

lous and suppurative forms of tonsillitis, as well as those forms of tonsillitis and pharyngitis which are symptomatic of the exanthemata, may reasonably be regarded as the most frequent causes of retro-pharyngeal lymphadenitis.

Whatever the source of infection, the initial stage of retro-pharyngeal abscess is retro-pharyngeal lymphadenitis, and moreover the lymphadenitis may be of a non-suppurative type, or the disease become arrested in this stage, undergoing resolution without the formation of an abscess. This simple lymphadenitis has been but rarely observed in this country, but Bokai, in addition to 400 cases of abscess, mentions 112 cases of simple retro-pharyngeal lymphadenitis as having passed under his observation in the Pester Kinderspital.

I would report the following instructive case:

A female babe 4 months of age, was convalescing from acute follicular tonsillitis, probably of the variety which I have elsewhere described, under the name of infectious pseudo-membranous tonsillitis, which was prevalent at that time, and which in several other cases, under my observation, had occasioned pronounced cervical lymphadenitis. As the tonsillitis subsided dyspnea commenced and increased for two weeks, at which time I saw the case in consultation through the courtesy of Dr. E. J. Kuh. Suffocation was imminent, cyanosis marked, respiration irregularly stertorous and only possible when the child was held in a certain position. The voice was unimpaired and inspection of the fauces negative, but careful palpation disclosed a hard tumor which projected from the posterior pharyngeal wall in the median line, extending downward sufficiently to press upon the opening of the larynx. I made three punctures into this tumor but failed to evacuate pus, and being otherwise satisfied by its hardness to the touch and the absence of fluctuation that it was not an abscess but a case of simple lymphadenitis, tracheotomy was advised. The recovery which ensued from this operation in a child so young as 4 months, is to be largely attributed to the skilful manner in which Dr. L. L. McArthur opened the trachea without an unnecessarily large external wound, without delay and with antiseptic precautions. The tumor underwent gradual resolution without suppuration, or at least there was no perceptible discharge of pus in any quantity. At the end of two weeks the tracheotomy tube was withdrawn, and the child recovered.

The successful management of such a case would depend first on a correct diagnosis. Dyspnea is the most prominent symptom, the cause of which must be precisely determined. It is easy to exclude diphtheria by inspection of the fauces, and equally easy to exclude both spasmodic and membranous croup by the presence of an unimpaired voice; but I have seen identical symptoms of suffocation produced by a large collection of "adenoids" in the naso-pharynx, which by pushing the velum palati downward and forward, caused it to impinge on the dorsum lingue and thus impede respiration. This condition can be excluded and the positive diagnosis of retro-pharyngeal lymphadenitis made, not by inspection, but by palpation. Examination deliberately made by the finger of each and every part of the pharynx and naso-pharynx will afford much more exact information in such cases than mere inspection of the fauces.

Having located the tumor in the posterior wall of the pharynx, the presence or absence of pus may be determined by a puncture or two or three punctures carefully made by a bistoury. The exact position of the tumor varies in different cases; it may be high or low, in the median line or to one side. "McClellan's Regional Anatomy" locates one retro-pharyngeal lymphatic gland opposite the second cervical vertebra, but it is likely that it may deviate from this position, and that others would be located by

close anatomic study. An inflammation commenced by infection of a lymphatic gland would be likely to involve, also, the surrounding connective tissue. When located low down in the laryngo-pharynx a comparatively small swelling may speedily occasion suffocative symptoms.

This paper includes within its scope the treatment only of retro-pharyngeal lymphadenitis, not that of abscess, and apart from general measures the only symptom of the former affection likely to demand interference is dyspnea. Having made preliminary punctures to exclude a possible collection of pus, the question of tracheotomy must be considered. Intubation is out of the question, for the same swelling which stops the glottis would stop the orifice of the tube.

Bokai¹ finds that tracheotomy is rarely necessary, resolution usually taking place in from five to seven days before suffocation becomes imminent. Nevertheless, Bokai² reports a case similar to the one herewith detailed in which he performed tracheotomy. It was a child 8 months old; the posterior wall of the pharynx showed diffuse hard swelling without fluctuation, and a deep incision into the mass had yielded no pus. Resolution occurred without suppuration, the tube was withdrawn at the end of three days and the child recovered.

Unlike diphtheritic croup, early age is no contraindication to the operation of tracheotomy in retro-pharyngeal lymphadenitis, for herewith are recited two cases under 1 year of age, my own of 4 months and Bokai's of 8 months, in which recovery occurred. Good judgment would therefore indicate that whenever dyspnea has advanced to the verge of suffocation, or even to threatened exhaustion of the patient, tracheotomy should promptly be performed.

VALUE OF ANTROSCOPY (ENDOSCOPY OF THE ANTRUM OF HIGHMORE).

Read in the Section on Laryngology and Otology, at the Forty-fifth Annual Meeting of the American Medical Association, held at San Francisco, June 5-8, 1894.

BY HENRY LEWIS WAGNER, M.D.

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I am convinced that we all are not always successful in the treatment of empyema of the antrum of Highmore, and consequently we have been obliged to perform a second and more extensive operation. This has taught us the real nature of the disease, and how to thoroughly eliminate the existing trouble. All this may be avoided by a thorough ocular inspection of the maxillary sinus by the antroscope—the endoscope of the antrum.

Two years ago I demonstrated this in a crude state to the San Francisco County Medical Society. I do not need to explain the details of the principles of the endoscope, which are used for illuminating closed cavities, as you are all familiar with them. The endoscope for the antrum is intended to be used after perforating through the alveolar process or through the fossa canina. It can also be used with the proper curvature through an intranasal opening. The latter method I have abandoned during the last years.

