

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6238 births and 4279 deaths were registered during the week ending January 7th. The annual rate of mortality in these towns, which had been 22.1, 20.8, and 24.8 per 1000 in the preceding three weeks, declined again last week to 23.8. During the thirteen weeks of last quarter the death-rate in these towns averaged 21.1 per 1000, and was 1.1 below the mean rate in the corresponding periods of the ten years 1877-86. The lowest rates in these towns last week were 14.8 in Brighton, 17.7 in Bradford, 18.8 in Huddersfield, and 19.5 in Birmingham. The rates in the other towns ranged upwards to 29.3 in Preston, 31.9 in Wolverhampton, 35.6 in Manchester, and 40.3 in Plymouth. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 455 and 503 in the previous two weeks, declined again last week to 493; they included 183 from whooping-cough, 90 from scarlet fever, 67 from measles, 53 from "fever" (principally enteric), 42 from diphtheria, 30 from small-pox, and 28 from diarrhoea. The lowest death-rates from these zymotic diseases were recorded last week in Portsmouth and Bristol, and the highest rates in Derby, Bolton, and Sheffield. The greatest mortality from whooping-cough occurred in Salford, Leicester, Norwich, and Wolverhampton; from scarlet fever in Preston, Sheffield, Huddersfield, and Blackburn; and from measles in Salford, Birmingham, Nottingham, and Bolton. The deaths from diphtheria in the twenty-eight towns included 28 in London, 2 in Birmingham, 2 in Derby, 2 in Leeds, and 2 in Cardiff. Small-pox caused 27 deaths in Sheffield, 2 in Leeds, and 1 in Bristol, but not one in London or in any of the twenty-four other large provincial towns. The Metropolitan Asylum hospitals contained only 8 small-pox patients on Saturday last, against 5 and 7 on the preceding two Saturdays. The number of scarlet fever patients in the Metropolitan Asylum hospitals and in the London Fever Hospital at the end of last week was 2098, against numbers declining steadily in the four preceding weeks from 2764 to 2184; the 160 cases admitted to those hospitals showed, however, an increase upon the number in the previous week. The deaths referred to diseases of the respiratory organs in London, which had been 357 and 442 in the preceding two weeks, further rose last week to 502, but were 54 below the corrected average. The causes of 96, or 2.2 per cent., of the 4279 deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leeds, Plymouth, Wolverhampton, Birkenhead, and Cardiff; and the largest proportions of uncertified deaths were recorded in Halifax, Sheffield, Oldham, and Blackburn.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 22.4 and 24.3 per 1000 in the preceding two weeks, further rose to 27.1 in the week ending Jan. 7th; this rate exceeded by 3.3 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 20.3 in Leith and 23.1 in Aberdeen, to 29.5 and 30.3 in Paisley and Edinburgh. The 685 deaths in the eight towns showed a further increase of 78 upon the numbers returned in recent weeks, and included 30 which were referred to whooping-cough, 23 to measles, 18 to diarrhoea, 7 to "fever" (typhus, enteric, or simple), 7 to scarlet fever, 4 to diphtheria, and 2 to small-pox; in all, 91 deaths resulted from these principal zymotic diseases, against 80 and 74 in the preceding two weeks. These 91 deaths were equal to an annual rate of 3.6 per 1000, which exceeded by 0.9 the mean rate last week from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had declined in the preceding four weeks from 29 to 24, rose again last week to 30, of which 15 occurred in Glasgow, 3 in Dundee, 3 in Aberdeen, 3 in Greenock, and 3 in Leith. The 23 deaths from measles also showed a marked increase upon the numbers in recent weeks, and included 13 in Edinburgh, 5 in Dundee, and 4 in Leith. A corresponding increase also occurred in the deaths attributed to diarrhoea. The deaths referred to "fever," which had been 17 and 5 in the previous two weeks, were 7 last week, of which 2 occurred in Glasgow, 2 in Dundee, and 2 in Leith. The 7 fatal cases of scarlet fever corre-

sponded with the number in the previous week, and included 2 in Glasgow, 2 in Dundee, and 2 in Perth. The 4 deaths from diphtheria showed a decline of 9 from the number in the previous week, 2 being returned in Edinburgh. The 2 deaths classed to small-pox were said to be fatal cases of chicken-pox, and occurred in Glasgow and in Dundee. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 132 and 184 in the preceding two weeks, declined again last week to 163, and were 50 below the number returned in the corresponding week of last year. The causes of 87, or nearly 13 per cent., of the deaths registered during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 29.4 and 36.2 in the preceding two weeks, further rose to 38.6 in the week ending January 7th. During the thirteen weeks of last quarter the death-rate in the city averaged 31.9 per 1000, the mean rate during the same period being but 20.0 in London and in Edinburgh. The 261 deaths in Dublin last week showed a further increase of 16 upon the numbers in the previous two weeks; they included 9 which were referred to scarlet fever, 9 to whooping-cough, 7 to "fever" (typhus, enteric, or simple), 6 from diarrhoea, 2 from measles, and not one from small-pox or diphtheria. Thus the deaths referred to the principal zymotic diseases, which had been 28 and 16 in the preceding two weeks, rose last week to 33; they were equal to an annual rate of 4.9 per 1000, the rate from the same diseases being 3.1 in London and 4.2 in Edinburgh. The deaths referred to scarlet fever, whooping-cough, "fever," and diarrhoea considerably exceeded the numbers respectively registered in the previous week. The deaths both of infants and of elderly persons also showed a considerable increase. Eleven inquest cases and 9 deaths from violence were registered within the city; and 61, or nearly a fourth, of the deaths occurred in public institutions. The causes of 34, or 13 per cent., of the deaths in the city during the week were not registered.

