is not likely to be performed again in any case of talipes varus, even in adult life."

In 1854, Dr. Little recommended this operation, and the late Mr. Solly, of St. Thomas's Hospital, performed it. The details of the operation are given; the cuboid bone, and possibly portions of other bones, were also removed piecemeal by the gouge. A Scarpa's shoe was applied, and the result was ultimately less successful than had been anticipated by Mr. Solly.

Let us now consider the rationale of this treatment on a club-foot (talipes varus). The astragaloid division of the foot is untouched; the metatarsal bones of the little and fourth toes are approximated to the os calcis; so that the expended tubercle on the fourth metatarsal rests on it. By fourth metatarsal I mean that of the little toe, because the great toe consists of three phalanges, and does not possess a metatarsal bone. The subsequent eversion and rotation of the foot anterior to the astragalus is much facilitated, because you concentrate your instrumental and manual energies on one hinge (astragalo-scapoid), instead of two (astragalo-scapoid, and calcaneo-cuboid); and, if you will pardon me for using a rough simile, it is far easier to wrench off the lid of a box that has support only from one hinge in the place of two. The block of cuboid, acting as a mechanical wedge, or key stone, of the tarsal arch, is taken away; the ligaments are more readily stretched or ruptured, while the cicatrising tissue intervening between metatarsal bones (third and fourth) and os calcis perpetuates approximation and contraction between this gap up to the point of bony contact. The following cases bear upon this question.

CASE I.—T. S., aged 15, was admitted on crutches, with exaggerated double talipes varus. The deformity was congenital, and he had been subjected to surgical discipline (off and on) since infancy. The cast of the deformity is shown prior to any operative procedure: the soles are completely approximated inwards, the dorsum of the feet looking outwards. On January 27th, 1874, the left cuboid bone was excised, and is exhibited before you. The immediate result was striking; the sole of the foot could with force be placed in natural position; and on March 17th, 1874, the left foot being in good figure, and wound healed, I cut out the right cuboid bone of the same patient. He did well, and left the hospital on May 27th, 1874, a distinct plantigrade, wearing an ordinary boot, with special plantar hinge, and leg instruments to his waist. This boy, I am told, has joined a travelling show in the country, or you might have seen him promenading the purlieus of Westminster.

CASE II.—On January 26th, 1875, I excised both cuboid bones at one sitting, in a boy aged 9, for confirmed talipes equino-varus. The immediate result was not so marked as in my first case, but on strapping these two legs together with a leathern buckle, and so permitting the legs to act as an inside splint, each to each, during convalescence, the result was that both soles touched the ground. The boy left the hospital on May 26th, 1875, walking very well with the aid of an instrument. I saw this boy on March 7th, 1876; his instrument was worn out by incessant usage, his feet were slightly inverted, and he was recommended to reapply for admission, because the inner division of both plantar fasciæ was tense and cordlike.

CASE III.—T. N., aged 14, now occupies a bed in Luke Ward. On January 18th, 1875, I excised this boy's right cuboid for most persistent talipes varus. You see how complete the reduction of the deformity is; how the sole can be placed in natural position; and assuredly this last case is the best of all the three. We have used a rectangular splint, the arm set off at right angles to the fibula, and sustaining a broad strap; this mechanism has exaggerated the leverage of a mimic peroneus longus muscle. The wound has healed satisfactorily without any dressings whatsoever.

On March 28th, 1876, I removed a wedge-shaped piece from the cuboid; and acted upon the principle of obtaining bony union in place of fibrous. The boy is now under my care in the hospital, and bids fair to make a good recovery, with very marked diminution of deformity. Although I believe that all talipes cases have distinctly a pathological seat in the nervous system, I have purposely confined my remarks on this occasion to the aspect of its mechanical treatment for progressive ends.

Conclusions.—From this experience, limited as yet, we have good grounds for believing that excision of the cuboid bone is an operation to be admitted for talipes varus of a confirmed nature. The loss of this bone by no means prevents subsequent progression. The injury inflicted on the outer wall of the foot heals kindly. The subsequent treatment of a case by instrumentation is facilitated. I should not hesitate to remove the base of the outer metatarsal bone, in addition to the cuboid, if the severity of the deformity mechanically suggested such a course; I do not advocate any intrusion on the os calcis. I am told that Mr. Davies-Colley, following a similar train of reasoning, at Guy's

Hospital, has now recently operated successfully on a double club-foot. Admitting, therefore, that this treatment is still *sub judice*, I am glad to have the opportunity of ventilating these facts before a coming race of operating surgeons.

A NEW OPERATION FOR THE OBLITERATION OF DEPRESSED CICATRICES AFTER GLANDULAR ABSCESES, OR EXFOLIATION OF BONE.*

By WILLIAM ADAMS, F.R.C.S.,
Surgeon to the Great Northern Hospital, and to the National Hospital for the Paralysed and Epileptic; Consulting Surgeon to the National Orthopedic Hospital, etc.

