Surgical reports / by George H. Porter.

Fig. 1.

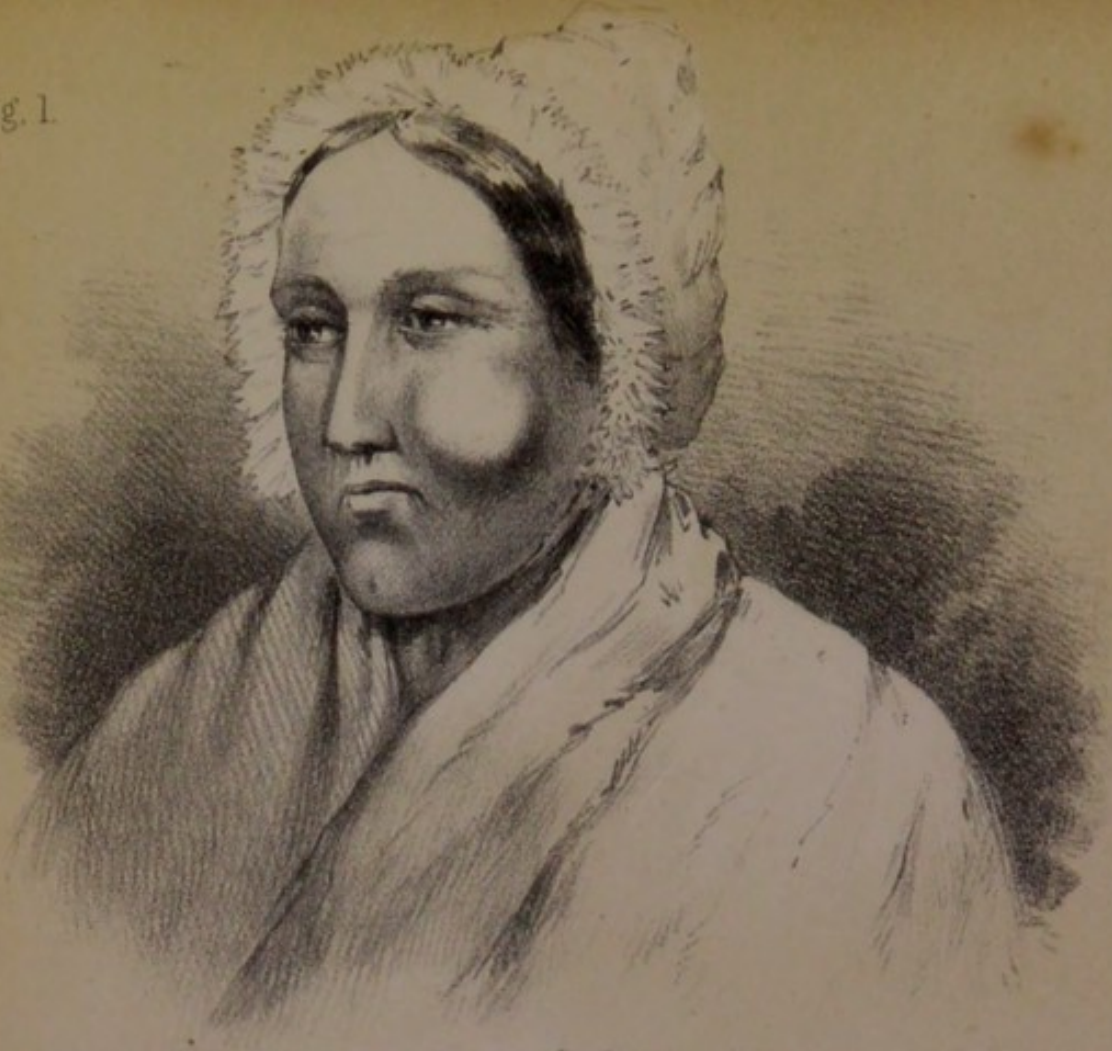
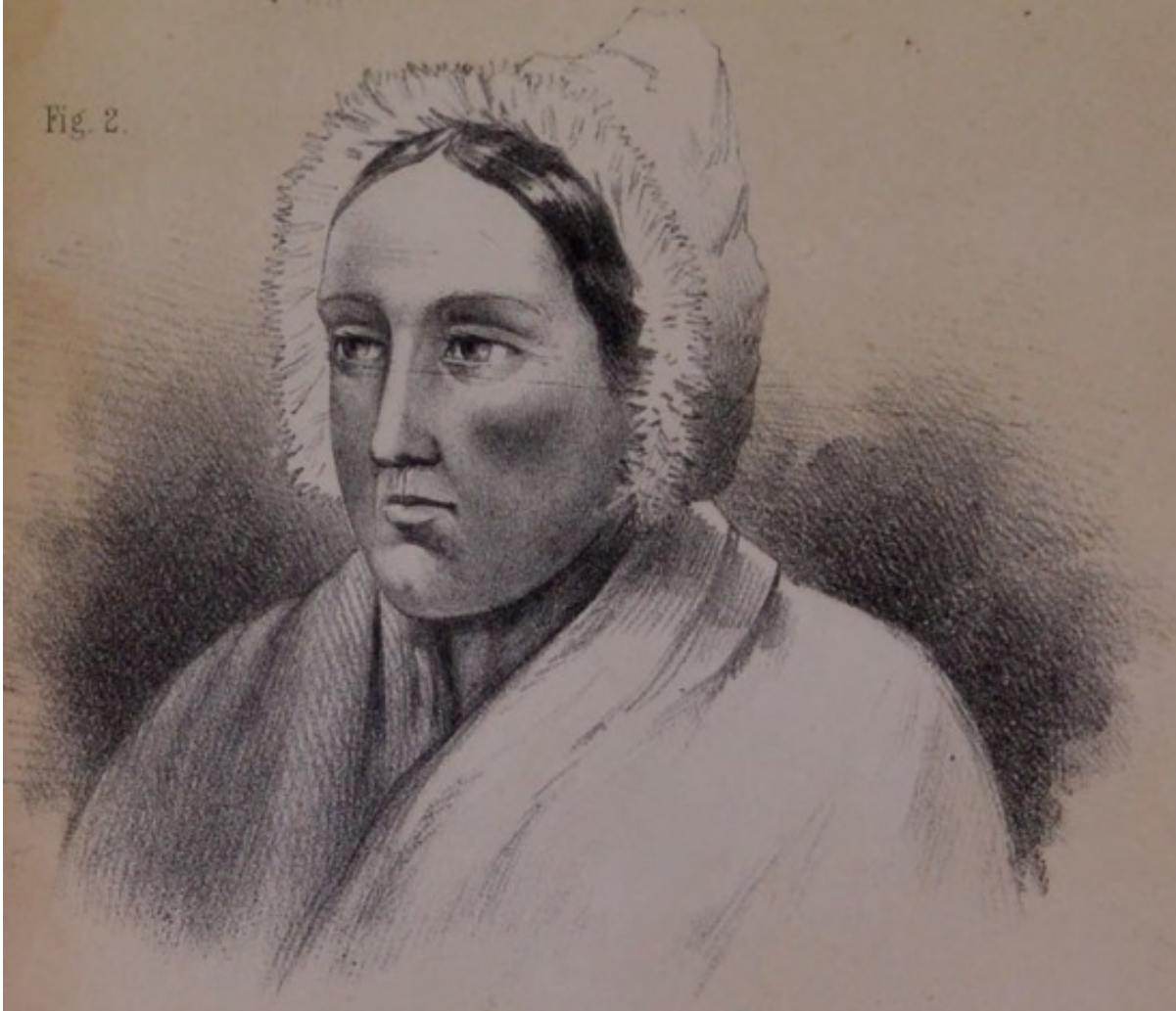


