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AN ORIGINAL DEVICE FOR CORRECTING DEFORMITIES OF THE NOSE RESULTING FROM TRAUMATISM; WITH A REPORT OF TWO CASES

BY

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presented by the author

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THE instrumentation and the operation proposed, aim at a refracture and union in proper position, of traumatically displaced nasal bones. The instruments used are an elevator (see Fig. 1), a retentive apparatus (see Fig. 2), and a plaster cast to assist in retaining the parts in their proper position after the operation.

The elevator, Fig. 1, is shaped somewhat like a tuning-fork; it is so constructed that it will resist a considerable pressure; the length of the handle, *a*, *b*, should be at least six inches, to allow for the use of sufficient leverage in refracturing the bones. The prongs, *c*, *a*, which are two inches in length, round and tapering, in diameter from one-eighth of an inch at the point, *d*, to three-sixteenths of an inch at the base, *c*, should be so tempered that the interspace between the prongs of the fork may be varied from three-sixteenths to five sixteenths of an inch, according to the thickness of the nasal septum, and the indications of the case to be operated. The entire length of the instrument is about nine inches, and its tensile strength should be sufficient to withstand any possible pressure which might be exerted during an operation.

The retentive apparatus, Fig. 2, consists of a bone-plate, *a*, *b*, two and one-half inches long, by one and one-half inch wide, and about one-quarter of an inch thick, having two slits through which is passed the head band

ratus is worn each day depending on the degree of irritation produced thereby.

The advantages claimed for this operation and mode of treatment over the old methods are: 1. The thoroughness, rapidity, and the comparative ease with which the operation is performed. 2. The ability to maintain during the operation an even pressure on both nasal bones at the same time, or greater pressure can be exerted on either side, if required, in consequence of more extensive sinking, by simply tilting the fork. 3. The absence of any external injury, which may occur in using the forceps. 4. The fracture produced is simple, instead of compound, as in the chiselling operation. 5. The value of the retentive apparatus in preventing subsequent sinking.

This operation has been performed on the two cases which are here reported.

CASE I.—G. B- - -, aged thirty-two, a strong, well-nourished man, born in the United States. He had a large and flat nose, the bridge of which was much sunken and deflected to the left. About five years before coming under observation he received a blow which took effect especially on the nasal bones, producing the great deformity and depression of the nose. The cartilaginous portion of the septum nasi was but slightly deflected.

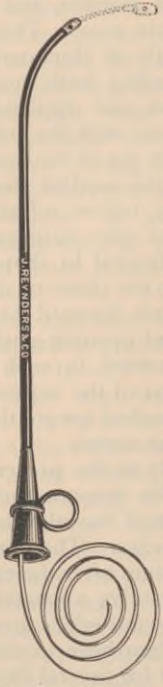
January 10th.—The operation as above described was performed, and was accompanied by a moderate amount of nasal hemorrhage, the bones were uplifted and pried toward the right side, leaving the median line of the nose perfectly straight, and the bridge sufficiently elevated. The retentive apparatus and the plaster cast were used twice daily for the next ten days, the periods of time during which they were worn being increased from two to four hours for each application. At the end of this time all instrumentation was discontinued, the apparatus at no time having produced unbearable irritation. The result of the operation was satisfactory, the deformity being sufficiently corrected to entirely change the appearance

of the patient's face, which presented no evidence of the previous existence of so disfiguring a nasal deformity.

Case II.—C. H——, aged twenty-seven, born in Ireland, was healthy but thin, with angular features, and a moderately prominent but very sharp, thin nose. Three years before this time he had a fall while on shipboard, striking the right side of the nose, deflecting both nasal bones to the left. The septum nasi was also displaced to the left, its shape being concavo-convex with the convexity extending toward the right side, the tip of the nose was deflected about one half-inch from the median line. In this case it was considered necessary, before refracturing the bones, to remove a section of the cartilage; the portion of cartilage removed was elliptical in shape, the incisions were made at right angles to the plane of the septum, the direction being from behind forward and downward. At the points of the elliptical opening single incisions were carried backward and forward in such a manner as to separate the upper portion of the septum from the lower half, which was forcibly pushed toward the left side by introducing the finger into the nostril.

The operation was performed similarly to the preceding one; in consequence, however, of the extreme thinness of the nose, it was more difficult and the elevator was not so easily applied as in the first case. The position of the cartilaginous edges of the septum after the excision and refracture was good, the retentive apparatus assisted in maintaining apposition of the cut edges until the healing was perfect. The nasal hemorrhage in this case was excessive, the oozing continued for several days after the operation. The after-treatment was identical with that of the former case, the retentive apparatus was, however, worn longer to insure perfect union of the cut edges of the septum, and symmetry of the bony parts. The result of the operation was very gratifying in its cosmetic effect, as well as in the decided improvement in breathing space resulting from the replaced septum nasi, which approximated its normal position.

In case excessive hemorrhage should occur as a result of the operation, or in uncontrollable hemorrhage of the nose from any cause, the following simple and cheap method of plugging the posterior nares may be employed. No originality is claimed for this procedure, the principle involved being that of the nasal cannula of Bellocq.



The intrument consists of a Eustachian catheter of medium size, and a steel spring which will pass easily through the catheter and is about twelve or fifteen inches in length, curling upon itself at either end of the catheter as it is passed through it or withdrawn, tipped with a small, olive-shaped piece of German silver the size of the catheter with an eye drilled through it for the passage of the thread. It is used in a similar manner to Bellocq's cannula, the spring being passed through the catheter, but it possesses some special advantages, which are: 1. The catheter is smaller and more easily and painlessly introduced, and may be passed readily in children and in cases of nasal deformity preventing the passage of the larger cannula. 2. The length and pliability of the spring will permit its passage to a point easily reached by the fingers, and it may be drawn from the mouth and unthreaded. 3. The trifling cost of the instrument.

The instruments as above described are manufactured by John Reynders & Co, New York.