GS

Builder Canadian Builder Carpenter

PUBLISHED ONCE A MONTH BY THE COMMERCIAL PRESS, LIMITED

the TO

Home of Mr. Frank Denison Wells Hill Ave. Toronto





Build Now

ITH this "Build Now" slogan, builders and contractors have an opportunity of creating building activity this Spring and Summer which otherwise might not materialize. There are some real solid reasons why buildings which are needed should be erected this year, rather than waiting until war is over, or until business conditions are booming, as there is a tendency to do.

The April issue of the Canadian Builder and Carpenter will be our Spring "Build Now" number; and will contain information that will be of great value to our readers in influencing the people in their sections of the country to take advantage of present opportunities to build at a much lower cost than will be possible a year from now. Be sure and look for this number.

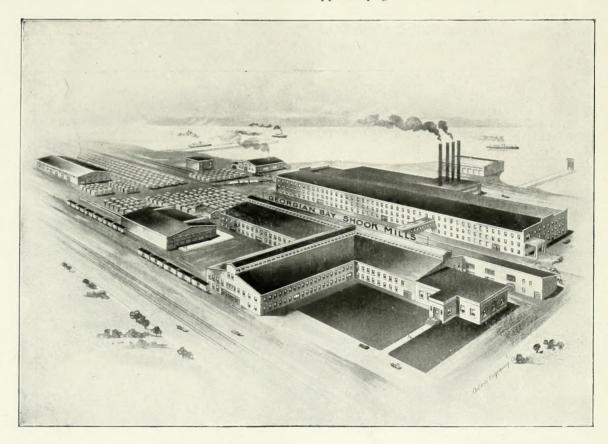
Midland Planing Mill Products

Made-in-Canada Goods

Mr. Contractor and Builder

You have WORK in hand-or PROSPECTS in view Then do not miss an OPPORTUNITY to SAVE MONEY on QUALITY GOODS.

Fill in the card on opposite page and we will do the rest.



Our policy this year is to serve you personally through the medium of our SALESMEN. We have them with Headquarters at Montreal, Toronto, St. Catharines, and Guelph. They are competent, practical, capable men.

They will gladly call, make any suggestions they can, explain our lines, quote you prices or make your estimates. It costs you nothing but the trouble to fill in and mail us the card opposite.

Send for our samples of four Canadian native woods—Clear Red Pine, Birch, Beech, and Ash.

Georgian Bay Shook Mills, Limited

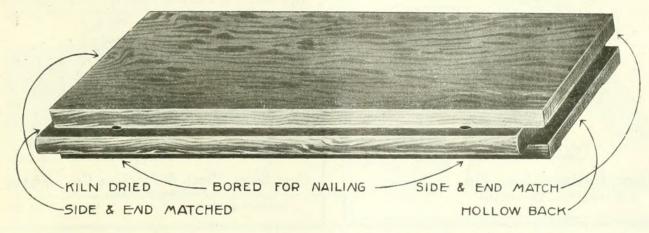
Midland, Ontario

Midland Planing Mill Products

Made-in-Canada Goods

We have nine distinct Departments in our organization. In this issue we would like to refer to one of these—Our

Hardwood Flooring Department



We manufacture Maple, Birch, Beech, Quarter Cut White Oak, and Plain White Oak Flooring. Our Hardwood Lumber is cut in our own Saw Mill—it is well seasoned and thoroughly kiln-dried. Our Machinery is new and up-to-date, and the manufacture consequently good. The thicknesses are 1-1/8, 13/16, 9/16 and 3/8.

A special line of our own is 9/16" Beech—which we claim is the best value to-day in Hardwood flooring. It is rich and red in color, very similar to oak in appearance, serves the purpose of 13/16" stock and the price is low.

We have special machinery for making Square Joint Veneer Flooring and sell it at the same price as 3/8" tongued and grooved stock. We carry a good assortment of flooring in stock, our capacity is 15,000 feet per day, and our deliveries are good.

Send for our Hardwood Flooring Price List to-day

Send for our Samples of Four Canadian Native Woods:

> Clear Red Pine Birch Beech and Ash

I have a list for prices	*
quire an estimate for prospective I your representative without ob	
Name	
Address.	

TEAR OFF AND MAIL US THIS REQUEST

Georgian Bay Shook Mills, Limited

MANUFACTURERS FROM THE TREE TO THE FINISHED PRODUCT

Midland, Ontario



Water - proof Hollow Cement Building Blocks with Granite Faces



They cost less

They sell for more

You sell more of

The Molds

BY A new process, which protects the facing while the block is being cast, we eliminate all traces of cement from the face of block, and nothing but the genuine granite shows in all its sparkling beauty.

WE challenge the whole world to show us a cement block made by any other system, at any cost, that equals these for beauty, strength, quality or imperviousness to heat, cold or moisture.

Special Offer: Send us fifty cents and we will send, freight prepaid to any point in Canada, one of our granite-faced blocks. You will say when you get it that you never saw a cement block before.

Mr Contractor:-

Get into a business that is protected. Then you will make money.

Send for catalog fully describing our system

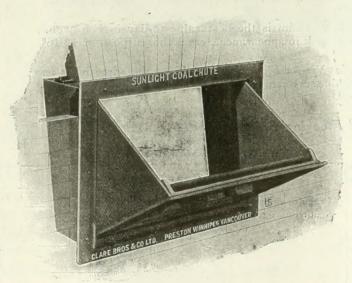


8x8x16 in. Granite Rock Faced Block

Cast Stone Block & Machine Co., Limited

302 Howard Ave.,

Windsor, Ont.



The Window Chute

is no longer a luxury but a recognized necessity in every up-to-date building.

Open—It's a chute through which fuel can be put into the basement with ease and convenience.

Closed—It's a window that locks automatically and can be opened only from the inside.

A Basement Window used for taking in fuel must be continually repainted, repaired and reglazed.

A Window Chute needs no repairs and is always neat and clean.

Prices sent on request.