AMONGST the operations which surgeons are not unfrequently called upon to perform, for the purpose of diminishing some of the effects of accident or disease—especially when producing any unsightly appearance—may be mentioned the operations for the removal or obliteration of deeply depressed cicatrices, such as result either from chronic glandular abscesses in the neck, or from disease of bone in any region, as represented in Fig. 3. Various operations have been performed for his purpose; but the one which I now propose to bring before the notice of this Association has not, so far as I am aware, hitherto been suggested or performed.

The operation consists—1. In subcutaneously dividing all the deep adhesions of the cicatrix by a tenotomy knife, introduced a little beyond the margin of the cicatrix, and carried down to its base; 2. In carefully and thoroughly everting the depressed cicatrix—turning it, as it were, inside out, so that the cicatricial tissue remains prominently raised; 3. In passing two hare-lip pins, or finer needles, through the base, at right angles to each other, so as to maintain the cicatrix in its everted and raised form for three days, as represented in Fig. 1; 4. In

Fig. 1.—Cicatricial Tissue of a Depressed Cicatrix everted, and afterwards retained in position by two needles.

removing the needles on the third day, and allowing the cicatricial tissue—now somewhat swollen, succulent, and infiltrated—gradually to fall down to the proper level of the surrounding skin.

CASE I. *Deeply Depressed Cicatrix on Cheek after Injury to Malar Bone by a Pistol-shot.*—The first case in which I performed this operation occurred in a young officer in the army, Lieut. B., aged 30, who, during the Indian mutiny, had received a pistol-shot in the cheek. A portion of the lower edge of the malar bone had been carried away by the ball, and a deeply depressed cicatrix remained adherent to the bone. When the muscles of the face were thrown into action, more especially in a smile or laugh, all the features seemed to be drawn towards the depressed cicatrix, which at once became painfully conspicuous.

This gentleman was very anxious to submit to any operation for the removal of the cicatrix, or calculated to diminish its unsightly appearance.

* Read in the Surgical Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.

ance; but I was at a loss to know what to suggest. I had on other occasions tried Dieffenbach's plan of subcutaneously dividing the deep adhesions of a cicatrix, and then moving it laterally to a new position, so as to alter its relations, and elongate or destroy its adhesions; but I had not found this plan very successful. I had also dissected out cicatrices and drawn the edges together, after cutting through fat and cellular tissue under the skin, on a plane parallel with its outer surface, so as to evert the edges of the skin; but this operation had failed to remove any deep depression. Many unsightly scars may be removed by this method, leaving only a linear cicatrix scarcely perceptible; but should any deep depression have existed before the operation, it will, to a greater or less extent, gradually return in a few months: the hole does not become filled up, so that this operation did not appear to be applicable to the present case.

Upon reflection, it occurred to me that if, after subcutaneously separating all the deep adhesions of the cicatrix, I could succeed in everting the cicatricial tissue, and retain it in the everted condition for a few days, the depression would become filled up by inflammatory infiltration, so that the cicatricial tissue could not again fall down below the level of the surrounding skin, thus the depression would become obliterated, and all the adhesions of the cicatrix to the bone, fascia, and muscles, such as produced the conspicuous deformity in this case, would be effectually removed. The only doubt I had in my own mind was, whether in the course of time, absorption and recontraction of the inflammatory lymph would take place, so that the depression would return to a greater or less extent. The case was, however, one of urgency and importance; I, therefore, determined to try the plan of everting the cicatrix, as above described, an operation which I performed on March 2nd, 1864. As the adhesions to the bone and the adjacent fibrous tissues were close and widespread, their separation was somewhat tedious and difficult; but I succeeded in thoroughly everting all the cicatricial tissue, and passed two needles through its base, to retain it in its everted condition. On the third day I removed the pins, when the cicatricial tissue was in a thickened and succulent condition. It showed no disposition to fall into a depression again, and, indeed, remained somewhat too prominent; but in the course of a few weeks the cicatricial tissue fell to the level of the surrounding skin, and the improvement produced by the operation was extremely satisfactory; although a portion of the malar bone having been destroyed, it could not be said that the depression was entirely obliterated. The deep adhesions of the cicatrix having been so thoroughly separated, there was no appearance of a deep hole towards which the features were drawn when the muscles of the face were thrown into action in talking or smiling.

