Medical Matters.

THE PREVENTION OF CONSUMPTION.



Dr. Koch's most interesting lecture at the British Congress on Tuberculosis on "the Combating of Tuberculosis in the Light of the Experience that has been gained in the Successful Compating of other Infectious Diseases," was attended by a crowded audience, and listened to with the attention which is the due of so eminent an authority.

THE PREVENTIBILITY OF TUBERCULOSIS.

The Professor said that as soon as the tuberclebacillus was discovered, it was possible to rank tuberculosis as a preventible disease. Practically, however, the conflict with it needed the cooperation of all medical men, shoulder to shoulder with the state and the whole population. Now the moment when such co-operation " Another is possible seems to have come. favourable circumstance is that success has recently been tachieved in the combating of several parasitic diseases, and that we have learned from these examples how the conflict with pestilences is to be carried on. Every disease must be treated according to its own special individuality.

THE LESSON OF OTHER INFECTIOUS DISEASES.

People used to act upon the conviction that a plague patient was in the highest degree a centre of infection, and that the disease was transmitted only by plague patients and their belongings. Even the most recent international agreements are based on this conviction. Although, as compared with formerly, we have the great advantage that we can, with the aid of the microscope and cf experiments on animals, recognize every case of plague with, absolute certainty, and although the prescribed inspection of ships, quarantine, the isolation of patients, the disinfection of infected dwellings and ships, are carried out with the utmost care, the plague has, nevertheless, been transmitted everywhere, and has in not a few places assumed grave dimensions. Why this has happened we know very well, owing to the experience quite recently gained as to the manner in which the plague is transmitted. It has been discovered that only those plague patients that suffer from plague pneumonia-a condition which is frequently infrequent-are centres of infection, and the real transmitters of the plague are the rats. There is no longer any doubt that, in by far the

majority of the cases in which the plague has been transmitted by ocean traffic, the transmission took place by means of plague among the ship rats. It has also been found that, wherever the rats were intentionally or unintentionally exterminated, the plague rapidly disappeared; whereas at other places, where too little attention had been paid to the rat plague, the pestilence continued. This connection between the human plague and the rat plague was totally unknown before, so that no blame attaches to those who devised the measures now in force against the plague if the said measures have proved unavailing. It is high-time, however, that this enlarged knowledge of the etiology of the plague be utilised in international as well as in other traffic. As the human plague is so dependent on the rat plague, it is intelligible that protective inoculation and the application of anti-toxic serum have had so little effect. A certain number of human beings may have been saved from the disease by that, but the general spread of the pestilence has not been hindered in the least. Dr. Koch then went on to show that as in cholera the main and most dangerous propagator in water (though it may, under certain conditions be transmitted directly from human beings to other human beings), in the combating of cholera water is the first thing to be considered, and that in Germany, where this principle had been acted upon, they had succeeded for four years in regularly exterminating the pestilence (which was introduced again and again from the infected neighbouring countries) without any obstruction of traffic. Protective inoculation had proved eminently effective in hydrophobia as a means of preventing the disease in persons already infected, but, of course, such a measure could do nothing to prevent infection itself. The only real way of combating this pestilence was, said the Professor, by compulsory muzzling. In this matter also they had had the most satisfactory experience in Germany, but had at the same time seen that the total extermination of the pestilence could only be achieved by international measures, because hydrophobia, which can be very rapidly and leasily suppressed is always introduced again, year after year, from the neighbouring countries.

Another disease which is etiologically very closely allied to tuberculosis, being caused by a parasite which greatly resembles the tuberclebacillus is leprosy. It is transmitted from person to person by close contact. Transmission by water or animals is out of the question. Combative measures, therefore, are to be directed against close intercourse between the sick and healthy, and Dr. Koch, therefore, holds that isolation is indicated. In this way, in the