Clare Bros. & Co., Limited:

PRESTON ONTARIO

Manufacturers of HECLA FURNACES, PENINSULAR RANGES

CLARE & BROCKEST, Limited, Winnipeg REYNOLDS & JACKSON, Calgary RACE, HUNT & GIDDY, Edmonton J. M. KAINS & CO., Vancouver

Business as Usual

ALL DEPARTMENTS IN OPERATION

Prompt Shipment Guaranteed

BENSON & BRAY, LIMITED

MANUFACTURERS OF

High Grade Planing Mill Products

MIDLAND, ONTARIO

Are Your Friends

Getting

The Canadian Builder and Carpenter

You can do them a good turn by introducing the paper to them, and at the same time make 50 cents on each subscription you secure for us.

Collect a dollar from each one who subscribes, and send name and address together with 50 cents, keeping the other 50 cents for your trouble.

The Commercial Press Limited

32 Colborne St.

Toronto

Hardwood Flooring and Hardwood Interior Finish

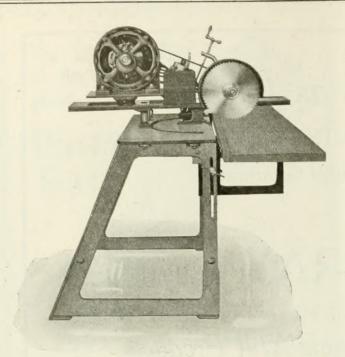
"WILSON BROS. LIMITED" on flooring means a carefully kiln-dried and well manufactured article. Our flooring is straightened, hollow-backed, bored, end-matched, steel polished and bundled.

We specialize in Veneered Doors to detail, also all kinds of Hardwood Interior Finish.

Write and send list and details for Quotations

Wilson Bros. Limited

Collingwood, Ontario



THE ELLIOT

is the woodworking machine that will give you entire satisfaction and easily save you its cost long before the season is over. Some features of

The Elliot Woodworker

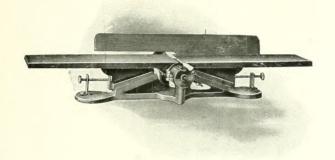
- ¶ Runs on any house lighting current.
- I Light and portable and can easily be moved to any part of the building.
- Takes but a few days for the user to become an expert.
- ¶ Almost impossible for the operator to obtain injury.
- It is equipped with the best motor on the market and absolutely guaranteed.
- It will save you 20% to 30% on every job.
- ¶ Saves running to the mill.
- In cross cutting plank the work is stationary and any length of plank can be cut same as with a swing saw.
- ¶ The cost of electric power in Toronto never exceeds \$1.50 a month.
- The simplicity of construction, absence of countershafts, long belts, etc., make it economical to use and ensure it from getting out of order.
- It will cut 3" thick, 3" joists, 2x4 fence boards, house out a pair of stair strings, 16' long in 35 minutes and do all other dadoing, grooving, etc., required.
- It is entirely different from any other machine.
- Hundreds of users all over Canada and United States strongly recommend it. We will gladly send you literature, prices and full information about the Elliot Woodworker on request.

The Elliot Woodworker, Limited

Head Office: College and Bathurst Streets, Toronto, Canada

United States Branch: 2405 Woodward Avenue, Detroit, Michigan

THE ELLIOT MACHINES



The Elliot Jointer

This Surface Sander fills the bill. It has a 12 x 12 drum mounted on hanging frame with adjustable spring that regulates the pressure. It is the best and cheapest Drum Sander on the market. Run it from an Elliot or any line shaft.



The Eliiott Drum Sander

This 6-inch Improved Bench Jointer is needed by every Builder and Carpenter. It is just as handy in a small shop as a large one and will take care of all jointing planing, rabbeting, etc. No more use for the hand plane when you have this machine. The same motor that runs the Elliot Woodworker can be connected to it or it will run from any line shaft.



The Elliot Scroll Saw and Shaper

The Elliot Scroll Saw and Shaper is two machines in one. The head can be removed and Shaper attachment put in its place in two minutes. As a Scroll Saw you cannot beat it for cutting cambers, corner blocks, fancy balusters, brackets, etc.

Used as a Shaper you can do all molding and shaping without delay.

Send a request for literature, prices and special catalogue of all our Woodworking Machinery

The Elliot Woodworker, Limited

Head Office: College and Bathurst Sts., Toronto, Canada

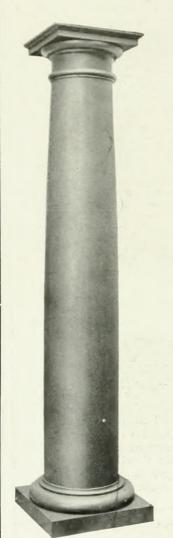
United States Branch: 2405 Woodward Avenue, Detroit, Michigan



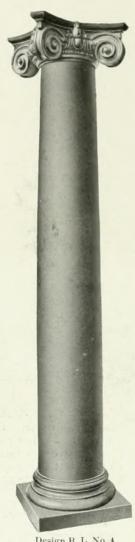
BATTS' STAVED COLUMNS

BUY GOODS "MADE IN CANADA"

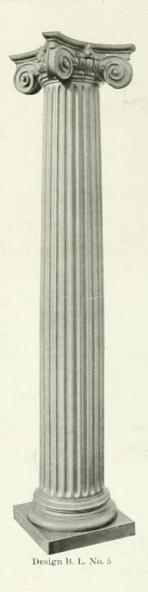
(WE MANUFACTURE ALL OUR OWN GOODS)

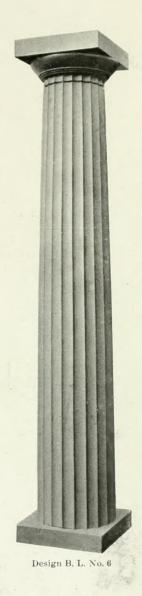


Design B. L. No. 1



Design B. L. No. 4





OUR FACILITIES FOR THE EXECUTION OF ORDERS FOR DOORS AND COLUMNS TO SPECIAL DESIGN ARE SUCH THAT WE CAN SATISFACTORILY MEET ANY REQUIREMENT.

