

Fig. 1.



Fig. 3.



Fig. 2.



Fig. 4.

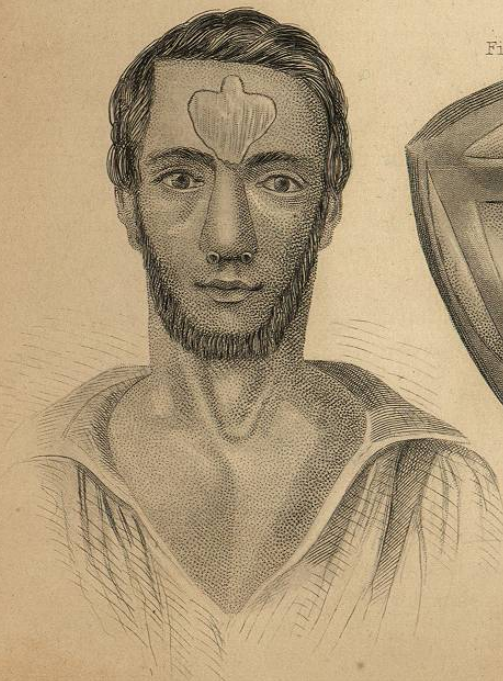


Fig. 5.



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be completely lost, or only one ala may be absent; a break in the continuity exist, as shown in Fig. 430, or with the loss of one side may be conjoined a misshaped and sunken condition of the opposite, as seen in Fig. 432; nose and lip may both be wanting, as exhibited in Fig. 356; or, as is often seen, V-shaped breaks may exist in the continuity of the free surface of one or the other of the alæ.

Four general features associate with the operations of rhinoplasty, namely: the Italian, the German, the Indian, and the English method.

The Italian method is that known as the operation of Tagliacozzi. This is practised by marking upon the inner and middle portion of the integuments of the arm two longitudinal lines four inches at least in length by three and a half in breadth; the flap thus outlined is raised, and, while allowed to remain attached at either end, is separated its length from the underlying parts by well-oiled linen or sheet-lead passed beneath it. Allowed thus relation until it become thickened and indurated, a period of some two weeks, the one end is detached, and the oblong flap, being pared into shape, is stitched to the face, which has been prepared for its reception.

The German method, being a modification of the preceding made by Professor Von Graefe, of Berlin, consists in the performance of the whole operation at a single sitting. This plan, while advantageous as regards the comfort of the patient, yet fails to secure that thickness of substance in the flap which was the object with Tagliacozzi in subjecting it to such long-continued irritation; also the shrinkage has to occur in the part, as a nose, rather than as integument.

The Indian manner, the one most generally practised, consists in taking the flap for the bridge and alæ from the forehead, and the columna from the lip.

The English operation, devised and first practised by Professor Syme, of Edinburgh, consists in taking flaps from the cheek, as is shown for one ala, in Fig. 432. In this operation the columna is also to be obtained from the lip.

Fig. 5, Plate IV., exhibits the flap, as made after the manner of Tagliacozzi; also the manner of attachment to the face, together with the means practised by that surgeon to fix the forearm over the head.

Fig. 4 of the plate shows the Indian operation; the general V-shape of the flap, conjoined with the strip for the columna, is recognized in the ulcer on the forehead; the flap, rotated on its pedicle, is seen to be raised in its new position into the shape of the nose by bougies introduced into the nostril-spaces.

Studies.—Fig. 430 exhibits a case in which the alæ and cartilaginous septum of the nose have been lost. In this case the defect is proposed to be remedied by material taken from the forehead, after the Indian method. First, the size and shape of the new wings are dotted out with ink, as shown. To so map out the organ it becomes necessary, first, to have a complete idea of what is needed; this is obtained by using a thin sheet of gutta-percha, which, on

being warmed, may be moulded as desired. Obtaining thus a measure, the material is spread out upon the forehead, as shown in the cut. It now remains to freshen the circumference of the parts to be restored, and, dissecting the flap from the forehead, plenty being allowed for shrinkage, twist it upon the

FIG. 430.



