

says that there is a tradition, that if it be given to a new-born infant no poison can afterwards influence it. The smilax China is employed as a medicine in the Chinese province of Ho Nansi, where it abounds; it is also used for rice. It was brought into Europe in the 16th century, and was introduced for the same purposes as the smilax sarsaparilla. It acquired some reputation in the venereal disease, and for cutaneous and rheumatic disorders. Browne says that this plant is commonly found in Jamaica, and expresses his opinion that it might be cultivated there, and that it would be found a very valuable substitute for the sarsaparilla. Seven or eight years since Dr. Ashbourne and Mr. Belinaye brought the smilax aspera before the profession, and gave the result of their experience. The smilax aspera is a native of the south of France, of Italy, Spain, and of Syria; and in the south of Europe the roots are often sold for those of sarsaparilla; they have a certain degree of efficacy, but are very inferior; they may be distinguished by being much larger, by being more porous, much less compressed. Humboldt found twelve new species of smilax in South America; amongst these the syphilitica of the Cassequiare, and the officinalis of the River Magdalena, are the most valued, from their possessing medicinal powers to a considerable extent.

Dr. Hancock found six or eight species of smilax growing in the woods of Guiana, but not one had the taste or the sensible qualities of the genuine medicinal sarza; he found that the inhabitants of those countries from which it was exported, gathered the roots from all the different species, and even from some other plants of different families. He says that till a very recent period the people of Essequibo mistook for sarza even the pendant fibres, not roots, of a species of climbing arum, with large heart-shaped leaves; and, however gross the error, he found certain medical practitioners there, indulging in the belief of its being the genuine drug. The specific name of our species is derived from the Spanish zarza, a brier, or bush, and parilla, a little vine, which latter it obtains from its being a climbing plant. The following is the description given by Dr. Woodville, and which appears to be confirmed by all travellers who have examined this interesting plant. The root is divided into several branches, which are somewhat thicker than a goose-quill, straight externally, brown internally, white, and three or four feet in length; the stems are shrubby, long, slender, climbing by means of tendrils, like those of our bryony, a little zig-zag, roundish, with about four slight unequal angles, and beset with strong scattered, awl-shaped, hooked prickles. The leaves are elliptical, or ovate, and when full-grown are nearly orbicular, two inches and a half broad, alternate, ab-

rupt, or contracted at each extremity, with a short terminal point, smooth, of a deep green colour above, somewhat glaucous beneath, and marked with three short prominent ribs; the footstalks are short, broad, and channelled, each furnished with a pair of long tendrils, subsequently deciduous. The flowers are male and female, upon different plants, lateral, and usually stand three or four together, on slender axillary racemes, longer than the footstalks. The calyx of the male flower is bell-shaped, divided into six segments, which are oblong, spreading, and reflexed at their points; the filaments are six, simple, and bearing oblong anthers. The calyx of the female flower is deciduous, and also bell-shaped, similar to that of the male; there is no corolla, unless the calyx be considered as such, which, from analogy to asparagus, it ought to be. The germen is superior, ovate, supporting three minute styles, with oblong, reflexed stigmas; the fruit is a round, three-celled berry, the size of a currant, umbilicated, of a red colour, and containing a solitary seed in each cell, one or two of them generally abortive. The roots are collected with great care, and dried, and collected for exportation at the different ports. According to Humboldt, nearly 5000 quintals are annually exported from Vera Cruz. Wherever there is any communication with the Orinooko, the Amazon, and the Rio Negre,¹ the trade is carried on with great industry, and it is considered an article of the greatest importance in commerce; and, as I shall in my next lecture take occasion to show you, it ought to be the subject of great attention on the part of the collectors and merchants, for, employed with proper management, it is one of the blessings to be obtained from the vegetable treasures with which our globe abounds.

ON THE

RESECTION OF THE FACIAL BONES.

By Professor DIEFFENBACH, of Berlin.

