

she is to continue wearing them for the present. The distance between the incisor teeth, when the mouth is wide open, is three-quarters of an inch.



KING'S COLLEGE HOSPITAL.

AUTOPLASTIC OPERATIONS AFTER A SEVERE BURN ; SUCCESSFUL TRANSPLANTATION OF INTEGUMENTS FROM THE ABDOMEN TO THE ARM.

(Under the care of Mr. WOOD.)

LYDIA W.—, aged eight years and nine months, was admitted into the hospital in January, 1862, for a severe burn, destroying the skin extensively on the left side of the front of the neck and chin, and over the posterior surface of the left wrist and forearm, and scorching in a less degree the front of the right elbow. After remaining in the hospital till the month of April, she was discharged. A broad, hard, contracting cicatrix, binding down the chin to the sternum; an extensive cicatrizing surface on the back of the left wrist, with a sore extending up to the elbow, drawing the hand backwards upon the forearm; and a cicatrization over the front of the right elbow, remained at the time of her discharge.

In the month of September she was again admitted, under Mr. Wood. The chin was drawn down to within an inch of the sternum, and the left corner of the mouth was distorted by a band of hard, thick, and tough cicatrix, an inch and a half wide, placed a little to the left of the median line. On the right side of this the skin was depressed, and puckered into a loose bag or hollow; on the left side of the neck it was tight and drawn, and marked by extensive cicatrices, especially towards the ear and angle of the lower jaw, where the widest diameter of the cicatrix was transverse. The left hand was drawn back upon the forearm, the wrist-joint being completely reversed by the contraction of a falciform cicatrix situated opposite to the ring finger, extending from near its metacarpo-phalangeal articulation to three inches above the wrist joint. The little finger was drawn to within an inch of the back surface of the forearm, the other digits being placed at increasing angles. The joints at the roots of the fingers, especially the little and ring fingers, were also reversed. An extensive sore, which had remained stationary since her discharge, extended up to near the inner condyle. The whole of the skin of the forearm, with the exception of a narrow patch on the outside, was seamed with cicatrices. The right arm was contracted at the elbow, and could not be straightened to much more than a right angle. The girl was in good health, with a clean tongue and good appetite.

Treatment.—The right arm was first extended gradually by the application of a straight splint in front, with graduated pads placed at the bend of the elbow, and withdrawn one by one from day to day.

On the 11th of October, 1862, the child was brought into the theatre to be operated on for the deformity of the neck. A straight, narrow-bladed knife was pushed through the skin behind the upper part of the cicatrix, and drawn downwards and forwards towards the sternum, dividing the cicatrix obliquely from the breast-bone. The head being then thrown well back, the cicatrix was dissected freely upwards towards the ear, and the edges of the wound raised from the deeper parts all round.

On the right side the dissection was carried under the puckered pouch of skin there found, and the incision prolonged transversely from the lower end, so as to loosen it and spread it out into a quadrangular flap of skin, which was then brought across the neck over the site of the cicatrix, the latter being pushed up high towards the angle of the jaw. The edges were then secured by wire sutures to the skin on the left side of the neck and to the displaced cicatrix above. At the lower edge of the flap was left an open wound to heal by granulation. The head was held back, and the chin raised by a bandage passing round the head, down the back, and round the waist, and the wound dressed with wet lint and gutta-percha skin.

After the operation a good deal of the upper border of the wound became adherent, but on the left side there remained for some time an open sore, which, with the exposed surface left by the transposition of the flap, gradually healed up, and by the end of the month was nearly closed, leaving the chin elevated, and the motions of the head free and unimpeded.

The persistent and extensive sore remaining on the left arm, the extreme contraction of the cicatrix already formed, the great backward distortion of the hand, and the small quantity of healthy skin remaining upon the forearm rendering hopeless all attempts to restore its normal position by gradual extension or transposition of adjacent skin, Mr. Wood resolved to attempt the grafting or transplantation of skin from the surface of the belly. A careful preliminary adjustment of an easy position of the arm on the trunk being made, a thin sheet of gutta-percha was moulded in the usual manner over the front of the chest, in the manner of a cuirass, overlapping well the sides of the chest, and hollowed out at the position of the armpits. At its left border was left attached a flange piece of the length of the upper arm, which was curved round the back and outer sides in the manner of a scroll splint. From its lower border, which reached to within three inches of the umbilicus, projected at right angles another piece to support the forearm, placed at an oblique angle with the upper. The body part of the cuirass was punched over with holes, and the whole well padded with cotton wool, and covered with leather. The apparatus was secured to the body by a strap round the shoulders and back of the neck, and held in its place by broad adhesive straps and bandage. When placed in position, and the arm laid on the abdomen, the centre of the cicatrix was situated above and a little to the left of the umbilicus, so that a flap raised from the integuments at that place would receive into its base the branches of the superficial epigastric artery, coming from below upwards and inwards.

