

distinguish the bolt heads on a ship's bottom with perfect ease.

Messrs. Ihlee and Horne of Aldermanbury, the agents for the patent, likewise showed a luminous inscription forty feet long in illustration of the value of the invention, as a means of advertising.

The lecture was largely attended, the presidents of several of the learned Societies being among the audience.

HEALTH OF LARGE ENGLISH TOWNS.

TENTH WEEK OF 1880.

ENGLISH urban mortality shows further decline from the high rates that prevailed a month since. In twenty of the largest towns, estimated to contain in the middle of this year seven and a half millions of persons, or nearly one-third of the entire population of England and Wales, 5680 births and 3070 deaths were registered last week. The births exceeded by 495, whereas the deaths were 205 below, the average weekly numbers during 1879. The deaths showed a further decline of 111 from the decreasing numbers in recent weeks. The annual death-rate in the twenty towns, which had steadily declined from 37.0 to 22.1 in the five preceding weeks, further fell to 21.4 last week. During the past ten weeks the death-rate in these towns averaged 26.4 per 1000 against 23.0, 25.5, and 27.2 in the corresponding periods of 1877, 1878, and 1879. The lowest death-rates in the twenty towns last week were 15.6 in Portsmouth, 17.5 in Brighton, 19.0 in Sheffield, and 19.2 in Wolverhampton. The rates in the other towns ranged upwards to 24.5 in Leicester, 24.6 in Sunderland, 24.9 in Norwich, 25.9 in Manchester, and the highest rate, 31.3, was again recorded in Plymouth. This continued excess in Plymouth was again mainly due to the exceptional fatality of measles.

The deaths referred to the seven principal zymotic diseases in the twenty towns, which were 638 in the first week of February, have since steadily declined, and were last week 457; these included 173 from whooping-cough, 99 from scarlet fever, 80 from measles, and 40 from fever, mainly enteric. The annual death-rate from these diseases averaged 3.2 per 1000 in the twenty towns, and ranged from 1.5 in Brighton to 5.9 and 9.0 in Hull and Plymouth. Whooping-cough showed the largest proportional fatality in Salford, Norwich, London, and Manchester; scarlet fever in Sunderland and Bradford; and measles in Plymouth, Hull, and Nottingham. Nine more deaths were referred to enteric fever in Sheffield. The 17 deaths from diphtheria in the twenty towns included 13 in London. Small-pox caused 13 more deaths in London, but not one in any of the nineteen large provincial towns. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had steadily increased from 80 to 185 in the five preceding weeks, declined to 172 on Saturday last; 39 new cases of small-pox were admitted to these hospitals during last week, against 48 and 49 in the two previous weeks. The Highgate Small-pox Hospital contained 16 patients on Saturday last, 2 of whom were, however, not suffering from small-pox.

The fatality of lung-diseases continues to decline, notwithstanding the prevalence of cold north-easterly winds. The deaths referred to diseases of the respiratory organs in London, which had declined from 1557 to 390 in the five preceding weeks, further fell to 315 last week, and were no less than 147 below the corrected weekly average; 191 resulted from bronchitis, and 83 from pneumonia. The annual death-rate from diseases of this class in London last week was equal to 5.0 per 1000, against 4.8 from the same diseases in Liverpool.

ABERDEEN ROYAL INFIRMARY.—The accounts of the Infirmary for 1879 show that the income amounted to £6082 18s. 3d., and the expenditure to £6270 8s. 6d., leaving a deficiency of £187 10s. 3d. In the previous year the balance sheet presented a surplus of £635, the income being £7075, and the expenditure £6440. The accounts of the Convalescent Hospital show that the income last year was £338 18s. 3d. and was exceeded by the expenditure to the extent of £88 2s. 9d., a considerable decrease having taken place in the amount of donations.

Correspondence.

"Audi alteram partem."

ALGIERS AS A HEALTH RESORT.

To the Editor of THE LANCET.

SIR,—I need not say one word on the beauty of the climate of Algiers, or of its fitness for the curative treatment of disease—Algiers is already accepted by the profession in England as one of our most valued health resorts. With a climate hardly inferior to Cairo, it is within thirty-six hours' sail of Marseilles, and—which is another practical recommendation—it is in the hands of our allies the French, whose firm rule makes life here as safe, pleasant, and luxurious as in Paris. In a few months there will be a daily large steamer which will make the journey in about thirty hours from Marseilles. When I crossed a month ago it was like a trip on the lake of Geneva. Algiers lies at four days easy journey from our own shores.