(Communicated by the Author.)*

THE resection of degenerated bones of the face, or the excision of tumours situated between them, belongs to the class of the most formidable operations. It is only in modern times that these operations have been performed to any great extent, and to Professor Saeger, at Erlangen, belongs especially the great merit, not only of having zealously collected all that had been done in this respect, but of having recommended the resection of diseased bones in a great many cases, and having executed himself a variety of the most important and ingenious

* We have not deemed it necessary to correct the very few idiomatic forms of expression which occur in the Professor's communication.

operations of this kind. I add to his rich experience some cases from my own observation, the number of which, however, is not great, as I began to attempt the extirpation of diseased parts of the upper jaw, and other facial bones, only a few years since, though I had performed long before, the resection of other bones. Some minor resections of the alveolar process met with success, and gave me confidence for greater operations, in which the success I met with was no less satisfactory.

CASE I. The first patient from whom I removed an osteosarcomatous degeneration of part of the alveolar process, was a man 38 years of age. There was a fungous softening, of the size of a small hazel-nut, on the alveolar process of the left side, which surrounded the small incisor. The tooth was loose in the fungous mass, and blood oozed at its sides. I excised with a small saw the diseased part of the bone, in the form of a wedge, and touched the remaining bones with the incandescent iron. Some splinters of the bones having afterwards exfoliated, the wound furnished healthy granulations. In six weeks the depression having greatly diminished in its size, was covered with a smooth scar, and the man was cured without relapse.

CASE II. I resected from a woman, 38 years of age, who likewise suffered with an osteosarcoma of the alveolar process, which had attained the size of a walnut in the space of a year, the alveolar process, with one molar, one eye-tooth, and one incisor. In this case, also, I made use of the incandescent iron after the operation, for the purpose both of stopping bleeding and procuring exfoliation. After two months the cure was complete, and no relapse followed.

CASE III. I excised, from a woman 46 years of age, on account of an osteosarcoma, of the size of a walnut, a part of the upper jaw, containing two incisors, and the left eye-tooth. The incandescent iron having been used, afterwards some fragments of bones were exfoliated, and the cure followed with a smooth cicatrice.

CASE IV. A lady, 46 years of age, was afflicted with a hard dark-blue sarcoma, which originated by degrees, and surrounded the roots of two incisors. I excised the morbid part of the bone, and touched the wound with the iron. The operation was successful, and no relapse followed.

CASE V. A delicate young woman, 24 years old, had been suffering for three or four months under an osteosarcoma of the size of a large walnut. It occupied the place of three teeth. I resected it in the form of a wedge as high as the antrum highmorianum, and along the hard palate,

on account of the bones there being found softened. The incandescent iron was applied to the wound, and the cure was complete in six weeks. The case is a recent one, and no relapse has yet followed.

CASE VI. A young, delicate, fair girl, 24 years of age, suffered under a softening of the alveolar process of the upper jaw, which was developed in the space of a year. She had used, in vain, many external and internal remedies; a loose molar tooth had been extracted, the surrounding part of the fungous substance excised; the surface of the wound was burned, but without success. The progress of the disease was only the more rapid, and was about to affect the zygomatic bone. The teeth projected only by the upper part of the crown from the fungous mass, which was especially developed towards the roof of the mouth. In seizing them with the fingers they felt loose, and the blood oozed out at their sides. Without dividing the external parts of the face, I resected in this case the whole left alveolar process to the incisors, passing with a small saw through the healthy bone, and stopped the strong bleeding by the incandescent iron. Some fragments of bone were afterwards thrown off by exfoliation, and the granulation was healthy in every part, and in five weeks the young girl was perfectly cured, and without any external disfiguration. In consequence of the operation she became flourishing and healthy, and still continues so, though a year has elapsed since the operation.

CASE VII. Mad. B., a lady 55 years of age, suffered for a year under a fungous softening of the greater part of the alveolar process of the upper jaw, especially affecting the anterior part of its margin. She had been treated by several physicians, by internal and external remedies, and the loose teeth had been extracted one after the other. After some time, the whole alveolar process was transformed into a thick steatomatous mass, which the upper lip could scarcely cover. After separating the latter from the tumour and turning it upwards, I removed with the saw the whole alveolar process, as far as it was affected, and touched it then with the incandescent iron. The patient seemed cured after some months, and she recovered gradually from her indisposition. But the cicatrix became again softened and covered with new fungous granulations. They were limited by astrigent gargles, the pencilling with extr. saturni, and cauterisation with nitrate of silver; but the bone softened again, and the patient withdrew herself from my care.

CASE VIII. A lady, 32 years of age, was affected for several years with a thickening of the left upper jaw, between the wing of the nose and zygomatic bone, produced by an encysted tumour of the bone.