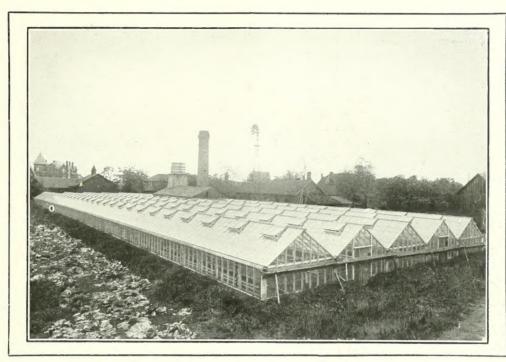
385-387 Pacific Ave.

BATTS LIMITED

West Toronto BATTS LIMITED

VENEERED & PINE DOORS

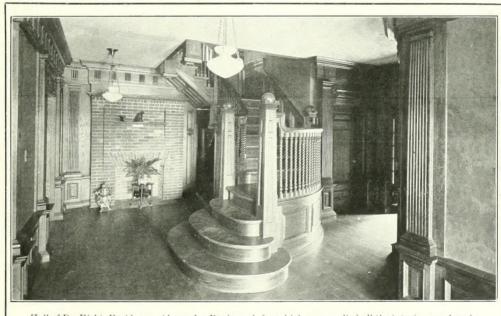
GREENHOUSE



MATERIALS

DETAIL WORK A SPECIALTY

NEWELS



Hall of Dr. Risk's Residence, Alexander Boulevard, for which we supplied all the interior woodwork

Write for Catalogue, showing cuts of varied assortment of goods that we carry in stock, all of which are manufactured at our own factory.

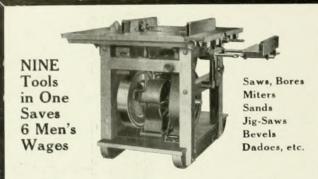
385-387 Pacific Ave. **BATTS LIMITED**

West Toronto

R

M

Change Tools—Don't Stop Engine



Eveready Saw Rig

The new belt-tightener appliance on the Evercady Saw Rig permits you to change the tools—any of them—instantly, at any time without stopping the engine. No clutch—simplest thing ever devised. Can't get out of order. Never fails. Saves hours of time in a month. Send for full particulars.

OSHKOSH MFG. CO., 520 So. Main St., Oshkosh, Wis.

Chicago, 1440 Monadnock Bldg., New York, Dodge & Dodge, 1133 Broadway

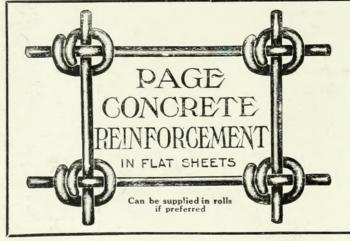
GLASS

All Kinds of Glass for Building Purposes

Plate, Window, Figured
Ornamental
Bent and Mirror Glass

The Consolidated Plate Glass Co.

TORONTO MONTREAL WINNIPEG



For Concrete Road Pavement, Walks and Building Floors

We are the originators of this wire reinforcement in flat sheets, and it is coming into universal use wherever introduced. We have supplied many carloads of it this past season.

The standard mesh for road pavement is 6 x 12 inches; for bridges and building floors, the standard is 3 x 6 inches. All sheets 4 feet wide, and any length specified that can be loaded in cars.

Samples will be sent upon request.

We also supply Iron Fences, Fire Escapes, Office Wire Work, and all kinds of Builders' Wire and Iron Work.

The Page Wire Fence Co., Limited

Dept. 21-a
1137 King St. W. 505 Notre Dame St. W. 87 Church St. 39 Dock St.
TORONTO MONTREAL WALKERVILLE ST. JOHN, N.B.

S BRAND WINDOW GLASS



GLASS BENDERS TO THE TRADE

THE TORONTO PLATE GLASS IMPORTING COMPANY, LIMITED

Plate, Window, Figured, Stained, Wired, Bent, Mirror and Ornamental Glass

TORONTO

DON ROADWAY



Amasa Stone Memorial Chapel, Western Reserve University Cleveland, O. Henry Vaughan, Architect, Boston, Mass.

Sounding Board Proved of No Value

In order to find out whether a sounding board of the most approved type would correct faulty acoustics, careful tests were made in the chapel of Adelbert College.

The result showed that, under certain conditions, the sounding board made hearing only 2% easier in some parts of the building, while at the same time, it made hearing less easy in the gallery-thus proving the sounding board of comparatively no value.

JM Method of **Acoustical Treatment**

was then applied to the ceiling panels and upper walls of the chapel, and resulted in the elimination of all acoustical defects.

There is nothing experimental about this system. It has produced successful results in courtrooms, theatres, halls, churches and public buildings all over the country.

The J-M Method of Acoustical Treatment should preferably be applied during a building's construction—but, as in the case cited above, it will correct existing acoustical difficulties in any building.

If you have any acoustical problem that our thorough experience can help you solve, write to our nearest Branch.

THE CANADIAN

H. W. JOHNS-MANVILLE CO., LIMITED

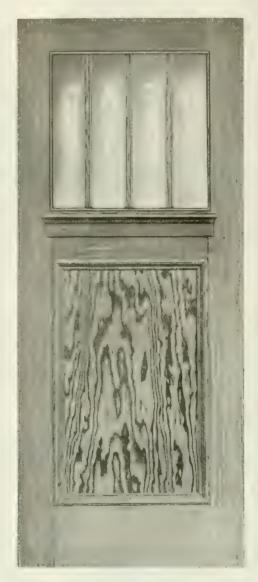
Toronto Montreal Winnipeg Vancouver



Manufacturers of Asbestos Shingles; Roofings; Stucco; Pipe Coverings; Cold Storage Insulation; Waterproofing; Sanitary Specialities Cork Tiling; Etc. 2913



YORK PRODUCTS



Made in Canada



Y.L. 580

Y. 570

The above cuts are two of our stock front doors. We carry a large assortment of styles. Made of three-ply veneer fir panels.

