with the compliments of the

ON THE CLAIMS OF PRIORITY

IN THE

EXSECTION AND DISARTICULATION

OF THE

LOWER JAW:

WITH

AN APPENDIX,

CONTAINING THE

REPORT OF SEVERAL OPERATIONS,

PERFORMED BY

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ON THE CLAIMS OF PRIORITY

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LOWER JAW.

ALTHOUGH nearly half a century has passed since Dr. Deadrick, of Tennessee, excised a portion of the lower jaw, and though some twenty-one years have elapsed since the publication of the details, in one of the leading medical Journals of this country, we observe that surgical writers are still almost constantly guilty of misstatements whenever they attempt to give the history of this operation. We believe that no surgeon on the continent of Europe has ever done justice to the claims of Dr. Deadrick, but in Great Britain they have, at least, been most honorably acknowledged. (Vid. SOUTH'S CHELIUS, vol. iii. p. 745.) The profession in this country have doubtless seen with surprise the attempt lately made by an *American Professor of Surgery*, to surrender the honor so justly due to *American* surgery. We think this *Professor* would blush to own his ignorance of the existence of such a publication as the "*American Medical Recorder*," and we know not what apology he can offer for the erroneous statements contained in the following extract from his report of an operation which he performed, for the removal of the *entire* lower jaw, published in the January number of the *New-York Journal of Medicine:*

"To Dupuytren was reserved the glory of having, in 1812, first removed, by a methodical operation, a portion of the body of the inferior maxilla; *but since the innovation of the celebrated French surgeon*, (the italics are our own,) the operation for the partial exsection of this bone has been repeatedly performed."

Now, we would respectfully ask the author of the above, why was not the operation of Dr. Deadrick, in 1810, "a methodical operation?" *Perhaps*, however, Prof. Carnochan has never seen Dr. Deadrick's report of it in the *American Medical Recorder* for July, 1823, vol. vi. p. 516; and for his benefit, as well as for those who are denied the privilege of consulting the pages of that journal, we will insert in this place that portion of it which is descriptive of the operation. The disease for which it was performed had invaded almost entirely the left side of the inferior maxillary bone. Internally it occupied nearly the whole of the mouth, and for three weeks previously, the patient experienced great difficulty in swallowing, and occasionally was almost suffocated during sleep. Externally, the tumor had the appearance of a wen of considerable size, &c., &c. The account of the operation we give in his own words:

"An incision was commenced under the zygomatic process, and continued on the tumor, in the direction of the bone, to nearly an inch beyond the centre of the chin. A second incision was begun about midway, at right angles with the first, and extending a short distance down the neck. The integuments were now separated from their connection with the tumor, &c., and the bone was sawed off immediately at the angle and centre of the chin. I saw nothing of the parotid or sub-maxillary glands; they probably shared the fate of the teeth. [Dr. D. states in another part of his paper that he presumed the pressure of the tumor occasioned their absorption.] The wound was united in the usual manner, and the boy had a speedy and happy recovery. The tumor was cartilaginous, and on being cut exhibited a surface as white and smooth as polished ivory."

Thirteen years afterwards this patient was in excellent health. This certainly looks very much like "a methodical operation," and one would have supposed that, with such facts within his reach, an American Professor would have been slow to yield to a foreigner the credit so justly due to one of his own countrymen. That Dr. Deadrick is entitled to this credit will be more apparent after perusing the account of Dupuytren's first operation. We believe that the earliest notice of this is to be found in the *Thesis* sustained by Lisfranc on the 26th Aug, 1813, before the Faculty of Medicine in Paris. The 29th Vol. of the "*Dic. des Scien. Med.*" was published in 1818, and at page 432 may be found an extract descriptive of the operation taken from the above *Thesis*, by F. Ribes, to whom was entrusted the article on the "*Machoire.*" The details given by Lisfranc, who was present at the operation,

in his *Thesis* and in his "*Precis de Medecine Operatoire,*" vol. ii. p. 419, as well as that contained in the "*Leçons Orales,*" vol. iv. p. 628, differ in no material respect from the statements made by Dupuytren in a clinical lecture "On Amputations and Resection of the Lower Jaw," delivered at the *Hotel Dieu* during the session of 1833. This lecture was revised by the Baron himself previous to its publication in the *Lond. Lancet* for 1833, '34, vol. i. p. 56. As its accuracy, therefore, cannot be questioned, we hesitate not to quote from it, premising, however, that the disease which gave rise to the necessity for the operation was of a cancerous nature.