I separated, at first, the cheek from the bone, beginning from the mouth, and removed the anterior part of the sac and of the osseous margin. The posterior surface, situated in the bone, was touched with the red hot iron. The cure followed without any other accident.

CASE IX. A man, 30 years of age, suffered under an apparent intumescence of the hard palate, which existed for several years, and had increased gradually. The tumour was convex, and not unlike a divided egg. I circumcised it with the knife, and removed it. The bones of the palate, which were much pressed upwards, showed on their middle a small hole. I touched the cavity with the incandescent iron. It became filled with granulations; the palate regained its natural appearance, and the articulation, which before was very indistinct, was restored to its former distinctness.

CASE X. The lower jaw of a man, 60 years of age, was at several places, and for a long period, enormously enlarged, in consequence of hydatid tumours between the external and internal laminae of the lower jaw. At different times these were inflamed, and went into suppuration. I treated them as single abscesses by incisions, by which means the suppuration ceased, and the man became well again. The advanced age of this patient would not allow of a radical excision.

CASE XI. A man, 33 years of age, who, for several years, had become an object of curiosity, in consequence of an enormous thickening of the left cheek, required my assistance. The cheek projected from the face, to the size of two fists. The upper part was hard, the lower elastic, and had been ten or twelve years in attaining this enormous development. I considered it to be an intumescence of the bones of the face, produced by an hydatid tumour. I therefore removed from the mouth the part of the tumour which projected into it, and extirpated through this opening a great part of the sac, together with the sharp edges of the bones. A strong suppuration was produced, and, with the beginning of the cicatrization, the cheek, before withered and attenuated, was so much lightened and contracted, that the patient was cured without the least disfiguration.

CASE XII. In a man of about 60 years of age, an osteosarcoma of the left zygomatic bone, attended with much pain, had been formed. At last the integuments were perforated, and the osseous fungus became plainly visible. Neither internal medicines nor strong cauterisation and burning had met with any success. I circumcised the diseased part with the knife, and removed, by means of the saw, the greater part of

the zygomatic bone. I happened, by separating the neighbouring healthy integument of the face, to be able to cover a great part of the wound. In three months the patient was cured, with only a slight disfiguration. I did not see him again, and heard, accidentally, that he died of dropsy a year afterwards.

CASE XIII. In a woman, 60 years of age, a long time after the gradual falling out of the molar teeth of the right side of the lower jaw, a tumour had been formed, reaching, by degrees, the size of a fist. It greatly impeded swallowing, respiration, and speaking, and threatened to destroy life in a short time, as it filled the greater part of the cavity of the mouth and throat. The tumour was free above, and below it was situated between the external and internal lamina of the lower jaw, which were separated by it from each other. It was not required to slit the mouth for the operation, on account of the great laxity of the soft parts. During the extirpation, the tumour was drawn forwards by a hooked forceps, and excised with the knife. I removed then, by the saw, the highly projecting edges of the lower jaw, which had been absorbed in the middle portion. The cure followed in a few weeks. A long time after, a fragment of the bone exfoliated.

The tumour was of a fibrous nature, and there was formed on its anterior and superior surface, a hydatid sac, which was filled with a clear albuminous matter.

CASE XIV. In the month of August of the year 1832, I was called to see a long-bearded merchant of the Hebrew tribe. I found the second molar teeth of the upper jaw surrounded by an osteosarcomatous tumour. I removed the teeth, with part of the alveola, with a saw. Before complete cure, the man departed for his country; the wound cicatrised very soon afterwards. After the lapse of three months, a new fungus grew from the cavity. A clever surgeon extirpated it, and the wound cicatrised again.

In the year 1833, in the month of May, a new fungous growth was extirpated, and the wound was cauterised with the hot iron. It healed, but, in the autumn of that year, another relapse occurred, and a new extirpation and cauterisation were required. For a fortnight afterwards the red-hot iron was repeatedly applied to the fungus.

