Dr. Alexander B. Mott's surgical operations : series no. 1.

Dr. Hall
with Compl^ts of
A B Mott
N Y March 10th /57.

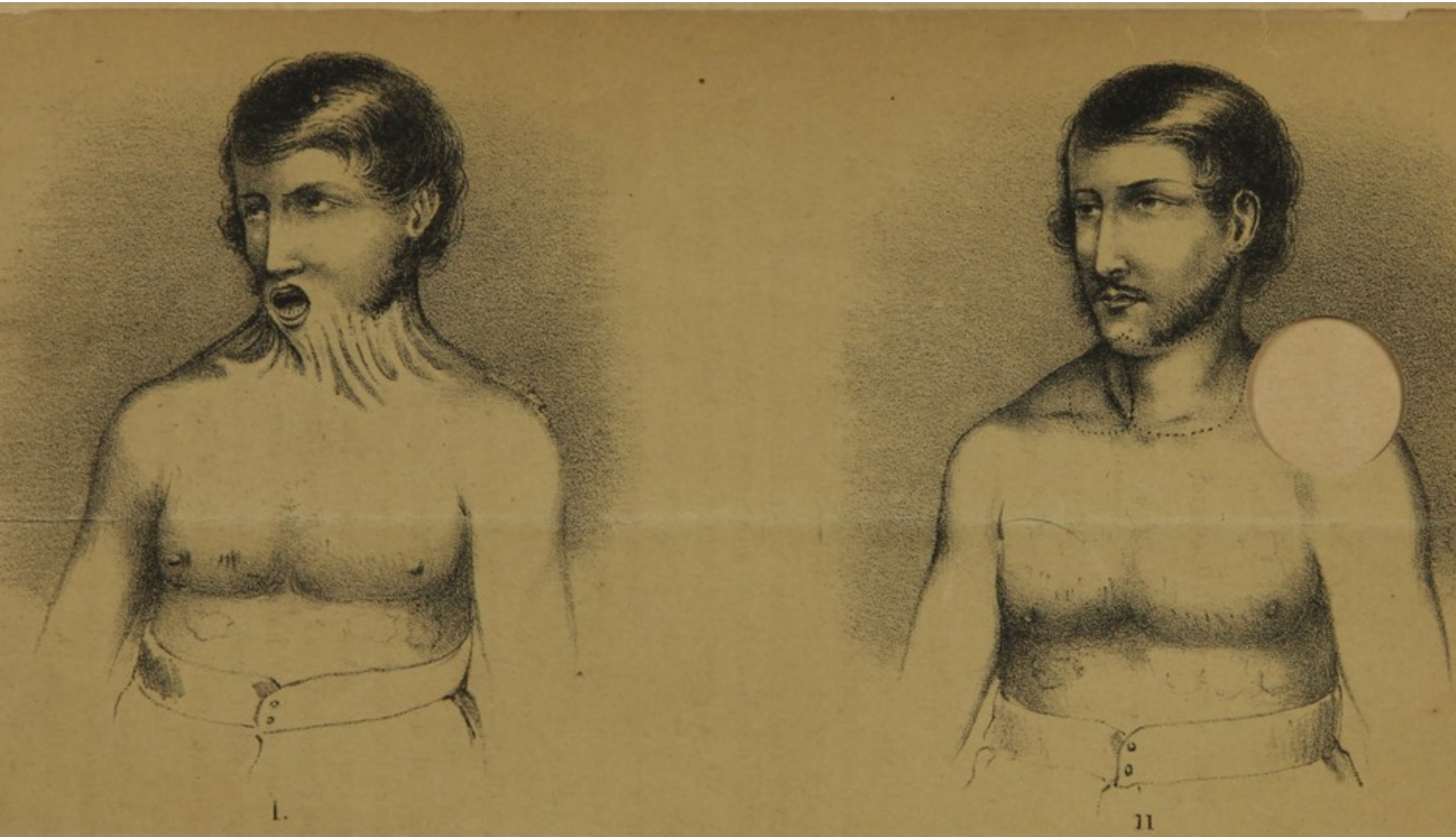
RKS
FROM

Bind this Cover in front,

DR. ALEXANDER B. MOTT'S

SURGICAL OPERATIONS.

Series No. I.



I.

II

Dr ALEX. B. MOTT'S CASE OF DEFORMITY FROM A BURN SUCCESSFULLY REMOVED BY AN OPERATION.

REMARKS
ON DEFORMITIES FROM BURNS;

With a Successful Operation on a Formidable Case.

BY ALEXANDER B. MOTT, M.D.,
Surgeon to St. Vincent's Hospital, and the Jew's Hospital, New York, &c., &c.

[From the American Medical Monthly for August, 1856.]

