THE INFLUENZA EPIDEMIC.

IT is satisfactory to notice that the fatality of influenza in London last week showed a marked further decline. The number of deaths primarily referred to this disease, which had been 506 and 436 in the preceding two weeks, further fell to 314 during the week ending Saturday last, February 5th, although this number was within 5 of the highest recorded in any week during the epidemic of last year. There was a corresponding decline in the number of cases in which influenza was noted as a secondary cause, these having fallen to 62, against 86 and 71 in the preceding two weeks. Of the 314 deaths directly referred to influenza last week, 80 were of persons aged under 40 years, and 81 of persons aged between 40 and 60 years; while the remaining 153, or 50 per cent., were of persons aged upwards of sixty years. There was also a very considerable decline last week in the mortality from diseases of the respiratory organs in London; the deaths from these diseases, which had been 1,465 and 1,192 in the preceding two weeks, further fell last week to 761, which, however, exceeded the average by 279.

From the special returns with which the BRITISH MEDICAL JOURNAL has been favoured by the medical officers of health of the various London sanitary areas, we are enabled to note the progress of the epidemic in the different districts of the metropolis. Although there was a marked general decline in the fatality of the disease in London last week, in ten at least of the sanitary areas of the metropolis there was an increase in the mortality from influenza. In Kensington, St. George Hanover Square, St. Pancras, Islington, Hackney, Clerkenwell, Whitechapel, Wandsworth, and Camberwell there was a marked decline in the mortality from the epidemic. On the other hand, in Fulham, Marylebone, Hampstead, Strand, Bethnal Green, Mile End Old Town, Poplar, Bermondsey, and Lambeth, there was an increase last week in the number of deaths referred to influenza. In Hampstead and in Lambeth the increased prevalence of the disease was most clearly marked; in the former district the deaths in the past three weeks have been 5, 9, and 13; and in Lambeth 24, 27, and 32 respectively. In East London the decline in the mortality from influenza was only about 10 per cent., and in South London about 25 per cent.; while in West, North, and Central London there was a much larger decrease, ranging from 35 to upwards of 50 per cent.

Judging from the returns forwarded to the BRITISH MEDICAL JOURNAL by the medical officers of health of many of the largest provincial towns, the epidemic appears to be generally subsiding. In most of these large towns, with the exception of Norwich, where the epidemic continues to be very fatally prevalent, the number of deaths referred to influenza showed a marked decline, especially in those towns in which it had previously been most fatal. In Croydon the deaths declined from 25 to 6, in Brighton from 13 to 6, in Portsmouth from 20 to 10, and in Manchester from 17 to 4. It is satisfactory to note that in Lancashire, where a considerable increase was reported in the preceding week, there was a decline in nearly all the towns furnishing returns. In Yorkshire there is an increase, although a slight one, in the total number of deaths from influenza in the six largest towns from which returns have been received.

CLINICAL ASPECTS OF THE DISEASE.

The following further communication has been received:—

DRS. HOLMAN, WALTERS, OGLE, and HODGES (Reigate) write: (*a*) The pathognomonic signs of uncomplicated influenza are: (1) Pain in the back in the region of the kidneys, shooting up the spine to the occiput. (2) General aching without pain in movement. (3) Pain at the back of the eyes. (4) Heats and chills alternating; high temperature, going up to 103°, more or less, with a pulse either below or moderately above normal. (5) Flushed face. (6) Furred, flabby, tremulous tongue. (7) Urine loaded with urates, which persists after the fall of the temperature. (8) Great prostration. (9) Sudden onset, generally with chills; with vomiting often in women and children. (10) Physical signs insufficient to account for such a degree of illness.

(*b*) The complications most frequently met with are.—*During the Acute Stage:* (1) Bronchitis, broncho-pneumonia, pneumonia, pleurisy. (2) Gastro-enteritis, vomiting, diarrhœa. (3) Tonsillitis, and glandular enlargement of the neck; the latter sometimes proceeding to suppuration. The less common complications observed are: (4) Transient albuminuria passing away as the disease becomes less acute, and leaving no trace behind it. In one there was suppression of urine for forty-eight hours; afterwards there was no blood in the urine. This case terminated favourably. (5) Acute nephritis (1 case). (6) Acute peritonitis (2 cases). This seems to be the most rapidly fatal complication, but not very common. (7) Pericarditis (2 cases). (8) Acute arthritis of hip in a strumous child (1 case) which passed off after six weeks in a splint. The most common sequelæ found have been nerve depression, neuralgiæ, headaches, lumbago, loss of taste and smell, irregularities and intermittences of the heart's action, persistent subnormal temperature, tracheal cough without physical signs.