In spite of these repeated extirpations and applications of the actual cautery, the softening and loosening of the alveolar margin spread over the moiety of the right palatine bone, the nasal process of the upper jaw, and the body of the latter. In order to attack the diseased bone, it was necessary previously to divide the soft parts. I slit up the half of the face, from the right inferior margin of the orbit, descending on

the side of the nose, and drawing the knife through the upper lip; the lip and cheek were then raised, and drawn to one side, and the cartilaginous part of the nose to the other. The diseased bones were then removed by the saw to a considerable depth, and the steatomatous degenerated masses on that side were extirpated with scissors. Upon the margins of the bones I produced a strong effect with the incandescent iron, and concluded the operation by applying many twisted sutures, by means of which I united the divided integuments of the face and the upper lip. The pins were extracted in a few days, when the wound was closely united.

In a month the cure proceeded so quickly, that a great part of the wound was filled up by luxurious granulations, to which a solid cicatrization followed. The patient seemed to be cured in the third month, but the upper jaw, near the side of the nose, and part of the roof of the mouth, began again to soften and exhibit the reappearance of the tumour. I extirpated again the diseased parts, and burned the edges of the bones with the red-hot iron. The whole exfoliated, and the cure was complete. The defect of the bones was supplied by an instrument ingeniously contrived by Wallross, with a series of teeth, and a plate for the palate. By this means the patient was enabled to speak with a natural voice. With the exception of a cicatrised line, there was no external disfiguration of the face.

The patient departed to his country, and, after two years, he wrote to me, saying that he was quite well. However, six months later, he apprised me of his disease again having returned. He came immediately to Berlin, to subject himself to a new operation, with his wonted fortitude. I found both the old cicatrices of the bones, and the neighbouring bones, very voluminous and softened; this was also the case with the left side of the lower jaw; I therefore repeated the last-described operation. I made an incision from the orbit to the angle of the mouth, turned the flap, containing the lip and the cheek, to the one side, ordered the assistant to press the nose to the left side, and removed the diseased bones again by means of the saw. I then burned the wound with the red-hot iron. The wound of the face I united by twisted sutures, and this time, also, a good and quick union followed. In a few weeks all was cured in the mouth. No external disfiguration was to be observed. The patient departed home, and has continued to enjoy the best health up to the present moment.

CASE XV. Mr. G., a strong young man, 22 years of age, was disfigured in such a manner as to prevent his going into society. The left side of the face projected in the size and shape of a large cocoa-nut, and by this tumour the right side was so much dis-

placed, that the nose was thrown far to the left side. The right-eye protruded from its socket, on account of a tumour of the size of a hen's egg, on the point of which the eye was situated. The slit of the everted eyelids had the width, and presented the appearance, of the female labia, when drawn from each other. There was, at the same time, a complete entropium of both eyelids. The integuments of the cheek were much strained and attenuated by strong extension, and covered above with numerous varicose veins. The upper and lower tumours were separated from each other by a deep furrow. The young man, notwithstanding, enjoyed the best health; none of his senses were affected, he could even see with the protruded eye.

It may easily be imagined, that, in this case, many physicians had been consulted, many medicines used, without stopping the disease. The best surgeons in Germany and France had seen the patient, and had treated him not with homoeopathic doses, as he had taken, besides other things, 200 bottles of the decoction of Zittmann,* and had been subjected twice to treatment by hunger and inunctions in all their severity; but as none of these methods had succeeded in checking the degeneration, he had discontinued for two years all further treatment. The degeneration, however, had continued its progress, and had gradually increased in size.

Convinced that internal treatment was of no use, that the tumour was of a fibrous nature, I resolved to perform the operation. I first made an incision, beginning from the external corner of the eye, and descending over the apex of the tumour to the margin of the lower jaw; I then separated the soft parts from the tumours under them, and turned the flaps to both sides. These flaps contained, together with the nose and cheek, the whole lower eyelid, and the deeply contracted fold of the skin, which separated both tumours from each other. I now began to work down below the boundaries of the tumour; I followed it below the extremely protruded zygomatic arch, from thence tracing it over the body of the right upper jaw, I arrived at the base of the cranium, where I found the principal root of the growth, which I separated from the surrounding parts. I separated other roots from out the nasal cavity, to which important ramifications extended. They had dilated the nasal cavity, and pressed down the roof of the mouth, which protruded in a convex shape. I then began the extirpation of the tumour of the orbit. Prolongations passing through the osseous plates of the orbital parietes, connected this tumour with the lower one. It was a difficult undertaking to preserve the eye; but I succeeded in freeing the bulb