"An incision was now made through the middle of the lip nearly down to the os hyoides; the two flaps were then dissected off on either side from the tumor; the labial arteries, lying in the substance of the muscles, were easily avoided, and the flaps being held on one side by an assistant, room was obtained to divide the periosteum. When the bone was sufficiently exposed, it was divided on either side with a common saw, at about an inch from its angles. Up to this period of the operation only a few drops of blood were lost; but when the muscles attached to the genoid process, and along the mylo-hyoidean line, were divided by a curved knife, certain arteries, which had become enlarged in consequence of the disease, were necessarily cut through; however, the hemorrhage was not so violent as we had expected; the fingers of the operator and an assistant, placed on the submental and lingual branches, suspended the effusion of blood, and the carcinomatous tumor with the bone was removed. The parts removed weighed a pound and a half. The bone was affected with exostosis, caries, necrosis, and was softened in several places. Twenty-one years afterwards the patient (M. Lesier) was in good health."

Why this, more than that of Dr. Deadrick, was "a methodical operation," we confess our inability to discover. As such it is acknowledged by British writers on surgery, as the following observations of Mr. South, *Op. Cit.*, 745, will prove.

"As will be presently seen, Deadrick was the first who, in 1810, cut away the side of the lower jaw," &c.; and again, at page 748, he remarks: "Deadrick, of Rogersville, Tennessee, is justly entitled to the merit of having first, in 1810, amputated a portion of the jaw of a child of fourteen, who had a tumor occupying the left side of the lower jaw."

Mr. Stanley, in his *Treatise on the Diseases of the Bones*, p. 278, (Lond. ed.,) remarks, that Mr. Anthony White, in 1804, excised a part of the lower jaw, and Mr. Samuel Cooper, in his *Dictionary of Surgery*, alludes to the same operation. In consequence of this,

Mr. South was induced to inquire of Mr. White himself the particulars of his case, from which it appears his operation was not performed in 1804, but in 1816. (*Op. Cit.*, vol. ii. p. 750.) This case, in which the jaw was removed from the articulation, in its nature and result, corresponds more nearly with one of the cases in which the writer has disarticulated than any we have found on record.

Baron Percy removed a portion of the lower jaw, affected with caries, some time during the latter part of the last century. That it was not, however, properly "a methodical operation," the following extract, we think, conclusively shows:

"De 1779 à 1784, Percy fit avec succes plusieurs opérations neuves et hardies. Il emporta presque tout le centre d'une mâchoire inférieure profondèment cariée, et dans ce grand dèlabrement il ménagea à la plupart des dents, flottantes et sans appui, les moyens de se consolider; bien que dépourvues d'alvéoles et de vaisseaux; et aux parties molles, convenablement rapprochèes, les moyens de reprendre leur forme et en quelque façon, leur consistance première. Un mois suffit pour réparer ces ruines; tant sont promptes les ressources de la vie lorsqu' elle les dèploie avec liberté!" (*Hist. des Memb. de l'Acad. de Med. ou Recueil des Eloges.* Eloge de M. le Baron Percy, par E. Pariset, tom. prem. p. 282.)

In 1818, we learn from the *Leçons Orales*, vol. iv. p. 669, that Baron Percy *proposed* to resect the ends of the bone in a case of ununited fracture of the lower jaw, but as the case presented some peculiar difficulties, he transferred it to Dupuytren.

If we go back to the last century we find that an *American* surgeon, Mr. Walker, in 1760, removed for *necrosis* the *entire* lower jaw, except the chin. Some particulars of this case may be found in the *Mem. de l'Acad. Roy. de Chir.* tom. v. p. 366. The parts removed were placed in the possession of Mr. Else, Surgeon of St. Thomas's Hospital, London, who forwarded them to M. Chopart, in Paris.

