

## THE CORRECTION OF OLD LATERAL DISPLACEMENTS OF THE NASAL BONES.<sup>1</sup>

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THE object of the following paper is to present a method of operation which I have employed in a series of 22 cases of old lateral displacement of the nasal bones. The technique is based essentially upon the procedure, which I first described in 1898, for the correction of the convex deformity of the nasal bridge, ordinarily known as Roman nose. In both operations one seeks to obtain mobilization of the nasal bones *en masse*, with the object, in the case of the Roman nose, of depressing them, and in the case of lateral displacement, of restoring them to a median position.

In the case of lateral deformity, this mobilization is effected in the following manner: The patient is etherized and placed in the Rose position or in a sitting posture. I usually prefer the latter, as bleeding is much less, and if the head is

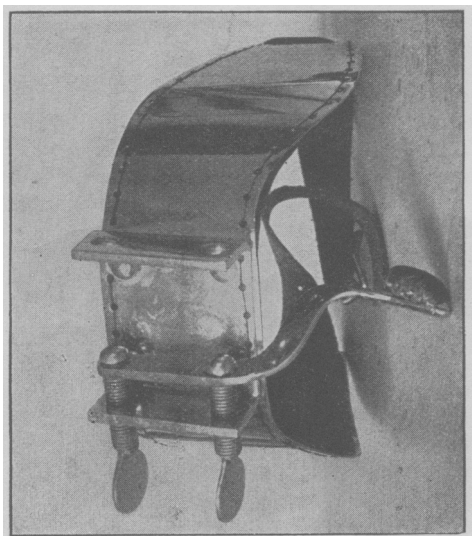


FIG. 1.

held well forward, the blood escapes almost wholly through the anterior nares. After application of a solution of suprarenal extract to the roof of the nose, a pair of short-bladed, straight scissors is introduced into the left nasal vestibule. One blade is made to penetrate the triangular cartilage at its anterior extremity immediately beneath the skin, and a cut is made through the septum, parallel to the external outline of the bridge of the nose and about 1 cm. below it, terminating at the junction of the perpendicular plate of the ethmoid with the cribriform plate. The septum is thus divided by this cut into two parts, a narrow upper strip connected with the bridge of the nose, and a large inferior portion attached to the floor of the nose. In young persons the cut is readily made with the scissors through the ethmoid plate, but in older individuals it may be necessary to use a short-bladed saw.

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The next step consists in freeing the nasal bones from their lateral attachments to the nasal processes of the maxillary bone. A small, strong nasal saw is introduced, with its teeth uppermost, into one nasal passage, and the articulation of the nasal and maxillary bones sawn through from below upwards,—nearly, but not quite, through,—the fingers of one hand being placed on the skin over the articulation, to feel when the first saw teeth make their appearance through the bone. I have found it advantageous to stop the saw-cut before the articulation is completely divided, leaving the bones somewhat loosely joined by a few spicules, which serve later as splints to retain the bones in the desired position. The saw-cut is next repeated on the opposite side through the corresponding articulation. By the foregoing procedure, the nasal bones are freed from their articulations, with the exception of their attachment to the frontal bone. One or two careful blows with a mallet on the convex side of the displacement usually suffice to loosen the fronto-nasal articulation, rendering it possible to carry the nasal bones into the median line. The upper strip of septum, attached to the roof of the nose, slides at the same time laterally a short distance upon the lower part, attached to the floor of the nose. As there is generally a slight lowering of the nasal bones *en masse* by their replacement, the upper strip of septum overlaps the lower portion to a corresponding degree, and is thereby to a certain extent retained in position. In uncomplicated cases of lateral displacements the operation is now completed. It often happens, however, that a considerable depression of one nasal bone was caused by the original injury. In young persons, where the articulations are not too rigid, it is possible to elevate the depressed bone by a short, stout, blunt pair of scissors, introduced into the nose and pressed forcibly upwards. I have occasionally, however, been obliged to separate the depressed nasal bone from its fellow by an extra saw-cut before I could elevate it.