Correspondence.

"Audi alteram partem."

COW-POX AND SCARLATINA.

To the Editors of THE LANCET.

SIRS,—The Hendon cow bids fair to become as famous in the history of pathology as that cow of Jenner's whose horns are enshrined in the College of Physicians. Indeed, horns other than bovine suggest themselves to an impartial reader of the discussion at the Pathological Society; and, if no point of reconciliation can be found, it would appear possible that one or other of the distinguished combatants therein must suffer transfixion upon the cornual appendix which appertains to a disjunctive dilemma.

It is most important to keep the issues clearly before the mind. Dr. Klein maintains that "a particular disease" of the cow will give man scarlatina, that a special micrococcus is associated with this disease, and that the same organism is recoverable from the blood of scarlatinal patients. Professor Crookshank, on the other hand, has investigated a disease which certainly closely resembled that of the Hendon cows; he has isolated therefrom a micrococcus which "exactly corresponds with the description and figures given by Dr. Klein of the so-called *micrococcus scarlatinae*," and "is convinced that the disease of the teats of the cattle is the true Jennerian cow-pox."

To those who have received with impartial judgment the evidence of these highly qualified investigators, and who agree with Dr. Klein in regarding his premises as amounting almost to mathematical precision, and, on the other hand, are not inclined to regard Professor Crookshank's argument as so "flimsy" and fallacious as the medical officer of the Local Government Board would have us believe, there is yet a *via media* open. There is every possibility—indeed, from our knowledge of the authorities themselves, there is every probability—that they are both correct in their views. Accepting for a moment such a contention, what will be the necessary implication? It will be this, that cow-poxed milk may give man scarlatina. Such a conclusion may appear

startling in its novelty, in the pathological questions it raises, and in the affinities of morbid conditions it suggests; at the same time it is worthy of study. There are not wanting facts concerning the evolution of zymotic poisons which warrant its consideration, and it is irresistibly forced upon the mind of an impartial reader of the reports of two investigators so exceptionally qualified in every respect.

The nature of cow-pox, its evolution, and affinities have occupied my best attention for many years, and I may perhaps be permitted to quote from my notes a case which bears upon the subject under discussion.

On May 20th, 1880, I saw a man, William D—, aged forty-five, who complained of some spots on his fingers which appeared five days previously; also of feeling feverish and unwell. He was a healthy-looking man, a milkman, or rather a dairyman, by occupation. He complained of having pain in the affected fingers, also in his arms, axillæ, and at the back of his head and between his shoulders; tongue furred and temperature elevated. On the first, second, and third fingers of the right hand, and on the second and third fingers and upon the palm of the left hand, were several perfectly circular dull bluish-white vesicles—ten or twelve in all—with distinct central umbilication and very small areolæ. The whole of the hands was swollen and the axillary glands enlarged. He did not remember having had any cracks or fissures on his hands or fingers. He had been engaged in milking the cows at a certain dairy in Islington until the previous day, when he was unable to continue on account of the pain. He had been vaccinated previously on both arms successfully, and in several places. Under observation the vesicles pustulated, scabbed, and cicatrised after the fashion of ordinary vaccination.

The same afternoon I visited the dairy in question, where I found about forty-five cows closely packed in a stuffy, ill-ventilated, and filthy shed. About ten of the whole number were affected with sores on the teats; these I examined with great care. Those in the early stage presented small indurated papules; I could find none in a truly vesicular stage, but many had passed into unhealthy-looking ulcers, either freely discharging a thin colourless lymph, or covered with copious, almost rupial, crusts. The affected cows were restless and irritable; their coats "stared"; but their milk was normal in quantity, with a good "head," and was sold over the counter with the rest. I was informed by the superintendent that some years ago the disease, which he called "cow-pox," had been very prevalent, but of late years instances of it had been both few and far between. The point which struck me more than any other was the entire absence of anything that could be called unequivocally specific or characteristic about the eruption upon the cows' teats. Dr. Klein's and Professor Crookshank's descriptions of the Hendon and Wiltshire cow diseases would apply to the cases I saw in 1880, and of which I have sketches before me, made at the time. I also have before me Mr. Ceely's beautiful drawings, and his Plate 2 would represent the Islington cow disease very faithfully. The vesicles on the dairyman's hands were just like the drawings in Jenner's "Inquiry," only rather smaller.