The cases in which the antroscope has proven to me to be useful, were:

¹ Jahrbuch für Kinderheilkunde, Band xxxiii, Heft 3, p. 360. American Journal Medical Sciences, p. 120, July, 1892.
² Loc. cit.

1. To determine the presence of a drainage tube in the cavity, which was said to be missing.

2. Where a polypus near the hiatus semilunaris could be located, which had kept up a sero-purulent discharge.

3. Where by a series of bony septa the pus was retained.

4. To ascertain the differential diagnosis of angio-ma, where suddenly a severe hemorrhage took place from the antral cavity.

5. To facilitate the thorough scraping of the necrosed bone by means of a bent curette—introducing first the curette and then the antroscope.

NEW INSTRUMENTS.

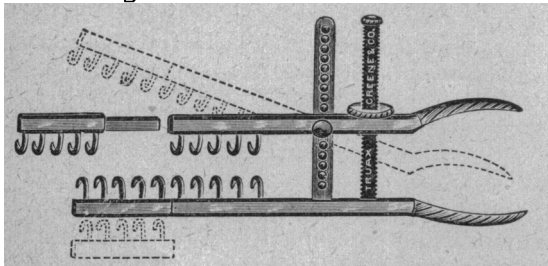
Read in the Section on Laryngology and Otology, at the Forty-fifth Annual Meeting of the American Medical Association held at San Francisco, June 5-8, 1904.

BY SETH SCOTT BISHOP, M.D.

PROFESSOR OF OTOLGY IN THE POST-GRADUATE MEDICAL SCHOOL AND HOSPITAL, CHICAGO, ILL.

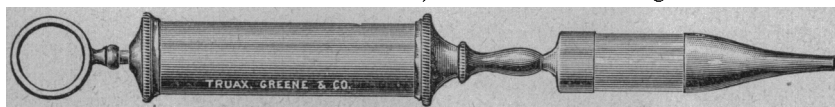
DOUBLE RETRACTORS.

The double retractors take the place of an assistant in keeping the soft tissues out of the way of the operator, and in controlling the hemorrhage during mastoid and other operations of like magnitude. The retractors consist of two shafts, each armed with a series of hooks that can be brought together and interlocked for insertion into the incision, when they can be separated and fixed at any desirable point up to two inches apart. After they have been drawn apart as far as may be required, the thumb screw on the fixation bar next to the hooks should be screwed down firmly into the bar, the handles should be pressed a little together until the tissues are well stretched as the distal ends of the retractors separate, then the thumb nut on the thread bar should be turned down against the movable handle.



If the instrument is properly adjusted the tissues can not slip out of its jaws and their pressure on the stretched lips of the wound reduces the hemorrhage to a minimum. In one operation these hooks proved more effective than five artery forceps.

The following arrangement renders these retractors equally useful in the smallest and the largest mastoid operations: The outer half of the shaft of



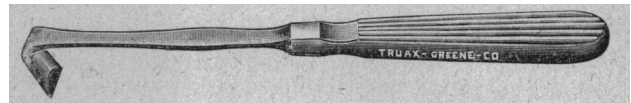
hooks can be slipped out of the inner half, leaving the retractors only an inch long. Replacing the adjustable series of hooks makes them two inches long, and by drawing these adjustable hooks outward one-half inch you can lengthen the hooks to two and one-half inches. This has the effect, when the instrument is in position in a large wound, of making an opening two inches to three and one-half

inches wide, by three or more inches long through which to work. However the opening can be made as small as one wishes, and the capacity of the instrument is far beyond what we usually require in operations on the skull, but I have had it made so as to be of service in other and more extensive operations, since its size in no way impairs its efficiency in mastoid cases.

When the adjustable parts of the hooks are removed for small operations the openings in the permanent hook-shafts, into which the adjustable hooks fit, may be securely sealed by a bit of beeswax to prevent the entrance of blood, etc. After being used, this wax will run out on the application of a little heat. A drop of oil should then be put in the same openings to prevent corrosion, or sticking of the adjustable shank.

A PERIOSTEUM SEPARATOR, RETRACTOR AND CURETTE.

This hoe-shaped device overcomes a serious objection to the misnamed periosteotomes we have been using. Indeed these instruments should not be *tomes* at all. They should not cut the membrane, but should lift it from the bone in continuity, so as to carefully preserve its integrity.



The old periosteotomes put the operator at a disadvantage by necessitating an unnatural play of his muscles. With a pushing motion one has not perfect control of the movements of the instrument and it is likely to slip and cut where it is not desirable to wound. In the use of this kind of a lifter the motion is one of drawing or pulling toward one's self so that the muscles brought into play are, together with the instrument, under easy control—on the same principle as the farmer's use of his hoe, after which it is patterned.

As the separator serves the purpose, not only of detaching the periosteum, but of retracting the loosened tissues, or of curetting necrosed bone, it may be said to constitute three instruments in one.

EAR ASPIRATOR.

This instrument is for the purpose of evacuating, or aspirating, the middle ear and adjacent cavities of pus. It consists of an improved air pump and adjustable glass air chamber that fits into the external auditory canal by means of a soft rubber covered tip.

A few gentle tractions of the piston will draw out the discharges from the attic and deeper recesses after the most thorough ordinary methods have proved futile. Not enough force should be employed to cause actual pain or much sanguineous effusion. Yet a slight show of hemorrhage is not disadvantageous, for the parts are stimulated and thoroughly washed of discharge.

The pump is serviceable in chronic cases of caries of the attic, aditus, and antrum in order to obtain complete evacuation and cleansing as the first step in every treatment.

These instruments were made for me by Messrs. Chas. Truax, Greene & Co., of Chicago.

Columbus Memorial Building.