Fig. 2.



Mr PORTER ON EXCISION OF THE UPPER JAW.

Forster & Co. Dublin.

SURGICAL REPORTS.

BY

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DUBLIN:
JOHN FALCONER, 53, UPPER SACKVILLE-STREET,
PRINTER TO HER MAJESTY'S STATIONERY OFFICE.

1867.

SURGICAL REPORTS.

1.—*Excision of a Large Portion of the Upper-Jaw for Epuloid Disease; Recovery.*

In every operation in any degree implicating the human face it must ever be desirable, as much as possible, to guard against the production of subsequent deformity. The removal of an unsightly tumour of the jaw-bone, which distorted the soft parts of the face covering the swelling, is a great benefit; but in accomplishing this the prevention of disfigurement, by cicatrices of those structures, is of the utmost importance. Among those eminent men who, by their valuable suggestions, have aided the operator in excising the upper jaw, or portions of it, Sir William Fergusson holds a foremost position. Various incisions to lay bare growths from the superior maxilla have been recommended, all of them most useful in the cases to which they are immediately applicable, and tending to assist the surgeon in dealing with such tumours. I believe, however, that in the majority of instances, a small amount of cutting into the soft parts will suffice to allow the excision of a large portion of the upper-jaw. The following case, I consider, proves, in a very marked way, the advantages of the simple incision practised by the distinguished surgeon before mentioned in removing tumours of a

moderate, and even of a large size from the upper-jaw. The trifling incision made vertically through the centre of the upper-lip, and prolonged into one or both nostrils, affords space enough to remove most of ordinary tumours of the superior maxilla, and leaves very little trace, or slight disfigurement behind. Great stress is laid upon the advantages of this incision by Sir William Fergusson, in the following quotation, which I take from one of his lectures (No. IV.), delivered at the Royal College of Surgeons, London, in 1865, on the "Progress of Surgery during the present Century." He says:— "There are two advantages of great importance, in my opinion, associated with this incision. First, the wound being made in the furrow below the columna, and exactly in the middle of the lip, is less observable than on any other part; and next, there is an inch in length gained by the natural opening of the nostril. The ala of the nose is so easily raised, and with the tip can be so easily moved according to the will and wish of the operator, and the cheek can be so readily dissected off the tumour as high as the margin of the orbit, and as far out as the malar bone, that a large space for operation on the anterior surface of the maxilla is easily made. Since 1848 I have never made any other incision in the upper-lip; and I have no hesitation in stating, from experience of twenty cases or more, that in a number of operations of moderate-sized tumours there is no need for more extensive incisions on the outer surface of the face."

Bessy G., aged forty years, married, was sent to me by my friend Dr. L'Estrange, of Dublin, and admitted into the Meath Hospital, August 10th, 1867. Her health appeared to be good; she was not wasted, nor did she complain of pain. Her left cheek was visibly swollen and distorted, and a well-defined tumour, of a somewhat globular shape, appeared about its centre, but still the deformity was not very great, She stated that the growth was of nearly three years' duration, but latterly had commenced to increase very rapidly. On opening the mouth a tumour about the size of a hen's egg came into view. Its surface was smooth, with the exception of a speck of ulceration, about the size of a three-penny piece, in the centre of its most prominent point. It was almost globular, but slightly longer from before backwards. The two incisor, and the last molar teeth were all that remained on that side of the upper-jaw. The colour of the tumour was a little deeper than that of the healthy gum structure. To the touch it was very firm, but not of a stony hardness, nor was it nodulated. It had never bled. It

extended half way in on the roof of the mouth. The patient found some difficulty in masticating, and her voice was a little interfered with. The left nostril was quite free, and there was no glandular enlargement to be found anywhere. As there was no evidence whatever of malignancy, and having had the advice of my colleagues, I determined to excise the growth. To this she at once assented, as she had come into the hospital for that purpose.