FIG. 431.



pedicle, which of course is allowed to remain, and by means of ligatures fix it in the new position.*

The separation of the pedicle is only to be practised after full relationship of circulation is established in the newly-related parts,—a period varying from ten days to as many weeks.

Convex position of a new nose and maintenance of the orifice are to be secured by tubes of silver, worn for several months. Fig. 431 shows a frequent result of such a rhinoplastic operation.

FIG. 432.



FIG. 433.

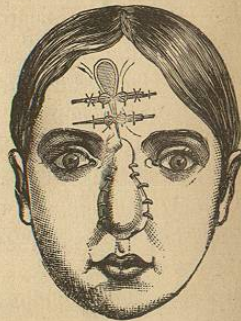


Fig. 432 being a case from the practice of Professor D. Hayes Agnew, in

* A manner of relating the parts, devised by the elder Pancoast, is known as the tongue-and-groove suture: this consists in associating two surfaces by means of convex and concave faces.

which the author had the pleasure to assist that gentleman, exhibits the loss of fully one-half the nose. In this instance it is perceived that, besides the absence of the ala, the remaining nostril, as the result of a cicatricial depression at the bridge, has been made to look unduly outward, the organ being converted into a very decided pug. Two indications are here seen to exist: first, the body of the nose is to be let down; secondly, a new ala is to be made. Turning now to the lines of incisions, it is perceived how these indications were attempted to be met. Across the bridge is seen the first cut made; this incision, with a little dissecting, allowed the part to drop as required; secondly, commencing upon the nasal prominence, as remarked in the diagram, an incision was brought down, and, after extending a very short distance, was made to assume a triangular form, thus affording a pyramidal slip to occupy the space necessarily resulting from the dropping of the nose; thirdly, continuing the line of incision, the cut was carried into the substance of the cheek, as shown in the drawing, the form of flap created being in accordance with the wants of the part to be restored; fourthly, the edge of the nose was freshened, and the triangular flap seen below was dissected to its base. All being thus made ready, the alar flap was brought into place and attached, while the inferior one was forced outward to help fill up the space left vacant by the removal of the irregular apex of the alar flap.

Fig. 433 exhibits an operation similar to that shown in Fig. 430, the new nose being here seen stitched in place, and the wound on the forehead approximated.

Fig. 434 exhibits a facial loss of substance, together with a proposed mode of correction.

FIG. 434.



FIG. 435.

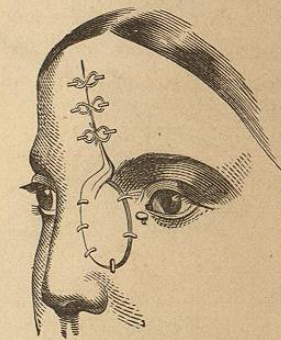


Fig. 435 exhibits the flap, as made in Fig. 434, in place, with the wound of the forehead approximated, the various pins and stitches required being shown.

Plate V. is one representing a combined operation in rhino-cheiloplasty,

PLATE V.

RHIPOPLASTIC AND CHEILOPLASTIC OPERATIONS.

Fig. 1.—Appearance of John Glover prior to the operations of cheiloplasty and rhinoplasty.

Fig. 2.—View of his face with the chin depressed. The mouth, being contracted into a rigid orifice, was enlarged laterally by the stomato-plastic operation of Dieffenbach for atresia oris, after which two flaps were made, as marked in the lines upon the cheeks, so as to form the upper lip.

