

EFFECT OF HEAVY SNOW STORMS ON WOOD BLOCK PAVEMENTS.

The severe weather, with an excess of moisture, which has characterized the past winter has proved very destructive to pavements of all kinds both in the coast and prairie cities.

The lumber interests of British Columbia, anxious to have the causes of any failure on the part of wood paving investigated with a view to the application of the remedy necessary to prevent a recurrence of similar troubles, approached the Minister of Lands with this object in view. As a result, the Forest Branch has been delegated to conduct an early inquiry into the matter.

In this connection it is of interest to know that enquiries have already been set on foot by the West Coast Lumbermen's Association, whose engineer has submitted a preliminary report, and there is no question but that the chief causes of trouble with wood paving are due to faulty treatment of the blocks themselves, and defective methods of laying. The report reads as follows:

"A brief report is here given on the condition of some of the wood block pavements in Oregon and Washington after the last heavy snow storm. Seattle's wood block pavements were practically unaffected by this snow. In only one case, that of Fourth Avenue, was there any damage at all. Here the damage was entirely confined to the car tracks, and was very easily remedied. Only a few square yards of pavements had to be taken up and relaid. This pavement is almost seven years old.

Wood block pavements laid in Seattle have been constructed in accordance with improved methods which accounts for the absence of difficulties from such a severe snow storm.

The best type of construction has not been used in all cities, and some of the older types of pavement have given some trouble.

In Everett conditions were by far the worst. Here practically every wood block street having street car right of way gave more or less trouble by heaving. A thorough inspection of all these pavements showed two very important causes for this bulging:

(1) Not a single block was found which contained more than a coating of oil on the outside; no appreciable penetration having been secured. This left the blocks free to absorb all available moisture, and without the aid of the necessary expansion joints bulging was invited.

(2) Only 60 lb. T. rails were used in all track work. The vibration resulting from the use of these light rails allowed the snow and water to run between the rails and the blocks, and freezing raised them.

The condition existed not alone in the wood block streets, but also in brick right of way paving along the rails, and on an equally extensive scale. A different type of construction was used on the wood block paving along the rails, and where this was put in last year no trouble was experienced. Considering the kind of blocks used and the poor rails, the pavements have done remarkably well. The city and railway officials state that they are satisfied that proper conditions would prove wood block entirely satisfactory.

In Tacoma no appreciable damage resulted, only a few square yards of car track paving having been damaged.

But very slight damage occurred to wood block pavement in Portland. A small amount of bulging occurred on Fourth Street, which was readily repaired at very small expense, only a few square yards of pavement being affected. It must be remembered that the recent storm was extremely hard on all types of pavement, and wood block did not suffer unduly in comparison with other types of pavement.

In Seattle alone 45 miles of track pavement is reported to have been damaged, making it necessary to remove 250,000 bricks.

The Sherbrooke, Que., City Council has passed a By-Law making it compulsory for all manufacturing plants using soft coal to instal smoke consumers."

As there are some twenty such plants in the city which must comply with this By-Law, Manufacturers' of Smoke Consumers will do well to cover the field, and secure the business."

HEARTS AND FACES.

J. MURRAY GIBBON.

Mr. J. M. Gibbon, of Montreal, in his novel, "Hearts and Faces," has entered a new field of literature. His writing in the past has been confined to articles and sketches, though they have covered a wide range of subjects—from philosophy, for which he is specially qualified by his training in the universities of Europe, to art, of which he is also a student. Since he gave up the editorship of "Black and White," a popular illustrated weekly published in London, Mr. Gibbon has travelled in most countries, and a book from his pen based on his experiences, would be invaluable at this time, when people are wanting to know something more about other countries, particularly China and Japan, which the author knows well. As a writer Mr. Gibbon shows much breadth of thought and sympathy with the weakness of human nature. This is especially shown in "Hearts and Faces."

Some time back Mr. Gibbon wrote a very interesting study of the "Scotsman in Canada," that is not so well known as it might be considering its valuable data and well written criticism.

CANADIAN INDUSTRY, COMMERCE AND FINANCE.

By J. J. HARPELL.

The Journal of Commerce, which is under the editorship of the Hon. W. Fielding, has just published its second edition of "Canadian Industry, Commerce and Finance." The book, which is divided into two parts, was written and compiled by Mr. J. J. Harpell. The first part is the one that interests us the most, as it deals very thoroughly with Canada's basic industries, and it is only by the reading of such a volume that one can get a true perspective of the vast material wealth of the Dominion—its fisheries, its forests, its agriculture its minerals and its manufactures. The book shows that the author has gone to a great deal of trouble to secure his data, which is put into good and convincing language, that will go far to popularize the publication. The second part is made up with complete lists of Canadian producers, manufacturers, foreign manufacturers of special machinery and supplies necessary to the industries of this country, importers, exporters and wholesale houses, and marketable commodities. "Canadian Industry, Commerce and Finance," is issued as a companion volume to the Journal of Commerce, and published by the Industrial and Educational Press, Montreal.

HYDRAULIC FLOW REVIEWED.

By ALFRED A. BARNES.

This book can be recommended as one of absorbing interest for the student of hydraulics, since it throws fresh light upon a subject which has never previously been gone into thoroughly. First, collecting the various formulae and data of those who have made the rules which all engineers are in the habit of following in the design of pipes, channels, weirs and other passages for flowing water, the author proceeds to show in what way these rules are erroneous. Next, taking us into his confidence, he tells us of his own experiments, explaining fully, both by figures and by diagrams, how he arrived at the more accurate formulae which he now advocates. The ground covered includes the flow of water in pipes of all descriptions and ages, as well as through rivers, notches, weirs and circular orifices. The method of work employed by the author has the double value of being practical as well as theoretical. Every rule set down has been demonstrated by numerous experiments, which are here described quite fully. The subject is handled in a way that makes everything perfectly clear and easy to follow, and many practical examples are worked out to show in exactly what way the formulae should be used. The diagrams at the end of the book are by no means the least valuable part of it.

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NEW MUNICIPAL TELEPHONE.

A new telephone company is proposed, to be owned, operated and controlled by the citizens of New Glasgow, Westville, Stellarton and Trenton.