Operation, August 22nd.—I excised the tumour in the following manner:—She was placed sitting in a strong chair, which was then gently thrown backward, so as to put her in a semi-reclining position, whilst chloroform was carefully administered. This having been accomplished, Dr. L'Estrange extracted the two left incisor teeth in a most expert manner. My assistants then raised the chair, so as to bring her again to an almost erect sitting posture, the head slightly drawn backwards, and held firmly. I then, with a medium-sized scalpel, quickly cut through the upper lip, exactly in the median line, and immediately afterwards carried the incision into the left nostril. A colleague then seized the opposite flap, whilst I held the one on the diseased side, so that bleeding from the coronary arteries was arrested. This amount of cutting, combined with traction made on the cheek by means of a copper retractor, brought a great portion of the abnormal growth into view. Keeping the knife close to the bone, I cleared the soft structures from the maxilla fairly above, and isolated the tumour superiorly to about a quarter of an inch below the infra-orbital foramen. A small vessel sprang during this dissection, which was easily secured. I then cut through the mucous membrane of the hard palate from behind forwards, and through the gum tissue in front, so as to make a groove for a strong cutting bone forceps, one blade of which I inserted into the left nostril, and the second into the mouth, and rapidly cut through the palate plate. With the little saw (somewhat resembling Hey's, but known as Sir William Fergusson's), I proceeded to cut through the front and side of the superior maxillary bone, about midway between the infra-orbital foramen and the alveolar process. Grasping the mass with a strong lion forceps, I forcibly depressed the tumour with the adherent bone, breaking down attachments behind, and wrenching the entire from its bed. A few more touches of the knife to soft parts which held it allowed me to remove the whole tumour. I now cleaned out the mouth and wound with sponges; and finding a bleeding point in the bone, I touched it with a small

red-hot iron, which arrested all hemorrhage. The cavity was now filled with four little pads of lint, having strings attached. The sides of the wound in the lip I brought accurately together by means of two needles with twisted sutures, and one point of interrupted silver wire suture in the red part of the lip. The three cords attached to the plugs of lint which filled up the cavity, along with the ligature, were brought out at the left commissure of the mouth, and fastened to the cheek by a small piece of adhesive plaster. A narrow strip of this plaster was then placed over the wound to relieve tension on the sutures, and more effectually to support the parts. The patient was then removed to bed, and a draught, containing twenty-five drops of Battley's liquor of opium, was administered. Some beef-tea was ordered during the day, and it was directed that the mouth should be washed out with iced water.

August 23rd.—The patient slept well ; the cheek was slightly swollen, but she suffered no pain, unless when she swallowed; pulse, 96 ; beef-tea ordered, with crumb of bread softened in it.

August 24th.—Had passed a good night ; the swelling in her face was less, and her pulse had fallen to 90.

August 25th.—She was better to-day. The needles were removed, also the wire suture, and the wound was found to be firmly united throughout. Suppuration was established in the former site of the tumour, and she complained of a disagreeable odour from the discharge. One of the plugs was then removed, and she was directed to wash her mouth with a lotion consisting of one drachm of solution of chlorinated soda, in half a pint of water.

August 26th.—The remaining plugs were removed, and on looking into the mouth the sore part looked healthy and granulating.

It would be useless to further note the daily report of the case. The ligature came away on 31st of August, and she progressed steadily from day to day, leaving the hospital, cured, on the 7th September, just sixteen days after undergoing the operation. In the drawings taken before and after this operation, Plate I., Fig. 1, faithfully shows her appearance before the operation, and Fig. 2, her condition after it. The trifling mark which remained from the incision through the upper lip is a palpable proof of the advantages of this mode of dealing with such a case, and its whole management shows very clearly that a large amount of disease extensively implicating the superior maxilla, may be removed with ease by this simple incision. Dr. John Barker, the distinguished

curator of the Museum of the Royal College of Surgeons, kindly examined the growth, and favoured me with the following description:—

"83, Waterloo Road,
"August 31, 1866.

"My Dear Porter,—The specimen you gave me appears to be one of epuloid growth. I examined it carefully under a power of about 400 diameters, and it presented the aspect mentioned by Paget as appertaining to fibrous epulis, with a gelatinous base. Many of the fibrous bands are curled and elastic; and although in some portions of the tissue they appear knotted, and in other parts dilated into cells, still the mass has a very uniform character. I do not think the cells have that independent appearance so characteristic of malignant disease. The specimen swelled up very much under the staining process, and became more gelatinous, the colour principally resting in the fibrous bands, giving evidence that these were the latest formed materials.

"I remain yours,
"Very truly,
"John Barker.

"Geo. Porter, M.D."

