THE INTERNATIONAL CONTROL OF DANGEROUS DRUGS.

BY

HILDA CLARK, M.B., B.S.LOND.

THE report of the Opium Advisory Committee of the League of Nations to the Assembly this year, which was described in the *British Medical Journal* of September 28th (p. 589) and October 5th (p. 626), was presented to a somewhat pessimistic gathering. It is the Fifth, or "Humanitarian," Committee which always considers this annual report, and its members, both new and old, had reason to be depressed at the small progress which has been made in stopping the illicit traffic in narcotic drugs of addiction. This discontent was voiced by M. Parra-Perez of Venezuela, who asked for an inquiry into the reasons why States had not succeeded in limiting the manufacture of such drugs. The South American Republics suffer very severely from the growth of the drug habit and the difficulty of preventing smuggling. M. Parra-Perez believed that the traffic was actually increasing, and claimed that it was generally admitted that it can only be checked by limitations of manufacture. He pointed out that the Health Committee had been able to determine the quantities necessary for medical use, but that no measures had yet been attempted to limit manufacturers to these quantities. He suggested that the Advisory Committee did not include enough representatives of what are called the "victim" States—who do not manufacture themselves but suffer from the increase of drug habits, which are having a terrible effect on the physical and moral state of their people.

The Italian delegate, M. Sardi, strongly emphasized the urgency of restricting and rationing manufacturers, and pointed out that schemes for this purpose had been brought forward by his own Government and by that of the United States, but that both had been rejected. He proposed a resolution asking the Advisory Committee to take the matter up seriously.

It was explained in the discussion that States were still expecting the indirect effect of the general system of export and import licences upon manufacturers to bring about the limitation which is accepted as a principle in the 1925 Convention.

The Japanese delegate gave the welcome news that his Government was trying to limit manufacture, and the Spanish, Hungarian, and Serbian delegates each spoke of measures taken in their respective countries to strengthen the control of this traffic.

Then came a surprise which changed the atmosphere of the conference. The French delegate, M. Pernot, announced that his Government, realizing that no really effective result could be obtained without direct limitation of manufacture, had prepared a measure, which would come into force within a few days, by which French manufacturers would only be able to handle the raw material and manufacture these drugs within the limits determined by a Ministerial decree. Other measures had also been taken to bring into force a strict licensing system, and no permit would ever be given to any person who had been convicted of illicit trading in any country. Further, a special Narcotics Bureau had been set up in order to combat illicit traffic in every possible way. M. Pernot pointed out that French internal legislation had been adequate to prevent the spread of drug addiction in the country, and the spirit in which the French Government had acted in taking the measures he had described was one of purely international co-operation.

This speech brought new hope and life into the discussion. A French firm was one of the four whose products were found in enormous quantities in the illicit trade when the

Dutch Government made public last year the dealings of the Naarden firm, and there had been no indication up to this meeting of the Assembly whether any of the four countries to which these firms belonged intended to take adequate measures to prevent the recurrence of such leakage. The French delegate's speech showed that at least one of the manufacturing countries which had opposed direct limitation had come to realize that it was necessary, and in the course of a later session the delegate of the Netherlands, another manufacturing country, after explaining that he still did not think direct limitation necessary, announced that his Government would now be prepared to consider any practical proposal put forward.

Mr. Noel Baker, on behalf of the British delegation, promptly took advantage of this change in the atmosphere. He reminded the Committee that the British Government had put forward a proposal for direct limitation of manufacture in 1924 in the course of the preparation of the Convention, but that owing to the opposition of other manufacturing countries it had not been possible to include it. In a very able and convincing speech, he emphasized that national measures alone would not be effective without an international agreement as to the quota to be manufactured by each country of the total amount estimated to be needed for medical and scientific purposes. He put forward a draft resolution in which the Assembly would recommend the Council to "invite the Governments of the countries in which morphine, heroin, or cocaine are manufactured to confer together as to the possibility of arriving at an agreement as to the total amount of each of those drugs to be manufactured annually and as to the quota of that amount to be manufactured by each of those countries."