We do not claim for this the title of "a methodical operation" in the modern acceptation of the term, the first of the kind having been performed, as we think we have conclusively shown, by Dr. Deadrick, in 1810, two years before that of the celebrated French surgeon. The following *panegyric*, therefore, *with a change of names only*, applies more properly to *another!*

"Quel nom donner à l'homme auquel l'humanité est redevable d'un si grand bienfait? Or hâtons nous de la proclamer hautement ici, à la gloire de son auteur, à le gloire de la chirurgie Fran-

çaise (*Américaine*)! C'est en France (*Tennessee,*) c'est à Paris (*Rogersville,*) par notre célébre professeur M. Dupuytren (*Dr. Deadrick.*) qu' a été conçue et exécutée pour la prèmier fois, en 1812 (1810,) cette admirable operation." (*Leç. Oral.* tom. iv. p. 669.)

Having substantiated the claims of American surgery to "the glory" of *priority* in exsecting, by "a methodical operation," a *portion* of the lower jaw, let us now examine some of the recorded facts which relate to the amputation of the *entire* inferior maxilla.

Prof. Carnochan, in the report to which we have already alluded, made the following statement:

"In the annals of surgery there is an *allusion* made to the amputation of the *entire* lower jaw by Walther, of Bonn, but I have not been able to trace the truth of it to an official source. The following case (his own) will prove that this operation can be performed with success," &c., &c.

From the above it is evident that Prof. Carnochan would have the reader believe that the authenticity of Walther's case, being, in his opinion, somewhat doubtful, his own operation must be the first that can be traced to what he denominates "an official source." Not knowing the precise meaning which he attaches to this phrase, we may fail in convincing him, that, even if Walther never did excise the entire bone, his own claims to priority in this respect are totally unfounded. However, we will present a few facts for his consideration, of the value of which he, as well as the reader, can form their own estimate.

In the *Annali Universali di Medicini*, for April, May, June, 1843, is reported a case in which Dr. Signoroni, of Padua, successfully removed the *entire* lower jaw for *osteo-sarcoma.* The date of the operation is not given, but it is stated that the patient, in perfect health, was exhibited to the Medical Congress of Padua, on the 27th Sept., 1842. For further particulars, see *Gazette Medicale* for Nov., 1844, p. 758; *Edinburgh Med. and Surg. Journal*, vol. i. 1844, p. 235; and *Philadelphia Med. Exam.*, vol. vii. 1844, p. 96.

In Prof. Syme's "*Contributions to the Pathology and Practice of Surgery,*" published in 1848, at page 21, is a case recorded in which for osteo-sarcoma the professor removed the *entire* lower jaw. Matters progressed favorably after the operation until the next day, when the patient died suddenly, probably from suffocation produced by the retraction of the tongue.

One word in reference to the "allusions" made to Walther's case "in the annals of surgery." Are they such as to afford us

good reasons for *rejecting* his reported operation? The earliest notice we have been able to find of this case is in the *Archives Generales de Medecine*, vol. xi. p. 466, and not the *second* volume, as stated in Mott's Velpeau, vol. ii. p. 713. In the report of the proceedings of the Royal Academy of Medicine, for the 15th June, 1826, contained in this volume, we learn that M. Lisfranc laid before the Sect. de Chirurg. a case of *partial* exsection of the lower jaw by Gensoul, of Lyons, and that of the *entire* amputation by Walther, of Bonn. Lisfranc remarked that Walther tied both primitive carotids as a preliminary step in the operation. This report, it will be observed, was made in June, 1826, and in his "*Precis de Medecine Operatoire*," published in 1846, Lisfranc repeats the same statement, adding, moreover, that Gräefe, of Berlin, had successfully performed the same operation, (*vide* vol. ii. p. 464.) Now, if we reject Lisfranc as an authority, "an official source," what becomes of Dupuytren's first operation in 1812? For the particulars of this we certainly are principally indebted to M. Lisfranc, for no one can deny that until the publication in the *London Lancet* of Dupuytren's clinical lecture, from which we have quoted, he was our only authority on this subject.