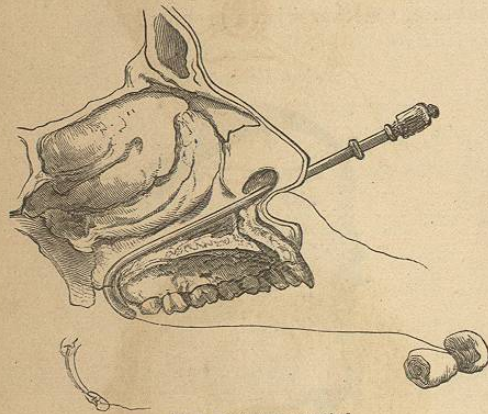
Fig. 3.—Appearance of his face after this operation, showing the position of the sutures and the improvement in the mouth.

Fig. 4.—Shows the steps of the rhinoplastic operation performed upon him subsequently. The edges of the nasal cavity being freshened by a grooved incision, the outline of the new nose was marked on the forehead before cutting the flap. The dots indicate the position of the sutures.

Fig. 5.—The wound in the forehead being closed by the hare-lip sutures, the flap was re-verted, and attached in the groove on the edge of the nasal cavity by three stitches of the interrupted suture, which were tied over little rolls of adhesive plaster, after Graefe's method. The edge of the septum is also attached to the upper lip. The twist in the pedicle is seen in the root of the nose.

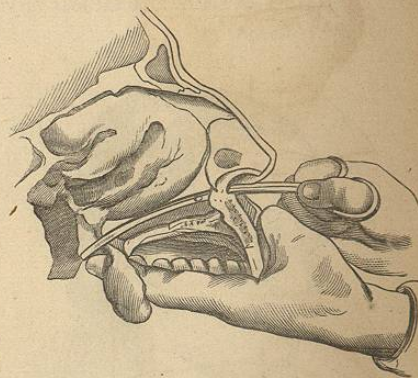
Fig. 6.—An accurate likeness of John Glover, sixteen months after the operation.

FIG. 436.



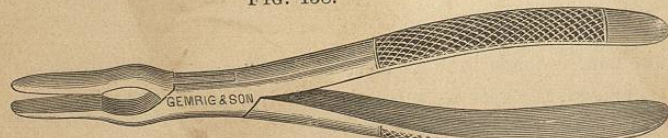
Belloc's canula applied.

FIG. 437.



Removal of polypus by means of forceps and finger.

FIG. 438.



Adams's forceps for straightening nasal septum.

FIG. 439.



Adams's screw plates for holding septum straight.

Fig. 1.

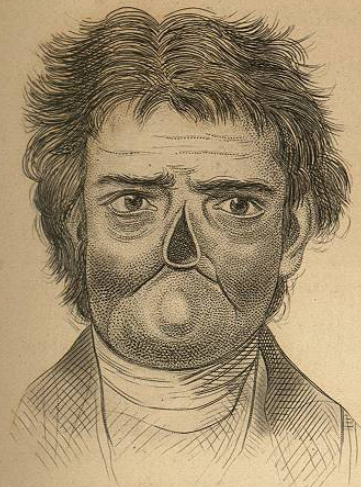


Fig. 2.

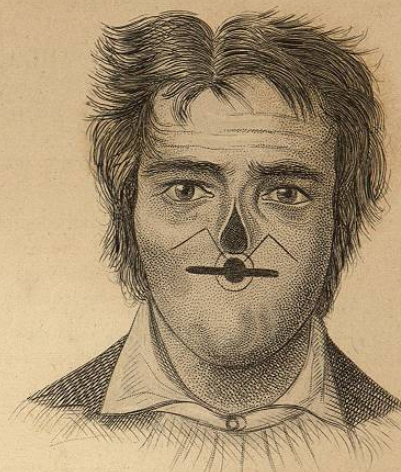


Fig. 3.



Fig. 4.