Burns have long been known to produce some of the most frightful disfigurements that occur in Surgery. Pott, Ambrose Paré, and other early surgeons, record the difficulties that occurred from this source in their days; Roux and Sir Astley Cooper allude to them in more recent times. Mr. Cleghorn, of Edinburgh, a celebrated Scotch brewer, who, in consequence of the frequency of such accidents among his workmen, treated scalds with an ability not inferior to any of the Faculty, as Abernethy himself sarcastically admitted, declared that the contraction arising from the cicatrix was the only calamity beyond his reach; and every surgeon of experience must, necessarily, have met with them as among the most troublesome of the difficulties he has to encounter.

Many of them have occurred to me, but I do not recollect one more striking than that which the case illustrated in the accompanying plate presents. The patient, a young man named Patrick Lavel, aged twenty-three, applied to me in the latter part of the month of December, 1850, for the purpose of obtaining relief from the effects of a burn which he had sustained in his youth. A glance at the plate will explain his condition. In early life he had been subject to one of the frequent accidents arising from fire, and, as usual in such cases, contraction had subsequently ensued to a most distressing extent. A cicatrix occupied the entire front part of the neck

and chin, and extended from ear to ear. It was the result of an injury which he had received by falling into a stove when only five years old, and the consequences had ever since been of the most painful as well as disagreeable description. The appearance of the face was distorted in the highest degree; the chin was drawn down to within half an inch of the upper portion of the sternum, and (so firm was the contraction) it was impossible for him to raise it or close his lips. The inconveniences he experienced, as well as the constant exposure of the mouth, prompted him to apply to me for relief; and it will be obvious at a glance how great the necessity was, as the man, though neither unintelligent nor beyond the prime of youth, had in his aspect all the marks of imbecility and age.

Having made a careful examination of the case, I arrived at the conclusion that it could be relieved by an operation, and so informed the patient. I at the same time warned him of the danger incidental to all plastic operations—namely, the hazard of sloughing, and leaving the parts in the same condition as before. In my advice and explanation he fully concurred, and urged me to undertake whatever course I saw fit. Thus allowed free scope, I reflected on the means by which the operation could be most effectually performed, and after due consideration, there appeared to me but one mode by which it could be successfully accomplished. From the nature of the cicatrix, which extended from the underlip far down upon the chest and over the clavicles, I could discern no other chance for success than by taking sound material from over the region of the scapulas; and, as at this period there was a prevalence of erysipelas in New York, it was necessary to undertake so extensive a cutting with precaution. Several patients on whom I had recently operated had been attacked by it, and fearing a similar result in his case, I urged upon him the expediency of postponing the operation for a few weeks. This he did; and when there was no longer any probability of the apprehended affection making its appearance in the flaps by which I proposed to replace the parts that had been destroyed, I at the end of a month resolved to operate.

The arrangements having been duly made, on the 27th of January, 1851, I proceeded to carry my designs into effect.

The operation was performed in the following manner :—After throwing the patient into a state of insensibility by means of chloroform, I made an incision through the middle of the cicatrix, extending from half an inch below the lobe of the right ear to a corresponding point on the left side of the neck, and carefully divided the tissues, which were firm and dense, until the sterno-cleido-mastoid muscles were brought into view. The patient being fully under the influence of the anæsthetic, I was enabled the more readily to make a gradual tension of the neck, and to divide the resisting tissues ; but I found it necessary to cut through the sterno-cleido-mastoid muscles before I could get the head into its proper position. This accomplished, the sheaths of the carotid arteries and deep jugular veins were plainly to be seen. Due caution was of course taken to avoid them, and the space before me to be filled up was now distinctly visible. It was extensive, measuring no less than eleven inches in length, by five and three-quarters in breadth—and, as I had anticipated, it would have been folly to have attempted filling it up with one flap. I accordingly continued my incision behind the ear and carried it down about six inches and a half in a line with the upper edge of the scapula. Thence I extended it downwards and backwards across that bone a little more than six inches, and up to the posterior part of the neck, leaving a base of about three inches to the flap, with a view of providing for an adequate and free circulation. The flap was next dissected upwards and left as thick as possible, for the purpose of being brought round to the anterior part of the neck ; and, to relieve the twist as far as practicable, the anterior incision was continued upward to the posterior of the ear. This effected, a similar flap was taken from the opposite side, and brought to join the other on the mesial line. I had taken the precaution to have an adequate extent of the new material and the space was consequently filled up without tension. Nothing now remained to complete the operation but to bring the extremities of the flaps together. This was effected by numerous interrupted sutures ; and the edges were afterwards in like manner attached to those of the upper and lower portions of the wound, as indicated by the dotted lines in the figure.

The dressings consisted of short pieces of adhesive plaster between the sutures, and narrow pieces of lint spread with simple cerate over the edges of the wound. The object of this was to avoid any pressure which might obstruct the circulation; and, with a similar view, a piece of lint secured by a bandage was lightly applied around the neck, over the whole. The wounds on the back were dressed with lint, and the edges drawn together as much as possible.

