tonsillotome will cut only the tonsil and in suitable cases it will remove as much of the organ as may be desired. This instrument commends itself, therefore, because of its strength, its simplicity, its safety, and its effectiveness.

There no doubt exists some prejudice against the use of an anæsthetic in removing tonsils. In the course of a discussion at the Paris Surgical Society, Reclus²⁹ referred to an unpublished case of fatal asphyxia during a tonsillotomy under chloroform. Avoid profound anæsthesia, remove the tonsils in quick succession, immediately turn the patient upon the face, and such a misadventure cannot occur. Some years ago Ingals³⁰ remarked that removal of the tonsils is as serious a matter for a child as it would be for an adult to be hung. In young children, therefore, we should use ether or chloroform, not only to obviate mental and physical suffering, but, what is much more important, in order to enable us to explore the naso-pharynx at leisure, and if necessary to remove from that region those collections of lymphoid hypertrophy so often associated with similar overgrowths between the palatine folds.

20 W. 31st street.

LOCAL ANÆSTHESIA WITH THE PHARYNGEAL COCAINE SYRINGE.

Read by Title in the Section of Laryngology and Otology, at the Forty-second Annual Meeting of the American Medical Association, held at Washington, D. C., May, 1891.

BY JNO. E. BOYLAN, M.D.,
OF CINCINNATI.

Mr. Chairman and Gentlemen:—I had occasion to report last year, at Nashville, a method of effectually anæsthetizing the tissue of the vault of the pharynx before operating upon adenoid vegetations, by the interstitial injection of cocaine with a suitably constructed and guarded needle syringe.

¹ Medical Times and Gazette, May 1859, p. 517.

² Anatom. Anzeiger, 1889, No. 15, p. 467.

³ American Journal Medical Sciences, March 1891, p. 257.

⁴ Medical Record, New York, April 3, 1891.

⁵ Transactions American Laryngological Association, vol. xi, 1889, p. 78. Note on the Galvano-Cautery in the treatment of Hypertrophied Tonsils, by Chas. H. Knight, M.D.

⁶ Diseases of the Throat and Nasal Passages, 2 ed., p. 233.

⁷ Arch. Méd. Belges, 1878, from Jour. de Méd. et de Chir. Prat. No. 12, 1878.

⁸ London Lancet, 1882, p. 798.

⁹ Cohen, Diseases of the Throat, &c., p. 233.

¹⁰ Diseases of the Throat and Nose, 1880, p. 68.

¹¹ Ann. d. mal. de l'oreille, du larynx, &c., July 1880, p. 63; 1881, p. 124.

¹² Ranking's Abstracts, 1862, p. 240.

¹³ Presse Méd. Belges, No. 10, 1862.

¹⁴ Gaz. Med. Ital. Prov. Sard., Dec. 30, 1861.

¹⁵ British Medical Journal, March 1884, p. 602.

¹⁶ Journal American Medical Association, vol. i., No. 1.

¹⁷ New York Medical Journal, Aug. 30, 1890.

¹⁸ Balme, De l'Hypertrophie des Amygdales, 1888.

¹⁹ Presse Méd. Belges, Nos. 31 and 38, 1863.

²⁰ Diseases of the Throat, 3 ed., 1889, p. 247.

²¹ Sore Throat, 4 ed., 1879, p. 240.

²² Die Krankh. der Mundh., des Rachens und der Nase, 1890, p. 151.

²³ Arch. of Laryngol., vol. iv, 1883, p. 145.

²⁴ Op. Cit., p. 229.

²⁵ Diseases of the Throat, 3 ed., p. 255.

²⁶ Diseases of the Throat and Nose, 1881, p. 141.

²⁷ British Medical Journal, March 12, 1887.

²⁸ Union Méd., No. 48, 1886.

²⁹ Journal of Laryngology and Rhinology, 1887, p. 231.

³⁰ Transactions American Laryng. Association, 1887, p. 178.

I wish to-day to make a brief report of observations with the instrument during the past year, and as it was incomplete when exhibited, and has since been somewhat modified, I take the liberty of producing it again. An objection raised to the use of the instrument, which was otherwise kindly criticized at the time, was the danger of calling forth alarming or even fatal symptoms by subcutaneous injections of cocaine.

Dangerous and disastrous results from the use of cocaine as a local anæsthetic was, from the start, the bugbear that stalked at the heels of this brilliant and most happy innovation, as it was upon the introduction of the general anæsthetics, chloroform and ether; and yet I should like to ask how many of the gentlemen present have found this objection a sufficiently grave one to have prompted them to desist from its use? Though we occasionally hear the note of warning, and here and there a fatal case has been reported, their proportion has not increased with the prevalence of the drug, while its use has become so universal, among the specialists particularly, that it is to be doubted if there are many of the latter who could now be induced to do without it. With the report of fatal cases we are almost invariably informed of the size of the dose administered, and I have yet to hear of a single one which was not much larger than necessary to produce satisfactory local anæsthesia.