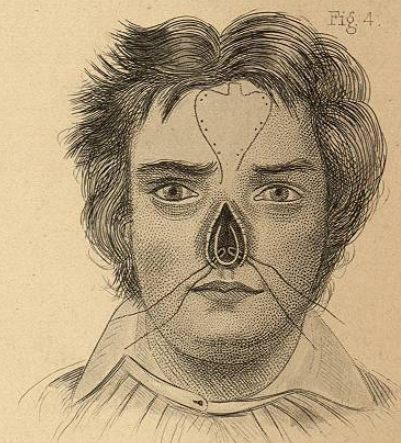
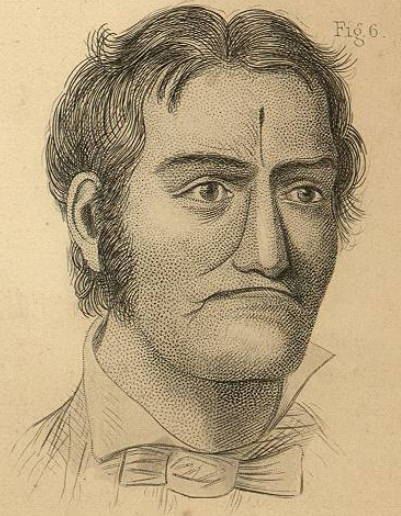


Fig. 5.



Fig. 6.



with the original appearance of the patient, the steps of an operation devised and executed by the elder Professor Pancoast, and the result obtained as exhibited by an accurate likeness of the patient taken sixteen months after the operation.

History of the Case.—The recital of this example, having the advantage of illustration, will serve as a type and study of similar cases. A man aged fifty-three had lost all the soft part of the nose and the whole of his upper lip, from the commissures of the mouth to the canine fossa of each side, as well as the septum narium and the turbinated bones; the cavities of the antra Highmoriana and of the sphenoidal sinuses being exposed. His appearance with his mouth closed is shown in Fig. 1 of the plate. The mouth, when opened, presented a rigid circular orifice three-fourths of an inch in diameter.

OPERATION.—The mouth being widened after Dieffenbach's method (see description on a preceding page), the free surface of the gum was freshened, and an incision made obliquely upward and outward for a quarter of an inch from the point where the gum was covered by integuments, and from the end of this another cut was made for about the same distance, nearly parallel with the incisions for widening the mouth, but inclined a little downward. The cheeks being now loosened from the gum and malar bone by incisions on the side of the mouth, the flap of skin and subcutaneous fatty matter was raised from the surface of the muscle by beginning the dissection at the angle next the nose, Plate V., Fig. 2.

The arterial branches, which were divided, having been twisted, the flaps were drawn downward and forward over the raw surface of the gum, and fastened together with the hare-lip suture, Plate V., Fig. 3, the inner edge of the rotated flaps being thus united in the middle line of the lip. The face was dressed with lint wet with lead-water and laudanum. The patient recovered in about two months. The nose was subsequently formed as follows:

The hair being shaved from the temple and forehead, the nasal orifices closed with lint to prevent the entrance of blood, and the patient lying down with the head supported by a pillow, a flap was raised from the forehead, as shown in Plate V., Fig. 4, the skin being divided at a single sweep of the knife, the blade of which was inclined outward so as to cut a bevelled edge. The apex of the flap, which was about five-eighths of an inch wide, rested between the eyebrows, and the tongue-like portion which was to form the columna nasi extended up into the scalp. The base of the flap was nearly three inches wide, in order to allow for its subsequent contraction. The flap, after being dissected up, was then turned down on the left side and wrapped in linen, while the wound in the forehead was closed by four interrupted sutures, after which the flap was applied to the freshened edges of the new lip and gums, the whole being held in position by the plastic suture before described, and tied over rolls of adhesive plaster, as in Graefe's method, Plate V., Fig. 5. Union having occurred, the pedicle of the flap was divided,

five weeks subsequently, by passing a director under it, after which it was smoothly fitted down to the roots of the ossa nasi, in a cavity which was made for its reception by excising a portion of the subjacent integuments. By the twelfth day union was perfect, and the patient left the hospital so much improved that, sixteen months subsequently, his likeness was taken, as represented on Plate V., Fig. 6.—*Smith.*

FIG. 440.