The patient quickly rallied from the effects of chloroform, and, to avoid the unpleasant consequences arising from its use (obstinate vomiting), which I feared might supervene and interfere with union by the first intention throughout the wound—thus defeating the aim of the operation—I cautioned him, and gave strict orders to his attendants that he should have no kind of nourishment or drink for several hours. This is a course that I invariably adopt after operations in which chloroform has been administered, and I moreover take the precaution of not allowing the patient to eat for at least four hours previously. No vomiting ensued, and but little nausea supervened; the latter being arrested by the application of a sinapism to the epigastric region.

On the evening of the operation I revisited the patient at 9 P. M., and directed twenty drops of Majendie's solution of morphine to be given, and repeated if necessary during the night.

Jan'y 28th. The patient had slept well, and the nausea had disappeared. I allowed him light nourishment, and visited him daily until the 31st, when the wound was dressed for the first time. In consequence of having previously taken the precaution to spread the lint with simple cerate, I found, as anticipated, that the original dressings had not adhered so closely as they generally do; and had the gratification of discovering every appearance of union by adhesion along the upper and lower edges of the flaps. The only portion which evinced a disposition to slough was the end of each of these as they united at the mesial line of the neck. Here a discoloration had ensued to the extent of a finger's breadth; but the effect was readily obviated by various stimulating applications which I used for the purpose of arresting its progress. In the course

of a few days the slough detached itself, and I then drew up the sides of the wound as closely as possible by means of adhesive straps. It healed kindly, and the patient was able to move about his room freely in the course of two weeks. No suppuration followed under the flaps; and the wounds of the back granulated rapidly and healed. During the month of March, the patient returned to his avocation much relieved, and entirely recovered from the effects of the operation. Subsequently I saw him from time to time, with the view of remedying the slight inconvenience experienced from a small hard cicatrix which had formed mesially at the end of each flap where the sloughing took place, and, on the 12th of April, I made an incision on each side of this excresence, and removed it all. The edges of the wound were then brought together; and, having allowed myself what might appear a superfluous extent of material in the first operation, I was now the more thoroughly convinced of the advantage arising from this course, as it enabled me to bring the soft integuments together without making any tension around the neck.

This subsequent incision healed kindly under ordinary treatment, and the patient returned to his usual occupation in the course of ten or twelve days, without the slightest necessity for again requiring my aid.

I have several times seen him since the last operation, and until within a year he has never been entirely beyond my view. He is so now, only because he has not the smallest occasion for surgical aid; having been completely relieved by this plastic operation, and again enabled to hold his head erect—an object of considerable importance for a man of his trade, which is that of a carpenter. He is able to close his mouth without difficulty, and his personal appearance is much improved. On meeting him casually in the street, no one would ever surmise that he had been the subject of an operation so formidable. He is now free and unconstrained in his movements, and has all the appearance of being a vigorous and intelligent man.

The drawing No. 2, was taken from life about a year after the first operation, and any traces of the incisions have since more effectually disappeared. I am not aware of any opera-

tion so extensive as this having ever been performed for the purpose of remedying a similar deformity, and at the time I operated on this patient I had not heard of a similar case having been recorded. Some two years after, my attention was drawn to one, reported in the "American Journal of Medical Sciences," Vol. IV. by Dr. Mütter, of Philadelphia, but it was on a much smaller scale; and any instances we find on record in the usual surgical authorities are still more limited. It is astonishing indeed how little has been written on such an important point in surgery, and, still more so, how little has been attempted. Dr. Mütter's is the only other case in this country that falls within my recollection; and on the opposite side of the Atlantic still less appears to have been accomplished. The late Mr. Henry Earle, of St. Bartholomew's Hospital, London, is seemingly the only British practitioner of note, in any degree identified with the subject; and even this accomplished gentleman, though the son of the former Sergeant Surgeon of the English court, apparently had very imperfect notions on the matter.

From the fifth volume of the Medico-Chirurgical Transactions (p. 96 et seq.), it will be perceived that he merely proposed cutting away the whole of the cicatrix, and bringing the edges of the skin towards each other as far as possible, in a transverse direction, by means of slips of adhesive plaster. A moment's consideration will suffice to show how utterly inadequate such a procedure must have been. The contraction, on healing of the wound, must either have been still greater than before; or, as in the instance which he gives of attempting thus to treat an injury of the forearm, the incision must have remained open so long before being finally closed by the tedious process of granulation, as to be equally painful and inconvenient to the sufferer. Indeed, it was very properly objected in England at the time, that had not the patient been a child only six years of age, where future growth might be anticipated to afford an adequate supply of new material, such an operation could never have been attempted with the least probability of success; and the forcible subduction of the power of the flexor muscles, accomplished in this case by the protracted application of a splint to the posterior of the arm, must have produced a

degree of inconvenience and suffering to which no adult could be expected to submit.

In conclusion, I would add that it is perfectly possible other cases may have occurred without falling under my notice; and I would at the same time express a hope that the attention of the profession may be more extensively directed to this subject; as, from the brief detail of the case I have just recorded, it will be obvious at a glance, how much of human pain and of human deformity may be relieved by a comparatively simple and in no degree dangerous operation.