* A decoction of sarsaparilla containing corrosive sublimate.—Ed. L.

from all surrounding parts, and in laying bare the optic nerve from the tumour. The tumour was still firmly attached to the orbital parietes; several osseous prolongations, or roots, proceeded from it, through the perforated bones; but I succeeded, at last, in becoming master of the whole tumour. The bulb of the eye, with its optic nerve, extending like a string at the bottom of the wound, was now as bare as an anatomical preparation between my fingers. My friend, Dr. Romberg, so highly esteemed for his researches on nervous diseases, and myself, now tried some experiments on the faculty of vision; we closed the other eye, and wherever we directed the eye, the patient discerned all objects very distinctly. As the bulb was too small for the orbit, there not being any adipose or cellular tissue, I made several coils of the optic nerve upon itself, and brought it into the posterior part of the orbital cavity. I then modelled from the lower eyelid, although enormously enlarged, attenuated, and covered with varicose veins, another one on a smaller scale, united it by fine knotted sutures, and, after concluding the operation, I adjusted and secured the large wound of the face by a considerable number of twisted sutures, using, according to the thickness of the edges of the soft parts, thicker or thinner Carlsbad insect pins.

The eyelids were closed to prevent the prolapse of the eyeball, and pressed into the ocular cavity with a large soft ball of lint, and by this means they were brought into a gentle connection with the eye.

The patient was subjected to a very strict antiphlogistic treatment; saline laxatives were recommended; he was bled; leeches were often applied in great number to the face, and day and night fomentations with ice-water were made. By this treatment life was at no time in danger; the wounds healed quickly. On the second, third, and fourth day, the sutures were removed, as the margins were united by the first intention. In a few weeks everywhere in the depth of the wound cicatrization followed. The bulb and the eyelids projected naturally by new formed cellular tissue, and, at a later period, nothing extraordinary could be observed in the young man, except an oblique position of the eyeball with respect to the slit of the eyelids, and an obliquity of the cheek, and hanging down of the angles of the mouth, a necessary consequence of the division of the facial nerve.

Two years after the operation, Mr. G. paid me a visit. The paralysis of the cheek was strikingly ameliorated, and the corner of the mouth was much more moveable. The sight of that eye is complete, and even the eyeball is somewhat moveable, as it follows the motions of the eyelids.

From this case the idea first suggested itself to me, in all my following operations,

where a complete division of the one side of the face might be required, and consequently of the facial nerve, to avoid this by not cutting through the cheek, but perpendicularly through the middle of the face, and even then, if the operation should be necessary, on the posterior part of the cheek. I therefore resolved, in the next case, to follow exactly the median line of the face, and, after dividing the nose and lips, to turn to one side the soft parts, like a half mask, and then to perform the operation.

This new method proved successful in the three following cases.

CASE XVI. Madame H., 54 years of age, often sickly, observed for several years an impediment in the left nasal cavity, and, at last, she could no longer respire through it. It became completely obstructed, and a dark blue tumour was observed in the depth. External and internal remedies had been of no avail.

The patient now applied to me. I found a melanotic fungus filling the left nasal cavity, by which the external parts were much protruded, and upon them several melanotic tumours were observed.

The patient having taken, for some time, the decoction of Zittmann, I extracted all of the fungus that I could reach with the forceps, and removed then a great deal of the steatomatous degenerated mucous membrane of the nose. The turbinated bones of the nose were affected with caries. When the whole of the diseased parts were removed, the cavity was burned with a hot iron, which had the shape of the little finger. The patient underwent a slight antiphlogistic treatment, and she again took, for six weeks, the decoct. Zittmann.

Several months after the operation, all seemed to do well, and the cavity to heal; but the fungus returned; it affected the inner surface of the nasal bone and the upper jaw, especially the nasal process of it; the soft parts swelled, and the protrusion of the fungus was only prevented in some places by the external integuments.

Three months and a half after the first operation, I performed the second. The soft parts were divided below the forehead, the knife drawn along the back of the nose, and, at last, the upper lip was divided. The parts were separated from their connections, the flaps, containing nose, cheek, and lip, were retracted, and the various parts of the ossa nasi, with a portion of the degenerated upper jaw, were removed with a saw. I then removed the carious and fungous portions of diseased bone which presented themselves in the bottom of the wound; some of the latter were prolonged even as far as the frontal sinuses. And, finally, after having cut off a melanotic part of the external integuments of the nose, I united the wound by means of a multitude

of twisted insect pins, beginning at the forehead and terminating at the upper lip.