Write for illustrated catalogue

The York Lumber Company, Limited

HEAD OFFICE 1000 Gerrard Street East

TORONTO

A PRACTICAL MONTHLY PAPER



PUBLISHED END FIRST WEEK

D O. MCKINNON PRESIDENT AND
GENERAL MANAGER

PAPERS

J C ARMER

VICE-PRESIDENT AND

MANAGER OF TECHNICAL

The Commercial Press, Limited

W. L. EDMONDS

VICE PRESIDENT AND

CONTRIBUTING EDITOR

32 Colborne Street, Toronto Montreal Office:

704 Unity Building

WESTON WRIGLEY VICE PRESIDENT AND MANAGER OF TRADE PAPERS

EDITORIAL

GORDON C KEITH, M.E., M SC CHIEF EDITOR ERIC A FORSON, EDITOR

C. G. BRANDT, CIRCULATION MANAGER, TORONTO

Subscription Rate, \$1.00 per year in Canada and Great Britain; \$1.50 to the United States; \$2.00 to Foreign Countries.

Subscribers would do us a favor by notifying us if they do not receive

GEORGE G COLVIN, ADVERTISING MANAGER R C HOWSON, MONTREAL

E J MACINTYRE, ROOM 1155 122 S MICHIGAN AVE CHICAGO

ADVERTISING

the paper regularly, so that the matter may be rectified. In notify mg us of change in address, please send old as well as new address Advertising rates on application.

Vol. 5

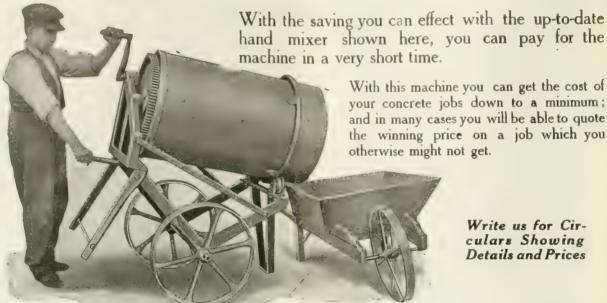
TORONTO, MARCH, 1915

No. 3

Editorial Contents

The New Workmen's Compensation Law in Concise Form	Correcting Damage Done by Sudden Rain on Concrete Pavement.				
By George A. Kingston.	Developments of London Concrete Machinery.				
A Business Slogan—Build Now 17	Large Concrete Order.				
Building Permits for December and Twelve	New Flat Concrete Reinforcement.				
Months	Canada's Fire Losses.				
Well-designed, Commodious Halifax Resi-	Improving Conditions in Lumber Industry.				
dence	Watchman's Register With no Upkeep Charges.				
Carpentry and Woodworking Department 20					
Thin Versus Thick Coats of Paint.	News of Builders' Exchanges				
New Use for Brace. New Use for Sawdust.	Annual convention of Provincial Builders' and Supply Association.				
How to Clean a Smoked Ceiling.	Noonday Luncheons at Toronto Exchange.				
	Convention Postponed.				
Wage Scale in Principal Towns and Cities in Canada.	New Officers of Regina Exchange.				
Red Birch Flooring.	Corrected List of Toronto Exchange Officers.				
Concrete Department	Annual Meeting of Vancouver Exchange.				
Time of Setting Cement.	Toronto Exchange Members Play Hockey.				
Dustless Concrete Floors.	Annual Convention C.N.C.P.A.				
Preventing Freezing of Concrete.	Winnipeg Exchange Holds Bonspiel.				

Make More Money On Your Next Concrete Job



the winning price on a job which you

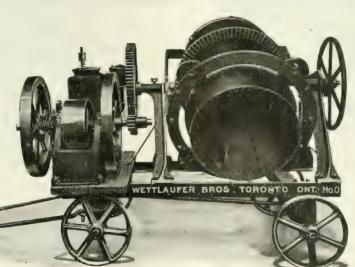
Write us for Circulars Showing Details and Prices

Wettlaufer No. O. Improved Hand Mixer

The Famous Little Wettlaufer No. O Power Mixer

Or perhaps it's a power mixer you need. If so the Famous Little Wettlaufer No. O Mixer is the very machine for you.

The range of work this Little Mixer covers is really wonderful. It is specially adapted for a hundred different kinds of jobs.



Copy of our circular giving complete details and information concerning this machine sent free of charge to readers of The Canadian Builder and Carpenter.

Office and Warerooms WETTLAUFER BROS. 316 Lagauchetiere St. W. Montreal

WETTLAUFER BROS.

178 SPADINA AVE., TORONTO

MAYSMITH & LOWE 545 Bastion St. Victoria, B.C.

A. R. WILLIAMS MACHINERY CO. 15 Dock St. St. John, N.B.

G. B. GRANDBY & CO. 20 Princess St. Winnipeg, Man.

A. E. HODGERT Regina, Sask.

R. F. MANCIL 41 Cadogan Bik Calgary

The New Workmen's Compensation Law in Concise Form

This article gives a concise statement of the terms of the new Workmen's Compensation Act which is now in force. It gives the essential features and will enable builders and contractors to understand it without going through the whole Act

BY GEORGE A. KINGSTON
Commissioner, Workmen's Compensation Board.

THE Workmen's Compensation Act was passed at the 1914 session of the Ontario Legislature. It was recommended and prepared by Sir William Meredith, after extended investigation. It may be described as a new code of law respecting compensation for accidents happening to workmen in the course of their employment.

The Act came into force immediately upon its passage, so far as preparations for its administration were concerned, but the provisions respecting the payment of compensation came into operation at the beginning of this year, 1915, that being the date fixed by proclamation as provided for in the Act.

Employments Covered.

