A RECENT IMPROVEMENT IN POSTERIOR RHINOSCOPY.

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THE importance in many cases of drawing forward the soft palate with a hook or other means, in order to obtain a thorough view of the naso-pharynx—especially of the posterior and superior walls of that cavity—is pretty generally acknowledged. A hook appears to be, on the whole, the simplest and most convenient instrument for the purpose, and Voltolini's hook, the application of which I have elsewhere described,¹ acts satisfactorily now that we are able to have recourse to cocaine anaesthesia. Many like myself must, however, have felt the importance of having an instrument which, whilst capable of rapid application and removal without inconvenience to the patient, would at the same time hold itself in position, leaving at liberty both hands of the observer. These conditions appear to be fulfilled by the self-retaining palate retractor, invented by Dr. Joseph A. White, of Richmond, Va., and described by him in the *Journal of the American Medical Association* for February 18th, 1888.

Description.—Dr. White² describes the instrument as "made of a square steel bar about 3 millimètres thick, terminating in a loop of pure silver wire, heavy enough to hold the palate, and light enough to be readily changed in shape by the fingers to suit each individual case. On the bar slides the attachment which clamps over the upper lip and holds the retractor in position. This sliding attachment with two arms requires no fixation to keep it in position, the tension being alone sufficient to make it immovable on the square bar. For greater security, however, in performing an operation a small fixation screw is attached to the side of the slide to fasten it securely, so that facial contortions should not displace it."

Dr. White at first sometimes used pads attached to the arms of the sliding attachment, but now he only uses silver loops, as they can be "moulded by the fingers to suit any case." In the instruments which I have employed³ I have made the little modification of leaving the loops open (as shown in the adjoining figure), as by this means the length of the loops can be varied at the operator's pleasure. In practice, however, it is convenient to have two sizes ready to suit different-sized upper jaws, for if too long loops be applied to a small jaw, the anterior end of the instrument will hang down inconveniently into the mouth. The smaller instrument is also made lighter and shorter in the stem.

Mode of Application.—Dr. White, in his short communication, does not give any directions for this. The mode in which I apply the instrument for an examination is as follows: The hook is held

in the right hand between the thumb and two first fingers in the manner shown in the accompanying woodcut (which I have had made from a photograph), a rhinoscopic mirror, which has been previously warmed being grasped between the two last fingers and the palm. (A large mirror may often be employed, one having a diameter of three-quarters or seven-eighths of an inch.) The tongue being held down by an angular depressor in the left hand, the hook is rapidly introduced well up behind the velum, which has been previously cocaineised, and the clamp is pushed forward with the fingers of the right hand until the loops fix firmly in the depression on either side of the nose, where they remained without the use of the screw. My practice is always to apply the loops to the outer side of the alæ, but Dr. White sometimes catches them "in the nostrils." The heated mirror being ready in the right hand can then be immediately applied to view the naso-pharynx. Removal is accomplished by catching and drawing forwards the under part of the sliding attachment with the right index or middle finger. This loosens the hold of the attachment, and the hook drops out of itself. By adopting this plan the hook need only be kept in a very short time if a simple examination is all that is required.⁴ Cocainisation is usually necessary before applying the hook; indeed, it may be said that the introduction of cocaine has produced quite a revolution in the examination and treatment of these parts. I apply the cocaine by injecting a few drops of a 5 or 10 per cent. solution into either nasal cavity with a small syringe or medicine dropper, holding the patient's head at the same time well back so as to allow it to run over the velum. A few patients only tolerate the application of the hook without any cocaine. For a simple examination, which can be very rapidly executed in the manner already described, a 5 per cent. solution often suffices, but for a prolonged application and in very irritable throats a 10 per cent. solution is necessary, and the nasal injection may have to be supplemented by painting the posterior surface of the palate with the same solution by means of a curved brush introduced through the mouth.

On one occasion, after applying a ten per cent. solution through the nose and mouth of a boy, aged 13, I saw some temporary faintness, but, as this did not come on until after the removal with forceps of a large adenoid vegetation, it may have been due to the latter.

In applying the hook, it is desirable to draw forward the palate rapidly, disregarding any slight reflex action, which generally subsides of itself. Voltolini has pointed out⁵ that a firm pressure is much better borne than a light one, and it is evident that the pressure is much steadier and less likely to irritate with this hook than with one held in the hand. If reflex contraction of the palate is not thus overcome, a more thorough cocaineisation must be employed, or attempts may be made to overcome it by directing the patient to "sniff," the hook being gradually tightened as the muscles yield. Those not accustomed to using a palate hook may be astonished at the power possessed by the palatal muscles, also at the extent to which the palate can be drawn forwards, and the very thorough manner in which the naso-pharynx can be inspected. Besides the greatly improved view gained of the vault and back wall of the naso-pharynx (pharyngeal tonsil and bursa), it is possible to see further into the posterior nares, on account of their appearing less foreshortened and better illuminated with the larger mirror.

I may say that Dr. White mentions one objection to the instrument, and that is, "that the bar may get in the way of operating in the right nostril; but this does not hold good if the operator is ambidextrous, and, moreover, it is so small that it is not much of an obstruction."

From the patients' account, the application of the hook does not appear to be particularly inconvenient, certainly not more so than that of Voltolini's hook. I have several times applied it to children aged 13 or 14 years. It may in certain cases also obviate a resort to the much more disagreeable procedure of palpation of the naso-pharynx.

During the last six months I have employed the hook in a large number of cases, and can recommend it as a valuable assistance in examining the naso-pharynx, and in carrying out operations in that cavity.

⁴ The uvula does not usually give any trouble if it be tucked to one side of the instrument; but, if necessary, the hook could be made solid and the stem broader in order to support it.

⁵ *Die Rhinoskopie und Pharyngoskopie*. By Dr. Rudolph Voltolini. Second edition, 1879. p. 18.

¹ *A Guide to the Examination of the Nose*, 1886, page 120.

² *Loc. cit.*

³ Made by Down Brothers, Borough, London. The American maker is Mr. Charles Wiltner, 224, North Howard Street, Baltimore, Md.