additional, Surgeon Robert Hardie, M.B., to the *Dreadnought*, Surgeon James C. F. Whicher to the Plymouth Division of Royal Marines, and Surgeon Robt. H. Nicholson to the *Hercules* (all dated March 1st, 1889); and Surgeon George F. Collins to the *Pigeon* (dated March 12th, 1889).

VOLUNTEER CORPS.—1st Lanarkshire: William John Shaw, M.B., to be Acting Surgeon (dated March 2nd, 1889).

VOLUNTEER MEDICAL STAFF CORPS.—The Woolwich Division: Surgeon J. F. H. Bottrell resigns his commission (dated March 2nd, 1889).

Correspondence.

"Audi alteram partem."

COW-POX AND SMALL-POX.

To the Editors of THE LANCET.

SIRS,—In answer to Mr. Taylor, I have nothing more to say than repeat the assertions which I made in vindication of Jenner—that, seeing the cow-pox vesicle on the udder of the cow only, he was justified in believing that the disease was induced by human agency; he probably would not have denied, any more than I should, that the bull might be inoculated. I still say that, having read Ceely's works as well as those by more recent writers, all the arguments in my judgment are against the belief in the existence of a cattle-pox, and in favour of the cow-pox being a local contagious disease. I must also assert again that the resemblance of the pustules of vaccinia and variola is very great and too remarkable to be ignored. The growth of both takes seven or eight days; in both there is the formation of a layer of lymph from the corium, which drags down the cuticle so as to produce the characteristic umbilication, and this layer, being thrown into folds, forms the meshes or loculi known to every vaccinator. So great a resemblance is not seen between any other pustules, and therefore to my mind is one argument in favour of the relationship of the two affections.—I am, Sirs, your obedient servant,

Grosvenor-street, March 2nd, 1889.

SAMUEL WILKS.

To the Editors of THE LANCET.

SIRS,—I have read with much interest the correspondence in your columns on cow-pox and small-pox. There is one statement which I think may be misunderstood.

Dr. Wilks says "there is no such disease as cow-pox in cattle, for the males do not suffer from it, and the cows exhibit it only on the udder." Cow-pox is a vesicular disease of the teats and udder, communicable solely by contact and spreading through a herd of milch cows, being conveyed from animal to animal by the hand of the milker. This explains why we always hear of "cow-pox," and never of "cattle-pox" or "bull-pox." Jenner, who was the first to describe this disease, speaks of it as one which "our oldest farmers were not unacquainted with in their earliest days, when it appeared among their farms without any deviation from the phenomena which it now exhibits." I need not tabulate the various outbreaks referred to by Jenner, but it was very prevalent in the western counties in his day; nor need I refer to the accounts of Pearson, Aikin, Ring, and other writers of the same period.

A long interval followed in which outbreaks of cow-pox were not recorded, not because they did not exist, but because they were either concealed by the dairymen or did not call for remark. In 1838 Estlin met with the disease and raised a stock of lymph, but the idea was started that it was not the true Jennerian cow-pox, but a *spurious* cow-pox; the evidence, however, on this point was conclusive, for the lymph was widely used, producing after the early removes correct vaccine vesicles. In 1840-42 Ceely published his classical work, in which he says that cow-pox "had long been known in the Vale of Aylesbury and neighbourhood." He investigated a number of outbreaks, and has fully described the disease on the teats of the cow and the hands of the milker. It may be asked, What evidence is there that the prevalent disease described by Ceely was the same as the cow-pox of Jenner? The answer is as conclusive as before, for Ceely raised several stocks of vaccine lymph from these outbreaks.

Again a long period followed in which there was neglect to record outbreaks of cow-pox, but that it still existed is

certain from the evidence of Dr. Sanderson. Mr. (now Sir John) Simon quotes the words of Dr. Sanderson in his sixth report, 1863: "From statements made to me by lay practitioners in these districts [the whole pastoral country which, from Gloucester to Thornbury, lies between the Severn and the Cotswold Hills, having Berkeley in its centre, Jenner's birthplace] it appears that cow-pox is usually to be met with in the dairy farms in the months of April, May, and June. When a dairy is invaded, the disease not only infects the whole of the stock, but is very frequently communicated to the milkers—invariably men,—on whom the vesicles are seen on those parts of the hand which are applied to the teat in the act of milking, particularly on the grasping surface of the thumb and index finger." Some may be ready to suggest that these were only cases of a disease *like* cow-pox, but *not really true* cow-pox; but the answer is again absolutely conclusive, for, continuing the quotation, we read: "The inoculating of lymph directly from the cow has been practised in several districts with success; all who have employed such lymph agree in stating that after the first or second transmission the results obtained do not differ from those of ordinary vaccination, either in respect of the progress or character of the vesicle."