The part of the Act which is to be administered by the board is called Part I. It does not apply to all employments, but it applies to employments in the very large number of industries enumerated in Schedule 1 and Schedule 2, chief among which are manufacturing, building, construction, lumbering, mining, quarrying, transportation, navigation, operation of public utilities, etc.

The distinction between the two schedules is that as to employers in the industries in Schedule 1 the board is to levy an assessment and collect an Accident Fund out of which the compensation to workmen is to be paid, the employers in this schedule not being individually liable to pay the compensation; while as to employers in Schedule 2, no accident fund is collected from them, but they are individually liable to pay the compensation as each accident occurs.

When Compensation Payable.

The compensation for the injury is payable irrespective of any question of negligence or absence of negligence in the employer or the workman. The matter is not complicated by the old defences of common employment or voluntary assumption of risk. The only cases in which compensation is not payable, provided the accident arises out of and in the course of the employment, are:

1. Where the disability lasts less than seven days;
2. Where the accident is attributable solely to the serious and wilful misconduct of the workman and does

not result in death or serious disablement.

No agreement to forego the benefits of the Act is valid; no part of the amount payable to the Accident Fund by the employer is to be charged against the workman; and the compensation cannot be assigned, charged, or attached, except with the approval of the board.

An employer in Schedule 1 may carry himself on his wage list at a reasonable salary, not exceeding \$2,000 per annum, and, if he makes return to the board accordingly, will be entitled to compensation like any ordinary workman.

Compensation is to be paid for the industrial diseases specified in the Act, as well as for accidents.

The right to compensation under the Act is in lieu of the right of action for damages at law.

Scale of Compensation.

The scale of compensation provided for by the Act is as follows:

If the accident results in death and the workman leaves a widow, but no children, the widow is entitled to a monthly payment of \$20 a month.

If he leaves a widow and children the payment to the widow is \$20 a month and \$5 a month for each child under sixteen years of age, not exceeding \$40 in all.

If he leaves children only, the payment is \$10 a month for each child under 16, not exceeding \$40 in all.

If the workman was under 21 years of age and his dependents are his parents, or one of them, such parents or parent will be entitled to \$20 a month until the workman would have become 21 years of age, or for such longer time as the board may determine.

In the case of other dependents they are entitled to a sum reasonable and proportionate to the pecuniary loss occasioned to them by the workman's death, as de-

termined by the board.

The necessary expenses of burial, not exceeding \$75,

are also in all cases to be paid.

All the above is governed, however, by the provision that in no case is the compensation to exceed 55 per cent. of the workman's average weekly earnings in the employment, and all provisions for compensation are subject to the further proviso that no salary or wages of a workman shall be reckoned at more than \$2,000 a year.

In the case of a widow who marries again, the periodical payment ceases on her marriage, but she is entitled within a month after her marriage to a lump sum

equal to two years' pension.

Where the accident results in total disability of the workman, he is entitled during the continuance of the disability, whether for life or temporarily, to a weekly or monthly payment equal to 55 per cent. of his average weekly earnings in the employment. Where the workman is only partially disabled, he is entitled to 55 per cent. of the impairment of his earning capacity.

An important feature of the compensation under the Act is that, unlike what existed under the old law, it is payable periodically rather than in a lump sum, and as a rule it continues during disability or during life, as

the case may be.

Where the impairment of earning capacity does not exceed 10 per cent. the compensation is to be fixed by the board at a lump sum, unless the board thinks it is not to the advantage of the workman to do so; and the board may in other cases fix the compensation at a lump sum if it sees fit.

How Questions Determined

All questions as to the right to compensation and the amount of it are to be determined by the board and its officers instead of by the courts. The employer is re-

quired by the Act to notify the board, within three days, of any accident happening to a workman in his employ. The workman must, as soon as practicable, and before voluntarily leaving the employ, give notice of the accident to his employer, and, in all cases under Schedule 1, also to the board, and must make claim for compensation within six months. Forms prepared by the board will be required to be filled up by the workman, by the employer, and by the physician, where one has been in attendance, and forwarded to the board, and from the particulars given in these reports and from the examination of a medical referee chosen by the board, where that is deemed necessary, the board will deal with the claim, award payment, order further investigation, or take such action as seems proper.

How New Law Differs From Old.

The new law differs from the old:

First, in the circumstances of conditions under which the compensation is payable. Under the old law an injured workman, or the dependents of a deceased workman, had no right to recover anything unless negligence of the employer could be proven. If he was himself guilty of negligence contributing to the accident, he could not recover. If he was injured by the negligence of a fellow workman he was barred from recovery. If it was a case in which he was presumed to have voluntarily assumed the risks of the employment, he was also barred from recovery. Under the new law none of these things is of any consequence. The misfortune of a crippled workman, or the needs of his widow or children are not any less because he or someone else was or was not to blame, and the Act provides that the workman or his dependents are to be entitled to compensation irrespective of negligence or any other circumstance except only, as before mentioned, that the accident must not be attributable solely to his own serious and wilful misconduct; and even where it is attributable solely to his serious and wilful misconduct, he or his dependents will still be entitled, if the accident results in serious disablement or death.

Secondly, the new law differs from the old in the amount of compensation and in the mode of payment. Formerly it was a lump sum fixed by the jury or by the judge, varying greatly in different cases. Under the new law there is a greater certainty and a more equitable rule as to the amount. A very important feature of difference in the new law is the periodical continued payment rather than a lump sum in settlement of damages. The benefit of periodical payment is obvious. Often lump sums in damages recovered by a widow or other dependents have been badly invested, frittered away, or otherwise lost, and the widow and children perhaps in the end left without support. The policy of the new Act is to provide continued support.

