

MUNICIPAL DEPARTMENT

HYGIENIC VIEW OF WOOD PAVING.

The following communication was sent to the Society of Sanitary Engineers and Architects of France by Mr. A. Petsch, engineer for bridges and roads, and is printed in L'Echo Forester :

The sanitary condition of cities is influenced in an important manner by the care given to the highways and by the nature of the adopted covering. Public opinion takes account of these matters and the question is often asked if wood paving is a covering consistent with hygienic requirements? In Paris there are about 1,000,000 square metres of wood paving. On this surface one hundred thousand metres have been laid expressly for the property owners along the river, at a cost of 450,000 francs.

The preference of the people is thus indisputable. Is this fact sufficiently reflected on, and does it not indicate a danger to the public health?

A few pages of a work on wood paving answers partly this question. From the beginning, wood paving has been criticized by certain hygienists, and it is not at all their fault, nor that of the contractors who willingly make themselves their echo, if the infatuation of the public has not changed into aversion.

In 1872, in the report on the application of science and art to street paving and street cleansing of the metropolis, the general board of health of London, Eng., declared that wood is a material which ought to be removed for covering streets, as the surface of the roads ought to be impervious. * * * Hygiene is absolutely opposed to its employment for reasons which the municipality slights in its dangerous ignorance of sanitary science. Wood is porous, is composed of bundles of fibres, it absorbs and retains water and especially putrescible fluids.

In 1878, Doctor Raymond, an inspector of public hygiene in New York, attributed the dreadful havoc made by the yellow fever at that time in New Orleans to the miasma spread by the wood paving.

In 1882 (when there hardly existed any wood paving in Paris), The Review of Hygiene took the ground that the reason of the unhealthfulness of wood paving seems no less than the impregnation of a body as porous as wood through muddy liquid charged with organic matter, the urine of horses and diluted dung. The wood itself also contains a certain quantity of albuminous matter, soluble, very fermentative and consequently dangerous. In addition, one is often blinded by dust formed of fragments of woody fibres and other injurious substances, and orphalmia is frequently bred by this cause of irritation.

In 1884, at the meeting of the associa-

tion of English civil engineers, a director of an asphalt company declared that wood paving was excellent for two or three years, but from that time it looked like an old tooth brush and gave off pestilential emanations through the heat of the sun.

Again in the same year, a report, written by a committee of physicians and scientists, was read before an important gathering, which contained the most serious accusations against wood paving. It said that wood ought not to be used for paving with any feeling of security until there is found a means to make it absolutely impervious to humidity and to suppress the dismemberment of its fibres, which conditions are not yet fulfilled.

Doctor Sedgwick Saunders, a physician to the board of health of the city, at the same time recommended sprinkling with antiseptic liquids, and stated as his opinion that wood paving is the most anti-hygienic street covering that man has invented. In certain roads the disinfection ought to be used twice a day as the organic matters infiltrate into the joints, decompose there and spread unhealthy odors. These and similar arguments are reproduced periodically in terms differing very little and can be summed in the following: The wood produces, when dry, a fine dust composed of pulverized fibres which is carried about in the atmosphere and from there into respiratory organs. The wood becoming every day more spongy, absorbs the liquids spread on the surface, not only rain water, but water from the household, horse urine and generally all the impurities of the street. These liquids introduced into the pores of the wood there lodge putrescible matters to which they serve as vehicles. These impure matters penetrate by the opening of these joints to the foundation, where they settle and form a pestilential hearth.

These arguments so often repeated, or drawn up a priori, or supported by probabilities, have never been demonstrated. And what are the facts? There has been immense and continued development of wood paved surface even in those cities where the attacks have been most violent. Is it blindness on the part of the municipalities, or on the part of the population which demands the new paving? At the metropolitan meeting (Jan., 1894), of engineers of cities and counties of England, all the members were unanimous in considering the contention of the hygienists as absolutely factitious and sentimental (Major Isaacs, engineer of Holborn; Tomkins, engineer of Marylebone; Masin of Saint Martin in the Fields; Bouinois, chief engineer of Liverpool, etc.); and according to these engineers if the local complaints sometimes have been raised with reason, they have only been justified through the poor work in paving or bad sprinkling.

In Paris, the opinion of the engineers is the same, that is to say very reassuring; certain quarters in the west, such as Marbeuf, are almost entirely paved with wood; their sanitary condition has been very satisfactory; and if it is recognized that this condition, superior to that of the

east, is due to other causes, it is also to be admitted that the establishment of wood paving has not interfered with the sanitary conditions and has not developed any epidemic.

ONTARIO HEALTH OFFICERS.

The annual meeting of the Ontario Health Officers' Association was held at Niagara, Ont., on the 14th of September. The president, Dr. W. B. Hall, of Chatham, occupied the chair. There were also present:—Dr. P. H. Bryce, Secretary, Toronto; Ald Allan, Chairman of the Toronto Board of Health; Dr. Sheard, Medical Health Officer, Toronto; Drs. Cassidy and Kitchen, of the Provincial Board of Health; Major Patterson, Chairman of the Chatham Board of Health; Dr. Beaudry, Chief Inspector of the Quebec Board of Health; Dr. Wyatt Johnston, Analyst of the Quebec Board of Health; Mr. J. J. Mackenzie, Analyst of the Ontario Board of Health; Dr. Wardlaw, Galt; Dr. McCrimmon, Palermo; Dr. Griffin, Brantford; Dr. Robillard, Ottawa; Dr. Vaux, Brockville; Dr. Anderson, Dr. Chrysler and Dr. Avery, Niagara. A number of medical health officers from the United States were also present.

After the delegates had been welcomed by the Mayor and aldermen, Dr. J. J. Cassidy, who has been connected with the association since its inauguration some ten years ago, briefly reviewed the reforms which it had wrought in sanitary matters during its existence.

Dr. C. O. Probst, Secretary of the Ohio State Board of Health, read a paper on the "Impediments to Sanitary Progress." He was of the opinion that the public did not appreciate the efforts of the health officers, and in many cases looked upon any new sanitary law as an infringement upon their rights.

Mr. J. J. Mackenzie, the analyst of the Ontario Board of Health, dwelt at some length upon the work which his department had accomplished. He dealt particularly with epidemics in cities, and showed clearly how, by analysing water and food stuffs, a disease might be traced to its source.

Dr. P. H. Bryce explained the working of the law passed at the last session of the local legislature regarding registration. The results derived from the new law, he said, were eminently successful.

The Secretary-Treasurer submitted his report for the year, showing a good balance to the credit of the association, and it was decided not to charge any membership fee for the ensuing twelve months.

The election of officers was then proceeded with, resulting as follows:—President, Dr. C. Sheard, Toronto; Vice-Presidents, Dr. McCrimmon, Palermo, and Dr. J. J. Cassidy, Toronto; Secretary-Treasurer, Dr. J. J. Mackenzie, Toronto. Council, Dr. Wardlaw, Galt; Dr. Griffin, Brantford; Dr. Coventry, Windsor; Dr. Hutchison, London, and Dr. Bowman, Berlin.

In the evening a banquet was held, which was largely attended.