From this time onward there is no record of this much neglected disease of the cow until the outbreak in Wiltshire in 1887, which I have described elsewhere. On the Continent there have been numerous records. I will mention some. It was found in sixty-nine places in Würtemberg in 1827-37 in such a state that successful vaccination was performed. There were thirty-nine cases in Würtemberg in 1873 and twenty-eight in 1874, and in the same year in Denmark no less than 374. In Prussia cow-pox occurred in thirty-seven districts in a period of six years. In France also the disease has been fully recognised, and comparatively recently I have described in detail an outbreak at Eysines in 1881, the source of the lymph supplied to the Local Government Board; a second outbreak at Eysines in 1883, and an outbreak at Cérons in the same year.¹

But not in a single instance has any connexion been proved with small-pox; and this leads me to Dr. Wilks' statement that "Jenner was quite justified in presuming that the cows had been infected by human agency." I should be very much indebted to Dr. Wilks if he would refer to any statement in Jenner's writings which have led him to attribute this theory to Jenner. Jenner satisfied himself that cow-pox arose from "grease" in the horse; he also believed that small-pox had its origin in the "grease." As cow-pox protected against small-pox, and as there was reason to suppose, as he thought, that the two diseases had a common origin, he invented the term *variola vaccinae*, as a Latin handle to the dairyman's *cow-pox*. His nephew, Henry Jenner, believed that the cow-pox was the "small-pox in its original unadulterated state before it became contaminated by passing through the impure and scrofulous habits of human constitutions." This is obviously the reverse of the doctrine of the present day. This is not cow-pox derived from man, but small-pox derived from the cow.

All this theorising arose from the fact of the protective influence of cow-pox against small-pox, and was speedily followed by the ingenious suggestion that cow-pox on the teats of the cows was produced by milkers suffering from small-pox. This came from America; it was brought forward by Dr. Waterhouse, of Massachusetts, in a letter to Jenner. Cow-pox was never called *cow* small-pox by dairy folk, but a strong attempt was made to justify the term in the Report of the Committee on Vaccination in 1839. I must admit, with Dr. Creighton, that the natural cow-pox and the early removes in man have at certain stages a similarity to the hard sore, and the appearances in Ceely's and my own drawings are suggestive of a possible origin of the term Cow-pox or Pap-pox. That this similarity in appearance does strike those who have the care of animals is supported by the fact that an outbreak of horse-pox, the history of which I hope shortly to publish, was mistaken for a disease known as *maladie du coit* or *maladie vénérienne du cheval*. But an idea which is being circulated, that cow-pox and syphilis are one and the same disease, is a monstrous piece of misrepresentation.

The pathology of cow-pox and horse-pox involves matters of the highest importance and of the deepest interest to comparative pathologists. There ought to be no doubt about

¹ Brit. Med. Jour., July 14th, 1888.

the nature of cow-pox. If the current view of the origin of cow-pox from the hands of the variolous milkers be the true explanation, how is it that it has never been confirmed by observation? If it be inaccurate, by all means let us "nail it to the counter," or sweep it into the "pathological dustbin."

I am, Sirs, your obedient servant,
Manchester-square, Feb. 23rd, 1889. EDGAR CROOKSHANK.

THE TREATMENT OF FRACTURES OF THE ELBOW-JOINT.

To the Editors of THE LANCET.

SIRS,—At the meeting of the Clinical Society on the first evening of this session, I took the opportunity of suggesting that fractures through the elbow-joint should be treated by placing the forearm in an extended position; and I made this suggestion in consequence of having seen several instances in which the ordinary treatment by the rectangular splint had not been followed by results entirely satisfactory. As is shown by your report of the meeting in THE LANCET of Oct. 20th, 1888, in this suggestion Mr. Bryant and Mr. Heath did not concur, and Mr. Heath again, in his clinical lecture on Fractures of the Upper Extremity, published in THE LANCET of Jan. 19th, 1889, recommends that, "in all cases of fracture of the lower end of the humerus the arm should be well bent." A short time after the meeting of the Clinical Society, Sir James Paget most kindly pointed out to me a communication on this subject to the German Surgical Society, published in the Transactions of that Society,¹ by Dr. Carl Lauenstein of Hamburg. Treatment of these fractures by placing the elbow in the extended position is strongly advocated by Dr. Lauenstein. The following is a *précis* of his paper. Reference is made to the fact that in most manuals of surgery it is recommended that fractures of the lower end of the humerus should be put up with the elbow flexed. This position is also in the teaching of Professor Baum approved, whether the fracture be transverse immediately above the trochlea, T-shaped, or oblique through the condyles. Dr. Lauenstein alleges, on the other hand, that serious and irreparable damage to the joint may accrue from this treatment, and asserts that mischief may be avoided by placing the forearm in the extended position at the commencement of treatment. A description is given of the dissection of an elbow twelve months after it had been fractured and put up in the rectangular position, the patient, who had been under the care of Dr. Dencker, having died of tabes. The elbow-joint, which was supposed to have been flexed when the splints were applied, was really extended, the flexion having been actually through the line of transverse fracture, just above the trochlea. The fracture had united, so that the trochlear fragment was fixed at *right angles to the shaft of the humerus*, and, therefore, the patient had lost the power of extension movement, the joint being already fully extended, although seemingly flexed. This dissection led to the conclusion that the extended position at the commencement of treatment should replace the old position of flexion. Since he had adopted this position for these fractures Dr. Lauenstein had obtained improved results, a more free ultimate use of the extremity had been secured and the deformity either of cubitus valgus or cubitus varus had been obviated. Great weight is attached to the circumstance that even considerable displacement of the lower end of the humerus (processus cubitalis) cannot be adequately recognised in the rectangular position of the joint, more especially when effusion of blood and swelling of the soft parts exist. This is corroborated by the fact that where an oblique fracture through the inner condyle has united with an upward displacement of the condyle no effect on the shape of the arm by this displacement is seen until the forearm is extended, when a considerable degree of cubitus varus becomes at once evident. A parallel is drawn in respect of this point between cubitus varus and genu valgum; the flexed position of the knee can conceal a high degree of genu valgum, which extension betrays. One advantage of the extended position is that it enables the surgeon, by his eye, to detect any deviation from the normal axis of the limb as easily as in fracture of the shaft of a long bone, and the bones of the forearm in the extended position