Velpeau, in a "Note sur quelques observations recuilliés à la Clinique Chirurgicale de M. I. Cloquet (Hosp. de Perfect,") in the *Archiv. Gen.*, vol. xiv., precedes his description of a formidable operation on the lower jaw, by M. Cloquet, with the following remarks, after alluding also to the operations of Mott, Gräefe, Cusack, Gensoul, &c.: "Il y a plus, c'est que M. Walther est allé jusqu' à faire l'énlévement complet d'os maxillaire; en consequence ce n'est plus une operation extraordinaire que celle dont je veux parler en ce moment."

Dupuytren also makes the following "allusion" to the case in question, in the clinical lecture to which we have before referred. "But the boldness of surgeons did not stop here; it is reported (*Arch. Gen. de Med.* tom. xiv.) that Walther and after him Gräefe (*Journ. Hebdom.* t. 4) have removed the whole of the lower maxillary bone, by disarticulating it on both sides. Walther had previously tied both carotid arteries. These facts appear almost incredible, and it is difficult to imagine how the patient could survive such formidable operations." (*Lond. Lancet*, vol. i. 1833–34, p. 61.)

Malgaigne, in the first edition of his "Medecine Operatoire," published in 1834, gives to Walther the credit of having ampu-

tated the *entire* lower jaw, and in all subsequent editions he permits the same assertion to remain unchanged.

In the magnificent work of Bourgery & Jacob, published in 1837, we find it stated in the chapter on "Exsections of the Bones," that Walther had successfully removed the whole inferior maxilla.

Dr. Martell Frank, in his "*Systematisches Lehrbuck der gesammten Chirurgie,*" published at Ehrlangen in 1851, (*Zweiter Band, Erste Abtheilung*, p. 167,) thus remarks: "Ph. V. Walther hat diese operation zuerst ausgeführt."

Dr. Weber, a son of the celebrated Prof. of Anatomy in the University of Bonn, and nephew of *Walther*, is at present residing in New-York. He informs us that his uncle *did perform* the operation which Prof. Carnochan cannot trace to "an official source!" True, others have considered Walther's case somewhat doubtful, as they could scarcely credit the fact that there *could be* sufficient disease of the bone, *without materially involving the soft parts*, to warrant so serious an operation. For example, Sedillot, in his "Traité de Medecine Operatoire," p. 384, inquires, in reference to this case, "*Comment s'expliquér une maladie de la totalité de la machoire sans alteration des parties molles?*" &c., &c. Prof. Carnochan, however, must consider this circumstance as of little weight, for if the veracity of the operator is to be questioned on such grounds, his own may hereafter suffer from the same cause!

Prof. Carnochan's operation was for *necrosis*, and in the "annals of surgery" it is not difficult to find the record of several cases in which the *entire* lower jaw has been removed for this disease. Perhaps the case in which Dr. Geo. M'Clellan extracted the whole bone (vid. *Principles and Practice of Surgery*) may not be admitted among "the methodical" operations, but we do not see how this title can be denied to that performed by Mr. Perry, which is reported at page 292, in the 21st vol. of the *Transactions of the Royal Medical and Chirurgical Society of London.* Mr. Perry has given an excellent plate representing the parts removed, and which include the *entire* bone. He does not inform us whether it was taken before or "after maceration." A very interesting question may arise in the minds of those who will take the trouble to compare the plates in the January number of the *N. Y. Journal of Medicine*, showing the parts "after maceration," with that given by Mr. Perry in the volume to which we have alluded. This question it is not our intention at present to discuss,

and we will only add on this point, that we think many with ourselves would gladly have dispensed with plate *No.* 2, for one which represented the parts before the operation!

Prof. Carnochan asserts that his operation proves that the lower jaw may be entirely removed with success, &c., &c. We have already shown that to Prof. Carnochan was not reserved "the glory" of having first furnished this proof. The case in which Mr. Spence completed the extirpation of the *entire* bone except the chin, (vid. *Ed. Med. Surg. Jour.*, Apr., 1843,) together with the terrible operations for *Osteo-Sarcoma*, performed by Mr. O'Shaughnessy, (*Brit. For. Med. Rev.*, July, 1845;) by Lisfranc, (*Prec. de Med. Op.*, vol. ii., p. 453;) by Prof. Syme, (*Cont. to Path. and Pract. of Surg.*, pp. 14, 15;) by Dieffenbach, (*Die Operative Chirurgie; Zweite Band*, p. 64;) in which cases *nearly* all was removed, proved, in our humble opinion, far more than does the operation of Prof. Carnochan, that in those really demanding it, the entire bone might be amputated.