CASE II. Deeply Depressed Cicatrix on Right Side of Neck, resulting from Chronic Glandular Abscess.—The second case which came under my observation was that of a young lady, Miss B. (Fig. 2), who was

Fig. 2.—Complete Obliteration of Depressed Cicatrix in Neck, in Case 2, ten years after the operation.

sent to me by my friend Dr. Sharpe of Norwood. On the right side of the neck, a little below and behind the angle of the jaw, was a large and deeply depressed cicatrix, which had resulted from chronic glandular abscess. The base of the cicatrix was adherent to the fascia, over the sterno-mastoid muscle, and its depressed apex slipped down a little

in front of the anterior border of this muscle. At this part, a branch of the jugular vein was in close proximity to the cicatrix. The operation was performed on April 27th, 1866, in the same manner as described in the previous case; the only difficulty arose from the close proximity of the large vein, which was so intimately involved in the adhesions that the greatest care had to be taken to avoid opening it. No such accident, however, occurred, and the operation was in every way most satisfactory. The needles were removed on the third day, and the cicatricial tissue remained raised above the level of the surrounding skin for a considerable time. For several months afterwards it remained a little thickened and prominent. Absorption, however, gradually proceeded, and the level of the surface was restored, without the least inclination to any depression recurring.

I have frequently seen this young lady since, up to the present date, more than nine years since the operation, and not only has the depressed cicatrix been entirely obliterated, as shown in Fig. 2 taken from a recent photograph, but, from the improvement in the cicatricial tissue, slight traces of it only remain.

CASE III. Deeply Depressed Cicatrix on Right Side of Neck, consequent upon Abscess with Necrosis of the Lower Jaw.—Miss S., aged 26, was sent to me also by Dr. Sharpe of Norwood, in October 1872. Her general appearance was healthy. On the right side of the neck, a little below and behind the angle of the jaw, was a deeply depressed cicatrix (shown in Fig. 3), large enough at its orifice to admit

Fig. 3.—Deeply depressed Cicatrix in Neck after Necrosis of Lower-jaw.

the end of the little finger, and its apex reaching to the surface of the jaw-bone. The deep surface of the cicatrix was adherent to the fascia, over the sterno-mastoid muscle, dragging from its anterior border. The free anterior border was formed by a prominent semilunar fold of the skin, three-fourths of an inch in length, and rendered still more prominent in some movements of the head, in consequence of the firm adhesions of the deep surface of the cicatrix. On the opposite side of the neck, a little below and behind the angle of the jaw, was also a large cicatrix, with its deep surface adherent to the fascia, over the sterno-mastoid muscle, and having at its anterior free border a semilunar fold of skin, but without any deep depression. Its general appearance was that of a large, flat, and adherent cicatrix. There were also two small cicatrices, one on each side of the chin, depressed and adherent to the bone.

Of these cicatrices she gave the following history. Six years ago, being then twenty years of age, at the time when the last molar, or wisdom-teeth, were making their appearance, considerable swelling and inflammation occurred about the angle of the jaw, on the left side. The dentist could not force the mouth open, and she was unable to take solid food for a month. At the end of this time, the dentist, with difficulty, extracted the last molar tooth on the left side in the lower jaw; and it is said that some bony enlargement of the fang of the tooth existed. Abscesses about the angle of the jaw and necrosis of the bone followed: several pieces were removed by Dr. Sharpe, and the patient took away small pieces herself. The late Mr. Partridge removed a large piece of bone. A few months later, severe inflammation, with swelling of a similar character, occurred about the angle of the jaw on the right side, and the last molar tooth was extracted with difficulty about six months after the removal of the tooth from the left side.

Necrosis of bone also occurred on the right side, and a number of small pieces continued to come away from time to time nearly up to the date of the operation. Altogether, less bone, she states, came away from the right side than from the left. Small pieces of bone also came away through two sinuses under the chin, indicated by the small cicatrices alluded to, and shown in the woodcuts. All the molar, and some other teeth on both sides of the lower jaw, had to be removed; and only six of her own teeth now remain in the lower jaw—viz., the four front teeth, and two bicuspids on the left side.

This patient was most anxious to submit to any operation for the obliteration of the large depressed cicatrix on the right side, which, from its unsightly appearance, and the popular prejudice against a supposed scrofulous constitution, had prevented her from obtaining a situation as lady's-maid. I therefore performed the same operation as that described in the previous cases, at the Great Northern Hospital. It was necessary to take great care to avoid opening one or two large veins leading to the jugular; and the separation of the cicatricial adhesions to the jaw-bone, and also the adhesions to the fascia over the sternomastoid muscle, was both tedious and difficult, a little venous hæmorrhage occurring. The cicatricial tissue, however, was thoroughly everted, and the needles introduced, as represented in Fig. 1. These were removed on the third day, when it was evident that a little supuration had occurred. A poultice was therefore applied for a week, and then wet lint at night, and a piece of soap-plaster during the day. The cicatricial tissue remained in a somewhat infiltrated and thickened condition, above the level of the surrounding skin, for three or four months; but at the end of six months it had fallen to the level of the surrounding skin, and, being of a pale colour, no longer attracted attention. At this time, she obtained a situation as lady's maid without difficulty. At the present time (August 1875), nearly three years since the operation, no trace whatever of the depression remains; the cicatricial tissue alone can be seen; but it is perfectly on a level with the surrounding skin, and has so much improved in texture and appearance, as very closely to resemble it. This is well shown in Fig. 4, from a drawing by Mr. D'Alton.*

Fig. 4.—Obliteration of depressed Cicatrix, represented in Fig. 3, three years after operation.