Turning now to the Registrar-General's returns for London in the same year 1880, I find that scarlatina was unusually prevalent in London that year, as measured by mortality; that the northern districts suffered severely; that in Islington and Hackney, the parts probably within the radius of supply of the dairy in question, there were 366 deaths from scarlet fever out of a population (1871) of 263,882, while in all the other northern districts together, with a population of 487,847, there were only 277 scarlatina deaths. I do not presume to base any argument upon these figures. The relationship may be as coincidental as suggestive, and requires comparison with other years, for which I have not the statistics at hand.

I am, Sirs, yours faithfully,

W. J. COLLINS, M.D., M.S., B.Sc. Lond.

Albert-terrace, Regent's-park, Dec. 26th, 1887.

THE TREATMENT OF CANCER.

To the Editors of THE LANCET.

SIRS,—During my connexion with the Birmingham and Midland Eye Hospital and the General Dispensary, as one of the honorary staff of those institutions, as well as in private practice, I have met with a great number of cases of malignant disease, in which not only was the pain

greatly relieved by local depletion, but by it also the progress of the malady was arrested to a large extent. Cancer being especially a blood disease, I can scarcely imagine any treatment more likely to cure it, if any treatment can do so, than the removal of the blood which contains the germs of the disease, combined with the substitution by transfusion of other and more pure blood taken from younger and more healthy subjects. I have many times afforded such patients great relief from pain by the local abstraction of blood with the artificial leech, though at present I have not gone so far as to adopt transfusion with the view of producing a permanent cure of the disease; but I should be very glad if some of my professional brethren, especially those connected with hospitals for the cure of this hitherto fatal disease, would put the practice more completely to the test. A few weeks ago, noticing the very unfavourable reports of the condition of the Crown Prince of Germany, and that excision of the larynx was proposed, I took the liberty through His Imperial Highness's chamberlain, Count Radolinsky, of suggesting my plan of treatment, and I was gratified about a fortnight ago at noticing that blood had been removed from the neck by the cupping process (artificial leech); and I was still more pleased to hear how much the local congestion had diminished, and how greatly the comfort of the illustrious patient had been increased. I further suggested that the local depletion should be renewed from time to time, subject to the discretion of the distinguished physicians who were in attendance on His Imperial Highness; but should the loss of blood tell on the patient's health and strength, I suggested that transfusion should then be resorted to.

If I might be permitted, I would say that the practice both of general and local bloodletting has gone out of use to an unwarrantable extent, and if the practice were in some degree restored, especially in the earlier stage of inflammatory diseases, many valuable lives would be saved. Personally I have great reason to speak in favour of bloodletting, since when I was only seven years old, and my case being supposed to be nearly a hopeless one (convulsions), under the advice of one of the most eminent physicians Birmingham ever had—Dr. D'Lys—I was bled in the arm by the late James Russell, and by that my life was probably saved.

Being a member of the Midland Medical Society, I had the privilege some few years ago of giving a prize of five guineas for the best essay on general and local bloodletting, and many useful and valuable essays were written on the subject. Hydrophobia and other diseases of the septic class, if not too long delayed, I feel convinced, might be treated on the same plan with great advantage; and it is quite possible, I think, if M. Pasteur were to take it up and act upon it, he would find it far more useful in many cases than inoculation, which is always attended with hazardous and sometimes fatal results.

I think it is highly important, as I said before, that the plan should be more extensively put to the test, and I should be glad if some of your correspondents, especially those practitioners who are connected with cancer hospitals, would thoroughly test the plan and give your readers the benefit of their experience.

I am, Sirs, yours &c.,

EDWIN CHESHIRE, F.R.C.S.,

Consulting Surgeon to the Birmingham and
Birmingham, Dec. 31st, 1887. Midland Eye Hospital.

THE HÆMORRHAGIC TENDENCY IN MYXCEDEMA.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Dec. 31st Dr. Shelswell draws attention to a hæmorrhagic tendency in myxœdema, and in support of this fact he quotes two cases under his own observation, besides that of Dr. Savill and thirteen other reported cases, "where hæmorrhage of one form or another had occurred, but had not, as a rule, attracted any particular attention as bearing on the disease." I am able to supplement these cases by three others at present under my notice, in all of which there is a hæmorrhagic tendency present. Of the three cases, one is that of a man in whom after the extraction of some loose teeth there followed a recurring hæmorrhage, which lasted three days. Again, pricking his finger, in order to make a microscopic examination of the blood, was sufficient to cause bleeding for nearly a day. In