Mr. Baker also laid great emphasis on the urgency of all States ratifying the 1925 Convention and carrying out its provisions, and throughout the discussions, which lasted through six sessions of the Committee, one felt that, owing to the feeling that a definite attempt to limit manufacture would make the success of control more likely, the plea to States to carry out the other measures of control was meeting with more response than ever before. Among the speakers who followed, the German and Swiss delegates, representing the other manufacturing countries whose drugs have been found in large quantities in illicit trade, assured the Committee that their Governments would give favourable consideration to the British proposal.

There is not space to consider in detail the greater part of the discussion that followed. Some suspicion of the Advisory Committee was shown because it consists mainly of representatives of countries which manufacture drugs, and half of its members have not yet ratified the Convention of 1925. A number of other important proposals were considered and adopted in the final report to the Assembly, but the chief debate was on the best procedure to secure an effective plan for the limitation of manufacture. The Italian delegate insisted with great force that the conference proposed by the British should not be of manufacturing countries only, but should include representatives of "consuming" countries, and should be under the direct auspices of the League. The Chinese delegate also pressed for the inclusion of non-manufacturing States, because otherwise he felt that the temptation to the manufacturers to keep a margin above the medical needs would be too great and public opinion in the States which suffer most from the drug habit would not be satisfied. It was the latter States which were vitally affected.

Mr. Noel Baker, who had already proposed that there should be further representatives of the "consuming" countries on the Advisory Committee, agreed that they should also be represented in the conference on limitation of manufacture, in equal numbers with the representatives of manufacturing countries.

Finally a long resolution was agreed on, presented to the Assembly, and adopted. The important points are that the Assembly asks the Advisory Committee to prepare plans for the limitation of the manufacture of the drugs mentioned in paragraphs (b), (c), and (g) of Act 4 of the Convention

of Geneva by international agreement, regard being had to world requirements for medical and scientific purposes, and the means of preventing an increase in price which would lead to the establishment of new factories in countries which are not at present manufacturing countries. The Committee's report is to be presented to the Council, "which will decide on the convening of a conference of the Governments of countries where drugs are manufactured and the principal 'consuming' countries in a number not exceeding that of the manufacturing countries, and whether certain experts proposed by the Opium and Health Committees should be included."

This conference will evidently be of considerable interest to the medical profession. The drugs which are to be limited are those which are scheduled as dangerously habit-forming, but the question will certainly arise whether it is possible to have adequate control of these without some provision to keep track of those products of opium, such as codeine, which are not found to be dangerous. Obviously a manufacturer can profess to be manufacturing codeine when he is really buying it in the open market and using the opium he obtains for this purpose to manufacture additional supplies of morphine.

Manufacturers who are above suspicion will feel aggrieved if they suspect that others are making profit in this way. The question of State monopoly will also doubtless be considered, and many feel that it will prove to be the best solution.

INDUSTRIAL FACTORS IN THE PRODUCTION OF TUBERCULOSIS.

ADDRESS BY SIR THOMAS OLIVER.

ONE of the events of the fifteenth annual conference of the National Association for the Prevention of Tuberculosis, which has been taking place during this week at Newcastle-upon-Tyne, was a discussion on the factors that produce adult pulmonary tuberculosis.

In an opening address, in which he approached this question from the industrial side, Sir THOMAS OLIVER, Vice-Chancellor of Durham University, said that while occupation as such could not cause tuberculosis—unless in the case of direct infection of a wound—it could favour the development of the disease by locally predisposing the pulmonary soil for the reception of the organism, and also by reducing the individual resistance. Moisture and dust were the media for the conveyance of bacilli, but the number of tubercle bacilli thrown off during coughing, apart from expectoration, was smaller than might be expected. Experience showed that where tuberculous workmen were employed, so long as spittoons containing disinfecting fluid were provided and used their fellow-workmen remained free. It was when a careless phthisical workman spat indiscriminately on the floor, and the expectoration, having dried, was raised from the floor with the fine dust, that there was danger. As direct sunlight was hostile to the organism, factories in which dusty occupations were followed should have large windows so placed as to allow the workrooms to be flooded with sunlight, even if, during the summer months, it was necessary to make them temporarily opaque.

