fresh brewer's yeast—the intention of which remedy I suppose to have been that it might evolve in the bowels a quantity of fixed air, and so extricate any unnatural twist or convulsion that might have been formed. She was desired to continue it along with treacle-beer.

November 28th. There had been no vomiting since yesterday. There had been sensations of movement and peristaltic action in the bowels, and offensive flatus had been passed repeatedly. She had felt more relieved and easier than for several days, and she was even hopeful. This result she attributed to the yeast which she had taken. It was a delusion, however, created probably by that mental perverseness, not unusual, which is apt to bias sense in favour of nostrums and advice derived from unorthodox or spurious sources, for in material respects no improvement could be substantiated—indeed, on the 29th, faecal vomiting had recommenced, with much hiccough and general anxiety and distress. The abdomen had become decidedly tympanitic and painful on pressure; pulse more frequent, very feeble and compressible. Enemata of beef-tea were ordered every three hours.

November 30th. Faecal vomiting occurred; she had hiccough, eructations, great prostration; the exposed parts were cold and clammy; she was nearly pulseless; the tongue was red, and there were sordes about the gums; the mental condition was drowsy and semi-stupid. Diffusible stimuli were ordered.

December 1st. Death took place at 3 A.M. She had passed nothing from the bowels, and had vomited faecal matter to the last. The mind was conscious. The duration of the disease was fourteen days.

Necropsy Eight Hours after Death.—The body was plump, with a considerable layer of fat in the parietes of the abdomen, which was greatly distended, and had a drum-like resonance. The peritoneal covering was smooth and glistening, and disclosed no inflammatory appearances nor products. The small intestines were much distended, and concealed from view all other organs; their parietes were thin and transparent, without rupture, and not remarkably changed in colour, until approaching the right iliac region, where a livid mass of strangulated bowel indicated the site of the obstruction. The lower portion of ileum along with the caecum was removed for examination; and the cast now exhibited was taken from the preparation. A portion of the ileum, about

a. Ileum. b. Colon. c. Caecum. d. Inclosed loop of Ileum. e. Knot.

twenty-two inches in length, was found tied in a running knot about two inches above the caecum. The entanglement must have taken place in this wise: about twelve or fifteen inches of the lowest part of the ileum must have become coiled in a circular loop; the portion of the intestine directly above must have twined round from behind to the front of this coil; a knuckle or rather elbow of this portion of the bowel must then have accidentally slipped through the loop, and, having become embraced by it, on the tightening of the noose, have been caught in a slip-knot, or the same knot as that by which sailors hang their necktie. This included portion formed a sort of *cul-de-sac*, being bulged out into a globose form, with a semilunar outline, like a bag or pouch, measuring five inches by three, and marked on the surface with the depressions of six or eight sacculi or folds. It was drawn into puckers at the neck, but the little finger could be passed freely under the point of constriction; it contained fluid, and was not immoderately distended, and the colour was heightened only and not livid. It was the caecal or distal end of the ileum which constituted the knot, which was in one place of a dark brick-dust or brown colour, and in another coil of a livid purple, and in parts black, soft, and gangrenous. This was the point at which the constriction was greatest. Below the knot the distension and dark colour terminated abruptly. The caecum and colon were white and collapsed. The stomach was empty; the gall-bladder full. No disease was found elsewhere.

REMARKS.—It is the disclosure of the pathological cause that attaches to this case of ileus an interest and importance; and the value of it depends on the circumstance, that it affords a perfect example of an exceeding rare form of intestinal lesion—viz., true knotting of the bowel. Amongst the various causes of intestinal obstruction seated in the bowel itself, as distinguished from those which proceed from constrictive agencies external to the intestine, we may arrange under the one head of *volvulus*, two subdivisions—viz., (a) twists or folds of the intestine on its own axis; and (b) twists around another piece of bowel, or knots. *Volvulus*, even strictly in its generic sense, as including both these two forms of entanglement, is a comparatively unfrequent cause of ileus; and species b, or knotting of the bowel, is a lesion of the extreme degree of rarity. Dr. Hilton Fagge (*Guy's Hospital Reports*, 1868) has given the records of all the cases of intestinal obstruction which have occurred at Guy's Hospital for fifteen years, from 1854 to 1868 inclusive. The necropsies were fifty-four in number; and only seven died from twists or folds of the intestine, or *volvuli*; and I do not find one case amongst them from knotting of the bowels. The most elaborate essay on intestinal obstruction is that of Duchaussoy, published in 1860 (*Mem. de l'Académie de Médecine*, 1860, xxiv). It is founded on the results of five hundred and eighteen observations, in which the anatomical changes are accurately described. Out of these five hundred and eighteen fatal cases of ileus, twenty-one were caused by "strangulation of the intestine by the intestine", and are tabulated by him under head No. 2, under which he includes various forms of displacement and compression, as well as twists and *volvuli*. On examination of the causes of the strangulation in these twenty-one cases, as set forth by Duchaussoy, I find that thirteen were caused by twisting of the bowel on its own axis in various ways; that four were from *enroulement*, or from a piece of bowel being wrapped or rolled around another; and amongst these only one case of the bowel being knotted. The case is reported from Parker, and the facts are given in a note. Like the case just related, the entanglement was formed on the lower ileum, near the caecum, by two loops, one passing within the other, and drawn tight into a knot an inch and a half long. In one of the loops was a cherry-stone. The case was operated on by enterotomy. The knot could not be unravelled, but was cut off. The case recovered in four and a half months.