After the operation, the cicatricial tissue always loses its shiny, membranous, and vascular character, like that on the left side of Miss S., which has not been operated upon: it becomes thickened, and of an opaque white colour. The thickening of the cicatricial tissue results from its succulent condition during the three days it remains elevated by the pins, and the inflammatory infiltration at its base.

The permanency of the operation is placed beyond all doubt by the two last cases described—one nine and the other nearly three years since the operation; and the completeness of the obliteration of the depression and the improvement of the cicatricial tissue, has surpassed my most sanguine expectations.

* Since this paper was read, one of the small depressed cicatrices under the ramus of the jaw—viz., that on the right side—has been operated upon by the subcutaneous method, in consequence of a return of the depression after the operation of excision performed three years previously. This operation was performed on September 22nd, and to all appearance it will be perfectly successful.

THE CLIMATE OF MADEIRA.

By FREDERIC D. DYSTER, M.R.C.P., Tenby.

I SHOULD not have troubled the readers of the JOURNAL with any remarks on Dr. Theodore Williams's statements had they been made in a book; but a Lettsomian lecturer has, through the medical journals, a wide circle of readers. For one hundred people who would read a book, one thousand will glance over a lecture.

I joined issue as to the fact of the climate of Madeira being damp. There can be no better test, I imagine, than wet and dry bulb readings, such as are given in this short table for 8 A.M.

	Dry bulb.	Wet bulb.
January	59.90	55.30
February	57.50	53.30
March	61.27	55.17
April	63.15	57.78
October	68.77	63.48
November	63.93	58.33
December	60.37	53.87

In connection with this table, the average daily range may be taken:

January	6.38	October	4.14
February	7.01	November	6.30
March	5.58	December	5.56
April	5.63		

Common sense, to which Dr. Williams appeals, must decide on the dampness of Madeira.

Dr. Lund only admits that steel rusts more than iron at Madeira as well as elsewhere; he denies that leather moulds. My own experience is, that steel instruments rust far more rapidly in England than in Madeira.

In a table of 100 cases of phthisis published in White's *Madeira*, it appears that 48 were in the first stage; of these, 37 were arrested—13 for from 4 to 10 years, 2 for three years, 11 for from 18 to 20 months, 11 for from 7 to 12 months; 11 cases progressed, of which 5 died and 6 were living. Of 24 in the second stage, 5 were arrested, 19 progressed, of whom 11 died. Of 28 in the third stage, 5 were arrested for from 3 to 12 years, 5 were still living, but disease advancing, and 18 died.

Of course, the opportunities of London physicians are enormous; but they do err sometimes. Sir James Clark, who bestowed a good deal of pains on me, dissuaded me from going to Madeira, on the ground that I should die in three months; that was nearly forty years ago. When I saw him again, he hinted that I insulted medicine by my obstinate clinging to life. But, without impugning the lofty position of London physicians, I venture to say that there was no man among them then, nor is there any now, who would be injured by being placed on an equality with Dr. Renton. I knew him well, and I know that his opinion of Madeira was as favourable when he relinquished practice as when he began it. He deprecated, as any rational man would do, sending people with cavities, or lungs thoroughly impregnated with tubercle, and regarded Madeira chiefly as a means of removing adverse influences, and giving nature and medicine every chance; and the result of large experience was, that in his opinion, Madeira was, for prophylaxis, unrivalled.

THERAPEUTIC MEMORANDA.

CARBOLIC ACID SPRAY IN THROAT-AFFECTIONS.

IN no department of medical or surgical practice has the beneficial effects of the antiseptic system been more conspicuous than in the treatment of throat cases. For more than twelve months, I have exclusively treated all cases of diphtheria and of ulceration of the tonsils and fauces by means of carbolic acid spray, except that, in some of the more severe instances, the solid nitrate of silver has also been applied; the result being, that in about thirty cases there has been only one death. In relaxation of the uvula and other non-ulcerative conditions, most excellent effects have been obtained. In scarlatinal sore-throat, the results have likewise been equally satisfactory; no death having occurred on my hands during the same period, although several fatal cases are reported in the practice of practitioners who have not adopted this mode of treatment. Among the beneficial effects of this method of medication, the almost immediate removal of the sickening fœtor of breath and the speedy restoration of the power of deglutition, are the most marked. As the strength of the solution used is from 1 in 40 to 1 in 20, according to the age of the patient and the severity of the