

The Canadian Architect and Builder

C. H. MORTIMER PUBLISHING COMPANY
W. A. LANGTON

PUBLISHERS.
EDITOR.

OFFICES: CONFEDERATION LIFE BUILDING, TORONTO, CANADA.

VOL. XIX.—NO. 221.

MAY, 1906.

ILLUSTRATIONS ON SHEETS.

Parsonage for the Metropolitan (Methodist) Church, Toronto.—Messrs. Sproatt & Rolph, Architects, and S. Q. Curry, Consulting Architect, Toronto.

ADDITIONAL ILLUSTRATIONS IN ARCHITECTS' EDITION.

The Dominion Bank, Branch on the corner of Bloor and Bathurst Streets, Toronto.—Mr. Eden Smith, Architect, Toronto.

The Federal Life Building, Hamilton.—Messrs. Finley & Spence, Architects, Montreal.

CONTENTS

Editorial	65	The Art of Make Believe	74
Mr. Charles P. Baillairge	66	Judicial Decisions	75
Earthquakes and Earthquake Proof Buildings	67	Montreal Notes	76
Our Illustrations	68	The P. Q. A. A. Sketching Club	77
Mining Asbestos or Mineral Wool	69-70	A New Architects' Association	78
Royal Institute of British Architects	71	Blueprint Specifications	79
The Toronto Builders' Exchange	72-73	Painters and Decorators	ix
		The Labor Situation	xiv

Power from Windmills. A means has been found of utilizing windmills as a means of producing electricity. The cause of failure hitherto, has been in the attempt to obtain electricity directly from the wind-power; the variability of the power has proved to be beyond control. Mr. R. W. Wilson of Westfield, Ind., has contrived to utilize windmills to give a steady application of power without diverting them from their proper function of pumping water. The water is his agent for the application of power. It is pumped up first to a reservoir into which it may flow regularly or irregularly as the wind serves. The exit from the reservoir is under control by automatic valves, so as to apply power from the head of water as it is wanted. The apparatus runs itself. As storage for some days is possible, there is nothing to prevent farm's and workshops in the country being lighted and even run by electricity every day, in still as well as in windy weather; and, in the case of the farm, it may be a by-product, if the water is necessary for irrigation and other farm purposes. It is obvious that the use of wind-power as a remote agent instead of an immediate agent in the production of electrical power is capable of solution in other ways. Mr. Wilson's application of the windmill amounts to more than a new application; it is a new idea. The use of intermittent forces like wind-power and wave-power is understood to be awaiting the development of electrical storage. Mr. Wilson's invention amounts to the

introduction of an intermediate agent capable of storage. And there are other storable agencies in use in mechanics that it may be possible to apply on a large scale to take the place of water when its supply or disposal is not convenient.

Steam from the Earth

Another invention is promised by persons who are spoken of as "scientists of high position."

This is the use of the earth's internal heat as a source of industrial power. There is but little variation in the degree of heat found at the same depth in different localities. A comparison of underground temperatures has been made and a theoretical increase of one degree for every sixty feet has been determined. The boiling point should therefore be reached at about 12720 feet. The proposition is to bore two holes, about fifty feet apart, to a depth sufficient to reach a temperature of 240°; then lower charges of dynamite to the bottom of each hole and explode them until communication is established by fissures in the rock between the lower ends of the holes. These fissures will form an irregular but capacious caldron. All that remains is to supply water by one hole and apply the steam which will come from the other. The steam will have no divided inclination, with a water pressure of several thousand pounds to the square inch bearing upon it at the bottom of the supply hole.

A determination to put this idea into practice would