(*c*) The best methods of treatment in our experiences are as follows. *Preventive:* (1) Immediate isolation. Drugs such as quinine appear to be useless, and eucalyptus oil apparently does not prevent the onset of the disease. (2) To attend to general health, by looking after the diet and excretory processes; and by taking plenty of open-air exercise short of over-fatigue.

Therapeutics.—In ordinary cases salines seem to answer best. If there is much muscle pain or in rheumatic subjects, salicylates are indicated. If much headache, antipyrin in moderate doses. Stimulants are useful after the acute stage, if there is much depression, and as an aid to digestion, and in old and feeble patients may be required even earlier.

Necessity for Isolation.—Isolation should be commenced at the earliest possible opportunity, and should be continued for at least eight days. We have tried this method with apparent success in several cases, but it is very difficult to be certain of its value, as in cases where several have been sleeping in the same room, one has suffered and the rest have escaped.

We have never met with a fatal case of simple uncomplicated influenza.

SOME EXPERIENCES OF THE PRESENT EPIDEMIC.

DR. ROBSON ROOSE writes: During the last few months it has fallen to my lot to treat many—a little over 300—cases of influenza, and, on reference to my notebooks, I find that I prescribed chiefly salicin for one-third of the number, salicylate of sodium for a similar proportion, and for the remainder a mixture containing bicarbonate of potassium, carbonate of ammonium, solution of acetate of ammonium in camphor mixture. In those cases in which hyperpyrexia was a marked symptom the following combination proved very serviceable: Salicylate of sodium, bromide of potassium, antipyrin, of each 5 grains; aromatic spirit of ammonia, 20 minims; in an ounce of water every four hours. Up to the present I have not had a single fatal case among my patients, and, so far as I can judge, all have done equally well under the various remedies which I have adopted. Great stress must be laid upon the importance of keeping the patient at rest and in bed, and of supplying as much nourishment as the stomach will tolerate. There is considerable waste of tissue during the progress of the disease; the urine always contains an increased amount of urea. Stimulants are valuable adjuncts, and may usually be given in somewhat large doses. I have frequently ordered 6 ounces of warm milk or beef-tea with two, three, or even four teaspoonfuls of brandy every two hours. Champagne also is often very beneficial. When cough is troublesome the application of counter-irritants (for example, poultices of linseed-meal and mustard) to the chest is attended with the best effects. After recovery, even from mild attacks, the patient should always remain indoors for at least five days, and should leave his house only during fair weather, and with all proper precautions as to dress, etc. In my experience quinine has not proved useful during the attacks. Given even in moderate doses, it is especially liable to cause deafness and tinnitus, and to increase congestion of the nervous centres. It may prove, however, a valuable tonic, combined with strychnine, during convalescence. Influenza certainly assumes several more or less distinct forms, early prostration of strength being the predominant feature in nearly all cases. There is first the simple form often described as a feverish cold; secondly, the pulmonary form, with symptoms of

bronchitis or of pneumonia, or of both; thirdly, the intestinal form, with marked gastric or intestinal symptoms; and, fourthly, the rheumatic form. In many cases, however, the symptoms are of a mixed kind, those of one type being especially prominent, but aggravated by those of another. All the phenomena are doubtless due to the influence of some depressing agent which selects various parts of the great nervous centres for its attacks. This hypothesis enables us to explain the headache, backache, and the muscular pains so frequently experienced, and likewise the cardiac, respiratory, and digestive disturbances. We are driven to infer that the special nervous centre of each division is markedly involved. The thermogenic centre is nearly always affected; hence the sudden and frequently great rise of temperature, out of all apparent proportion to any local inflammation that may be present. The pulmonary congestion, when a very early symptom, may be an evidence of altered circulation due to disturbance of innervation. It seems almost useless to speculate as to why the symptoms take different forms in different cases. We can only fall back upon the differences of individuals; such differences are, beyond all doubt, very important elements in all morbid conditions. Few persons are without some *locus minoris resistentiæ*, which becomes manifest only under peculiar circumstances. We are amply justified in treating influenza by means of germicides; at the same time we must never forget that so multiform a complaint must often be treated on general principles—apart from theories of causation—and that we must be ready to deal with special symptoms as they arise. A subnormal temperature, in my experience, has always been characteristic during the period of convalescence.

NOTES ON THE EPIDEMIC.

OUR BIRMINGHAM CORRESPONDENT writes: Influenza, up to the present time, has not been so widely spread or very virulent in Birmingham. One hears of cases scattered through the city, but the death-rate, which for some weeks had considerably increased, is now about the normal level. It is worth noting, however, that the epidemic was at its worst here last year in the months of March, April, and May.