Fig. 440 exhibits a case which was of much interest to the author, inasmuch as the defect deformed the face of a fine-looking person, and had twice been attempted to be cured by a plastic section from the cheek; the flap in both instances having sloughed. Examining the diagram, an irregular V-shaped break is seen to exist in the right ala; this had been produced by the improper application of caustics for the cure of a supposed cancer. The character of operation seen in the diagram yielded a most satisfactory result; this consisting in the employment of a double V-incision, conjoined with a second loosening of the ala at its external inferior angle from the cheeks; these cuts made, the ala was slipped toward the mesial line and fixed in its new position by a pin. Passing now to the comparatively lax nostril, a delicate hare-lip pin was passed through the apices of the two lesser triangles, and by means of the figure-of-8 ligature these apices were brought into contact, thus necessarily securing a proper curvature to the free border of the nostril.

Referring to Plate IV., Fig. 1, is seen the front view of a patient operated on by Dr. Watson, in the New York City Hospital, for the relief of a large ulcer, accompanied with syphilitic caries of the frontal bone; the ulcer is represented with thickened and inverted edges, and as retaining a portion of the diseased bone. A fistulous orifice is also described as existing at the upper border of each orbit, with another in the left temple, through which pus escaped freely. The superior eyebrows and eyelids are shown as slightly elevated and deformed by the adventitious adhesions existing around the fistulæ.

Fig. 2 represents the lines of incision practised for the securing of flap-tissue to cover this ulcer, together with the approximation secured, and the appearance of sutures in place.

Fig. 3 exhibits the relief secured by the operation.

Another manner of treating a facial ulcer, or indeed any ulcer, consists in the transplantation of particles of skin, as referred to on a previous page. These islands serve as points of cicatrization, and not infrequently succeed most happily in covering an ulcer, and in limiting to marked extent the boundaries of a cicatrix.*

* The study of the subject of transplantation of tissue has recently received fresh impetus from the experiments which have been made in the direction of attempts to compel inde-

An accident occasionally met with by persons who indulge in street-brawls, consists in the loss of the tip of the nose by the teeth of an antagonist. Fig. 441 affords idea of the appearance of the part after such incident.

To treat a case of the kind implies, first, consideration of the state of the lesion. The incisor teeth of people differ very markedly, being in some of such knife-like edge that a bite made by them would really represent the ordinary incised wound, and might be expected to heal with little or no slough; on the other hand there are teeth, known ordinarily as double, where the surface is so broad and jagged that sloughing to a greater or less extent would necessarily associate with an injury done by them.

FIG. 441.



In the case of a portion of nose bitten off, it is good practice, if the piece be quickly found and is not too much injured, to stitch and bind it in position. Nothing can be lost by doing this, and a happy repair may possibly be secured. Should such result not ensue, the loss is to be replaced by modifications of some of the various operations suggested. Or, most conveniently, it is to be done from a flap secured from the lip as shown in the diagram; this flap, shaped to fit the part, is twisted on its pedicle, and attached after the usual manner. The gap left is simply an expression of hare-lip, and is to be so treated. (See *Operations for Hare-lip.*)