209 Tenth Street, June, 1856.

CASE OF WOUND

OF THE

INTERNAL JUGULAR VEIN,

SUCCESSFULLY TREATED BY LIGATURE.

BY ALEXANDER B. MOTT, M.D.,
Surgeon to St. Vincent's Hospital, and the Jew's Hospital, New York, &c., &c.

[From the American Medical Monthly for November, 1856.

Amongst the most painful cases that fall under the notice of the medical practitioner, are those in which he is called to render his assistance when life is seemingly no more. In most instances they are beyond the reach of aid. The wretched subjects of them—the victims of their passions, their intemperance, or their misfortunes—have generally sought and found relief in another world than this, and all that the medical man usually can do, is to cast his eye helplessly on the remains of fallen and inanimate humanity. Deeming his presence useless, he generally hurries from the scene. There are instances, however, in which science and perseverance can render service when all is apparently hopeless; and of such a nature is the case whose leading features I am about to record:—

About half-past eight o'clock of an evening in the early part of January, 1855, I was sent for in great haste, to see a man who had attempted to commit suicide by cutting his throat with a razor. I immediately followed the messenger and arrived at the place about fifteen minutes after the act had been perpetrated.

The patient, William H——d, (for obvious reasons I withhold the name,) a young man of twenty-three, residing in S—— Street, had made the attempt while laboring under an attack

of delirium tremens, induced by that over-indulgence in unwholesome liquids, but too common in our clime; and when I first saw him, he was lying with his face towards the floor, his father leaning over him and holding some clothes saturated with blood around his neck. Beneath him was a pool of blood, the carpet being positively soaked; and on entering the apartment I was greeted with the father's exclamation, that "It was too late, his son was dead," &c. Anxious, however, to ascertain the fact and examine the wound, I seized the neck, and passing my fingers into the incision, placed them so as to fill up the gash, which was fully as wide as three of them; requesting at the same time a police officer, who was present, to turn him on his back, so that I might be more at liberty to follow the course which I designed to pursue.

This being done, I had an opportunity of making an ampler inspection, and ascertained that the wounds were two in number: comprising one large incision on the right side of the neck, extending from the left side of the trachea to the ear, and another smaller about an inch in length, dividing the integuments on the left. The former alone was important and was very serious,—laying bare the trachea, the common carotid artery, and severing the internal jugular vein, the sterno cleido mastoid muscle and external jugular vein. The artery was under my fingers, but no pulsation was perceptible, and I became apprehensive that the old man's words were only too true. Feeling, however, a certain degree of heat in the body, and having great confidence in artificial respiration, I resolved to try what could be accomplished by its agency. Placing my mouth against the patient's lips, and pressing back the larynx so as to close the œsophagus, I breathed into his lungs, and with the aid of those around me, successively evacuated them by pressure on the chest and sides. After keeping this course up for fifteen minutes, I cautiously examined the wound by gradually raising one finger after another to ascertain what vessel was cut; and on removing the forefinger, observed the deep jugular vein, an inch of which was perfectly bare, fill with blood. This affording a ray of hope, I, without removing my fingers, continued the artificial respiration, and on the elapse of other ten minutes, had the satisfaction of finding a slight

pulsation in the carotid artery. Encouraged still more by this, I persevered with my inflations, and at the end of the three-quarters of an hour, was yet more gratified by feeling a feeble pulsation at the wrist. Natural breathing was at the same time restored, although no consciousness was yet visible on the part of the patient; but he had evidently so much revived that I resolved on now carrying out the second part of the treatment which I had determined to adopt.

Having still retained my fingers in the wound, I now carefully withdrew the upper one, but found no blood flow. I next pursued a similar course with the lower one, and it was attended with the same result. From this I inferred that the incision must be under the middle finger, and raising it with much precaution, I discovered not only the seat of the wound, but also that a considerable piece had been actually cut out of the vein.

With my left hand, which was the one disengaged, I then took from my pocket-case an eyed probe, bending it in the shape of a hook, and a double ligature being passed through it, inserted it under the wounded vein. By keeping one finger on the upper and another on the lower portion of the vessel, the opening could be easily seen, and I consequently, without any unusual difficulty, succeeded in placing one ligature above, followed by a second below it. Several professional gentlemen, in the meantime, had entered the room, and judging from his cadaverous appearance, expressed an opinion that the patient could not survive. It was useless, they said, to attempt anything whatever; and after witnessing the incision in the vein, which I took an opportunity of showing them when the vessel was secured, they retired, evidently wishing to avoid the inconveniences of a coroner's inquest, which is always attended with an unpleasant loss of time. Left again to my own resources, I next endeavored to make the patient swallow some stimulants, which he did with difficulty, vomiting shortly afterwards, but not until he had taken a considerable quantity. The effect of this, however, did not prove so serious as I had anticipated, though he remained several hours in a very low condition. He was still unable to articulate, but by means of signs he contrived to express a desire for water instead of brandy, and again relapsed into a state of semi-stupor.