At a meeting of the Perthshire Branch of the British Medical Association, on January 29th, the Chairman (Dr. Ferguson) in opening a discussion on influenza. first dwelt on the peculiar immunity of young children. He said if the disease started from bacillus infection of bronchial mucous membranes by reason of contagion, one would have expected that the delicate pulmonary apparatus of childhood would have been particularly liable. In his experience, however, it had been less markedly attacked in influenza than in common colds. Again, he had found a different type of disease in the epidemics of 1890 and 1891. Pain in the back was a very troublesome symptom in the former and very seldom seen in the latter. As to treatment, he had used nothing claiming to be a specific, but employed such means as commended themselves on general principles. After some remarks from Dr. Robertson and Dr. Urquhart, Dr. Simpson emphasised the facts of contagion as shown by the epidemic which recently occurred at Trinity College, and also referred to the similarity of the initial symptoms of the first cases to scarlatina. Dr. Fleming had used diaphoretics and rum and milk with decided advantage. Protection from draughts was an indication of moment, and iron was to be recommended in convalescence. Dr. Morrison was struck by the constant occurrence of symptoms indicating weak points in the constitution. He had found it important to have a pure atmosphere in the sick room. He had found very frequently that the temperature became subnormal in the course of recovery. In addition to ordinary remedies, he had found a sponging with a solution of bicarbonate of potassium very useful. Dr. Carruthers referred to the occurrence of murrain in former centuries, as stated by Dr. Robertson, and the present cases of pink eye, etc., amongst horses. Dr. Paton had found a diaphoretic mixture containing nitrate of potash very useful in abating the fever.

Dr. T. H. DAVIES (Samoa, South Pacific) writes under date January 4th: It may interest readers to know that in this group we have just recovered from a severe epidemic of influenza *à la grippe*. At the present time there is very frequent steam communication between Sydney, New Zealand, and this group. It was not until influenza had appeared in Sydney that any cases were seen here. The epidemic began at the harbour of Apia, and from thence radiated to other parts of these islands. Symptoms exactly resembled those of the epidemic in New South Wales and Victoria, as well as Europe. A good number of natives and a few foreign residents have died. In the hundreds of cases occurring in natives, and in a few foreigners (with one exception), whom I have treated, all have recovered. Not so with others. The proportion of deaths occurring among Samoans, who trusted to their very imperfect herbal remedies, was as follows: 10 deaths out of an entire population of 600 or 700 in one village, and in others 4 and 5 out of a population of 160 and 500 respectively. So-called influenza is a very common affection in the South Sea Islands, but the recent epidemic was unique, and spoken of by the natives as a calamity as well as a new disease. The high temperature, the marked anorexia, the great prostration, followed by pleurisy, pneumonia, and bronchitis, and also, in many cases, diarrhœa and vomiting, gave distinct features to this recent epidemic. In the Targan or Friendly Islands, some 400 or 500 miles south of this group, influenza has appeared, which the foreign residents believed to have been brought by steamers from Sydney or New Zealand. The infectious character of this influenza seems to have been established by its course in this group. Nearly the entire population of villages have been prostrated, and in many families of Samoans so many have been prostrate as to be unable to get their native meals prepared.

The epidemic, which has been very prevalent in North Hants and South Cambs, has, during the last few days, shown signs of abatement.

OUR PARIS CORRESPONDENT writes: In the course of a recent discussion on influenza at the Académie de Médecine M. Ollivier strongly advised cod-liver oil. He stated that among his patients, to whom he prescribes it, only one—a tuberculous subject—had an attack of influenza, and even in his case the attack was not severe. Children take the oil remarkably well, as much as two or three dessertspoonsful a day. M. Ollivier recommends that it should be taken in the middle of meals, as the action of the glands of the stomach are not thus interfered with. Influenza has doubled the death-rate at Lyons. In Paris 67 daily deaths from influenza are registered, but Dr. Bertillon says this does not represent the actual number. Frequently influenza has appeared as a lung affection, or increased the gravity of existing conditions, resulting in death. The last week's mortality is less than the two preceding weeks (1,560, 1,615), the last 1,437, but it is higher than that of the corresponding week of 1891—1,129. Pneumonia has caused 139 deaths; the preceding week, 164; the usual average is 86.

TREATMENT OF INFLUENZA.