Thirdly, the new law differs from the old in the mode of determining the right to and the amount of compensation. Under the old law if the employer and the employe did not agree on a settlement the remedy was an action at law. This sometimes lasted a long time. After trial usually came an appeal; perhaps one appeal after another. It meant expensive litigation and annoyance to the claimant, and perhaps in the end not a very satisfactory result. The ordinary workman would often prefer to do without damages or compensation rather than undertake the trouble and expense; and perhaps he did not have the money and could not proceed with it. On the other hand, in many cases, claims for damages would be brought against employers with-

out just grounds, and litigation and expense would be entailed; and often the employer, rather than fight the lawsuit, would settle. In this way the old system of recovering damages by lawsuit was unsatisfactory and oppressive to one or both parties. Those who deserved compensation often got nothing, while some not entitled harassed employers with vexatious actions. Under the new law all matters as to the right to, and the amount of compensation, will be settled by the board with little or no expense to the parties and without any appeal. Employers in Schedule 1 will no longer be liable to pay or be sued for damages, but will be liable only to contribute to the fund out of which the compensation is to be paid.

Collection of Accident Fund.

All employers in the industries included in Schedule 1 are required, without notice, and subject to penalty in case of default, to prepare and transmit to the board statements of the amount of wages paid by them. Assessments will be levied for such sums as are deemed necessary for each class of industry, and after receiving notice of assessment, employers must transmit the amount to the board, in accordance with the terms of the notice, employers failing to make payroll returns may be assessed for such sum as the board deems right. In case of failure to pay any assessment, judgment may be entered in the county or district court, or means of enforcing payment may be taken through the medium of the municipal tax collector. If any employer is for any reason not assessed, he is nevertheless liable to pay the amount for which he should have been assessed. Audits of payroll statements will be made by the officers of the board from time to time and errors in amount, or classification or otherwise, will be corrected.

Employers commencing any industry after an assessment has been made are required forthwith, under penalty, to notify the board of the fact, and security may be required in the case of any industry carried on only temporarily.

Wherever any employer included in Schedule 1 would be entitled to a lien under The Mechanics' and Wage Earners' Lien Act, it is the duty of the owner, as defined by the Act, to see that assessments are paid by such employer, and if he fails to do so, the owner will be personally liable to pay them to the board.

Employers in the industries included in Schedule 2 are not required to contribute to the accident fund, but as accidents occur from time to time, they must pay the compensation fixed by the board. They are, however, to be assessed for contribution to the expenses of administration.

Accident Prevention.

Employers in the industries included in any class may form themselves into an association for accident prevention and may make rules for that purpose, and when such rules are approved by the board and by the Lieutenant-Governor-in-Council they shall be binding upon all the employers in that class. Such an association may in accordance with such rules appoint an inspector or expert for accident prevention and his salary may be paid in whole or in part by the board.

Committee of Employers.

Employers in any class in Schedule 1 may appoint a committee of not more than five of their number to watch over their interests and to approve payment of

claims or act as a medium of communication with the board.

Part 2 of the Act.

Though not under the jurisdiction of the board, it may be mentioned that by Part 2 of the Act workmen employed in industries other than those included in Schedule 1 and Schedule 2, have had their right to recover damages in the ordinary courts extended by the taking away of the employers' defences of common employment and assumed risk and the making of contributory negligence only a ground for reduction of damages instead of a bar to recovery; but from this must be excepted farm laborers, menial and domestic servants, outworkers as defined in the Act, and persons engaged in clerical work and not exposed to the hazards incident to the nature of the work carried on in the employment, these being expressly excluded from the operation of any part of the Act. With the exceptions mentioned, workmen omitted or excluded from the schedules, as well as those included, are now in a much better position than under any former law.

X0 34

A Business Slogan—Build Now*

Only last month there met in convention in this hotel the Canadian National Clay Products Association, and at this present time there are also meeting in convention, in Ottawa, the Associated Builders' Exchanges. Now the hardwaremen are meeting together. These three great associations have some common planks in their platform, one of which I would like to draw to your attention.

You have no doubt heard the slogan of the cotton growers in the Southern States, "Buy a Bale of Cotton"; of the druggist, "Buy a Bandage"; of the furniture manufacturer, "Buy a Piece of Furniture." I bring you a new slogan built on business principles, BUILD NOW. This is a business proposition for several reasons, one of which, taking all things into consideration, is that it is cheaper to build now than a year ago.

I mentioned the manufacturers of brick and hollowware. We must confess that brick is selling at \$8 to \$10 per M., which is 25 per cent. at least less than a year ago. The brick manufacturers have two slogans, BUILD NOW and "Build with Brick." They go well together.

I referred to Builders' Exchanges, employers of labor and dealers in building materials. There is no doubt that labor is more plentiful and may be secured at at least 10 per cent. less than a year ago. While some building materials have increased in cost, due to the war, there has been a decrease in the cost of several lines.

The Financial Situation

One important feature in the building situation is the loosening up of money. The financial statement of the chartered banks of Canada shows that there is over \$1,000,000,000 in deposits. The commercial loans have greatly decreased, and the money in the bank vaults has been piling up so that they must put it to work if they wish to pay dividends, and money from this source will be easier to secure.

This same condition obtains in the United States.

In this connection it may be interesting to know that in 1913 we borrowed from the United States \$50,720,000; in 1914 we borrowed \$54,000,00, while the first five or six weeks in 1915 alone we borrowed \$37,000,000.

The bond houses tell me that there is a greater demand for bonds and debentures than they are able to supply. It is evident, therefore, that there is money available for municipal works and building construction.

There is still another feature of the financial situation. Have you ever seen the time when the farmer secured more for his butter or more for his eggs? It is interesting to know that the farmer secured \$86,000,000 more for his field crop in 1914 than the year previous. We have been preaching to the farmer to produce more, and he is taking the steps to produce more in 1915. This means that he will receive more money in 1915 for his field crops than he did in 1914.

It looks to be the logical time, therefore, for a campaign among municipalities and especially the farmers to BUILD NOW, to build and repair and paint their houses; to build and repair and paint their barns and other buildings. Farmers are spending money on automobiles, and if you coax them a little bit there is no doubt that you will get a large share of the business for builders' hardware.

Let the Brick Manufacturers, the Builders' Exchanges and the dealers in Builders' Hardware join together with the slogan BUILD NOW.