It was now about half-past two in the morning. During the whole time I had never quitted him, but was now rewarded for my anxious labors and suspense, by at last hearing the patient speak. He called for water and addressed several of his friends by name. The immediate danger being thus evidently passed, I dressed the wounds, drew them together with stitches and adhesive straps, placed him in bed with warm applications to his feet and body, ordered strong beef tea and brandy to be administered freely, and finally at half-past three in the morning, left him sleeping quietly.

On visiting him the first day after the operation, I found him delirious, with a small pulse of 110. I consequently prescribed him morphine.

On the second day the pulse had fallen to 105, but the delirium still continuing, I repeated the anodyne in larger doses.

On the third day, he was still delirious, though with a pulse less frequent and fuller. Morphine in large doses was still continued, and on the fourth day, I dressed the wounds. The delirium now was sensibly less, but on the fifth, it still was observable, though the pulse had progressively diminished in frequency.

On the sixth, too, when I again dressed the wounds, he was yet slightly delirious, and exceedingly restless. With regard to the wounds, I may add, that originally they appeared to have united by the first intention, but on the second dressing, I found they had opened in consequence of his great restlessness and constant tossing of the head from side to side. I subsequently dressed them with lint, and they healed kindly by granulation ; the ligatures detaching themselves on the twelfth and thirteenth days ; from that date his recovery was rapid. Eventually he was entirely restored to health, though he remained for sometime so timid, that it was with the greatest difficulty I could persuade him to leave the room. This, however, was obviously to be attributed to the consequences—fear of ridicule, exposure, &c.—that might possibly arise from his rash and unfortunate attempt.

The preservation of this man's life, I may remark, was exclusively due to perseverance in producing artificial respiration.

An impulse was thus communicated to the small portion of blood still remaining in his body, but incapable of itself, to sustain life for any lengthened period; and nature, which is always ready to assist our efforts, rapidly reproduced what had been lost.

I have had several opportunities, I may further mention, of testing the efficacy of artificial breathing, and am satisfied that in many cases life might have been restored by its agency, while death has often ensued in consequence of the individual being allowed to remain unaided after a superficial and unsatisfactory examination.

In two instances of suspended animation, of which I am cognizant, I have observed similar results, after the pulse had ceased to beat and apparent dissolution followed from the action of chloroform.

The first was that of a boy, about six years of age, on whom I was performing the lateral operation for stone. The administration of the anæsthetic had been entrusted to a gentleman, who was accustomed to apply it; but he had evidently given it in a dose unduly large, for, while in the act of introducing the forceps, I looked at the boy and noticed that the action of the thorax had ceased. I consequently felt for the pulse, but could find none. Discerning the danger, I immediately, without removing the instrument from the bladder, applied my lips to his mouth, inflated the lungs, and by pressing upon the chest, expelled the air. This I repeated several times, until becoming fatigued through my awkward position, I requested an attendant private pupil to breath into the mouth while I retained charge of the chest; several gentlemen meantime had examined the pulse, and one of them—a veteran in the profession, remarkable for his caution—had even put on his coat with the intention of quitting, remarking "there was no chance," evidently thinking that it would be better for him to avoid the pleasure of an encounter with the coroner. He had scarcely, however, got further than the door, when I recalled him by stating that, I was about to extract the stone, and this being an inducement which he could not resist, he returned to witness the completion of the case. The child had in the interval recovered, in consequence of the artificial respiration to which I have alluded,

and the operation was finished without further difficulty, and the patient ultimately recovered.

The second case to which I refer, is that of a lady, who was operated upon for hemorrhoids, by an eminent surgeon of this city. In this instance, I administered chloroform, and requested a professional gentleman present, to keep up the effects, which was done very judiciously, while I assisted in the operation. This was performed with the utmost care, and on removal of the handkerchief the pulse was good and breathing perfect. Chancing shortly afterwards to take hold of the wrist, I discovered that pulsation there had suddenly ceased, and respiration at the same time became suspended. The operator's attention was called to the subject, and he immediately remarked that the patient was dead. My previous case had taught me an impressive lesson, and I accordingly had recourse to similar means. The result was the same,—equally successful ; the only difference between the two cases being, that in the former the disagreeable consequences had ensued from the over anxiety of the administering party to witness the operation, causing him for the moment, to overlook the condition of the patient, while in the second, they resulted solely from the depressing power of the anæsthetic upon a frame greatly debilitated by frequent losses of blood.

To revert for a moment to the original subject. Prof. John George Morgan, of Geneva, in the *American Journal of Medical Sciences*, for 1836, (vol. xviii, page 330,) records a somewhat similar case. The patient in this instance was an unhappy convict who attempted to escape from incarceration for life by suicide, and, after first endeavoring to hang himself, had afterwards cut his throat. With a professional callousness, which I hope is rare, the doctor tells us that though the man was cut down with "face pale, pulse feeble and irregular," he considered the first attempt a *sham*, and thus took no steps for averting the more desperate and nearly successful second, in which the unfortunate prisoner divided "three-fifths of the deep jugular vein." Dr. Morgan tied it; but speaks of troublesome effects as apt to flow from such operations as the application of ligatures to veins. I can only say that I have been obliged to cut out a portion of the deep jugular vein in the course of

removing tumors from the neck, and have tied it without any inconvenient results whatever; the ligatures coming away sooner than in the case of any artery.