On the 5th of November the child was again brought into the operating theatre and placed under chloroform. A lancet-shaped flap of skin two inches and a half long, with its apex upward, and a base of the same width directed towards the left groin, was then raised from the surface of the belly a little above and to the left side of the navel. The thickness of the flap was gradually increased towards the base, where the aponeurosis of the external oblique was a little exposed. The edges of the wound were then brought together by the use of a pair of rectangular pins passing in opposite directions, and fastening to each other's loops so as to form a quadrangle, with the ends well covered with lint and padded with cotton-wool. Over these a thick dressing of simple cerate and cotton-wool was laid. A transverse incision was next made across the middle of the falciform cicatrix on the back of the left wrist, directly opposite the joint, and carried sufficiently far to permit the hand and fingers to be straightened out in a direct line with the forearm. No dissection was made, nor were the edges of the cut raised from the deeper parts. The surfaces of the wounds were then carefully washed with lukewarm water until the bleeding had completely ceased. The hand was then laid upon the abdomen and strapped to the body-splint in a straightened position, and then adjusted so as to bring the surface of the wound easily under that of the flap raised from the belly, the hand resting directly over the wound left by raising the flap. Another pair of rectangular pins were then passed right through the centre of the flap, about an inch apart, and through the integuments at the outer side of the skin of the forearm, so as to obtain a deep and firm hold. The pins when locked into each other's loops formed a quadrangle, the ends of which were well padded where they rested on the surfaces of the flap and skin of the forearm, the padding being adjusted so that by abstracting from or adding to it the pressure upon the centre of the flap could be regulated to a nicety according to the degree of swelling in the flap after the operation. A few wire sutures were placed around the edge of the flap, the point of its lancet shape being fixed into the angle of the cut across the wrist. A pad of lint was placed across the

root of the flap, and the whole secured by narrow and long strips of plaster. Broad straps were then passed round the arm, splint, and body, and a bandage passed over all so as to prevent the slightest relative motion. The rise and fall of the respiratory wave affected both the surface of the abdomen and arm, carrying both equably together.

The child was little affected by the operation, and the arm was perfectly easy in its position. For the first week no more interference was made than was absolutely necessary for cleanliness. At the end of that time a few of the sutures at the edges were removed. About an inch near the fingers was then seen to have become united by the adhesive process. The pressure by the pins was adjusted from time to time by the removal of some of the padding; and about the tenth day the pins were removed altogether from the flap. The body portion of the cuirass was also carefully raised, and the abdominal wound examined; the pins and sutures were removed; no adhesion having taken place, but filled with healthy granulations. The wound was then dressed with simple dressing, and the cuirass readjusted. The flexibility of the gutta-percha admitted of the upper arm-piece being bent down for examining and dressing such parts as became sore from the long continuation in one position under the pressure of the splint. At this time it was evident that the surface of the flap was firmly adherent to that of the wrist wound. The progress of the cicatrization at the edge of the flap was uniform.

On the 13th of December, the union being completely effected close up to the root of the flap on both sides, the first step to its separation from the abdomen was made by an incision about an inch long, directed obliquely from the left side of the root of the flap downwards and inwards, so as to obtain still more skin from the belly. By this means the hand was allowed to be placed further inwards towards the navel, so as to move it from the surface of the abdominal sore. Narrow straps of sticking plaster were then placed round, so as to obtain close apposition of the newly cut edges. The cuirass splint was then left off, and a simple bandage and strapping applied to keep the arm *in situ*. The parts united without hesitation. A week afterwards another cut was made on the opposite side of the flap attachment to the same extent, and with the same obliquity. The hand could then be shifted over from the surface of the abdominal sore, so as to leave it perfectly free for dressing. In a week this was also healed. The union being now quite firm and safe, flexion of the hand and fingers upon the forearm was made at each dressing, and the bandage applied, so as to maintain the bent position. This had the effect of drawing still more of the skin of the abdomen into the side of the flap, which now assumed the shape of a lozenge, with the lower angle attached to the abdomen. After two more separate divisions of small portions of the root in the same slanting direction, the flap was finally severed from its connexion with the abdomen on the 3rd of January, 1863. The pedicle then severed was about half an inch in diameter. There was free bleeding from the cut part of the flap, showing that the vascular connexion was now very free. The sore on the abdomen and that on the arm remaining from the original burn had by this time diminished to small proportions, and both were covered with healthy florid granulations. Up to the present time daily flexion movement of the distorted fingers and retroverted wrist has brought the tips of the former very nearly to their normal relation with the thumb and palm, and the patient can grasp objects with much facility. The flap has remained plump and unshrunk, and the surrounding lozenge-shaped cicatrix has assumed a linear appearance. Both the sores on the arm are now healed, while that on the body is diminished to the size of a half-crown. The patient uses her hand with great freedom. The effect of this motion has been to elongate the flap from two and a half to three inches and a half, and somewhat to narrow it from one lateral angle to the other, since its severance from the body.