2.—*Complete Excision of the Elbow-joint for Strumous Disease; Recovery.*

In the *Dublin Quarterly Journal* for November, 1860, I published a case of resection of the elbow-joint for compound fracture, the result of which was most successful, as the man operated upon, who was a painter by trade, was afterwards enabled to use that limb at his wonted employment. The following case was one in which the operation was performed under much more unfavourable circumstances, the constitution of the patient having been debilitated by scrofulous disease of the tibia, for which the late Mr. Smyly had amputated her left leg below the knee, on the 4th November, 1863:—

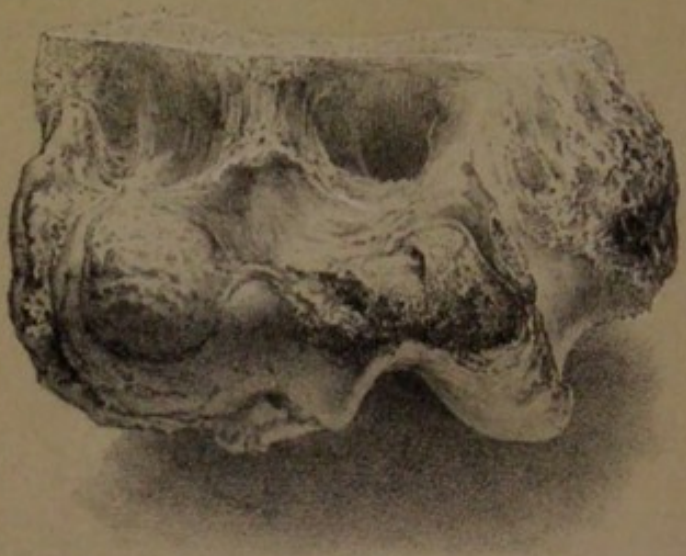
Julia D., aged thirteen years, was admitted into the Meath Hospital the 21st August, 1866. She was a very delicate child. Her right elbow joint was much swollen and stiff, and the seat of constant excruciating pain. She suffered also from nocturnal sweats. The posterior aspect of the articulation was occupied by a large

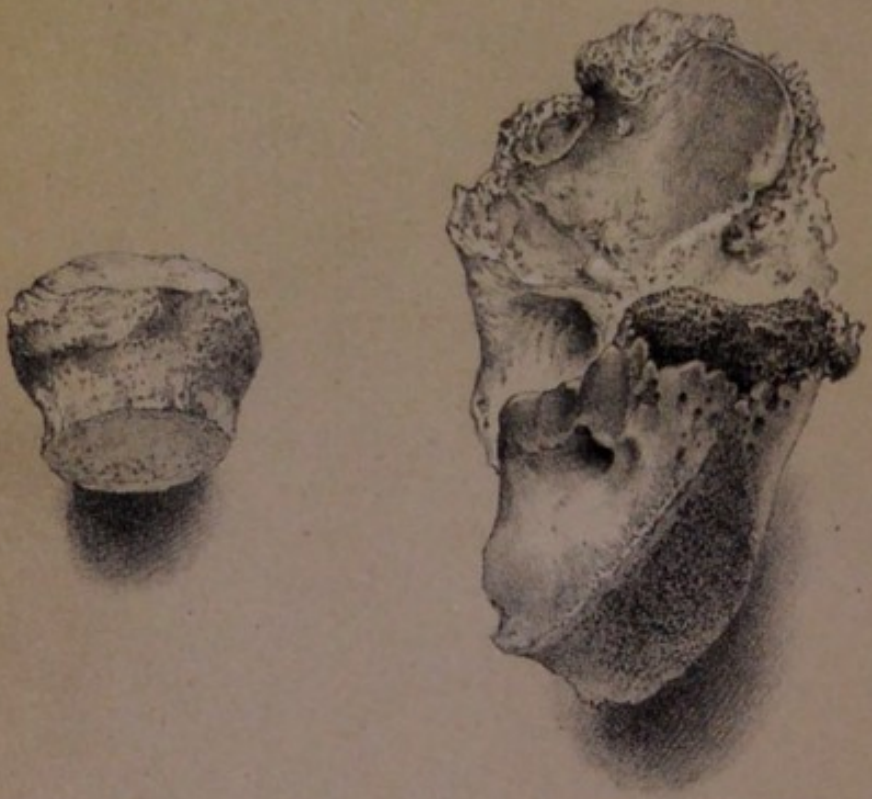
unhealthy ulcer, from which a sinus led inwards to diseased bone in the immediate neighbourhood of the joint. Symptoms of disease had been present for two years; and the forearm and hand having been rendered useless, it was determined to cut down and remove the diseased bones.