These were cases in which it must truly have been, in the language of Dieffenbach, a "*kuhnsten und blutigsten operationen*," and which required "*von seiten des Kranken die grösste Hingebung, von seiten des Chirurgen die grösste Gewandheit, Kuhnheit und Fassung.*" No one will question the boldness and skill of the distinguished surgeon from whom we have just quoted, but we doubt whether success obtained in cases like those in which Dr. M'Clellan, Mr. Perry or Prof. Carnochan operated, would have emboldened the German surgeon to attempt the extirpation, *at once*, of the enormous growth so graphically described at p. 64, (*Op. Cit.*,) and in the accomplishment of which, with all his daring, he thought it expedient to resort to three different operations. The same observations apply to the cases of Prof. Syme, Mr. O'Shaughnessy and M. Lisfranc. In the first of these the parts removed weighed 4½ pounds, in the second they were as large as a child's head, and in the third they were of very great magnitude. We believe we express the sentiments of the majority of surgeons, when we assert that the success which followed the operations of Dr. M'Clellan, Mr. Perry and Prof. Carnochan, under the peculiar circumstances of these cases, affords but a feeble criterion of what we might expect were we about to encounter cases of such frightful character as those to which we have referred, and in which the extent of the disease might require the removal of the *entire* bone.

APPENDIX.

REPORT OF CASES.

CASE I.—Caries.—Peter H. Fowler, of Montgomery, Orange Co., N. Y., came under my care in February, 1848. From the history of the case I learned that, in the latter part of December, 1847, Mr. F. had experienced considerable uneasiness about the left angle of the jaw, which he attributed to the irritation excited by the fangs of a decayed molar (last) tooth, and which were removed by his attending physician, Dr. Evans, of Walden. This proceeding, however, afforded no permanent relief; his face began to swell, his breath to become offensive, and in a short time several openings communicated externally with the bone. At the time of my first visit, Feb. 19th, the lower part of the left side of the face was greatly swollen, and presented a fungoid appearance. On making free incision into the swelling, exit was given to a considerable quantity of matter, resembling that which usually is found in the vicinity of a diseased bone. A probe, passed through the openings, at once struck upon the denuded bone, which was evidently in a carious condition. The patient thought he could distinctly feel a loose portion of bone, but in this he was mistaken. A careful examination led us to conclude that the bone must be in a carious condition, from near the symphisis to the angle of the jaw, and to propose its removal. Feb. 26th, with the assistance of Drs. Evans, Crawford and Eager of Montgomery, and Phinney of Newburgh, I proceeded to operate. During the week which had passed since my last visit, the patient's condition

had become much worse, for he was now strongly threatened with suffocation from the quantity of matter which ran down his throat, whenever he attempted to sleep. This, together with the cough which was excited by the same cause, rapidly exhausted his strength, and gave a serious aspect to his case. Supposing the disease to be limited to the points above specified, my first incision was made through the enormously swollen cheek, from the angle of the jaw, in a horizontal line, to a point about three-quarters of an inch below the commissure of the lip. The knife was passed directly down to the bone, and the latter cleared as rapidly as possible from the soft parts by which it was surrounded. The hemorrhage from the facial vessels was small, and no ligature was necessary. On reaching the inner angle of the jaw, we found a large pouch of most offensive matter, which had burrowed between the pterygoid muscles and the bone, and which so encroached upon the pharynx as to add to the danger of the impending suffocation. This was scooped out, and our exploration continued along the inner side of the ramus, which was found to be in such a ragged condition, as to leave no doubt in the minds of all present as to the propriety of its removal. Another incision was, therefore, made from the zygomatic process along the posterior margin of the ramus, till it met the outer border of that which had been made along the base of the jaw. Considerable difficulty was experienced in our attempts to disarticulate the bone, as the condyloid process was immovably bound to the glenoid cavity by a deposit of bone. This was finally ruptured, and the operation completed. The only hemorrhage with which we had to contend in the latter part of our proceedings was occasioned by a plunge of the patient, which nearly upset me, and caused me to divide, either the main trunk or one of the largest branches of the internal maxillary artery. Owing to the retraction of the vessel, it was found impossible to apply a ligature; but the bleeding was easily restrained by pressing a piece of sponge into the wound. On account of the absolute impossibility of ascertaining the boundaries of the disease before we commenced, the operation was necessarily protracted, and, we need not add, severe. Our patient was, of course, greatly prostrated; not, however, by hemorrhage, for that was but trifling,—but from the shock which so formidable a proceeding must almost invariably produce. For some months after the operation he continued to improve in strength. The symptoms of impending suffocation,

