of that disease to man. This work, which is now before me, is an essay of ninety pages by Professor Klencke, M.D., published at Leipsic in 1846, under the title of "Ueber die Ansteckung und Verbreitung der Scrophelkrankheit bei Menschen durch den Genuss der Kuhmilch." He traces a connexion between the "scrofulous disease" which developed in a number of children and the milk with which they had been, and continued to be, supplied from certain known cows. One of the sixteen children died; the others improved greatly in health when the suspected milk was stopped in each case. Of the seven cows implicated in this undesigned experiment, three were followed to the slaughter-house, and were found to be tuberculous in various organs and parts; a fourth, which was killed and dissected carefully under Professor Klencke's direction, was also found full of tubercle; in a fifth the nodular masses could be felt during life through the skin of the abdomen; the remaining two were young and healthy, and are introduced for contrast. The most general symptom was a state of passive congestion in the bloodvessels of various regions.

With reference to the children, it was somehow possible to ascertain which particular cow had supplied the milk for each of them; so that five of the seven cows and the sixteen children are brought into relation. The symptoms which arose in the children after they began to be fed with the cow's milk were those of scrofula (glandular swellings &c.), and sometimes of rickets. Professor Klencke endeavours to establish the link of cause and effect by a strict handling of facts precisely ascertained. Even if the ailments of the children were not in every case scrofulous, there was reason to think that the cow's milk had caused them. Besides the cases (in cows and children), the essay contains many sensible remarks on the artificial feeding and forced milking of cows, especially in town dairies, as well as a number of chemical and physiological observations on the abnormal nutrition and milk-secretion of animals so situated.

In my book on "Bovine Tuberculosis in Man" (1881) I claimed that the twelve cases there given were the first of the kind recorded as such, and, in so far as post-mortem verification is essential, I believe they really were the first. But from what I have said above it will be seen that Professor Klencke had endeavoured to establish the link of connexion in another way as early as 1846. Between that date and 1869, when Gerlach of Hanover took it up, the subject would seem to have dropped. Gerlach was the first to show that bovine tubercle could be communicated experimentally by inoculation of the morbid products, or by feeding with the milk. He was not satisfied with having set up a tuberculous disease generally; he insisted upon the distinctive characters of bovine tubercle, and upon the morphological identity between these characteristic products of disease in the cow and the formations of the serous membranes and viscera in the animals experimented upon. He thus combined morphological and experimental evidence. Klencke's work illustrated the third, and perhaps the most ambiguous, kind of evidence—namely, the tracing of disease from a particular cow to a particular child. It is not likely that the doctrine of communicability to man will be generally accepted by the public, or even by the profession, until the evidence procured on these several lines of research, together with the obvious facts of malnutrition in cows closely confined and over-milked, is worked up into the synthetic form which proof must always take if it is to become an effective and familiar conviction. Doubtless the Congress on Tubercle and other Diseases of Domestic Animals which is to be held at Paris in the ensuing summer, under the presidency of M. Chauveau, will help to give currency to that inevitable belief.

In reading the history one finds such suggestive coincidences as the following: In 1817, Dupuy, a Paris veterinarian, described the peculiar pendulous tubercular masses on the serous membranes of the cow, and traced them to a "hydatid" origin. Two years after, Dr. Baron, of Gloucester, who is best known as the biographer of Edward Jenner, published a memoir on a series of cases of serous membrane tuberculosis in man, for which he also asserted a "hydatid" origin, having arrived at that conclusion from their peculiar pendulous form, just as Dupuy had done for bovine tubercle itself. At that time there was no suspicion of any connexion of cause and effect between the tubercular disease of the cow and any variety of tubercle in man.

I am, Sirs, your obedient servant,

March 5th, 1888.

C. CREIGHTON.

SCARLATINA AND THE COW.

To the Editors of THE LANCET.

SIRS,—At the fortnightly meeting of the Medical Society of Cannes held on March 3rd, an interesting communication was made regarding the connexion between scarlatina and an eruptive disease observed on the udders of certain cows located in one of the dairies of the place.