It is of the accommodation which the invalid will find at Algiers that I feel it my duty to say a word of warning. For the rich patient who can afford to hire one of the villas at Mustapha, a suburb of Algiers, a very perfect winter home is offered. The sight is lovely, looking over the bay of Algiers and the distant, snow-capped hills. It must, however, be said of this enchanting spot that the drainage of these villas is not good, that French imitations of our water-closets are not a success, that sewer-traps are unknown, and that certainly there have been cases of typhoid there this winter. A model villa, perfect in every sanitary appliance, and placed on the heights at Mustapha, is the home of our Consul-General, and is known to all English visitors by his pleasant Tuesday afternoon garden parties. Colonel Playfair has introduced earth closets, and thus cut himself off from the defective drainage system of Mustapha. I cannot doubt that his example will extend to the other villas. I would also say that there is at Mustapha a charming English boarding-house for invalids—the villa Roussel of Mrs. Jennings—unfortunately so full that I could not gain admission.

This winter every villa and lodging in Mustapha is crowded, and the stranger seeking health in this climate is driven to the hotels in Algiers. I can fancy the dull sense of horror which must come over any English party with a sick brother or sister, who, familiar with the hotels of the Riviera, have by medical advice changed their winter resort to Algiers. I say at once they had better have stayed at home—many times better have gone to Ventnor or Torquay. The French quarter of Algiers is on the shore at the foot of the hill, on which lies the crowded Arab town. It consists of two or three streets of the usual French type, with covered arcades and high houses built round court-yards. I believe they pulled down many interesting Moorish houses, including the Palace of the Dey, to make room for these streets; yet on the opposite shore of the bay they had a site for a new Algiers which might one day have rivalled Carthage in the beauty of its surroundings, as it would have resembled it in position. Rooms were taken for me by a friend in one of the principal hotels on the boulevard facing the sea, and I thus had the good fortune to get a front room high up, out of the reach of the sewer gases that pervade the atmosphere of every street in Algiers, and even make the walk on the splendid terrace facing the sea intolerable. The court-yard of my hotel was glazed over, and the staircase and some of the bedrooms going into this court had thus no direct communication with the open air, and this in a hot climate, with the thermometer above 60° in midwinter. The water-closets all opened into one shaft, which was lighted from the roof, and was also glazed. There was no proper trap to these closets, and they and the corridors of the hotel on which they open are therefore in direct communication with the main sewers of the town. The service of the hotel was good, though the food and cooking were most indifferent. The whole hotel was thus about the type of one in a French or Italian provincial town. The crowded boulevard on which these hotels are situated is very noisy; a tram runs along late and early; the morning gun fires at

six and shakes the house, and after that there is no rest. Fancy the misery of such surroundings to a delicate patient accustomed to the quiet luxury and order of the Riviera or Torquay hotels! It is proposed to build a large hotel at Mustapha, and I am sure, Sir, you will concur with me that until this hotel be opened patients, who cannot afford to live in a villa at Mustapha, had better not risk further illness in the hotels of Algiers, but remain on the other side of the Mediterranean. I stayed a week in Algiers, and had the fortune to escape all the ills which follow sewer-gas contamination of houses. Others I have seen have not been so lucky.

I came on by rail some fifty miles to this splendid health resort, the Hammam R'Irha, some 2000 feet above the sea, and on a site which for beauty or extent is excelled by few in Europe. It reminds one of the higher Italian Alps. There is a French village close by, and a few of the fields are being got under cultivation. M. Arlès-Dufour is the owner of the hotel and the adjoining land, and he is now planting vineyards on the site of the old Roman city of Aquæ Calidæ, the foundations of which lie all around. The hotel is very comfortable, and the table good. I have enjoyed ten days quiet and unbroken sunshine, with a shade temperature of 60° at these heights, and only the first days of March. The hot-water springs, which rise at 114°, are mildly saline, and are used as baths. There is, moreover, a pleasant, cold, alkaline spring, with a trace of iron, and slightly gaseous, which is the usual table water. I can hardly fancy a more charming retreat from the heat and sewer poison of Algiers, and I think our London physicians will be glad to remember this spot when giving instructions regarding a winter in Algiers.

I am, Sir, your obedient servant,

C. LOCKHART ROBERTSON.

Hammam R'Irha, March 9th, 1880.

AN EXAMPLE SHOWING THE ADVANTAGES OF ANTISEPTIC SURGERY.

To the Editor of THE LANCET.

SIR,—In an address on the "Advancement of Surgery," delivered by Dr. Roderick Maclaren to the Border Counties Branch of the British Medical Association, published in recent numbers of THE LANCET, Dr. Maclaren gives, as an example of the advantage of antiseptic treatment of wounds, a case of compound fracture of the patella, involving the knee-joint. As this case will show the good results which can be obtained by strictly following Mr. Lister's plan of treatment, I venture to add a few further details of the case.