and the cough which had previously harassed him, immediately disappeared. The tumefaction of the face, however, not only continued, but, in a few weeks, began to increase. Abscesses still formed occasionally around the eye and temple, which were opened, when they discharged a large quantity of matter. Indeed, the whole progress of the case up to the present time (Mar. 15th, 1852) has been so peculiar, that we are tempted to insert in this place the following extract from a letter of Dr. Evans, his attending physician, dated Sept. 2, 1850 :

" The operation was performed Feb. 26th, 1848. The wound never healed ; fungus granulations filled it, and the adjacent parts seemed to degenerate into a similar fungoid condition. This gradually extended over the neck, and now, two and a half years since the operation, it reaches within an inch of the clavicle. The glands on the other side of the neck are enlarged and very hard. Their size varies considerably at different times. The skin over the neck is hard and unyielding, which causes his head to be constantly bent forwards. This indurated condition of the parts about the trachea, by the stricture which it produces, seriously affects his respiration. For the last eight months he has been obliged to sleep in a chair, in the erect position. Fungus growths sprouted from the different points where the abscesses had been opened. His present condition, compared with that which he presented one year ago, is as follows : the abscesses on his temple and in the vicinity of his eye, are slowly improving. The fungus on the lower part of his face and neck, extends over a larger surface, and continues gradually to spread. The glands on the other side of his neck, one-half larger. His general health rather better, which he attributes to the use of Lugol's solution of Iodine, which he commenced taking last spring. A few days since I put him on Iodide of Iron. I think his lungs still retain their integrity. Every winter he runs down, and comes out quite feeble in the spring. During the summer he again recruits. In the winter he is troubled with indigestion, when his respiration is always worse, the agony sometimes being intense. You recollect that Prof. —— and Dr. —— considered his disease *cancer*. Time has shown that they were mistaken. Pus always has, and still does form in abscesses. It is never thin and ichorus, but always of a good character. From the present condition of his throat, and the effects of winter upon him, I doubt whether he can survive another spring."

A few weeks since we were in Mr. Fowler's vicinity, and were informed by some of our medical friends who assisted us in the operation, that his health is now (four years after the operation) tolerably good, and that the fungoid condition of his face, neck and head is gradually disappearing, and there is every reason to anticipate somewhat of a restoration to their normal state.

CASE II.—Osteo-Sarcoma.—On the 25th of March, 1848, I removed the left half of the lower jaw, from the chin to the articulation. The patient, aged 14, a son of Mr. J. P. Cole, of Wantage, Sussex Co., N. J., was affected with osteo-sarcoma. The tumor, of three years growth, commenced near the left angle of the jaw, and at the time of my visit, had attained the size of a goose egg. It gave rise to no pain, but its growth was rapid, having in six months before the operation increased more than in the previous two and a half years. With the assistance of Dr. Cooper, and several physicians from the adjoining towns, I proceeded to operate. An incision was commenced beneath the zygoma, and was carried along near the posterior border of the ramus and inferior edge of the base of the jaw, to a point below the chin. The hemorrhage from the facial veins was considerable; but with that from the facial artery soon subsided. No ligature to this artery was required. Only one vessel, a branch from the internal maxillary, was tied. The bone was divided by a saw at the symphisis, and the dissection carried to the articulation. Though the patient had been insensible to pain, from the use of chloroform, yet when the operation, which lasted about 25 minutes was completed, he appeared to be greatly prostrated. He soon rallied, however, when the wound was lightly dressed, and with the exception of a slight erysipelatous attack of the wound, his recovery was rapid. I saw the patient two and a half years after the operation, when he was working in the hay field, in perfect health. The trifling deformity remaining was indeed surprising. A firm fibro-cartilaginous band supplied the place of the removed bone, and his power of mastication was most excellent. Four years have now passed since the operation, and as we have recently been informed, his health is in every respect perfect. The tumor, which involved nearly the whole body of the ramus, is now in the Museum of the College of Physicians and Surgeons, N. Y., and has been pronounced by able pathologists to be a beautiful specimen of osteo-sarcoma.

