

they are leading persons suffering from minor mouth disorders to believe themselves to be afflicted with pyorrhea, claiming it to be a 'loose term,' whereas in fact it has a definite medical significance; that the public has already been defrauded of several hundred thousand dollars through the operations of the respondents; and finally that if prompt steps are not taken to prevent further use of the mails by the respondents the public will not only be further defrauded, but those suffering from pyorrhea will be discouraged from securing proper treatment which might save the teeth if taken in time."

From the memorandum it seems that Willard and Oneal made a strenuous effort to continue taking in the \$75,000 annually and submitted to the postoffice department a new set of advertising urging that they had completely modified the claims previously made. They stipulated that if permitted to continue in business they would not advertise their treatment as for pyorrhea or Riggs' disease nor use the mails to solicit money for the sale of a pyorrhea treatment. The solicitor of the Postoffice Department called attention to the fact that under the stipulations suggested, the Willard treatment could still be advertised and sold through the mails provided no mention was made of pyorrhea or Riggs' disease. As Willard-Oneal had claimed throughout the hearing that the "Willard Treatment" was specially designed for the relief of pyorrhea, the suggested stipulation was a virtual admission that its sale for such a purpose was fraudulent. The solicitor pointed out that it was difficult to understand why it should be deemed valuable for any other purpose than the one for which it was claimed to be specially prepared. The memorandum closed with the following recommendation:

"After a careful consideration of all of the circumstances of this case I am convinced that it is one in which the protection of the public demands the issuance of a fraud order . . . I find that this is a scheme for obtaining money through the mails by means of false and fraudulent pretenses, representations and promises, and therefore recommend that a fraud order be issued against the names appearing in the caption of this memorandum."

The fraud order was issued, Dec. 28, 1916.

## Correspondence

### Compulsory Health Insurance Unnecessary as a Public Health Measure

*To the Editor:*—In view of the fact that the propaganda for compulsory health insurance is made to rest largely on the assumption, which, however, is quite erroneous, that the health progress of countries under social insurance has been more pronounced or effective than the corresponding health progress of countries which have not established at least compulsory health insurance, such as the United States, Canada and Australia, or any one of the great South American republics, it may interest your readers to know that during the last twenty years the sanitary progress of the cities of New York and Berlin has been as follows:

Comparing the period 1888-1892 with the period 1908-1912, since there are no trustworthy data of a later date for the city of Berlin, it appears that the general death rate of New York decreased from 25.8 per thousand to 15.5, or 10.3 per thousand, equivalent to 39.9 per cent. The death rate of Berlin during the same period decreased from 20.9 per thousand to 15.1, or 5.8 per thousand, equivalent to 27.8 per cent. The average death rate of both cities during the period 1908-1912 was practically the same. It would therefore seem entirely erroneous to claim that the sanitary progress of the largest city of Germany was to a measurable extent affected by compulsory health insurance.

The mortality from pulmonary tuberculosis in the city of New York decreased from 32.4 per 10,000 during the first five years of the twenty-year period to 18.1, or 14.3 per 10,000, equivalent to 44.1 per cent. The corresponding decrease in the pulmonary tuberculosis death rate of Berlin was from 28.3 per 10,000 to 17.9, or 10.4 per 10,000, equivalent to 36.7

per cent. The actual as well as the relative decrease in the pulmonary tuberculosis death rate was therefore more pronounced in the city of New York, *without* compulsory health insurance, than in the city of Berlin, where practically the entire wage-earning population is subject not only to the provisions of the compulsory health insurance law, but also to the even more drastic provisions of a compulsory invalidity insurance law. It may be said in this connection that very little, indeed, has been done by sickness insurance societies in the direction of the prevention and cure of tuberculosis among wage earners. What has been done in this direction has been almost exclusively in connection with invalidity insurance, for the obvious reason that the comparatively short period during which medical attendance is provided would be of little, if any, real value in connection with the treatment of chronic or prolonged diseases.

The mortality from typhoid fever, which is perhaps the most sensitive index of sanitary progress, decreased in New York City from 2.5 per 10,000 to 1.1, or 1.4 per 10,000, equivalent to 56 per cent. The corresponding decrease in the typhoid fever death rate of the city of Berlin was from 1.4 per 10,000 to 0.3, or 1.1 per 10,000, equivalent to 78.6 per cent. The actual reduction in the typhoid fever death rate of the city of New York was therefore greater than the corresponding reduction in the typhoid fever death rate of Berlin, which, however, has now been reduced so low that the mortality is practically negligible. However, it requires to be considered that the city of New York has had to assimilate an enormous immigrant population, aside from the fact that large numbers annually go on vacation and contract typhoid fever in unsanitary resorts, etc. It is a safe assumption that a large portion of deaths from typhoid fever in the city of New York at the present time are cases contracted outside of the city.

An equally sensitive index of effective sanitary progress and control is the mortality from diphtheria and croup. The death rate from these diseases in the city of New York decreased from 13.3 per 10,000 to 3.2, or 10.1 per 10,000, equivalent to 75.9 per cent. The corresponding decrease in the death rate of Berlin was from 8.3 per 10,000 to 3.3, or 5.0 per 10,000, or 60.2 per cent. The mortality from diphtheria and croup is now almost exactly the same in the two cities, and it may safely be asserted that the reduction has been achieved in both cities without any reference whatever to compulsory health insurance.

A large amount of additional statistical and other evidence can be brought forward to prove that the sanitary or public health progress of the German Empire has not been in advance of corresponding progress made in this country or Canada or Australia. Since the death rate is practically proportionate to serious sickness rate, it is a safe conclusion that the general health conditions of this country, with particular reference to wage earners, are, broadly speaking, more satisfactory at the present time than at any time in the past, and that therefore the establishment of compulsory health insurance as a public health measure is wholly unnecessary.

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### Blood Transfusion

*To the Editor:*—In your answer to the inquiry of M. Y. D. regarding blood transfusion in THE JOURNAL, Nov. 25, 1916, it was stated that "in November, 1666, according to the diary of Samuel Pepys, blood transfusion from one dog to another was performed." I should like to amplify your perfectly correct quotation for the benefit of M. Y. D. and others interested in the subject.

It was in February, 1665, that Richard Lower, while working in Thomas Willis' laboratory at Oxford, transfused blood from one animal to another. Lower was "that expert anatomist" who had assisted Willis in his dissections of the brain and had drawn, with Christopher Wren, the later famous architect, some of the remarkable plates for Willis' celebrated book "Cerebri Anatome." It is thought that Wren first suggested the transfusion experiments following some infusion experiments which he had done in the Oxford laboratory.