An external splint is always necessary. I have found very useful one devised several years ago by Dr. Coolidge, consisting of a metal forehead-plate, from which descend two parallel brass rods, each with an adjustable button so arranged that one can be placed against the original point of convexity of the deformity, the other against the cartilaginous tip of the nose. I have lately used with much satisfaction a splint devised by a patient. As seen in the diagram, it consists of a broad, metallic forehead-plate, from which a finger-like projection extends downwards, and is adjusted to press upon the desired part of the nasal bridge. The pressure is regulated by two screws in the manner of a carpenter's vice. This is an extremely useful feature of the apparatus, as it frequently becomes necessary, for a day or two following the operation, to relax somewhat the pressure, on account of the swelling, and increase it later on. (Fig. 1.)

In one instance the operation was done under local anesthesia. Here the roof of the nose was

thoroughly cocainized, and cocaine in 1% solution was injected under the skin about the site of the operation. The various steps of the operation were attended with only moderate pain, up to the blow on the nasal bones with the mallet. This caused so much pain that the patient was unwill-



FIG. 2.

ing to have the blow repeated, and fracture with the frontal bone was consequently not completely effected. The splint above referred to was then devised for purpose of forcing over gradually the nasal bones by constant pressure. The screws were tightened every few days, and within a week the bridge had been slightly overcorrected. The splint was then worn at night only for 3 weeks longer, and then left off. The bony bridge was found firmly fixed in the middle line, and showed



FIG. 3.

no tendency to return to its old position. It should be said that local anesthesia was employed in this case only at the urgent request of the patient, who refused to submit to general anesthesia. It is certainly not to be recommended.

The case shown in the illustration (Fig. 2) was a young man, 18 years of age, referred to me by

Dr. Cutler of Waltham. The deformity was the result of an injury 6 years previous. There was in addition a deviation of the septum to the left. The nose was straightened externally, as above described, and the septum refractured by a stellate punch. In addition to the external splint an Asch splint was introduced into the left nasal passage to hold the septum in place. Fig. 3 is the photograph of the patient, taken 1 year after the operation.

### CLEFT PALATE.<sup>1</sup>

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THERE is a fairly general agreement that a hare-lip should be operated upon in the early months of life, as soon as the child's general condition will allow. Of course, where the intermaxillary bone projects forward, though even on one side only, the operation means much more than where the lip alone needs to be united.

Opinion is divided regarding the age at which a cleft palate should be operated upon. Those who use obturators after operation, as a temporary guard to protect the line of sutures from the tongue, must wait until the sixth year molars give a point of attachment for the plate. Others wait until about the same age, because up to that time it is usually impossible to secure any cooperation from the child in the after-treatment. All admit the desirability of earlier operations. Almost all hesitate because of the large number of failures.

Wolff is the strongest advocate of early operations, doing them successfully in the first years of life, at an age when most others fail. He operates according to Langenbeck's method, freeing up two lateral mucoperiosteal flaps. The essential point in his technique is, that in very young children he divides the operation into two or three stages, separated by intervals of five to eight days. He first frees the flaps and later unites them. He is careful to control bleeding by pressure. He also sutures the uvula and the back of soft palate on its upper posterior, as well as on its lower, surface. Any operation which may be done with success in early life is to be welcomed. There is usually no difficulty in obtaining the consent of the parents to operation, because the deformity is so repulsive to them. It is often difficult to persuade them to wait until the child is strong enough to bear an operation well.

In 1893, before the World's Dental Congress, Dr. Truman W. Brophy of Chicago proposed a radically new operation for the closure of clefts of the hard palate, which is described in "Park's Surgery" nearly as originally proposed. It consists essentially of a sliding together of the two alveolar processes and palatal plates. He describes the operation thus:

After refreshing the edges of the cleft, including the surfaces of bone to be apposed, the cheek

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