September 26th.—She was laid on the operating table, and having been thoroughly chloroformed my assistant held the limb in a prone position, and at the same time so grasped it as to command the brachial artery. The precaution, however, was hardly requisite, as severe hemorrhage seldom occurs during this operation, the part of the limb to be opened being away from vessels of magnitude.

With a strong scalpel I made a longitudinal incision four inches in length along the back of the joint in the middle line, part of it passing through the ulcerated structures. I then made a second incision from the external condyle, so as to meet the first. The flaps thus cut were carefully dissected up, and the lateral ligaments, or at least such portions of them as remained, were divided, and the tendon of the triceps severed. My assistant then forcibly flexed the joint, and brought its diseased interior fairly into view. I then, chiefly with the handle of my knife, cleared the soft parts from the extremities of the bones, separating them with more care on the inside to avoid injury to the ulnar nerve. Having accomplished this I placed the reversed blade of Butcher's saw in front and above the condyle of the humerus, and rapidly cut through the bone towards myself. This section appeared redder and softer than I liked; I therefore cut off a second slice of bone, which revealed to view healthy osseous structure. I sawed off the olecranon and coronoid processes of the ulna, and the head of the radius in the same manner. With a strong pair of scissors I then pared away any thickened structures about the joint, and having tied three small vessels, I immediately washed out the wound by pouring into it cold water from a height, and introduced four points of silver wire suture to approximate the flaps, dressing the wound with strips of lint wet with spirit lotion. I gently flexed the forearm to a right angle, and placed the limb, carefully bandaged, on a well-padded rectangular wire splint. The patient was forthwith put to bed, and got an opiate.

The daily record of the case does not present any peculiarity. Passive motion was commenced about sixteen days after the operation, and increased gradually so as to ensure the formation of a false joint. The girl now possesses great command over the





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motions of the forearm and hand; she can supinate and pronate, flex and extend, the forearm, and can use her fingers sewing.

On examination of the portions of bone which had been removed, it was found that the cartilage had disappeared from part of the trochlear surface of the humerus, and had been replaced by fungous granulations, the greater sigmoid cavity having been almost filled up with a gelatinous fleshy mass; the coronoid and olecranon processes were denuded of periosteum and covered with spiculated bony projections; the head of the radius, at its articulation with the humerus, was diseased, the radio-ulnar joint alone remaining sound.

Plate II. gives a faithful representation of the different portions exsected. Two inches and a half of bone were removed. The primary incision which I adopted in the present case, as well as that in which the excision was performed for compound fracture, was one which gave ample room for the exposure of the articulating ends of the bones about to be removed. Different operators of eminence, however, recommend various preparatory incisions; as, for example, the H-shaped incision—Moreau, Fergusson, and Syme. The single vertical is recommended by Park, Chassaignac, and Langenbeck; the crucial by Park, Fergusson; the semi-lunar by Gross. All these methods have their respective advocates. Syme, to whom much is due for bringing this operation to perfection, in his *Observations in Clinical Surgery*, speaks highly of the H-shaped. He says:—"This incision I still regard as the most convenient for the purpose, since it not only affords free access to the joint, but also allows the transverse part of the wound to heal by the first intention, and thus prevent the obstacle to mobility which would result from the process of granulation, followed by cicatrization at this part." The form of cut adopted in this case will, I feel confident, be found amply sufficient and convenient. The advantages of this operation as a conservative measure require in the present day no advocacy, excision of the elbow-joint having been firmly established among the safe and beneficial operations. Whether performed for joint disease, compound fracture, or inconvenient anchylosis, it has been found that the proportion of deaths is very small, amounting to about 22·15 per cent., while amputation through the humerus yields 33·4 per cent. of deaths. Another encouraging circumstance is that this operation is most successful in young patients, among which class it is likely to be more frequently performed from the prevalence of joint disease in early life. The drawing, Plate III., gives a very good representation of

the present condition of the limb, which is in every respect a most useful one.