So far as I am aware, there is only one other analogous case recorded in surgery. Dr. Giraud, in Sedillot's *Journal Generale de Medicine, &c.*, states the case of a French surgeon, who, in 1814, at the Military Hospital of Toulouse, tied the trunks of the common carotid artery and internal jugular vein, both of which had been wounded by a musket shot. Up to the sixth day after the application of the ligatures no unfavorable symptom had occurred; but the final result of the operation is not mentioned either in the work itself or in *Cooper's Surgical Dictionary*, which quotes it.

209 Tenth Street, New York.

PLATE II.

Fig. 1.

Before the operation.

Fig. 2.

4 weeks after the operation.

Drawn from nature by James Plankett

Dr. ALEX. B. MOTT'S CASE OF EXOSTOSIS IN THE ORBIT AND NASAL CAVITY.

CASE OF EXOSTOSIS

OCCUPYING THE ORBIT AND NASAL CAVITY,

Successfully Removed, and Vision Restored.

BY ALEXANDER B. MOTT, M.D.,
Surgeon to St. Vincent's Hospital, and the Jew's Hospital, New York, &c., &c.

[From the American Journal of the Medical Sciences, Philadelphia. Vol. xxxiii, January, 1857.]

Tumors in the orbit, combined with exostosis, have long been familiar to every surgeon of experience. Sir Astley Cooper, in his *Surgical Essays* (part i., p. 157), in the earlier part of the century excited considerable attention by the narrative of one which proved fatal in consequence of making its way through the orbitar process of the os frontis to the brain; and Mr. Guthrie, the celebrated English military surgeon who has lately been removed from the world of science, records others which especially attracted his notice. One of these, however, was on a very small scale, not exceeding in dimension the size of a large marble, a point at which it seemed to have remained stationary; while a second, of larger growth, effectually resisted the application of the actual cautery, which seems to have been the only mode of treatment that suggested itself to the practitioner. On the continent of Europe we find numerous cases detailed by Brassant, Langenbeck, and others in the various scientific journals of France and Germany, all of which were accompanied by more or less displacement of the eye. But I am not aware of any so extensive as that which fell under my observation in the following instance; and though Mr. Guthrie, on finding the cautery fail, afterwards proposed the use of the saw and chisel, I believe my operation will be found original.

The patient, William Hoy, aged thirty-three, a native of Edinburgh, Scotland, and a wood turner by trade, had about

seven years previous to his applying to me for advice, noticed an enlargement towards the inner canthus of the left eye. His previous health had been good, though he had been subject to headache, and his attention was first drawn to the seat of disease by inflammation around the part, and a troublesome flow of tears over the cheek. About eighteen months after he first noticed the tumor, the left nostril was closed up, and he then applied for relief to a surgeon of Edinburgh, who passed a probe up that cavity; but the only effect of this was to excite great pain in the head and produce an extensive swelling on the side of the face. Professor Syme next examined it, but proposed no operation. At this time the tumor did not occupy the socket of the eye; but it gradually increased in size, pressing that organ to the outer canthus and impairing its vision. Nothing, however, appears to have been done; and, in this condition he progressively went on from bad to worse until, having in the interval emigrated to this country, he applied for my advice and assistance in the month of April, 1854. About two months previously, a discharge of bloody matter had taken place from the left nostril, and continued to a considerable extent night and day subsequently. The pain in the head had also become very violent, and prevented him from attending to his work. About a month after the discharge from the nostril the eyelids became swollen, and an abscess formed under the lower lid, towards the inner canthus. On passing a probe through this opening the bone could be distinctly felt, and its existence in the nostril was also equally evident.

It was on the 11th of April that he first applied to me, and on examination I concluded that the disease was a case of exostosis occupying the left nasal cavity and orbital foramen. The extent of the growth of bone could not be felt, but from the duration of the malady I inferred that it penetrated far into the socket and was firmly attached to the orbital plates. I informed the patient that in my opinion nothing but an operation would afford him relief, and that it was an operation which might involve his life. I considered it my duty also to apprise him that it was impossible to predicate a successful result, as the extent of the disease could not be ascertained; but he was suffering so much at the time that he expressed his

resolution to run the risk and have it performed. As he was living in a boarding-house, where it was not probable he could be attended to with the requisite care, I advised him to become an inmate of St. Vincent's Hospital, where I then was on duty. He entered it on the 19th, and on the following day I removed a number of polypi from the right nostril, with the view of enabling him to breathe freely through this channel, lest the other should be closed by the operation, which I determined to perform on Saturday the 22d.