The patient was treated on the antiphlogistic plan, and the preparation I delivered to my celebrated friend, Johannes Müller. This gentleman saw the patient on the third day almost cured, and on the fourth the whole wound of the face was united by a linear median cicatrix. Up to the present time, a year after the operation, no relapse has followed.

The following case, however, of the resection of the facial bones, on account of a fibrous tumour, is, undoubtedly, of much greater importance.

CASE XVII. One day a lady, closely veiled, came to me, desiring to speak with me alone. She raised the veil, and I imagined I saw before me a pumpkin; I could discern nothing but a large round body, on the one side of which there was a disfigured, distorted face, with a nose pushed to one side; the left ala was enormously extended, and, together with the integuments of the cheek, covered the tumour. The eyelids were likewise greatly extended, and their orifices were oblique; the whole skin was covered with thickly studded varicose veins. The disease had reached this extent by degrees between the 18th and 48th year of her age. I began the operation in this case by dividing the face in the median line, commencing between the eyebrows, which were placed laterally, having been thrown from their natural situation to the position in which otherwise a cheek only is to be found. Having extended the incision to the nose and upper lip, I made over the root of the nose a transverse incision, parallel with the aperture of the eyelid. I then separated the soft parts, *i. e.* the moiety of the nose, the lower eyelid, the upper lip, and the cheek from the tumour, near to the ear, and directed this immense flap to be retracted.

The extent of the tumour, which projected on all sides, and which was uneven, and of an osseous structure, did not allow me to commence resection from within outwards, and I was forced previously to remove with an amputation-saw a projecting portion of the size of a fist. I was thus enabled to penetrate with a small saw on the side of the nose to the frontal cavity. I then sawed out the greater part of the inferior orbital margin, together with the inferior wall of the orbit. I then resected the zygomatic arch, and sawed in a transverse direction through the upper jaw, so that the alveolar process only remained. After dividing with a knife-saw the deeper situated hard connections, and separating the softer ones with scissors and knife, I was able to elevate the whole mass with strong levers, and I now beheld a large wide cavity. If the appearance of the tumour before the operation was not dissimilar to a pumpkin, it might be

easily imagined now, after the operation, that the cavity had the appearance of an excavated one. On the left and right side, with the exception of the parts where the bones were sawed through, the parietes were felt smooth. The lateral wall of the cavity was formed by the inner surface of one-half of the nasal fossæ. The posterior limits of it were formed by the perpendicular posterior wall of the pharynx. At last I removed a great portion of the tumour from the frontal sinuses, which were enormously dilated. This was followed by the discharge of a quantity of fetid matter.

After restoring the fainting patient, I united the external incisions by a great number of twisted sutures. The eyelids and their corners were united by fine knotted sutures.

The patient at first received an analeptic medicine; the face was slightly covered; internally some wine was given, until the weakness had somewhat ceased, and on the following day a slight antiphlogistic treatment, corresponding with the constitution, was commenced by giving a solution of potassa. The thin deeply withered soft parts became slightly raised, and turgescient on the following day, and on the third day the union was so complete that all the sutures could be removed. In one place only, between the lower eyelid and the nose, did the united flaps open again to about the size of a shilling. But I hoped by a future operation to remedy the accident.

The case did not present any complication, or anything worthy of notice during its treatment. After a few weeks the patient was able to get up and move about. No paralysis of that side of the face occurred.

Besides several younger physicians, Drs. Jüngken, Berendt, Romberg and Holthof were present at this operation.

After complete restoration of the patient to health, two things were still to be done with regard to the face, which had become quite straight, *viz.*, to close the opening above mentioned, and to raise up the eyelid, which was somewhat drawn down by the formation of the cicatrix. Through the great thinness of the skin and absence of the subcutaneous cellular tissue, I completely succeeded in the first object, only after some unsuccessful experiments, by refreshing the edges, and by applying sutures, having rendered the approximation of its edges more easy by means of lateral incisions. In the latter, however, I have not yet fully succeeded. The lady, for the last year enjoys the best health, enters into society, from which she had been excluded for more than thirty years. Hitherto there is no appearance of relapse; the cavity left by the enormous wound is much diminished. The face is natural and the muscles, on both sides, are capable of being put into action. The resected and extirpated tumour was of

a fibrous nature. The bones appeared partly absorbed, while in part they remained attached to the tumour, as attenuated though healthy plates.

