THE INTERNATIONAL NOTIFICATION OF INFECTIOUS DISEASES.

By EDWARD WALFORD, M.D., D.P.H.,

Medical Officer of Health, City and Port Sanitary District of Cardiff.

(FELLOW.)

ALTHOUGH the subject of International Notification undoubtedly concerns inland towns, I shall confine myself chiefly to that part of it which is most closely related to port sanitary administration, and shall refer more particularly to smallpox, as one of the most important of the ordinary infectious diseases with which we have to deal.

All the ports in this country are more or less subject to the invasion of smallpox. The infection may be introduced by persons of our own nationality, or by aliens. Many of the extensive outbreaks of recent years in large towns owe their origin to invasions from abroad. The recent epidemics in London, Liverpool, and in some other places, were due, I believe, in the first instance to infection brought from foreign countries. All of us who are engaged in the public health service thoroughly appreciate the value of those weekly returns of the Local Government Board containing the records of the notification of infectious diseases in each sanitary district in the United Kingdom. They indicate at a glance the local incidence of disease, and in many cases the direction of an epidemic wave. Of the utmost value also are the prompt warnings from our colleagues of the possible danger to be apprehended from persons who have been exposed to infection, and who are proceeding to our district. But a shipload of such contacts may at any time come into any port without the slightest warning from abroad.

The danger of such an occurrence is sufficiently obvious, as, however vigilant the medical inspection at a port may be, it is made usually under somewhat unfavourable conditions, and a timely warning of what to expect would often prove an invaluable aid to diagnosis. Those of us who have had to examine Lascars or coloured men covered with coal dust and

dirt, and lying in a badly-lighted forecastle, will readily appreciate the difficulty of making a diagnosis in a case of smallpox in its early stage or in a modified form. For many years past I have felt that some system of international communication, more reliable than the official bill of health, would be a useful addition to our present methods.

The following recent event came to my knowledge through the courtesy of the medical officer of health of one of the largest ports in this country. A member of the crew of a steamer entering this port contracted smallpox on board, and on being paid off, went to his home in the North, then to the local infirmary, and was there found to be suffering from that disease. The infection in this case was derived from Spain. No notice was taken of the illness during the voyage, no mention was made of it in the log-book, and the captain disclaimed, of course, all knowledge of it. Thanks to the information received from the medical officer of health, I was on the look out for this vessel when she arrived in Cardiff; but how much more satisfactory would it have been if an intimation had been sent in the first instance from the port of departure in Spain.

At a conference held in London in 1904, relating to the spread of infectious diseases by vagrants, the following resolution was submitted: "This Conference is of opinion that the Port Sanitary Authorities should be authorised to take more stringent precautions to prevent the landing of persons arriving by vessels at the ports, who are suffering from smallpox, or who have been exposed to the infection of that disease, and for this purpose this Conference suggests that the regulations as to cholera, yellow fever, and plague, made by the Local Government Board on the 9th November, 1896, should be extended to smallpox." This resolution was not adopted in the form in which it was submitted. An amendment was moved and carried, omitting all mention of the Local Government Board regulations, which are not suitable for this purpose. Objection might be raised also to the wording of other parts of the resolution. For instance, smallpox patients must as a rule be landed, and also those who have been exposed to infection; the former for isolation and treatment, the latter for observation. The resolution is chiefly valuable as an expression of opinion of the conference that port sanitary authorities should have greater powers than at present. As a rule, however, little comes of these pious opinions, and pending the arrival of those greater powers, I would submit that an improvement in the methods of our International Intelligence Department might with advantage be attempted.

A vision of international notification seems to have floated before the eyes of the International Sanitary Congress held in Paris in 1903. From the report of the British delegates it would appear that at the first International Congress held in Vienna in 1874, there was a proposal to establish a central office under international management, and to collect and publish information on the course of epidemic diseases all the world over. This proposal was never carried out, but it was revived in a modified form by France at the conference of 1903. M. Barrère, who introduced the proposal, was careful to state that the bureau would be strictly international, that wherever located, the local government should exercise no controlling influence over it, that its main object would be to collect and distribute information about epidemics and the measures taken to deal with them.

The following resolutions (contained in the appendix to the report) were passed by the commission of ways and means of the Sanitary Conference of Paris, regarding an international health office:—

1. An international health office shall be established on the lines followed in the institution and conduct of the International Office of Weights and Measures. It shall have its seat in Paris.

2. The international office shall fulfil the function of collecting information as to the progress of infectious diseases. To this end it shall receive information given to it by the chief health authorities of the States that are parties to it.

3. The office shall periodically set out the results of these labours in official reports, which shall be communicated to the contracting governments. These reports must be made public.

4. The office shall be supported by contributions from the contracting governments.

5. The government, in whose country the international office is to be established, shall be charged with the submission, within three months of the signing of the proceedings of the conference, for the approval of the contracting States, of regulations for the institution and conduct of that office.

Article 181 of the Paris Convention refers to these resolutions as follows:—"The conference having taken note of the resolutions hereto appended, passed by its commission of ways and means, regarding the creation of an international health office in Paris, the French government shall, at such time as it may think fit, submit by diplomatic channels, proposals on this subject to the States represented at the conference."