pendent islands of skin to unite with and live upon an ulcerated surface without the support of a pedicle. The nutrition of such a piece of transplanted skin, and, in fact, the immediate union of any transplanted flap, necessitates the rapid passage of vessels across the intervening space and the production of but little intermediate tissue. The formation of new blood-vessels in tissue is a subject so wonderful that it is well worthy of careful study. At some point on an existing vessel the wall dilates; a pouch is formed; it deepens, and a blind canal results. At the same time, at a point not far distant from the first, a similar action is going on,—one diverticulum projects backward, the other forward, each taking its course in the direction of the new tissue to be nourished or formed; they extend, meet; the intervening walls which closed their ends are removed, and a continuous arch is formed, through which the blood freely courses. Thus at every place these little offshoots or arms, microscopic in size, unite with similar ones from the same or adjoining vessels, until multitudes of small arches and natural anastomoses are formed, and nutrition is accomplished, every step being taken with precision, regularity, and despatch. Thus marvellous are the actions constantly taking place in our bodies to subserve the process of repair; and although man's capacity for the reproduction of lost tissue is infinitely less than that of lower beings, yet all of us must frequently be astonished at the extent of reparative power exhibited by him. As we descend the scale to creatures incapable of self-defence, self-preservation, the provision for the sustenance of existence becomes more marked, until, in protozoa, self-mutilation is but a common occurrence in case of danger, repair being so active that a short time suffices to replace any member which may thus have been cut off. Man, endowed with powers of reasoning and defence, requires such provisions to a correspondingly less degree, and in him we find that repair exists in its least expression. Still, with our advancing knowledge, we may hope to assist nature even in this process, as exemplified, for instance, in the reproduction of bone from preserved periosteum.—*From Clinical Lecture by the author in the Hospital of Oral Surgery.*

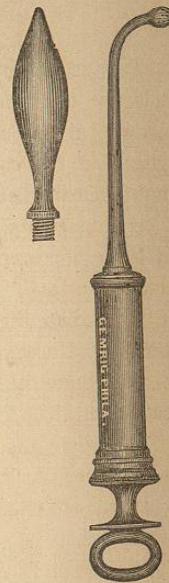
From the studies and illustrations offered, it is to be taken for granted that the ingenuity of the practitioner, directed by the hints afforded, will enable him to meet such varying indications as may from time to time be encountered. The subject is very interesting, and will repay attention given it.

FIG. 442.



Use of Nasal Douche. (See foot-note, page 654.)

FIG. 443.



Naso-pharyngeal Syringe with spray-nozzle; also nozzle for anterior nares.

CHAPTER XLIII.

DISEASES OF THE FACE.

THE most common diseases of the face arrange themselves under a dermatological signification. A division is into affections of the epiderm, of the corium, of the epiderm et corium, of the sebaceous glands, of the sweat-glands, of the connective tissue, and of the blood-vessels. A subdivision is into immediate and mediate diseases.

By immediate disease is meant anatomico-physiological perversion resulting in lesion of a part involved. Illustration: Sebaceous tumor arising out of duct occlusion.

By mediate disease is meant lesion originating in an indirect source of perversion. Illustration: Syphiloderma existing in constitutional condition.

Immediate diseases associated with the facial epiderm are callositas, cornu cutaneum, lichen pilaris, vitiligo, nævus pigmentosus, lentigo, chloasma.

Immediate diseases associated with the facial corium are nævus pilosus, scleroderma, dermatolysis, elephantiasis, atrophy, morphœa, framboesia.

Immediate diseases associated with the epiderm et corium are verruca and ichthyosis.

Immediate diseases of the sebaceous glands are seborrhœa, comedo, milium, molluscum sebaceum, sebaceous tumors.

Immediate diseases of the sweat-glands are hyperidrosis, chromidrosis, anidrosis, sudamina.

Immediate diseases of the connective tissue are keloid, molluscum fibrosum, xanthoma, rhino-scleroma.

Immediate diseases of the blood-vessels are nævus vasculosus and telangiectasis.

Mediate affections of the facial skin are the various manifestations of scrofula, of syphilis, of the exantheams, of the cancer vice.

EPIDERM.

Callositas.—A callus finds its best illustration in the horny hand of a workingman; it consists simply of hypertrophied epiderm. Callus upon the face is as rare as are indurating causes to the region. Splints used in jaw-fractures may excite the condition.

TREATMENT.—Remove the cause.

Cornu Cutaneum.—A cutaneous horn is a hyperplastic growth of the deeper strata of the mucous layer of the epidermis. These excrescences