Although the patient came under my charge as a private individual at the hospital, I considered it due to him as well as myself to call a consultation of my professional colleagues composing the surgical staff. This, I may premise, is one of the advantages attendant on an institution founded on the basis of St. Vincent's. According to the rules of the establishment, each member of the medical or surgical board possesses the privilege of introducing a private patient at any time and treating him within the walls of the edifice. He has thus the benefit of the collective advice of the establishment, in addition to the admirable care bestowed upon him by the beneficent Sisters of Charity who preside over the institution, and devote their attention to the alleviation of the sufferings of the diseased and the sick with an earnestness and a zeal truly worthy of their name. The consultation on the present occasion, however, was not unanimous. Almost the whole of my professional brethren there considered the issue of an operation as doubtful, inasmuch as it could not be ascertained to what extent the disease had invaded the orbital foramen, or what structures the bony attachments involved. To one less accustomed to operative surgery, and with less experience in cases of emergency, such doubts in the minds of the eminent individuals who constituted the board, and of others, might have been productive of hesitation ; and, under ordinary circumstances their opinion as to the impracticability or impossibility of removing the whole of the bony mass might have caused me to pause, if not abandon the design. But feeling confident that in undertaking the operation I should give the patient the sole chance he had for the prolongation of his life, and he reposing the most implicit confidence in me in return, I deter-

mined to proceed; the more especially as I knew it never could be attempted under circumstances more advantageous.

Having resolved to operate, I proceeded in the following manner to carry out my design. The patient being placed on a bed was brought under the influence of a mixture consisting of equal portions of chloroform and sulphuric ether, which in such cases I recommend. I then made an incision from the ala of the nose in a direct line upwards to about half an inch above the superciliary ridge, and afterwards a transverse one from the centre of the upper eyelid across the nasal bone to the opposite eyelid, terminating in a line with the inner canthus of the right eye. The four flaps thus made were next dissected up, beginning at the points where the incisions intersected each other, and carefully extending through all the tissues to the bone. Upon raising the flap nearest the nose, it was evident that a large portion of the osseous mass extended into the nasal cavity, and it consequently became necessary to remove the whole of the fleshy portion of the nose from the nasal bone of the left side. This being accomplished, I dissected the opposite flap clear from the tumor, keeping as close as possible to the bone in order to avoid wounding the eyeball or its surrounding tissues and their attachments. This too being done, I found the bony tumor was firmly impacted in the orbit and nasal cavity. I consequently separated the nasal bone of the left side from its fellow of the opposite by means of a strong pair of Liston's bone-forceps, and with a fine straight flexible saw detached it from its frontal attachment. By a little manipulation I was thus enabled to remove the portion represented in Pl. 3, Fig. 1; and on accomplishing this, I next by means of a delicate chisel and hammer gradually detached the other bony mass represented in Pl. 3, Fig. 2, from the orbital plate of the frontal bone, and also from the orbital plate of the superior maxillary. The os unguis was so thoroughly incorporated with the tumor that I was obliged to remove it along with the mass; and the whole being now somewhat moveable, I made a slight traction by means of a pair of strong forceps. A few more cuts of the chisel enabled me to withdraw it; and, to my great satisfaction, as well as to the astonishment of all present, I discovered that the orbital

PLATE III.

Fig. 1.

Fig. 2.

G. W. LEWIS. PRINT.

Exostosis from orbit and nasal cavity. removed April 22d 1854.

plates had not been injured. Had these been so, I need not say the result would have been most serious: the brain would have been exposed, and it would have been almost impossible to have avoided a fatal issue. But this danger was happily evaded, and all now went on comparatively easily. On removal of the tumor from the orbit, a slight discharge of pus took place; accounting in some degree for the pain previously experienced in that cavity.

The next important point which presented itself for my consideration was the restoration of the eye to its natural and original position. From attempting this I was dissuaded by some of the professional gentlemen around me, from whom I had derived valuable assistance during the operation. They recommended that the cavity should be filled in with lint; but, desirous of doing all in my power for the benefit of the patient, and seeing no reason why the eye should not be replaced—considering also that there was every probability of its coverings adhering, there being two raw surfaces to be brought in contact—I replaced the organ and drew the edges of the wound together by means of interrupted suture and adhesive straps. A bandage was next passed around the head, containing a small compress which was placed over the eyeball. The latter was thus retained in its natural cavity; my object being to fill up the orbital foramen and have union by the first intention.

To Prof. Mott, Drs. Van Buren, Schmidt, and Finnell, I am much indebted, both for their good counsel and able assistance in this formidable operation.

The patient having now recovered from the effects of the anæsthetic, was placed in a bed and left for some hours to repose. Nothing worthy of notice occurred in the interval. In the evening I visited him; and, as he was suffering some pain, though no vomiting had occurred, I directed twenty drops of Magendie's solution of morphia to be administered to him and repeated, if necessary, during the night.

April 23d.—Inthe course of the day I visited him twice, and ascertained that he had taken the second dose of morphia as well as slept part of the night. I directed mild diet to be given to him.

24th.—On returning this morning I learned that he had slept well during the night, with the aid only of a small anodyne. I ordered some light nourishment for the day.

25th.—This morning I found the patient had slept well without the anodyne and felt comfortable.