CASE. III.—Carcinoma.—Mr. Nolty, of Newburgh, about 45 years of age. Had submitted two or three times to the excision of a small portion of the lip and bone, affected with carcimona, before he came under my care. In every instance, shortly after the healing of the wound, the disease had returned. At the patient's urgent request, and against my own judgment, on the 30th August, 1848, I removed the entire lower lip, together with a portion of the symphisis. A new lip was formed by cutting through the cheeks on each side from the commissure of the mouth. These incisions extended through the whole substance of the cheek, except the lining membrane, and extended about an inch and a half on each side. The portion of the cheeks divided, immediately retracted, leaving sufficient of the lining membrane to form the vermillion border. This membrane was divided close to the level of the inferior margin of the upper part of the wound, and reflected over the borders of the upper part of the lower edge. Then the cheeks were detached from the bone towards the angles of the jaw, and drawn together in the median line. The patient was seen some months afterwards by one of the most eminent surgeons in N. Y., who pronounced it the best specimen of cheiloplasty that he had ever seen. Some time after this, the disease again appeared. He submitted to another still more extensive operation by another surgeon, and after lingering in a miserable condition for nearly a year, died.

CASE IV.—Epulis.—Miss C——, of Reade-street, N. Y., aged 13, a patient of Dr. Schaffer, Warren-street, had for about one year been affected with this disease. The little girl having been brought under the influence of chloroform, on the 18th of Sept., 1848, I removed, by means of Liston's curved bone-nippers, the diseased parts, extending from the first right incisor to the second molar tooth. The operation was performed without mutilating the external face. The hemorrhage was restrained without difficulty, and the patient speedily recovered. Dr. Schaffer informs me that he has heard of no return of the disease, from which he concludes the patient was perfectly cured.

CASE V.—Epulis.—Miss I——, aged 17, of Modena, Ulster Co., N. Y. The disease involved the greater portion of the right side of the jaw, from the angle to the symphisis. Chloroform was administered, and with Liston's nippers I removed (Nov. 15,

1848) the diseased parts as in the preceding case. The actual cautery was required to arrest the hemorrhage. Chloroform in this instance left a paralytic affection of the left arm, which lasted for several days. Some months afterwards the disease manifested a disposition to return, when a further portion was excised, since which, (now some three years,) the affection has not appeared. She is now in good health. This patient was attended by my friend, Dr. Henry Bowman, (now deceased,) and Dr. Morris Wurtz, of Modena, who assisted me in the operation.

CASE VI.—Osteo-Sarcoma.—Miss Fowler, aged 18, of Milton, Ulster Co., N. Y., first perceived an enlargement on the right side of the symphisis some few months before I saw her in the spring of 1850. Its growth was rapid; but she suffered no pain. At the time of the operation (in March, 1850,) the tumor involved the parts from the first molar on the right to the bicusped on the left side. An incision was made across the under surface of the base of the lower jaw; the soft parts were then reflected, and the bone was divided through sound portions of the bone. In this case, I had a large needle, armed with a strong cord, ready to use in case of retraction of the tongue, but from what occurred when the tongue was severed from the bone, (the patient being nearly suffocated,) I shall never again remove the whole of the symphisis without having properly secured the tongue. Chloroform worked admirably in this case. For some 12 hours after the operation, I thought I should lose my patient from hemorrhage; not from any particular artery, but from a general oozing from all the divided parts. This, however, was finally checked, and the patient in a very few days left Newburgh (where the operation was performed) with the wound healed. Four weeks after the operation I had the pleasure of dining with her, and was surprised to see her powers of speech and mastication, which, of course, were at first, entirely destroyed. For a few days, indeed, she took her food through a large gum elastic tube passed into the throat. This patient is now, we believe, in perfect health, and scarcely any deformity has resulted from the operation. In this case I was ably assisted by my friends, Drs. Gardner, Drake and others, of Newburgh, and Dr. James L. Van Ingen, of Schenectady.