After mentioning bodily conditions, such as fatigue, exposure, and lack of nourishment, which lowered the barriers of resistance, Sir Thomas Oliver spoke at length on dust, especially dust of hard stone, which, when inhaled, seriously injured the lungs. The particles evolved from a rock during dry machine drilling varied in size, but all had the same character of extreme hardness and comparative insolubility in the juices of the body, so that on reaching the lungs they might, if in small quantity, be engulfed and eliminated by the large scavenger cells in the pulmonary alveoli, or by means of mobile cells be carried into the lymphatics of the lungs, and, emerging from them, subsequently give rise to structural changes in the connective tissue which tended to fibrosis. The organisms of influenza and pneumonia, when operating in the lungs, could induce physical alterations of an almost similar character. On the whole, the lung with fibrosis caused by dust was harder and heavier, cut

with a gritty sensation, and when incinerated showed a larger quantity of ash and was richer in silica than a fibrotic tuberculous lung.

Discussing some trades in particular, Sir Thomas Oliver mentioned the Sheffield cutlery trade. Much of the hand grinding of steel blades had been replaced by machine grinding, and natural sandstones by an artificial abrasive wheel. Great improvement had taken place in the health of the Sheffield steel grinders. In 1927 the medical officer of health for Sheffield reported that his city's death rate from tuberculosis was less than that of any other town, very considerably less than most, and that the percentage of reduction during the previous decade had been the highest of any town, much higher than the figure for England and Wales as a whole. With regard to granite cutting, Sir Thomas Oliver cited some experiences from the United States which showed that there was no particular liability to pulmonary tuberculosis so long as the concentration of granite dust remained within certain limits. There appeared to be a distinct relationship between the length of exposure to the granite dust and the prevalence and mortality rate of tuberculosis. Men following a dusty occupation and breathing orally could not but inhale the dust, the finer particles of which might reach the lungs and induce the structural changes mentioned. As the silicosis proceeded the altered structure of the lungs appeared to provide a favourable soil for the reception and multiplication of the tubercle bacillus, so that if a workman with silicosis lived for a few years he would probably succumb to tuberculosis.

In the report of the Miners' Phthisis Medical Bureau for 1928 Dr. Irvine had stated that in the gold mines of South Africa, while the number of cases of simple silicosis had in recent years decreased, the infective or tuberculous type of the malady had increased, and he regarded the present method of mining, involving sprinkling with water, as largely responsible. Dr. Irvine was of opinion that water sprinkling, while it had contributed largely to a great reduction of the dust content of the mine air, had certain positive disadvantages, for even with the best of watering a residuum of very fine dust remained, for the removal of which the best means would be ventilation as if the material were a gas. A moist atmosphere formed a good vehicle for the entry into the lungs of whatever dust remained in the air, and an equally good entry for tubercle bacilli. The finest particles of dust, such as soot and coal dust, did not take up water, and here Sir Thomas Oliver described some experiments on the surface tension of these materials, which had been carried out for him by Professor W. M. Thornton of Armstrong College. It was generally held that the finest particles, when inhaled, injured a miner's lungs, but according to these experiments, even when passed through water, most of the finest particles remained dry and were not moistened at all. The particles, however, still exercised their power for harm as siliceous agents, so that their removal by ventilation would be more effective as a preventive measure than water sprinkling.

Sir Thomas Oliver also touched on trades of a lighter kind, into which less robust adolescents were drawn, such as wholesale tailoring, where a high tuberculous mortality was not entirely due to the occupation itself, but to the combined influences of faulty posture, the nature of the work, and often overheated and badly ventilated workrooms, reacting unfavourably upon individuals with inherited or acquired physical feebleness. Among laundresses there had been a notable decline in tuberculosis, owing to the fact that parcels of clothing now received preliminary disinfection, and washing was largely done by machinery. Rigid attention to cleanliness and disinfection accounted for the small incidence of the disease among hospital and sanatorium nurses. The same remark did not apply, in his experience, to sisters of religious orders; incidence of tuberculosis was high, especially amongst those who were brought into intimate association with subjects of chronic phthisis, and who spent hours in imperfectly ventilated wards and took little exercise in the open air. In a final word on injury and tuberculosis, Sir Thomas Oliver remarked that injury of itself could not cause the disease, but where patients had died shortly after a severe blow upon the chest the lung at the autopsy had been found lacerated and haemorrhagic. Had the individual survived he might subsequently have died from pulmonary tuberculosis, due either to infection by inhalation or to the activation of dormant foci.