Mr. R. RUTTLE (Accrington) gives 10 to 20 grains of salicylic acid dissolved in 2 to 4 drachms of concentrated sol. ammon. acetatis added to 8 ounces of water, a tablespoonful taken every hour. That has been the base of every mixture in every case, because the salicylate is in an acid solution and therefore in its most active form as a germicide, and is not depressing, but, on the contrary, stimulant. I have (he writes) found that cases treated so have not developed pneumonia or bronchitis. I was led to use this treatment for the following reason: My belief that in influenza, as in measles, the existence of one disease predisposes to the pulmonary complication, and I further believe that this arises from some suitability in the buccal and nasal secretions which are present in both diseases for the reception and growth of the pneumococcus or other organisms. In other words the influenza prepared a suitable soil for the ready growth of the specific organisms. For the last five years I cannot remember a single death from measles in my practice where I have been attending before the measles were complicated, in fact the only two cases I can find on looking the matter up was one where convulsions had supervened, and another with pneumonia established; and this notwithstanding the fact that we have had severe epidemics entailing the closure of schools in the very districts where my practice mainly lay. This fact is well known to many of my medical friends, and the fact that I attributed it mainly, if not entirely, to the disinfection of the mouth and pharynx by the frequent doses of the powerful antiseptic. In confirmation of this view I would note the observations of MM. Méry and Boulloche, quoted in the admirable SUPPLEMENT of the BRITISH MEDICAL JOURNAL of April 25th, 1891, showing that pathogenic organisms were found in the buccal secretion in 52 per cent. of the measles cases; and further that with few (if any) exceptions were pulmonary or bronchial complications present without the pneumococcus or streptococcus being present in the mouth. Now that Pfeiffer has found the bacillus and his observations receive the powerful confirmation of Professor Klein, it surely will not be difficult to discover a germicide which will thoroughly disinfect the oral and nasal passages at least and so reduce to a minimum the danger of infection from the more lethal complaint. Such a germicide I think we possess in the acid solution of salicylate of ammonia, which also possesses many other advantages that must be apparent to any therapeutist.

Dr. W. WYLIE (Skipton) writes: Apropos of Dr. Percy Edgelow's treatment of influenza by eucalyptus, I may relate my experience of it on three patients, which shall not be easily forgotten by either of them. In May of last year I fancied eucalyptus was just the microbe killer wanted for this disease, and, acting on the conviction, tried it on the first case of the malady I was called upon to treat. There was unpleasantness about it, for the patient seemed to have a very decided opinion after he had used the remedy for some time that it made him ill, gave him a feeling of nausea, increased his headache, and he assured me he would not have been half so bad but for the wretched stuff I had ordered him to inhale. I thought this ungrateful on his part, tried to persuade myself that he had some idiocyncrasy which was incompatible to its use, and tried other remedies. He got well. My next patient was a lady, who used the remedy with great regularity every hour, and saturated the bedroom with the vapour so that had it been hostile to the vitality and activity of the microbe we should have had a cure effected in a short time. On my next visit I was told she could stand the eucalyptus vapour no longer, that it increased her headache, and made her worse generally. I gave it up, tried other remedies, and the patient got well; but now she declares that never shall she use the drug again. I took the disease, and still having a belief that the drug was useful, I gave it a fair trial. I tried it on cotton wool, inhaled it in boiling water, and in various ways. I became very tired of it, commenced to dislike it, which dislike grew upon me so much that I shall not again try eucalyptus. I do not think it did any good whatever, but, on the contrary, increased my headache and made me more uncomfortable than I was already. Influenza is a fever and must be treated on the same principle as typhoid or scarlet fever.

INFLUENZA IN PARTURIENT WOMEN.

Mr. F. CHURCHILL (Cranley Gardens) writes: It would be interesting to have the experience of surgeons who have noted exceptional symptoms among parturient women during the prevalence of toxic infection by influenza. We have already noted the ephemeral character of the fever and the marked absence of symptoms in many cases. I would further add that in some cases that have come under my observation this year there has been during the first week of childbirth an exaltation of temperature ranging from 99°F. to 101°F., a quick, hard, throbbing pulse of 120 to 140, with very little variation night or day. Notwithstanding this the patients have been bright and cheerful, the uterine discharges have been normal. There has been no pain or tenderness in the hypogastric region, no enlargements of mammæ, a plentiful supply of milk. In short the cases have progressed favourably, though causing some anxiety in view of the possible fatal termination by septicæmia.

THE EGYPTIAN QUARANTINE STATION.