CASE XVIII. Mr. R., a judge, 50 years old, had observed, for many years, a gradually-increasing swelling of the bones of the left half of his face. There was no great pain, but always a dull sensation of pressure. The nose was pressed to the right, and the left wing was higher than the right, which latter covered part of the globular tumour. The skin of the cheek was bluish-red in colour, and was perforated by several fistulous openings. The left nasal bone, the orbital margin, and the zygomatic bone felt softened. In the cavity of the mouth, the alveolar process of the upper jaw, and the whole roof of the mouth were found to be transformed into a steatomatous mass.

The patient had been under the care of able physicians, and had used many of the remedies recommended against diseases of the bones, and lastly, the decoction of Zittmann. The disease, however, had developed itself in spite of treatment, and was about to perforate the whole integuments of the cheek. The patient now determined to come to Berlin.

I commenced the operation by dividing the face from above downwards, the incision passing through the nose and upper lip into the mouth. An upper transverse incision was made into the angle of the eyelids, and the inferior eyelid, the half of the nose, with the cheek, and the whole of the upper lip were separated from the softened bones underneath, until the masseter muscle was freely laid bare. I then commenced the resection, by sawing, at first, through the upper jaw in the direction from below upwards; passing with the saw through the nose, I turned the instrument transversely into the orbital cavity, and removed the greater part of the inferior orbital margin, and of the inferior surface of the orbit. I then sawed through the zygomatic bone, and penetrating into the deep-seated mass, changing sometimes the saw for the knife and scissors, I resected the deeper-situated parts of the upper jaw, the whole osseous part of the roof of the mouth to the velum, and the whole alveolar process. Several large cartilaginous portions of the bones, which were not yet fully softened, were gradually removed, and the parietes of this large cavity were burned with the red-hot iron. The bleeding soon ceased, and I was now able to unite the wound of the face. Twenty sutures were required for this purpose.

The patient was still able to stand after the operation. He was carried to bed, however, and received for refreshment a glass of wine and water. The treatment was slightly antiphlogistic, and as the vital

powers appeared to be sinking on the next day, he took an infusion of valerian; however we were soon compelled to return to the use of carbonised waters, Selter water, and Saisdschütz water, to open the bowels. On the fifth day the whole wound of the face was united, and all the sutures removed, except at the inner corner of the eye on account of the extreme thinness of the skin, where an opening remained; but the cure of this will soon be obtained. With a slightly nutrient and strengthening treatment the patient has made such progress, that to day, twenty-eight days after the operation, he walks about in his room: he was able to leave the bed already a fortnight ago.

In most of the cases of osteosarcoma here related, I had already tried an internal and external treatment, but it never was of any use; the disease proceeded in its development equally during the treatment, often continued for months. Mercury, iodine, gold, and the decoction of Zittmann, were especially the remedies by means of which I hoped to produce a favourable effect; externally I applied the pure extract of lead, and this latter appeared to stop for some time the progress of the degeneration.

In most patients the fungus began from an alveolar process, and extended either to the left or to the right, by affecting the neighbouring alveolæ one after the other. The disease seldom spread over both sides from the first affected alveolar process. Extraction of the teeth produced a much quicker development of the disease. I never extracted teeth but the patients came always to me complaining, that immediately after extraction of the teeth the fungus mass grew very quickly.

After the alveolar process had become degenerated in its greater extent, the zygomatic bone generally became affected before the palatine bones. The whole cheek formed an oval hemisphere; the nose was drawn to one side, and the nostril corresponding with the diseased cheek, formed a continuous level with it. Not only in *La Charité*, but also in my private practice, I have already seen a great number of such patients die, notwithstanding they were submitted to judicious treatment up to the moment of death. In some cases the fungous mass penetrated the skin, which previously became brownish red, and attenuated, and then the red fungous tissue was seen quite denuded. In others a collection of matter was formed in the cheek, which burst and gave issue to a decomposed and stinking fluid. In these cases the fungus sometimes shot out from the parietes of the cavity; the nasal cavity was obstructed with fungoid masses, and the patients respired only through the mouth.