The British delegates to the Paris Convention seem to have thrown a fair amount of cold water over this proposal. They report that, while from a theoretical standpoint this proposed institution had not a little to recommend it, there were important practical considerations which prevented them from giving it immediate and unreserved acceptance. They state that so far as concerns the obtaining of information on the course of epidemics, the machinery already possessed by His Majesty's Government for the purpose is as efficient as, if not more efficient than, any machinery that could be set up by an international bureau. It is doubtful, they think, if the reports from the bureau would be any more complete than those published by the Local Government Board, and that so far as the United Kingdom was concerned, the proposed bureau seemed to offer no advantage that she does not already possess.

The French delegates, on the other hand, seem to have attached much importance to the proposal. One does not quite know the real reason for the objection on the part of the British delegates.

There are, of course, difficulties in the way. Sanitary administration abroad is more a police affair than with us, and possibly the information obtained might have to filter through the hands of an army of officials before issuing from the bureau. In these days of rapid telegraphic and telephonic communication there need not surely be delay in the notification of a disease to a central bureau from any of the large towns and ports in Europe, from whence the information could be despatched as required.

No international arrangement could, of course, be come to with those countries in which antiquated systems of quarantine are carried out, and costly and useless restrictions are placed upon the movements of vessels. In such cases the notification of a case of smallpox in an English port might be the means of inflicting enormous loss upon the unfortunate owner of a vessel sailing from such port, quite out of all proportion to any possible advantage or gain to anyone.

A few words as to our present methods of obtaining information of infectious sickness on board vessels, and in this connection it must be remembered that, although on paper and in theory, cases of infectious disease on board ships and in houses are dealt with in the same way, in practice this is not altogether the case. Persons suffering from smallpox on land usually fall sooner or later into the hands of a medical practitioner. They find their way into the casual wards of workhouses, into infirmaries, into common lodging houses, and into places where medical attendance is at hand. On board ship, unless there is a doctor on board, such persons are more likely to escape detection. **The Infectious Disease (Notification)**

Act may be in force, but unless a doctor is called in, this Act is not of much service. The regulations under Section 125 of the Public Health Act, 1875, place the responsibility of notifying infectious disease upon the master or person in charge of the vessel, on entering port: but a conviction for neglecting to notify is seldom possible, as the master pleads ignorance and want of diagnostic skill. Evasions of this responsibility are extremely common, much more so than is usually supposed.

Customs officers boarding vessels from abroad notify to the sanitary authority any case of infectious disease which they may detect, but of course they are not very likely to detect anything of the kind unless their attention is called to it. A system of inter-communication between the various ports would undoubtedly be the means of reducing the number of these evasions; the master would feel that it was useless to practice deception when the authorities of the port of arrival might be already in possession of the facts. In many cases, of course, the master of the ship is not aware of the actual existence of a case of infectious disease at the time of arrival in port, but the information which we might expect from the port of departure would be an intimation of exposure to infection on the part of persons on board, and an indication that a careful medical inspection of such persons was called for.

It may be said that our system of medical inspection is not of much value if we cannot detect cases of infectious disease on board ships coming into our ports unless we have had previous warning arousing our suspicions. Many such cases are, of course, detected, but I would remind you that the medical inspection of persons arriving at our shores on vessels exists only in any degree of completeness at our large seaports, that in the majority of ports it is unknown, that it is not compulsory by law, except in reference to the introduction of cholera, yellow fever, or plague, and that even when it exists it must of necessity be carried out under unfavourable conditions, as to time, place, light, surroundings, etc.

Some notification, therefore, from the port of departure, in the case of vessels infected during any part of their voyage, would be of extreme value to the authorities of the port of arrival, and a useful supplement to the system of medical inspection, however efficient that might be.

In conclusion, I would suggest that international notification might be considered from two points of view. The primary object would be the concentration in a central international health office of all available information concerning epidemic diseases occurring in the countries entering into the convention, and the distribution of this information to the several countries concerned, very much on the lines of the arrange-

ment now so satisfactorily carried out by the Local Government Board in this country. I am inclined to think that information so distributed would have an official stamp upon it, and would be altogether more reliable than that which is derived from paragraphs in newspapers, a source of information recommended in a recent circular letter of the Local Government Board, relating to plague, in the following terms:—

“It will be seen that the Officers of Customs will look to the Medical Officer of Health to inform them from time to time of any particular ports or countries, the vessels arriving from which the Medical Officer may desire to visit, and in this connection the Board would observe that the earliest information which would usually be available to this end is that which would be obtained by a regular examination of the news telegraphed from abroad for the purposes of the Daily Press.”

The responsibility, therefore, of determining which are infected ports rests upon the medical officer of health, who is expected to be a diligent reader of the daily papers. The Local Government Board, although always ready to assist and to give information and good advice, takes no responsibility in this matter. It is obvious that in the event of any obstruction to the officers carrying out the plague regulations, a newspaper paragraph would be an insecure basis upon which to found a prosecution. Information from an international bureau would be preferable.

The other aspect of international notification might assume more the shape of a prompt and fairly complete intelligence department between the countries concerned, having for its chief object the continued observation or medical inspection of persons who have been exposed to infection. At the present time medical officers of health are in the habit of forwarding to their colleagues lists of names and addresses, and the supposed destination of such persons, in order that they may be kept under observation until the expiration of the incubation period. Such a system might, without any great difficulty, be made international in its operation. Certainly the difficulty would not be insurmountable in the case of persons exposed to infection and forming members of the crew or passengers of a ship. It would in most cases be sufficient to indicate the name of the disease, the name of the ship, and the port for which it was bound.

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