製 製

Building Permits for December and Twelve Months

Maritimes -	Dec. 1914	Dec. 1913	12 mos. 1914	12 mos.1918
Halifax	\$ 77.650	\$ 34,200	\$ 879,320	\$ 835,850
St. John	16,900	12,950	515,300	2,412,000
Moncton	4,750	700	337,355	180,780
Sydney			110,837	321,198
Quebec -			,	
Montreal	. 361,135	1,308,230	17,638,446	27,032,097
Outremont		107,000	974,050	2,003,675
Westmount		220,600	. 698,585	2,009,326
Maisonneuve		148,500	2,574,540	2,454,923
Quebec	308,673	61,291	2,759,572	1,939,881
Ontario		98,390	730,340	651,871
Brantford		53,325	439,510	1,015,886
Chatham		8,935	185,730	338,310
Guelph			521,784	357,335
Fort William		283,400	1,519,965	4,265,715
Hamilton		235,050		5,110,000
Kingston		85,207	288,577	666,474
London	30,555	47,035	1,837,735	1,789,920
North Bay	300	5,410	333,625	492,940
Ottawa	65,400	96,550	4,597,920	3,991,380
Preston		7,650	92,480	400,055
Port Arthur		25,075	1,234,039	1,935,185
St. Catharines		81,405	782,253	759,468 180,616
St. Thomas		6,900 4,290	381,331 444,315	301,813
Stratford		1,448,768	20,694,288	27,038,624
Toronto		98,700	1,121,413	1,148,975
Welland	2,250	57,500	337,918	611,157
Woodstock		13,500	115,284	191 282
Peterborough		47,605	436,320	488,540
Smiths Falls		5,500	118,450	222,055
Manitoba-				
St. Boniface	1,100	34,000	803,652	1,038,840
Winnipeg	18,650	504,950	13,948,050	18,357,150
Saskatchewan-	1	28,925	1 765 975	4,018,350
Regina	3,000	3,900	1,765,875	4,453,845
Saskatoon		114,200	459,610	4,238,470
Moose Jaw North Buttleford			74,090	859,195
			721,986	1,380,390
Weyburn			329,450	177,400
Alberta -				
Calgary	130,000	336,000	3,425,350	8,611,653
Edmonton	90,000	147,400	4,913,277	9,242,450
Medicine Hat	3,519	8,425		3,850,082 143,570
Red Deer			42,515	140,010
British Columbia-			172,784	300,422
Kamloops			70.945	131,100
Nelson			261,624	958,975
New Westminster Oak Bay			000 010	836,708
Prince Rupert				198,332
Vancouver	39,765	174,395		10,423,197
Vernon				175,068
Victoria			2,243,660	4,037,992
		(()	ourtesy Financ	181 1.09(

^{&#}x27; From a talk given at the Hardware Convention Toronto, Feb. 24th, by Gordon C. Keith.

A Well-Designed Commodious Halifax Residence

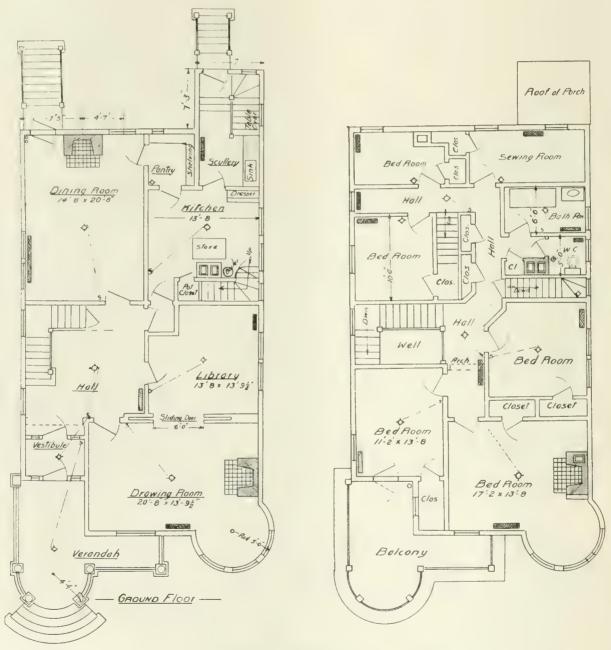
Built for: W. F. O'Connor.

Architect: Sydney P. Dumaresq.

THE accompanying illustrations show a home-like Halifax residence. While the width is narrow in comparison with the verandah, it does not appear so to the observer. The verandah with round front at a radius of 4 ft. 4 ins., and the circular tower built with a

radius of 5 ft. gives the house the appearance of being large and commodious.

That it is commodious is shown by a reference to the plans. Also, there are a great many conveniences included, such as numerous closets, three fireplaces, sewing room. The important dimensions are given on the plans.



Floor plans of Halifax house designed by S. P. Dumaresq

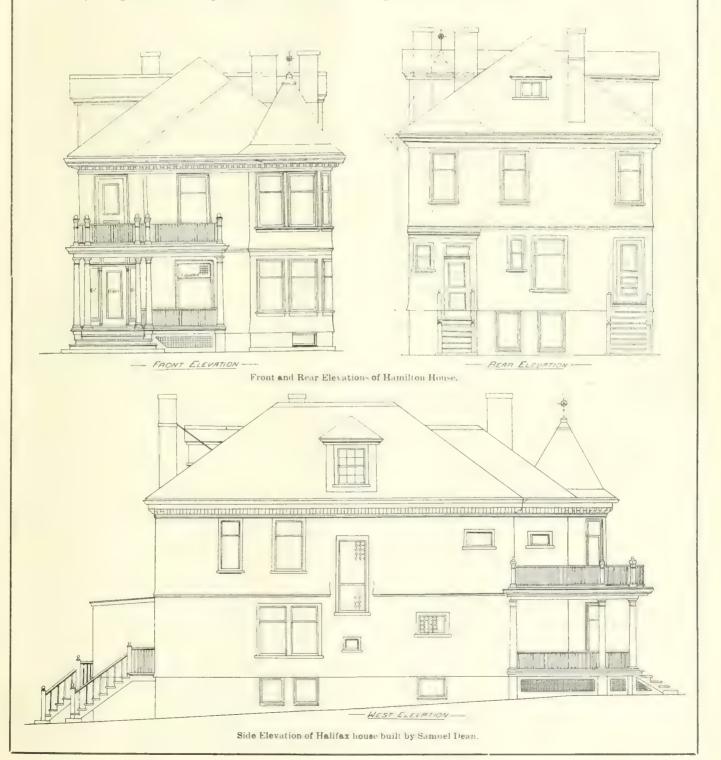
A Well-Designed Commodious Halifax Residence