3.—*Excision of a Large-sized Epulis, Springing from the Lower-Jaw; Recovery.*

Cecilia O., aged twenty-nine years, and married, was admitted into the Meath Hospital, under my care, July 16th, 1866, suffering from a large epulis. This woman was in a very weakly condition, having been confined only three weeks previously; and prior to that event, her circumstances being very straitened, she was ill clad and badly nourished. On admission she presented the following symptoms:—Her left lower jaw appeared at first sight greatly swollen, as if from a severe gum-boil. The examination of her mouth, however, displayed a large tumour, occupying the position of the teeth on that side of the inferior maxilla from the second incisor to the last but one molar. Its measurements, taken with a callipers, were one inch and a-half in its transverse diameter, and one inch six-eighths in its antero-posterior diameter. It pushed the tongue towards the right side. Its colour was that of the surrounding gum structure, and its surface was slightly lobulated, giving it a somewhat hour-glass shape. To the touch it felt firm and elastic, like healthy gum tissue. Its upper surface was ulcerated from pressure of the teeth of the upper jaw indenting the growth. The patient was unable to close the teeth in front, a space of half an inch existing between the upper and lower incisors. She suffered pain when she tried to masticate. The only teeth visible on that side were the incisors and the last molar. The others had (with the exception of the first molar) been thrust out by the tumour, which had apparently sprang from the socket of this tooth after its extraction two years previously. She did not feel any pain until the ulceration of its surface commenced, nor had the tumour bled before it ulcerated. Although wretchedly emaciated and looking feeble, there was no malignancy in her aspect, so that the absence of glandular contamination, coupled with the length of time it had taken to grow, made me decide on its removal. Any operative interference, however, in her debilitated condition was not to be thought of, so I determined to bring up her health by generous diet and rest.

On the 10th of August, her strength having very much improved. I proceeded to excise the tumour in the manner following:—I had her placed on a low table, with her head and shoulders slightly raised, and had chloroform administered. And here I may remark

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that although some surgeons have a great objection to the use of this agent when operating on the mouth, still my colleagues and I frequently give it in such cases, and never fear an unpleasant result, provided that any flow of blood is rapidly sponged up as the necessary incisions are proceeded with. The second incisor was drawn, and one of my colleagues having inserted a strong copper spatula, bent to an abrupt curve at its end, into the mouth, he forcibly dragged the cheek outwards and backwards. This manœuvre gave me a good deal of room, but not sufficient to allow me to work with a saw behind the tumour without splitting the cheek. The tongue having been well depressed, I cut downwards through the mucous membrane inside and outside the jaw, behind the mass, to about the extent of half an inch from the alveolar process. I then, with a strong nippers, the blades of which I placed in the incisions, cut through the bone to the same depth from the surface of the adveolar process. I now carried similar incisions through the mucous membrane in front of the epulis, and cut, with a small saw, to the same depth in the jaw bone as I had done behind with the nippers. Having now isolated the swelling before and posteriorly, I made incisions connecting these on the outside and inside through the lining membrane. Then with the saw I partially cut through the body of the inferior maxilla beneath the epulis, and completed its entire removal by means of a strong cross-cutting nippers. There was very free hemorrhage from the inferior dental artery, but I carefully plugged the space with lint, over which I placed a thick compress, and tightly bandaged the lower-jaw to the upper. This arrested all bleeding. At the same time sufficient space was permitted between the front teeth to allow of the patient getting fluids with a spoon. She was then removed to bed, and an opiate administered. On examination the tumour appeared to be a simple epulis. The section of the bone was sound, and the growth had arisen from the sockets of the teeth, and overlapped externally and internally. The above case may be considered interesting, showing, as it does, the feasibility of extirpating a large tumour from the lower maxilla without the infliction of any wound on the face. The epulis itself afforded a larger example of this disease than is usually met with. This poor woman made a good recovery, and left the hospital on the 31st August in excellent health.