The patient, a muscular labouring man, gave the following history of the accident:—Whilst engaged with several workmen in managing a powerful crane, from some cause it broke down, killing one man on the spot and driving a piece of jagged iron into the knee of the patient. The wound was simply bandaged up at the time, after the iron was withdrawn, and the patient was sent home, and it was not until the following day that he was sent to the Cumberland Infirmary, where he was admitted *thirty-two hours after receipt of injury*. The following was his condition:—Temperature 102°, pulse rapid and hard, skin hot and dry, tongue dry and furred, great thirst—in short, in a state of fever—with intense pain in the left knee. The injury had never been looked to since the accident, owing to his removal to his own home, away from the surgeon who first saw the case. The bandage was very dirty, and had a foul smell; on removing this I found a lacerated wound about two inches long immediately over the joint, which was much swollen; the edges of this wound were irritable and inflamed; on introducing my finger it passed through a transversely fractured patella, the fragments of which were widely separated, quite into the knee-joint; on withdrawing the finger a foul-smelling sanious discharge followed.

The case was a very grave one, and it was a question whether the limb could be saved. Here was a compound fracture communicating with a large joint, which had been exposed to septic influences for so many hours without even bathing with water, and fever had already set in. But, taking all points into consideration, I thought it possible to render the wound antiseptic, and if I could accomplish this I felt sanguine of a good result. With this object in view I first set the steam spray of carbolic acid playing upon and around the wound, then had the limb thoroughly washed

with strong carbolic lotion from the thigh to the ankle, and for about an hour the wound was carefully and constantly syringed with carbolic lotion. Having by this means thoroughly removed all septic matters I left the wound exposed for another hour to the influence of the spray, when, having given it a final syringe, I proceeded to dress it by Mr. Lister's method, placing a piece of carbolised oil silk immediately over the wound to prevent undue irritation from the acid. By means of an antiseptic gauze bandage, applied as a figure of eight, I drew the fragments of the patella as closely together as the case would permit, covering the whole with layers of antiseptic gauze and mackintosh sheeting. A long back-splint with foot-piece was applied outside the dressing, and the limb slung in an ordinary cradle.

In the evening the patient expressed himself as feeling much easier, the pulse was more regular and not so frequent, and the temperature was rather less being 101° 8'; he slept fairly well that night and the following morning the temperature had fallen to 99° 6'. I again dressed the wound, using strict antiseptic precautions, found it perfectly free from the bad odour it had on admission, and looking healthy. In the evening the temperature was 99° 8', and from that time it fell to normal, never rising higher than 99°.

The antiseptic dressings were left undisturbed for a week, when they were removed under the spray, and the wound found to be completely healed. The serious compound fracture was thus reduced to a simple one, and, as stated by Dr. Maclaren, eventually a good result was obtained.

Remarks.—During the two years I was house-surgeon to the Cumberland Infirmary many grave compound fractures were admitted and excellent results followed under the antiseptic plan of treatment, which is carried out in all its details by the surgeons of that institution, but none more typically illustrates the advantages to be derived from "Listerism;" for undoubtedly this case was "going to the bad" until the septic process was arrested as above stated, and the limb, if not the patient's life, saved.

The whole case shows that, although many hours may elapse before the treatment is commenced, we need never despair of a good result, provided sufficient trouble is taken to render such a wound thoroughly aseptic, and to keep it so until nature has time to effect the healing process.

If this case of a wound exposed to septic influences for some time, and actually stinking, could be rendered antiseptic by care, why should not operations (without the discomforts arising from clouds of steam-spray in the operator's face, impeding his sight, &c.) be performed, and then, the operation being completed, the wound rendered antiseptic by carbolic bathing and spraying before applying Lister's dressing?

If equally good results were obtained it would, I should imagine, be advantageous to the surgeon to dispense with the spray until he had completed the whole, or at least the more delicate part of the operation; thus allowing him to see what he was about more clearly—a highly important matter in most operations.

I am, Sir, yours truly,

F. SYDNEY SMYTH, L.R.C.P., L.R.C.S. Edin.
Brockley, London, S.E.

"SCURVY AND THE PROPOSED ARCTIC EXPEDITION."

To the Editor of THE LANCET.

SIR,—In the last number of your influential journal occurs a special article on "Scurvy and the proposed Arctic Expedition," in which I, as the intended leader of such expedition, am placed before your readers in a light calculated to cause serious damage to the immediate bright prospects before us—at all events, within the range of medical influence. I beg, Sir, that, in justice to my combined arctic experience and common sense, you will at once inform your readers of the following principle relative to the prevention of scurvy to which I have undeviatingly adhered:—

1. I believe in thorough ventilation of the ship, and keeping the crew as much as possible in the open air.
2. I thoroughly believe in the constant use of lime-juice, which I should take out in the form of lozenges, after a proper test as to their efficiency, and on no account would I be without such a necessary adjunct to arctic work.
3. I place thorough faith and confidence in the liberal