I have examined the volumes of our British medical periodicals for half a century. They furnish many reports of cases of ileus, the more numerous being cases of intussusception. Cases arising from twisting of the bowel, are related by Abercrombie, Oudney, and one or two others; but I have found no reference to any case of knotting of the bowel.

I have no remark to make about the diagnosis, as there are no means by which to distinguish this from some of the other forms of internal strangulation.

A consideration of the condition of the parts, as shown by the cast, will make it manifest that no medical remedies could have been of service; and that the only available chance, would have been enterotomy and untwisting and reducing the loop by the hand, which would have been feasible in this instance.

EXCISION OF THE ELBOW-JOINT: PRESERVATION OF EXTENSION OF THE FOREARM.

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OF the major operations, probably no one is more successful in saving life and securing a useful limb than excision of the elbow-joint. The articulation is reached, and the ends of the bones are exposed and removed with comparative ease, by a posterior longitudinal incision, with or without the addition of a short transverse cut—the latter through the skin only. By complying with the general principles of surgery applicable to resections, few important structures are injured by the knife, and as a result we have a most useful limb—one, it is said, generally oapable of performing to a large extent *all* the functions and movements of the healthy member.

It is from this latter statement that I venture to differ. Flexion shall be good, supination and pronation tolerably good; but *extension* of the forearm is generally impossible. For the latter defect, the mode of operating is responsible; but the remedy is easy, and our knowledge of anatomy will supply it. Although probably the majority of surgeons now employ the longitudinal incision, yet a certain structure to be alluded to is often severed to facilitate the operation, because its value is unknown. It is possible that the reader will be surprised when I say that the power of extension is rarely preserved; and when

it is, the means is probably not understood. On testing the movements retained by the forearm of a patient who has undergone excision of the elbow, extension appears perfect, while in reality it may be, and often is, altogether absent. A patient is desired to bend and then to straighten the forearm. He complies with the former request; but, when the limb becomes again straight, it is purely by the force of gravity: the hand and forearm fall, but are in no way extended by the triceps. The triceps muscle has no longer an attachment to the forearm. It will be remembered that the triceps muscle, while being firmly attached to the olecranon, also sends some of its tendinous fibres beyond that process to blend with the fascia of the forearm, especially with that portion of the fascia overlying the anconeus muscle; and by these fibres it is that extension may be *always* insured after excision. It is, however, probable that in exceptional instances the cut triceps acquires attachment to the end of the ulna, through the medium of fibrous tissue formed during repair. By this means, some amount of extension is secured; but it is accidental, and cannot be foretold in an individual case.

Operation.—In speaking of this operation, I must be understood to refer to that method by which the articular ends of the bones are cut away to the extent to which they are normally covered by cartilage—the one now generally adopted. I commence by a longitudinal incision at the back of the limb, in length three or four fingers' breadth both above and below and crossing the point of the olecranon. Then, if there be a wound in the adjacent integument, conveniently situated, I generally lay it open into the longitudinal incision, and am able to expose the bone-ends with greater facility. I next let the knife sink into the triceps muscle, and divide it also longitudinally into two portions, the inner one of which is the more firmly attached to the ulna, while the outer portion is continuous with the anconeus muscle, and sends some tendinous fibres to blend with the fascia of the forearm. It is these latter fibres that are to be scrupulously preserved. Thus, in conducting the early steps of the operation, two chief points have to be

remembered, instead of one (care for the ulnar nerve) as hitherto advised. The ulnar nerve, often unseen, must be lifted from its bed, and be carried over the internal condyle to a safe place; and then the outer portion of the triceps muscle, with its tendinous prolongation, the fascia of the forearm and the anconeus muscle, must be dissected up, as it were, in one piece, sufficiently to allow of its being temporarily carried out over the external condyle of the humerus. This done, the operator may proceed in the usual way; but it is not my intention to follow him further in this paper. I will add, that I have exhibited at meetings of the Hunterian and Medical Society of London three patients, adult males, who had undergone excision of the elbow-joint; and all who saw them were surprised by the degree of active extension of the forearm by the triceps muscle which each possessed.

