mouth (Fig. 3, T_2).

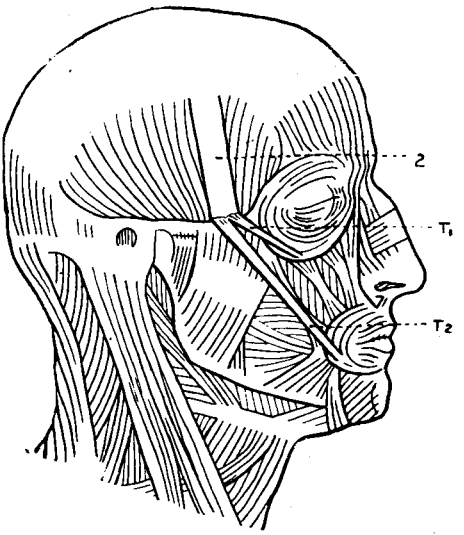

FIG. 3.—2. Denuded area in temporal fossa. T_1. Slip of temporal muscle inserted into orbicularis palpebrarum. T_2. Slip of temporal muscle inserted into orbicularis oris.

The facial incisions are sutured with horsehair; the cut margins of the temporal muscle are brought together as far as possible with catgut (it is extremely difficult to get apposition), and the temporal wound closed with silkworm-gut.

Faradism and massage should be employed early, and the patient should daily exercise his facial expression before a glass. The grafted straps of muscle will continue to function.

In the first operation he attempted, a slip of the temporal muscle was grafted into the orbicularis palpebrarum and a slip of the masseter into the orbicularis oris (Fig. 1, M); Stenson's duct was guarded by a probe inserted and tied to a tooth. Considerable difficulty was experienced in getting the slip from the masseter, and there are no compensating advantages. He has performed the temporal muscle-graft without making use of a cheek incision, but prefers the method described, and the

additional scar, lying as it does in a natural skin-fold, is almost imperceptible.

The cavity left in the temporal fossa after swinging down the slip is of considerable dimensions, and to obliterate it by approximation of the cut edges of the muscle is almost impossible.

Good results in paralytic ectropion have been obtained by means of the ordinary Kuhnt-Dimmer operation, but the sling of living muscle is more likely to ensure permanent improvement than the mere shortening of the lower lid.

REVIEW.

Studies in the Anatomy and Surgery of the Nose and Ear. By ADAM E. SMITH, M.D. New York: Paul B. Hoeber, 1918.

The book is well printed and neatly produced. It consists of some 150 pages, and is copiously adorned with illustrations, of which a great many are full-page plates.

A number of lateral vertical skull sections are depicted to show the relation of parts in reference to the nasal cavities, and also an elaborate series of vertical antero-posterior sections is shown to indicate the relationship of the accessory sinuses to the nasal fossæ and to each other. That portion which is devoted to the ear is profusely illustrated, each plate being supplemented by a diagrammatic "key."

Some parts of the book are without novelty, as Chapter I, which deals with the importance of nasal breathing, and expresses in the main the accepted views thereon. We say "in the main," because in one passage here we find it stated that the ingoing air-current on the side of the nose which happens to be obstructed by a deflected septum causes recession of the outer wall of the nose, and therefore asymmetry of the sinuses, and this cannot be regarded as an accepted view, much less as a proven one.

On the whole, it may be said that the author's opinions are out of harmony with the views and practice of British rhinologists.

No authorities are quoted. There is an efficient index.

Archer Ryland.

OBITUARY.

CHRISTIAN R. HOLMES, M.D., Cincinatti, U.S.A.

(*Died January* 9, 1920.)

DR. CHRISTIAN R. HOLMES was born in Copenhagen, October 18, 1857. He received an early training as a civil engineer, but when his family emigrated to Cincinnati he took up the study of medicine, and graduated in 1886. His name became well known as a prominent worker in diseases of the eye, ear and throat. He was a member of the American Laryngological Association and a frequent visitor at medical gatherings in Europe, but on this side of the Atlantic we have hardly realised the immense work he did in consolidating the two leading medical colleges of Cincinnati in the new building of the City Hospital. With enthusiasm and devotion he visited and studied all the leading hospitals of Europe