ST. BARTHOLOMEW'S HOSPITAL.

PECULIAR AFFECTION OF THE SURFACE OF THE TONGUE;
EXCISION OF THE DISEASED PART.

(Under the care of Mr. LAWRENCE.)

ON a former occasion (THE LANCET, vol. i. 1862, p. 459) we briefly recorded an instance of rather peculiar disease affecting the left side of the surface of the tongue of a patient under Mr. Lawrence's care. He was a middle-aged man, and had been subject to a thickening of the membrane for about eight

years; it was also elevated and fissured, and had a white appearance, not unlike the boiled white of an egg. One very painful part, the size of a nut, was removed, without chloroform, by slicing it off with a scalpel; this was found to be confined solely to the mucous membrane, and did not involve the true substance of the organ. The man recovered, and remained free from any return for some weeks. The disease, however, recurred, and he was again admitted in October, under Mr. Lawrence; and this time the peculiar hypertrophied epithelial surface occupied one half of the tongue—namely, the whole of its left side superiorly, encroaching on the right side. It was very painful at one part, although there was no decided ulceration. This caused much inconvenience both in eating and speaking, and the patient, otherwise in good health, was anxious again to get rid of it, but this time under chloroform.

He was brought into the operating theatre on the 1st November, and chloroform administered in the usual way. He was then seated in a chair, with his head reclining backwards against a cushion, and the influence of the anæsthetic was kept up by means of an apparatus devised by Mr. Copeman, which permitted of inhalation through the nostrils. The tongue was laid hold of with a pair of wide-bladed forceps; but as there was very strong resistance in the way of retraction, it was found necessary to pull the tongue forwards by a pair of hooked forceps, and with a sharp bistoury Mr. Lawrence removed the affected part in one large piece from the surface of the left side of the organ. There was free bleeding, as on the former occasion; but it was not found necessary to tie any of the blood-vessels, as the hæmorrhage readily ceased by the use of cold water; and the patient was removed to the ward. On examining the specimen, the disease was discovered to be of the same character as formerly, not malignant, but simply involving the mucous membrane. It looked like masses of thickened epithelium that had become indurated and fissured in various directions, a longitudinal section giving the boiled white of egg appearance already referred to. The muscular structure of the tongue was not meddled with, as it was quite healthy in every respect. As on the first occasion, the man again progressed favourably; but there is still the probability that the affection, notwithstanding its benignity, will recur.

GUY'S HOSPITAL.

PHTHISIS PULMONALIS, AFFECTING THE LOWER LOBE OF
THE RIGHT LUNG; THIRD STAGE OF THE DISEASE.

(Under the care of Dr. WILKS.)

AMONGST the out-patients at our hospitals, in cases of cough of a doubtful nature, it is the custom to place the stethoscope at the upper part of each lung to ascertain the condition of the breathing, for this is generally the part affected in phthisis, especially in the left side. In a certain small percentage of cases, the disease commences in the lower lobes, and may escape detection unless the general symptoms are very well marked, so as to induce an examination of the lower lobes.

A case in illustration presented itself lately at Guy's Hospital. The upper lobes of both lungs were found normal; but on particular inspection, the mischief was discovered at the base of the right lung, where it had unfortunately advanced to the third stage of the disease, for there existed one large and several smaller cavities, in which pectoriloquy was very well marked; indeed more so than usual, because the patient, a female aged about thirty-five, in Esther ward, was deaf and spoke in a loud voice, thus permitting it most sensibly to enter the ear through the chest during auscultation.

The fact we have noticed is certainly no novelty in regard to the situation of the tuberculosis; but as it is frequently overlooked in out-patients, a reference to the circumstance may do some good in discovering cases in the earlier stages, when the chances of beneficial treatment are more hopeful.

ST. GEORGE'S HOSPITAL.

SUPERNUMERARY LITTLE FINGER IN AN ADULT;
REMOVAL.

(Under the care of Mr. TATUM.)

THE common practice at the present day is to remove supernumerary fingers and toes when they are observed shortly after birth, and are likely to prove inconvenient. Owing to this it is rare to see them in adults.