Aside from the repeated applications to the mucous membrane of the nose and throat, made almost daily over a period of about four years, I have, since May last, injected cocaine into the tissue at the vault of the pharynx of thirty-seven different patients. I have never failed to make a note of cases in which symptoms other than local anæsthesia were manifested, and of these there are nine all told. In five of the nine cases, toxic or constitutional symptoms, such as hilarity, pallor, somewhat labored respiration or tendency to syncope, occurred after the application of about 30 m. of a 20 per cent. solution with a brush. The remaining four cases occurred after hypodermic injection, and as follows: The first three happened among the first ten cases treated, and following an injection of 20 m. of a 10 per cent. solution, or about 2 m. of cocaine, while the fourth was the only one which occurred among the last twenty-seven cases, after reducing the injections to 15 m. of the same solution, to which quantity they have since been confined. In only one of all the cases were the symptoms at all alarming. In this instance the patient was a robust boy 15 years of age, and the dose, which was injected with the syringe, was possibly a little more than 20 m. Within two minutes the patient became pale, and stated that he was growing numb and dizzy. He stamped about for a few minutes, slapping his hands and legs, which seemed to be rigid with cramp; his respiration

became labored, the dizziness increased, and he insisted upon lying down to sleep. Some whisky, a current of fresh air from the open window, and friction, gradually rallied him from this condition, and within twenty to thirty minutes he was completely restored. A week later, an injection of exactly 15 m. into the same patient was followed by but slight pallor and somewhat accelerated respiration, which did not impede the operation.

As the result of the above, as yet, rather limited observations, I infer that the amount injected should be about one-half that which may be applied to the mucous membrane. I believe m. 15 of a 20 per cent. solution a perfectly safe quantity to inject, and I have never known such a dose to fail in producing within five minutes entirely satisfactory anæsthesia, so that the patient never complained of pain from the operation.

The chief points of advantage which may be claimed for this method of anæsthetization are, 1, that it greatly reduces the percentage of cases in which a general anæsthetic must be resorted to, by effectually benumbing the part; 2, the ease and celerity with which it is accomplished, for it is done in an instant, and regardless of the ordinary retraction of the palate, the guarded point being quickly inserted between the latter and the pharyngeal wall, if necessary; 3, the rapidity and completeness of its effect; and 4, the fact that no cocaine is swallowed or retained in the nose, which does not assist in producing anæsthesia in the pharynx. As obstructions of the lumen of the needle necessitated various trips to the instrument makers, this has been made to screw to the canula, and can easily be detached with a forceps and cleaned. The instrument is made by Tiemann & Co., of New York, and by Max Woche & Co., of Cincinnati.

AN ABSTRACT OF PAPER ON CHRONIC CATARRHAL LARYNGITIS.

Read by Title in the Section of Laryngology and Otology, at the Forty-second Annual Meeting of the American Medical Association, held at Washington, D. C., May, 1891.

BY MARION THRASHER, M.D.,
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Chronic catarrhal laryngitis is a continuous passive inflammation of the laryngeal mucous membrane. Its etiology is multifarious. The most influential causes are nasal stenosis, liquor drinking, tobacco smoking, vitiated air, and an intemperate use of the vocal organs.

Nasal stenosis necessitates mouth breathing—an abnormal respiration, by which we have carried into the laryngeal cavity an air pregnant with dust, that soon begets an inflammatory process.

Chronic alcoholism produces an abnormal activity of the mucous glands of the mouth and

fauces, which, during sleep, drops depraved excretions into the larynx, thereby producing a permanent inflammation.

Tobacco smoking causes to be deposited daily in the air passages the liquid alkaloid nicotine, which produces partial paralysis of the vasomotor nerves of this locality, and a resultant permanent injury to the mucous texture.

Vitiated air, in illy ventilated apartments, is one of the commonest causes of chronic laryngitis. Air reeking with noxious vapors poisons the delicate tissues over which it passes, fails in its mission of aerating the blood, and by its toxic reaction, superinduces a chronic hyperæmia of the respiratory tubes.

An intemperate use of the vocal organs in criers, speakers and singers, must of necessity produce chronic laryngitis. Mandl says, in singers and orators, the arytenoids and vocal cords are inflamed, while in drinkers and smokers, the inflammation exists in the epiglottis and aryglottic folds.

The pathological condition is always one of hypertrophy of the mucous membrane of the larynx. This is a diagnostic symptom, and is accompanied by all or part of the following symptoms: difficult nasal respiration, morning hoarseness, decreasing with the day, cough, dysphagia, copious secretion and excretion, supplemented always by a feeling of uneasiness or discomfort—but by an absence of positive pain.

The prognosis of chronic laryngitis is favorable as to fatality, but usually unfavorable as to a permanent cure. For years, extending to a long lifetime, it may continue, with remissions and exacerbations, and not perceptibly affecting the general health. The difficulty in the way of a permanent cure, lies in a failure in keeping up a given line of treatment for a sufficient length of time. Both physician and patient may at first be enthusiastic, but as days, weeks and months go by, the enthusiasm wanes, the treatment is neglected or wholly ignored—or perchance a temporary abatement of the prominent symptoms had led them into the belief that a cure had been accomplished. We should not forget to impress upon the mind of the patient and his friends, that a chronic disease can only be successfully combated by chronic treatment.

The pathological factor is hyperæmia. The chronic inflammation of the laryngeal membrane has produced a permanent distension of the capillaries—oversecretion and supersensitiveness.

The treatment may be local, general, or both—guided by the etiology. No less an authority than Lennox Browne claims but little for constitutional treatment. The experience of most physicians will not agree with his. The treatment may properly be local, constitutional, or both. The exciting cause must be discovered and overcome. The diagnosis can readily be made with