In December last a committee was appointed by the Medical Society to investigate and report upon the subject of the milk supply of Cannes—i.e., the condition of the dairies, the health of the cows, the storage of milk, &c. During their investigations the committee came upon a dairy where all the cows were suffering from a diseased condition of the udders. They saw no ulceration, but the teats were covered with large scabs, and the proprietor of the dairy stated that the scabs had been preceded by a vesiculo-pustular eruption, which broke whilst milking, moistening the hands of the milkers. In one case only did the committee see an unbroken pustule. At the time these investigations were being carried on (January, 1888) a few cases of scarlatina had shown themselves among the visitors at one of the hotels and in a villa situated close by, and the committee ascertained that these individuals had partaken of milk supplied from these diseased cows. In one family four persons used this milk; two who took it after boiling escaped, whilst the other two members of the same family who used it unboiled contracted the disease. The hotel in which these cases occurred was supplied at the time with milk from another dairy, and no cases of scarlatina showed themselves either then or afterwards among the numerous visitors and servants. Only those who had purchased on their own account milk from the diseased cows contracted the disease. All the cases of scarlatina were at once removed from the hotel and strictly isolated. The disease did not spread in any way either among the visitors or the inhabitants of Cannes. The outbreak was entirely local and limited, as far as could be ascertained, to those who used the contaminated milk; at least, if other cases occurred, they must have been very few, as at the meeting of the Medical Society held to-day none of the many practitioners there present were aware of the existence of other cases. There was no scarlatina among the dairy people either then or previously; no sores formed on the hands of the milkers, who continued to enjoy good health. Cannes, I regret to say, possesses no health officer, and the inquiries having been made by very able, but just then busily engaged, private practitioners, they could not be carried on further. Yet, incomplete as the cases may be, it is either a strange coincidence or another instance illustrating the power of certain eruptive diseases situated on the cow's udder to provoke scarlatina in man.

I remain, Sirs, yours truly,

Cannes, March 3rd, 1888.

H. BLANC, M.D., F.R.C.P.

IMMEDIATE REDUCTION AFTER TENOTOMY.

To the Editors of THE LANCET.

SIRS,—In answer to Mr. Parker's letter in THE LANCET of March 10th, I wish to say that a considerable time is necessary to estimate the exact value of such a procedure as *immediate reduction after tenotomy*. Every cautious surgeon who ventures to depart from the methods which he has been taught to consider correct will, I should think, abstain from advocating such departure until he is able to do so with certainty as to the results. When I published the "Surgery of Deformities" in 1882, I had only operated in this manner on a very few cases, and in these cases the contractions were very limited. Although, as time went on, these operations emboldened me to adopt the same course in the more severe deformities, I did not at the time of publication feel justified in advising other than the plan laid down in works upon orthopædic surgery, and taught by the majority of orthopædic surgeons.

Mr. Parker remarks that "he cannot accept immediate reduction as possible on anatomical grounds, &c., unless" (if I understand him correctly) "multiple tenotomy and syndesmotomy precede it." Mr. Parker apparently means that when many tendons and other structures are involved, as in severe cases of talipes varus, it may be impracticable to restore the foot at once to a correct position. Of course

this is so; but Mr. Parker ought to know that what is meant by "immediate reduction" is reduction *as complete as possible* at the time of operation in contradistinction to the old method of allowing the foot to remain in the deformed, or in nearly the deformed, position for some days, and then applying gradual extension. While such partial "immediate reduction" is all that can be attained in many cases, I cannot admit that it is so always; for in other instances, as in most cases of talipes equinus, the foot may be placed at once in a normal position. Mr. Parker seems, however, to ignore the possibility of deformity depending upon the contraction of one tendon alone. I cannot quite understand the object of his letter; it is evidently written without much care, as he has not quoted my book correctly. If he had read the context of the first quotation which he makes, he would have seen that the procedure recommended was in reference to treatment by "assiduous bandaging to a splint without tenotomy," and not treatment after operation. The second quotation, however, rightly applies to the subject; but I have explained above (an explanation which can hardly be necessary to the majority of your readers) why I did not advocate the plan of "immediate reduction" when I published my book, "The Surgery of Deformities."

I am, Sirs, yours truly,
Queen Anne-street, W., March 12th, 1888. NOBLE SMITH.

METROPOLITAN PROVIDENT DISPENSARIES.

To the Editors of THE LANCET.

SIRS,—The following resolutions have been agreed to by a committee of medical men appointed to consider the objections to be taken to the scheme of the above Association, and I have been instructed to invite the attention of members of the profession to the subject, and to obtain the signatures of such as are disposed to acquiesce in the views expressed, or to offer suggestions in the matter:—

"Resolved that—1. The resolutions adopted at a public meeting held at the Society of Arts in December, 1887, cannot be accepted as embodying the opinion of the medical profession. 2. That objections to the scheme of the Metropolitan Provident Medical Association are based on the following grounds: (a) Provision for medical attendance on those unable to pay the fees required in ordinary practice is already amply provided for by existing charitable institutions or by the individual or collective efforts of general practitioners. (b) Measures hitherto taken by the lay public to establish so-called Provident Medical Institutions have invariably resulted in introducing a system of unhealthy competition, detrimental alike to the best interests of the profession and subversive of its influence with the general public. (c) The wholesale distribution of handbills by the organisers of any scheme of medical relief is to be condemned as much as similar action on the part of individual members of the profession. 3. The committee would further suggest that, in order to carry out the principles embodied in these resolutions, it is desirable, in order to preserve the rights of general practitioners, that an organisation be formed for that purpose."