Having had many of these unhappy examples before my eyes I was induced to per-

form the resection of the bones of the face to a greater extent, more particularly as smaller operations of this kind had always met with success. I generally found a relapse after resection of the bones, of a much rarer occurrence, than after the operation for carcinoma, or fungus in other parts of the body; at least, the disease, in respect to its curability, is much more favourable than carcinoma of the glands. Amongst the remedies calculated to prevent a relapse, I prefer the decoction of Zittmann to all others.

Some of the operations which I have described, are, on account of their great extent, and the success which attended them, not devoid of surgical interest; but their greatest value, in a scientific point of view, is to be found, perhaps, in the fact demonstrated, that by *dividing the face along the median line*, I have suggested a new method of operating, the effect of which is to prevent the paralysis of one moiety of the face, the infallible consequence of commencing our incisions in the posterior part of the cheek.

MR. WARD'S DEFENCE
OF
IRREGULAR PRACTITIONERS.

To the Editor of THE LANCET.

SIR:—I have been, for many years, an occasional subscriber to *THE LANCET*, which I regard as a valuable medium for communicating to each other, and to the medical profession generally, the individual sentiments of its respective members. There is no profession more honourable, more useful, or more important, than the medical; nor is there any other in which it is so necessary for the public to be in possession of an absolute guarantee, and certainty that all its members are men of real talent. It is because I think thus highly of the profession, and am anxious that every possible means of extending and improving its efficiency should be resorted to, for the benefit of the public, that I trouble you with a few remarks upon the *British Medical Association*, whose first anniversary is reported in the second number of your present volume as having been held in London on the 30th of Sept. last.

I do think it necessary that the public should have the best possible satisfaction that the man whom they entrust with the restoration or destruction of their health, is a man who thoroughly knows, and is perfectly aware of what he is about. For this very reason I deprecate the formation of this Association, and still more the application to Parliament to confine the study, science, and practice of medicine, surgery, &c., within its own contracted circle. I feel perfectly assured that this "liberal"

proceeding of the most "liberal" section of a "liberal" profession will, if successful, entail a large amount of injustice on the public, and especially on the poorer classes of society, who now often receive much benefit (especially in the minor cases of disease) at a cheap rate, from persons whose practice will be completely put an end to by the contemplated measure. The consequence of this, in very many instances, will be that the poor, unable to pay the charges of a "regular" practitioner, which charges, now high, will no doubt be rendered higher by the increased "respectability" of the profession, after the putting down of "quackery," will be compelled to forego the benefit of medical assistance entirely, or submit themselves to be quacked and drugged by a parcel of ignorant and inexperienced young men who, at some public institution, may be allowed to acquire that practical knowledge which is necessary for their subsequent success, at the risk and sacrifice of those whom poverty compels to become the subjects of their crude experiments, in their first essays to reduce theory to practice; this alone is a sufficient reason why we should pause before adopting the suggestion of the "Medical Association," which would oblige every person, on every trifling occasion of injury or disease, either to forego the benefit of medicine, or to incur the serious expence of calling in a "regular" practitioner.

There are no circumstances under which the stale adage of "a stitch in time saves nine," is more palpably and immediately applicable than in the early stages of disease. The simplest remedies which can be furnished by the druggist, frequently at almost no cost at all, may be sufficient to stop a disease in its infancy, and prevent its progress, when a few days would give it such a predominancy in the system as might bid defiance to all the skill and ingenuity of the ablest practitioner. I have no doubt that the knowledge of this fact induces hundreds of poor persons to make timely application to these parties, when their circumstances might render the employment of a "regular" practitioner out of the question. I do, therefore, protest against the "respectability" of the profession being enhanced, by putting money into the pockets of "regular" practitioners, at the risk of annually sacrificing an immense number of human lives, and inflicting a large amount of human suffering through the want of that attention in the earlier stages of disease, which might have stopped its progress, but which poverty compelled them to decline until the last moment. If more evidence than this were necessary that the "liberal" members of the profession who thus seek an exclusive protection, are actuated (notwithstanding all their assumptions of generous care about the public) by the most sordid motives of