



A workman's home, built entirely of concrete. The walls have continuous cavities, a unique feature in this kind of building

### Cement and the Housing Problem Continuous Cavity Cement Walls Are Dry, Warm and Sanitary

Roughly speaking a half million immigrants will pour into Canada during the present year. They must be housed, and climatic conditions make comfortable houses a necessity. Co-incident with this great influx of new citizens there is a steady and rapid rise in the price of lumber. According to the Labour Gazette the index number for this important building material rose from 165 in January, 1912, to 170.9 in January, 1913, and the probability of a further rise is by no means remote.

#### Housing Requirements

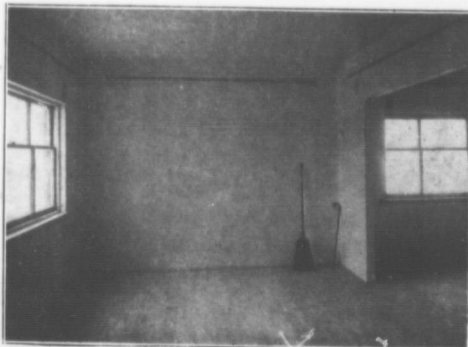
Such a situation bears most heavily on the labouring and artisan classes. When the cost of building materials is excessive, and the demand for homes rapidly on the increase, housing conditions among the less well-to-do are certain to degenerate. It is indeed surprising that architects and builders have not devoted more time to the construction of buildings that would prevent in large measure, the development of slums. Working men's homes, in common with others should be comfortable, thoroughly sanitary, well ventilated and lighted and attractive in appearance, and these features must be obtained at a minimum cost.

Of all building materials now in use, cement promises to fulfil these requirements in greatest measure. It can be used for the construction of walls, partitions, stairways, roofs and floors. It can be applied to advantage in the making of bathroom, laundry and kitchen equipment. It is easily kept clean, it is fire proof and construction can be carried out cheaply and rapidly. In addition, its plastic qualities make it easy for the architect to devise attractive designs.

#### Advantages of Cavity Walls

Solid cement walls are, of course, almost invariably damp and cold, but by using "continuous dead air" cavities this defect has been overcome. The building of such walls, however, requires special moulds, and efforts to construct the latter

so as to build a wall quickly and cheaply have been largely successful. The house illustrated in this number, is that of a better class artisan's or workman's home, having outside dimensions of 24 feet by 24 feet by 26 feet high. The walls are of cement and have continuous air cavities. The partitions are of solid cement three inches thick and the floors and the roof are of reinforced concrete. The building contains a basement; three rooms and a hall on the ground floor; and three rooms, a hall and a well equipped bathroom on the second floor. The cement construction-work, including the setting up and taking down of the forms occupied some 17 working days and this in spite of the fact that the moulds had never been tried before. The total cost of the house, complete with heating, plumbing and lighting apparatus, painting and finishing will be about \$1,800 and can be profitably rented at \$16.00 to \$18.00 per month. The maintenance charges for such houses need not be heavy. Fire insurance is not essential. They are practically frost, damp and vermin proof, and much less fuel is required than in the ordinary veneered house. Herein is surely a suggestion of great importance in the solution of the housing problem in Canada.—A. D.



An interior view of the home illustrated above, showing cement walls and partitions. The floor is overlaid with wood

### Public Health a Federal Question

"It seems to me, particularly with respect to the Maritime provinces, that, if there is one thing that we should be rid of, it is the administration in respect to Public Health; if there is any subject that should engage the attention of the Federal administration and should be subject entirely to Federal legislation, that subject is public health. In the Maritime provinces, particularly with our limited revenue, we have not the money to efficiently protect the public health, and, secondly, because if there is any one thing common to the whole of Canada, it is public health.

Take tuberculosis, with which we are trying to deal locally in Nova Scotia; what matter can be more easily discussed from one province to another, than tuberculosis? If there is any subject that this Commission could effectually deal with and assist us with, particularly in the Maritime provinces, it is this question of the prevention of disease throughout Canada, and the impressing on the Federal government of the necessity for dealing with this subject of public health."—Hon. O. T. Daniels, Attorney-General of Nova Scotia, at Fourth Annual Meeting of the Commission of Conservation.

#### WIRELESS USED IN FORESTS

The United States Forest Service is conducting experiments in the use of wireless telegraphy and wireless telephones as a practical means of communication between fire patrolmen and the headquarters office. Quick communication means the arrival of fire-fighters in the early stages of a fire. This in turn means that many fires will be extinguished in their incipency, with only nominal loss.—C. L.

The average value per acre of farm land in the United States rose from \$15.57 in 1900 to \$32.40 in 1910, a rise of 108 per cent.—United States Census Bulletin.

Leisure is a universal right in a society which boasts an economic surplus.

### Facts Concerning the Beaver

Canada and Siberia the Only Countries where Beaver are found Outside of Reservations

The upper waters of the Peace and Fraser rivers and the watersheds lying between the St. Lawrence and Hudson Bay may be regarded as the last homes of the beaver in America.

Their extinction in the regions of Canada just referred to, would render Government reservations a necessity in order to prevent their complete extermination.

#### The Beaver in Europe

The history of the beaver in Europe is instructive, in that it foreshadows what may occur in America. In the eleventh and twelfth centuries, the rights of hunting were carefully awarded and were highly valued. By the sixteenth century, we find efforts being made to prevent extermination of many of the most important beaver colonies. In 1714 and in 1725, edicts were issued insisting on the protection of those on the Elbe river—a fine equal to about \$200.00, being imposed for killing. Small colonies are still protected on the Elbe; on the Rhone in France; and in Sweden and Austria.

The retreat of the beaver in the British Isles was synchronous with the advance of settlement. The last colonies of beaver existed in Wales and in the Highlands, and in 1526, British beaver disappeared from the records of fur sales in England.

In Asia about 1000 are annually taken about the headwaters of the Obi in Siberia.

Very small numbers may still be found in parts of the United States and Mexico, and considerable successful restoration work has been carried out by the state of New York.

In Canada, the retreats are now being made before a civilization which is rapidly extending its boundaries. Reservations from which pot-hunters are excluded, and from which only a stated number of animals, predetermined by a study of the extent of the local food supply, may be taken annually, is the best means of conserving this very valuable fur-bearing animal. As they are given a measure of protection in Ontario, it is unlikely that they will ever be completely exterminated in that Province.—J.W.J.

#### OYSTER FISHING

The very stormy weather which prevailed along the coasts of the Maritime Provinces interfered to some extent with the oyster fisheries during the month of October. In Prince Edward Island, 6,148 barrels were taken in October 1912, as compared with 6,018 barrels in the corresponding month of 1911; while the catch in New Brunswick declined from 9,703 barrels in 1911 to 5,366 barrels in 1912.