CASE VII.—Carcinoma.—Peter Space, aged 40, of Wantage,

Sussex Co., N. J., consulted me in the early part of August, 1850. For two or three years he had suffered from a carcinomatous affection of the lower lip, which, although once excised, had now involved in one mass of destruction, not only the soft parts covering the bone, but the bone itself from the second molar tooth on the right side to the first molar on the left. His condition was truly deplorable. His sufferings were great, not only from the pain with which he was harassed, but from the offensive discharge which ran down his throat whenever he attempted to sleep. The odor, too, which he was obliged constantly to inhale, was most disgusting. The glands of the neck were free from disease, his pulse was about 80, and there was every reason to believe from his appearance, that, contrary to his wishes, his life might be prolonged for several months. He was candidly told that all he could expect from any operation, would be the removal of the huge mass of disease from the situation it then occupied, to one which would perhaps be more tolerable, a cure being entirely out of the question. He was anxious for the operation, and on the 12th of August, assisted by Dr. Alexander Linn, of Dickertown, Dr. Winfield, of Middletown, and Dr. Cooper, of Wantage, I removed the affected parts. The patient, without my knowledge, had during the day taken large doses of opium to blunt his sensibility to pain during the operation, and whether it was owing to this cause or some other, I know not, but chloroform served only to render him boisterous, and we were obliged to discontinue its use. Though I had taken the precaution to pass a strong cord through the tongue, and had intrusted this to an assistant, still the moment it was separated from its attachments to the bone, its retraction was so violent, that in the act of suffocation, he fell backwards to the floor, carrying with him some two of the assistants who were supporting his head. I immediately seized his head with my left hand, and pressed it forwards and downwards, while with my right, I grasped the cord, and pulled the tongue out of his mouth. At this stage of the operation, matters presented truly a frightful appearance, and for a few moments I was very apprehensive of a fatal termination. The tongue having been properly secured, the patient again rallied, when I endeavored, by detaching the skin from the neck to cover by a plastic operation the huge cavity I had formed. To effect this, however, I was obliged to loosen also that covering both upper jaw bones, which was drawn down-

wards to meet that taken from the neck. In this manner I succeeded beyond my own expectations in accomplishing the object intended. After securing the tongue and dressing the wound, I left the miserable patient in the care of Dr. Linn, who, with Dr. Cooper, kindly attended to the subsequent treatment of the case. On the 25th August, 13 days after the operation, Dr. Linn thus wrote me a letter, from which the following is an extract:

"I am happy to be able to inform you, that our patient, Space, is doing well. When I visited him the next day, (after the operation,) I perceived the integuments on the right side of the face were somewhat discolored, and in a few days a considerable portion of them sloughed out, leaving the mouth of very uncouth dimensions. In all other respects the case is doing well, union by the first intention having taken place throughout. His general health is good, and the deformity of the face, though great, far less disgusting than previous to the operation."

On the 28th of January, 1851, some five and a half months after the operation, Dr. Linn wrote me again, as follows:

"I am sorry to inform you that your patient, Space, is in a most deplorable condition. A few weeks after I had discontinued my visits, (his face having nicely healed, and there being no appearance of a return of the disease, when I dismissed him, cured,) I found ulceration had commenced in the mesial line, below the tongue, involving the glands in the vicinity. The whole of the anterior part of the neck, from the tongue to the top of the sternum, is one diseased mass, covered by a most foul stinking ulcer. A number of the glands in the vicinity have suppurated, and then healed. There are many enlarged glands about the thorax. His general health is failing, and altogether he is the most pitiable object imaginable."

He died in less than a year after the operation.—Was the operation justifiable in this case, *on the grounds for which it was undertaken?* If not, did the success obtained in Dupuytren's first case, (Lesier,) in 1812, offer any encouragement to my patient? Let those who are disposed to condemn my operation in this case, carefully peruse that to which we have alluded, and in which the celebrated French surgeon operated for *Carcinoma.*

CASE VIII.—Epulis.—A female, aged twenty, affected with *epulis* of trifling extent. Diseased parts removed on the 6th of September, 1850, at Newburgh. Result not known.