26th.—To-day he was a little feverish. Having an amputation of the leg to perform in the same ward, I was under the necessity of ordering him to be removed to another room. This increased the fever, and on the following day, the 27th, the pulse was 110. I consequently ordered a gentle aperient and low diet to be given him.

28th.—The fever continued. Erysipelatous inflammation had also appeared on the cheek, and during the day it extended over the nose. I loosened the dressings. No discharge ensued. Applied tincture of iodine for some distance to the sound skin around the inflamed surface, and ordered the face to be kept powdered with scorched rye flour. I also directed ten drops of the tincture of muriate of iron to be administered to him every two hours.

29th.—This morning I ascertained the patient had not rested well during the night; but the fever was less, and the erysipelas had decreased on the nose, though it extended over the jaw. I consequently ordered fifteen drops of the tinc. ferri mur. to be given every two hours, and in the afternoon administered the same quantity every hour. In the evening I had the satisfaction of finding that the erysipelas had left the jaw, and was now confined to the forehead. Still, I considered it prudent to order the same treatment to be continued during the night, but directed a more generous diet to be given, and a little porter.

30th.—The fever had diminished, and the erysipelas was confined to a small spot on the head; but the patient was much debilitated. I consequently ordered the porter to be continued, with strong beef-tea, &c., but did not deem it expedient to interrupt the administration of the tinct. ferri mur. I considered, however, that I might now with safety remove the dressings, as well as take out the stitches; and, on effecting this, was gratified to find that the wound had entirely healed, with but very little discharge of pus from the nostril.

Adhesive straps and a little lint were applied constituting the second dressings.

May 1st.—The erysipelas had now completely disappeared, but the patient continued very much debilitated, and required stimulants with good nourishment frequently during the day.

2d.—He still remained very weak ; and this condition having now continued several days, it became necessary to give him a large quantity of stimulants and nourishment. It was now that he experienced, to its fullest effect, the benefit of the Institution into which he had had the good fortune to find entrance. To the devoted attention of the kindest and best nurses in the world—the Sisters of Charity — who follow directions to the letter, and feel a deep and earnest interest in the sick, this man may in some degree attribute his recovery. Too much cannot be said in favor of these truly pious ladies. Sacrificing themselves to the cause of humanity, looking for no reward in this world, they deserve all they can desire or anticipate in the world to come. None can appreciate them as they should be appreciated, save those who have been the recipients of their sedulous attention, or have watched them at the bedside of the sufferer. Day and night they are at their posts, anxious to devote their all to the relief of suffering humanity, and bestowing their care wholly irrespective of country or creed.

Secondary to the recovery of the patient from so formidable and dangerous an operation, the most gratifying result in this case is the fact that the eye, which had been gradually but completely pressed out of its regular position, was eventually replaced ; and that the vision, which had been totally lost for several years, was perfectly restored. So soon as he was able to sit up—that is, about sixteen days after the operation—the patient called my attention to his eye, which appeared to move naturally, and to his astonishment he found that he could distinguish objects, although not very distinctly. His sight continued to improve, as well as his general health ; and in about a month he was able to leave the hospital entirely cured.

From time to time I have seen him since, and observed with pleasure the gradual improvement in his vision. In less than

three months after the operation, the sight was as good in the eye operated upon as it was in the other, and his personal appearance was much improved. The eyeball had resumed its natural position, and, when I last saw him, the scar on the face was scarcely perceptible.

The annexed drawings, Pl. 2, will afford some idea of the case, both prior and subsequent to the operation. Fig. 1 represents the appearance of the patient before the operation, Fig. 2 his appearance four weeks after the operation. The tumor, which is of a dense osseous substance, is represented, Pl. 3, Figs. 1 and 2, natural size. Its weight is three ounces and one drachm. I am not aware of any similar case in the annals of surgery.

Many instances of exostosis are of course on record—this being unhappily a prevalent form of surgical disease—and Sir Astley Cooper, as I have already remarked, has detailed one of an analogous order which affected the bone of both orbits. In his case, however, it was allowed to prove fatal by extending into the brain, whereas in the present instance the disease has been wholly arrested by a timely operation, and up to the present moment there is not the slightest indication of its recurrence. It was besides accompanied by peculiar circumstances. The occurrence of erysipelas at the critical moment in which it appeared might, but for the prompt treatment adopted, have been attended with the same fatal results which have so often marked its course. In such instances I cannot too highly extol the peculiar virtues of the tinct. ferri mur. In the present case the patient was utterly prostrated by the effects of the erysipelas; but to its vigorous and unhesitating exhibition he is mainly indebted for his recovery. Secondary only in importance and anticipation was the restoration of his vision. The eyeball had been so long displaced that few would have looked to such a result; and it affords me subject for congratulation that, contrary to the opinion of my distinguished colleagues at the hospital, I determined to replace it, though at the moment I assuredly never expected that this resolution would have been attended with a success so agreeable to the patient as well as to myself.

203 Tenth Street, New York, *November*, 1856.