the number in the previous week, and included 6 in Edinburgh, 5 in Glasgow, and 2 in Leith. The deaths from diphtheria further rose from 7 and 9 in the previous two weeks to 11, of which 5 occurred in Glasgow, 2 in Leith, and 2 in Paisley. The 10 deaths referred to "fever," of which 7 occurred in Glasgow, showed a marked increase upon the low numbers in recent weeks. Three of the 5 fatal cases of scarlet fever and 3 of the 7 deaths from diarrhoea were returned in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 135 and 153 in the preceding two weeks, further rose last week to 159, and exceeded the number returned in the corresponding week of last year by 24. The causes of 71, or nearly 12 per cent., of the deaths registered in the eight towns during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 25.9, 28.4, and 34.0 per 1000 in the preceding three weeks, declined again to 33.1 in the week ending March 10th. During the first two weeks of the current quarter the death-rate in the city averaged 32.1 per 1000, the mean rate during the same period being 22.6 in London and in Edinburgh. The 224 deaths in Dublin showed a decline of 6 from the number in the previous week; they included 7 which were referred to whooping-cough, 5 to scarlet fever, 4 to measles, 4 to diarrhoea, 3 to "fever," 2 to diphtheria, and not one to small-pox. Thus the deaths from these principal zymotic diseases, which had been 17 and 25 in the preceding two weeks, were again 25 last week; they were equal to an annual rate of 3.7 per 1000, the rate from the same diseases being 2.5 in London and 2.6 in Edinburgh. The fatal cases of whooping-cough, which had been 4 and 6 in the previous two weeks, further rose last week to 7; while the deaths from "fever" showed a decline of 2, and those from diarrhoea an increase of 2, compared with the numbers in the previous week. The deaths both of infants and of elderly persons showed an increase upon the numbers returned in the previous week. Four inquest cases and 5 deaths from violence were registered; and 62, or more than a quarter, of the deaths occurred in public institutions. The causes of 30, or nearly 14 per cent., of the deaths in the city were not certified.

HEALTH CONDITION OF FRENCH TOWNS.

The recent issue of the December number of the *Statistique Sanitaire des Villes de France* affords the means for summarising the facts for the twelve months of last year, and for calculating the mortality statistics for the fifty-one French towns which had at the time of the last census in May, 1886, a population exceeding 30,000 persons. The return in question is a valuable source of statistics, but it has deficiencies which detract somewhat from its value as a means of educating public opinion in France in the direction of sanitary progress, which the figures about to be referred to show to be of such urgent necessity. The return gives no calculated rates to population, and the bare figures without relation to population are useless for comparative purposes, or as a test of sanitary condition; moreover, no figures are given for the aggregate of the fifty-one towns. On account of these defects, the calculated rates for the entire year involved much labour, which should be as far as possible obviated, if statistical returns are intended to serve a useful purpose. It should be stated, moreover, that the calculated rates for 1887, to be hereinafter quoted, are based on the census numbers for 1886; but this need not seriously detract from their value for comparative purposes, as the rate of increase of population in French towns is not, generally speaking, very great. The aggregate population of the fifty-one French towns dealt with in this return was rather more than six millions and a quarter, among which population the birth-rate in 1887 was 25.9 and the death-rate 25.3 per 1000. The excess of births over deaths in these towns during the year was only 3348, whereas at the rate which prevailed in the English towns it would have exceeded 70,000. The birth-rate was 6.9 per 1000 below the rate in the English towns; it exceeded 29 per 1000 in very few towns, among which may be mentioned Marseilles 29.5, Lille 32.4, Havre 32.5, and Roubaix 37.3. In a large number of towns not only was the birth-rate exceptionally low, but it was exceeded by the death-rate; among the larger of these may be mentioned Lyons 21.0, Bordeaux 22.4, Toulouse 19.3, and Nantes 21.5. With regard to the

mean death-rate in the fifty-one towns, we have stated that it was 25.3 in 1887; this rate exceeded the mean rate in the twenty-eight large English towns by 4.5 per 1000, and implied the deaths of more than 28,000 persons in the French towns, who would have survived if the death-rate had not exceeded that which prevailed in the English towns. In the ten largest towns, having populations exceeding 100,000, and including Paris, the mean death-rate was 24.7; in ten towns with populations ranging from 65,000 to 100,000 the mean rate was 27.1; in ten towns having populations between 50,000 and 65,000 the rate was 25.3; in ten towns having populations between 40,000 and 50,000 the rate was 26.8; and in the eleven smallest towns in the list with populations ranging between 30,000 and 40,000 the rate was also 26.8. It appears therefore that, generally speaking, the largest excess of death-rate, and by fair inference the greatest sanitary deficiencies, exist in the smaller of the French towns. Among the eleven largest French towns, each having a population exceeding 100,000, the death-rates last year ranged in order from the lowest, were Lyons 22.2, Roubaix 22.6, Paris 23.4, St. Etienne, 24.8, Bordeaux 24.9, Lille and Nantes each 25.1, Toulouse 26.5, Marseilles 29.2, Havre 32.1, and Rouen 33.7. Bearing in mind the still higher mean death-rates in some of the groups of smaller towns above noted, it is certain that even the high rates in Havre and Rouen (due in great measure to exceptionally severe epidemics of typhoid fever) were much exceeded in many of the towns with populations ranging between 30,000 and 100,000. The return which supplied the facts from which the above-mentioned rates were calculated also contains much valuable information concerning the ages at death and the causes of death in these French towns, to which we may on occasion refer.

Correspondence.

"Audi alteram partem."

THE PRESIDENCY OF THE ROYAL COLLEGE OF PHYSICIANS.

To the Editors of THE LANCET.

SIRS,—In the last number of your journal you informed your readers, in a leading article, what you considered were my claims and qualifications for the honourable and distinguished position of President of the Royal College of Physicians. I ought, perhaps, to feel grateful for the very flattering terms in which those so-called claims were put forward; but, when it is remembered that, by the regulations of the College, the choice of a President is to be made "without any formal proposal or nomination," I cannot but think that more respect would have been shown to the College, and more consideration for myself, if all reference to the subject had been avoided. You further state "there are many Fellows, doubtless, who would wish to know if I would consent to serve the office (of President) for the ensuing year." Permit me, therefore, to request that you will be so good as to inform them that I should positively but most respectfully decline to accept the office. I am deeply sensible of the kind feelings which have been manifested towards me by the Fellows of the College on many occasions, and I am aware that it must seem ungracious, and certainly premature, to decline an office to which I have not been elected; but the false position in which I have been placed has rendered such a declaration on my part necessary.

Let me add that my resolution is the result of mature deliberation, and of a firm conviction that the office of President should be filled by someone who is not so far advanced in years as—Your obedient servant,

March 12th, 1888.

HENRY A. PITMAN.

EARLY WRITINGS ON BOVINE TUBERCLE.

To the Editors of THE LANCET.

SIRS,—The letters addressed to you recently by veterinarians, in order to show how much their profession has done in the study of one of its own subjects—namely, bovine tubercle—have suggested to me to send you a brief account of the earliest publication on the communicability

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