DR. PAUL KAUFMANN has recently published a little work entitled *Die Quarantäne-Station El Tor* (Hirschwald, Berlin, 1892). The author spent five weeks at El Tor in August and September last, as a special delegate of the Egyptian Sanitary Council, for the purpose of making bacteriological examinations in cases of suspected cholera. It appears, from a previous visitation by Dr. Pollock, that the Arabian doctors were at one time instructed by the chief inspector to return all cases of diarrhœa as cholera, and there is always a strong leaning this way. In discussing the constitution of the Sanitary Council he suggests that the Egyptian representation should be lowered from a third of the whole Council to a fourth or even fifth; that each of the great European States should have two representatives, one of whom should reside in Egypt; and all the smaller sections should send each one delegate, not a foreigner. There would be thus twenty-four members. "It would be still better if only Egypt, Germany, England, France, Italy, Austria, Russia, and Turkey were represented, the smaller Powers might safely leave their interests in their hands much better than when represented by Greeks, Smyrniotes, Syrians, and Maltese."

All pilgrims returning from Mecca up the Isthmus of Suez have to disembark at El Tor, and encamp there twenty days. For those returning by land a three days' quarantine in Ras Mallap, higher up in the Sinaitic peninsula, is appointed; lastly, for the Turks passing up the Suez Canal there is a ten days' quarantine at Klazomene, near Smyrna.

The Council sits at Alexandria because most of its members live there, and the work of inspection at Suez is delegated to a small Commission, which does its work badly. Dr. Kaufmann affirms that, instead of the necessary two hours in visiting a pilgrim ship, the Commission does not take five minutes. If the Conseil Sanitaire were established in Suez it could easily send a small commission to El Tor.

Again, the rights and duties of the leading officials should be clearly defined. In particular, the commander of the troops should be strictly subordinated to the director. The Arab doctors employed should at least have studied for some years in a European university, have passed an examination regulated by a European commission, be paid an adequate salary, and be required to use some European language in their official work. At present the notes above the head of each patient in the hospital cannot be read by either the director or the general inspector. The water supply evidently varies in quality at different times of the year. Dr. Kaufmann asserts that the pilgrims dip their own vessels and hands into the water pumped up from the wells in the sand, and that the only two which gave good water were insufficient for the wants of the camp. A distilling apparatus should be provided for the drinking water, which should be conveyed to the camp sections by the aid of a light tramway 2 kilometres long. The reservoirs adjoining the wells should be sealed and pipes with stopcocks provided.

El Tor is so dry that cholera could never, Dr. Kaufmann thinks, become established there, even if imported. At present there are two steam ovens for disinfecting the pilgrims' clothes, but one of these is out of use, and the pilgrims evade the regulations as much as they can. The latrines of the camp are badly arranged, the distance to be traversed being far too great.

Dr. Kaufmann satisfied himself that no true cholera existed at El Tor. The chief cause of death is "pilgrims' diarrhœa." The pilgrims are compelled to stay at El Tor, and are charged 15 francs for the privilege; in fact, they are fleeced by the authorities at every turn. Food should be supplied by the Government at cost price, and Dr. Kaufmann states that a sum of £50,000 ought to be contributed by the Powers interested for the establishment of proper sanitary arrangements.

The camp was open from July 12th to the end of September. During that time 11,950 pilgrims arrived in eighteen ships at El Tor, though only 10,711 were indicated in the various ships' papers, the pilgrims being systematically under-estimated on every ship. There were 86 deaths, 6 of which were ascribed (erroneously) to cholera. The camp consisted of six sections, placed 250 metres apart, with a general and a cholera hospital. The latter was shamefully neglected. It is a tent with four upright poles, none of them straight, and one was too short and was placed upon an upturned earthenware vessel intended for a very different use. Of five patients there, four had bedsteads and one lay on a mattress on the ground. Two others soon preferred the ground because the mattresses had become too soiled for use. They were left then in the tent two days before they were changed. He states that the inspector and chief physician seldom visited the tent. The ordinary hospital was somewhat better.

Great difficulties were encountered in recognising the cholera bacillus, since the impossibility of procuring ice at El Tor prevented the use of gelatine; the author fell back on the indol test. The cholera bacillus forms not only indol, but nitrites also, hence a red colour on adding any pure mineral acid to a culture of 24 or 36 hours to set free the nitrous acid. In this way the absence of true cholera was made certain.

Dr. Kaufmann has full confidence that the English will bring back to Egypt not only material prosperity, but a new era of science and the arts.

ASSOCIATION INTELLIGENCE.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members in commodious apartments, at the Offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the Office.

NOTICE OF QUARTERLY MEETINGS FOR 1892. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on April 13th, July 6th, and October 26th, 1892. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, March 24th, June 16th, and October 5th, 1892.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.