The drawing shows the state of parts after primary excision has been performed, by the usual longitudinal incision, upon a left extremity. The tenaculum sustains the band of fibres which is to be preserved uncut.

CLINICAL MEMORANDA.

HERPES ZOSTER, GIVING RISE TO CONTAGIOUS (?) ERYSIPELAS.

AFTER reading Dr. Broadbent's interesting case of herpes frontalis giving rise to contagious erysipelas, which appeared in the JOURNAL of July 22nd, I am induced to refer to the following case, at present under my care.

A man aged 63, an out-patient in the Hulme Dispensary, suffered on June 27th from severe pain extending round the trunk on the right side. There were no abnormal physical signs, and no swelling nor redness of the skin. Temperature 98.4 deg. F. On July 4th, there was a well marked belt, composed of groups of herpetic vesicles, distributed over the whole of the right side of the thorax between the fifth and ninth ribs. These groups were perfectly defined, and appeared in several successive crops. On July 8th, erysipelatous inflammation of the affected side had appeared, which speedily spread so as to invade the left side also. At this stage, the swelling and redness were so marked and of such a diffuse character, that it would have been difficult for one seeing the patient for the first time to say what was the true nature of the case. By the 13th, these symptoms had nearly disappeared, leaving characteristic light brown scabs, some of which have now become detached, exposing small scars or pits, indicating that it was a true case of zoster, followed by erysipelas. The treatment consisted of saline purgatives, followed by thirty-minim doses of tincture of perchloride of iron, to which was afterwards added five minims of liquor arsenicalis, three times a day.

A son of my patient, who had been on a visit to his father, and had slept with him for some nights, was said to have returned home with a "red rash on his skin" exactly like his father's, which disappeared at the end of five days without medical aid. Viewed in the light of Dr. Broadbent's case, it is not improbable that it may have been an erysipelatous attack, communicated by the father to the son; but, be that as it may, it is interesting to note the occurrence of herpes zoster, a neurotic affection, with erysipelas, apparently in the relation of cause and effect.

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REMOVAL OF THE PITTING OF SMALL-POX BY ERYSIPELAS.

DURING the time that I held the post of Medical Inspector to the Privy Council, I saw at Chesterfield an elderly woman who told me that in her youth she had suffered severely from small-pox, and that for several years she had been disfigured by the pitting which resulted from it; but that, after a sharp attack of erysipelas, accompanied by much swelling of the face, the pitting had disappeared, with the exception of a few spots between the eyebrows. When one's attention was drawn to the woman's face, one could see that she had had small-pox by the few remaining marks just mentioned; but otherwise there was no indication of it, for her skin was smooth, and in an excellent condition for a person at her time of life. Have any similar cases been observed?

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ROYAL COLLEGE OF SURGEONS.—At the examinations for the diploma of membership which were commenced on Friday last, and brought to a close this day (Friday), 114 candidates offered themselves. Of these, 43 had previously obtained a recognised medical diploma; 54 were examined in medicine by the College examiners; and the remainder preferred obtaining licenses in medicine elsewhere.

TREATMENT OF DIVIDED TENDONS.—In the case of a young man who had received a wound from a billhook on the back of his hand, dividing the extensor tendon of the middle finger, Dr. Bessières had two splints made, curved on the flat: one, the palmar splint, was large enough for the hand; while the dorsal one was two finger-breadths wide. The wound was united by a suture passing through the skin only; the concave surface of the palmar splint was then applied to the hand, and the convex surface of the dorsal splint to the middle finger which was kept thus (with the aid of diachylon plaster) in a state of extension. At the end of three weeks, a little stiffness in flexion remained; and six weeks after the injury the man had complete use of his finger.—*Annales de la Société Méd.-Chir. de Liège*; and *Journal de Méd. et de Chir. Pratiques*, Février 1871.