furnish a lever by which the fragments of the lower end of the humerus may be manipulated and adjusted. Moreover, in the extended position the anterior portion of the capsule of the joint is held "on the stretch," and the bones of the forearm are, as far as possible, prevented from becoming entangled in the proliferating and overlapping callus. Three illustrative cases are given in which, although fairly good mobility of the elbow and usefulness of the limb existed, there was a greater or less degree of cubitus varus. The patients, adults, were a sailor, a lady, and a student, and had suffered from fracture of the elbow at the ages of five, eleven, and seven years respectively, and had been treated in the rectangular position. Dr. Lauenstein insists that surgeons ought not to rest satisfied with conserving the mobility of the joint simply, since the deformity of cubitus valgus or varus may be of ulterior prejudice to the patient. Dr. Illingworth of Accrington read a paper on Fractures into and in the vicinity of the Elbow-joint in the Section of Surgery at the Dublin meeting of the British Medical Association in 1887, and illustrated the deformity caused by rectangular splints by casts, and he has devised a splint² for the putting up of these fractures in the extended position. I regret that I was not earlier aware of the existence of this paper, but by some means or other it escaped publication until Feb. 9th of this year.

I remain, Sirs, your obedient servant,

March, 1889.

T. W. NUNN.

ROYAL COLLEGE OF SURGEONS AND ITS MEMBERS.

To the Editors of THE LANCET.

SIRS,—The Council of the Medical Defence Union has decided to support Mr. Lawson Tait in his action against the Council of the Royal College of Surgeons, and the considerations which led to this decision may be of interest to your readers.

The Medical Defence Union is not concerned with the merits of the dispute between the College and its Members; but since Mr. Tait, as a Member and Fellow of the College, has been threatened by the Council with deprivation of his Fellowship and Membership because in the course of the controversy he has followed what he conscientiously thinks to be a right and proper policy, the Council of the Medical Defence Union considers that it is a fit and proper case to be defended. The position is simply incredible that Mr. Tait or any other Member of the College should be threatened with deprivation of the privileges of Membership because he affixed his name to a document calling a meeting of the Members at the College.

We are, Sirs, yours obediently,

LESLIE PHILLIPS, M.D., } Hon. Secs. Med.

March 5th, 1889.

A. J. BATEMAN, M.B., } Defence Union.

To the Editors of THE LANCET.

SIRS,—Doubtless by this time most of the Members of the Royal College of Surgeons are acquainted with the recent action of this Association at the meeting which was convened and held at the College, but adjourned to the Venetian Chamber of the Holborn Restaurant, on Thursday, the 28th ult. This meeting, after an ineffectual application from us to the Council for permission to hold the same in the hall of the College, was summoned, on the requisition of thirty Fellows and Members, for the purpose of presenting to the whole corporation the draft of a Bill which is about to be presented to Parliament for amending the constitution of the College, and for establishing the rights of the Members which have for so many years been denied them. Those who convened this meeting of the Fellows and Members have been threatened with the penalties contained in Bye-law 17, which enables the Council to degrade and ruin any who may have taken part in summoning a meeting of one's fellow members for the purpose of discussing matters seriously affecting their interests. The Association of the Members has now taken definite action in the matter, and injunctions have been served upon the various members of the Council restraining them from closing their doors against the Fellows and Members, and prohibiting them from enforcing the penalties of Bye-law 17, which, it is alleged, on behalf of the Members, is invalid, and also from their using the College funds in

¹ Verhandlungen der Deutschen Gesellschaft für Chirurgie, April, 1888, and also printed in Von Langenbeck's Archiv, Bd. xxxvii.

² Made by Aitken and Co. of York