It will be observed that it is proposed to form a definite organisation to oppose this scheme, and the following members of the committee or myself will be glad to receive the names of all members of the profession who are willing to co-operate: Dr. Cohen, 195, Sutherland-avenue, Maida-vale, W.; Dr. Maunsell, St. Mark's House, Bolingbroke-road, S.W.; Dr. Paramore, 2, Gordon-square, W.C.; Mr. Kisch, Abingdon House, Sutherland-avenue, Maida-vale, W.; Dr. Sargent, High-street, Shadwell; Mr. Wainwright, 230, Brunswick-road, Poplar; Mr. Simson (treasurer), 110, Lavender-hill, S.W.

I remain, Sirs, yours faithfully,

F. H. CORBYN, Hon. Sec.

18, Abercorn-place, St. John's Wood, March, 1888.

P.S.—The resolution passed at the Society of Arts was in favour of establishing Metropolitan Provident Dispensaries all over London.

MANCHESTER.

(From our own Correspondent.)

FEVER HOSPITALS.

THE opposition which was made on various grounds to the building of a new fever hospital by the Salford Corporation the Eccles New-road appears to have been overcome. The Local Government Board have refused to interfere in the matter on the ground of having no legal *locus standi*, and an exhaustive report on the whole question has been published by the officer of health to the borough, in which he deals *seriatim* with the several specific objections raised. He asserts that no harm has been shown to arise from the proximity of a fever hospital to dwelling-houses, and quotes from the experience of other hospitals situated in populous districts. But in none of these is small-pox treated, a disease which the Salford authorities may find themselves at any time called upon to make provision for, the arrangements now existing for the treatment of these cases in the hospital belonging to the Royal Infirmary being only of a temporary character, and liable at any time to be terminated by the latter body. Another objection, the proximity of the proposed site to the borough sewage works, he considers in some respects an advantage, as affording facilities for the immediate and separate treatment of the hospital sewage, without its passing at all into the public sewers. From information obtained from some towns where similar works are in operation, he states that no harm could arise to the patients, and that any nuisance that may possibly arise is directly controllable by the Corporation itself. This evidence, however, hardly agrees with that given by Dr. Carpenter, and quoted in "Wilson's Hygiene," as to outbreaks of diarrhoea at Christ Church Workhouse caused by emanations given off from sewage works at Spitalfields. Without in the least degree depreciating Dr. Tatham's able report, it would no doubt have given more satisfaction, especially to the opponents of the site, had some independent opinion been obtained from an expert or sanitarian having special knowledge of the subject. Some attention has recently been directed to the question of fever hospital accommodation in our own city. As many of your readers know, Manchester as a corporation has no hospital of its own, but contracts with the Royal Infirmary to treat its cases of infectious disease. Serious allegations have lately been made in the public press that patients suffering from typhoid cannot obtain admission to hospital without payment, and as a consequence the very class who most need careful treatment and skilled nursing throughout a dangerous and tedious illness are left at their own homes, too often overcrowded, with diminished chances of recovery, and to be a possible source of danger to others. That this should be so reflects no credit upon either our largest and wealthiest medical charity or the health authorities of our city, and it is probable that something more may yet be heard of this subject.

OWENS COLLEGE.

The Court of Governors, at their last meeting, re-elected the Duke of Devonshire as president of the College for the ensuing five years. In 1883 the Court made certain regulations for the admission of women as students of the College, experimentally, for a term of five years. That period having now elapsed, and the experiment having proved satisfactory and successful, permanent arrangements have been made for continuing the same on a more liberal basis even than heretofore. At the same meeting it was stated that the extensive building operations of the last few years, by which class rooms and laboratories for zoology, botany, geology, and mineralogy, &c., had been provided, had rendered it incumbent to raise additional funds, and an urgent appeal is put forth for £45,000 to free them of present debt.

SMALL-POX.

Cases of small-pox continue to arise, but as yet not to an extent to cause any alarm, though, owing to the epidemic at Sheffield, much more is heard about them than would otherwise be the case. Since the beginning of the year there have been nearly 100 cases in Manchester and Salford, and about a dozen more in the surrounding townships. It is reassuring to know that our health authorities are fully alive to their responsibilities in regard to this disease.

THE annual meeting of the governors of the Royal London Ophthalmic Hospital was held on the 13th inst., when satisfactory general, financial, and medical reports were presented and adopted.