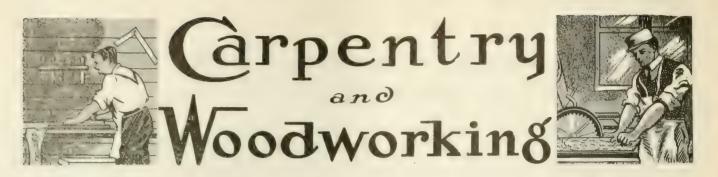
Builder: Samuel Dean, Halifax

Cost: \$4,500

A REFERENCE to the elevations below will show that the architect, Sydney P. Dumaresq, has given the house a very fine appearance, whether viewed from front, back or side. It is surprising that the cost of the house, as given to a representative of The

Canadian Builder & Carpenter, was so low. The rounded verandah, the circular windows, built up from the foundation, and the many other attractive features, not often found in such a low-priced house, would lead one to put a much higher valuation on it.





Thin Versus Thick Coats of Paint

There is this vast difference between a coat of oil paint and a coat of water paint-while the former should be as thin as possible to get it within reasonable limits, and while preserving the body, the latter is best if put on quite thick. Some painters have an idea that a thick coat of oil paint will preserve work better than a thin one. As a matter of fact, three or four coats of paint, all very thin, give the best possible results. Zinc oxide, which is sometimes condemned for want of body, is used too thick to be durable on some occasions, while it would be very much better to go to the small extra expense of an additional coat and get perfect results both in appearance and durability. An expert puts the case of thin coats very nicely when he says: "There seems to be considerable misapprehension regarding the covering capacity claims that can be made for good metal paints, due to the fact that certain painters, from a theoretical standpoint, have considered a thick coat essential to good painting. The contrary is the truth as borne out in practice, as we wish decidedly to take issue with any man who advocates and uses a thick coat of any kind of paint. The more you can brush out a coat of paint and have it properly cover the surface, the better will be the results of drying, and the more fit will that coat be to receive and hold succeeding coats. A thick paint film is bound to cause trouble to itself and to succeeding coats; they will not become thoroughly knit together, they will not form a homogeneous coating, and with the contraction and expansion of the metal are bound to crack badly. This is true whether the thick coat results from the 'flowing on' of a paint capable of better spreading, or from a paint of poor capacity that can only cover by using a heavy coat. Further than this, if your paint has the proper capacity and can be thoroughly brushed out for the first coat and brushed into the surface, it will get a firmer hold on it, fill its pores better, and make a more satisfactory protection to the metal as well as a better foundation for the coats to follow. Many paints are of such a character that they can cover up the surface only when the paint is piled on thick, and you can take it from us that where you find this true (it will show up in the number of square feet you can cover per gallon) you would best pass the paint by. Of course, large spreading capacity with poor covering power is of no value; but where you get the large spreading plus good covering, you are getting the most for your money."

New use for Brace

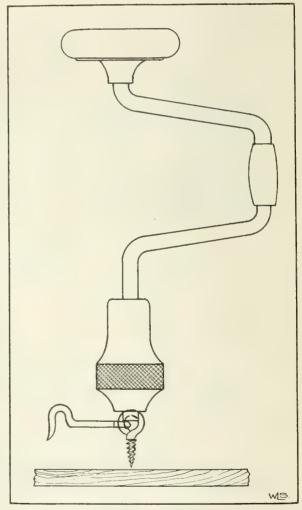
The accompanying illustration shows a new brace for putting on either hook or eye on screens or doors. It doesn't require a hole to start the hook, thereby

saving time and labor. Any brace will grip the hook or eye firmly.—W. L. Spain.

30

New Uses for Sawdust

Each year brings with it the discovery of some new uses for sawdust. Among these of recent development are the use of dried sawdust in place of ground cork



A new brace for putting on hook or eye on screen doors

for packing grapes, the use of sawdust in concrete mixtures for certain purposes, and some use of it in making hollow-clay blocks for partition walls in buildings.

The use of sawdust in concrete floors, and with the harder material for partition walls, is to soften the mass and make it possible to drive nails into it and attach other work more readily. Mixed with concrete in

floors, it makes it easier to attach a covering of heavy linoleum. It is not good to mix sawdust and concrete for factory floors, because sawdust will take in moisture. Its main use is in big buildings, where the floor

is to be finished off with a top covering.

In making hollow-clay tile, for partitions, it is said there is a porous and semi-porous product made by mixing a little sawdust with the clay, 20 per cent. of 81.01 sawdust being used in the semi-porous and from 25 to. 35 per cent, in the porous. Sawdust burns out in the process of burning the clay, and this leaves a product that can be cut with a saw and into which nails can be

There is a disposition to use sawdust to mix with gypsum, and with concrete, in the making of composition tile for partitions for the same purpose. Most of these efforts are still in a somewhat experimental stage, but they are being spoken of with enough favor to suggest considerable development in the near future.

How to Clean a Smoked Ceiling

When incandescent mantles are used the ceilings immediately above often become blackened, while the rest remains quite clean. If whitewashed, the place can be cleaned by being rubbed over with a mixture of starch and water of the consistency of cream. A soft flannel cloth may be used. When quite dry spread a newspaper underneath, and gently rub off the starch. The black stain will come off with it.

Wage Scale in Principal Towns and Cities in Canada

The accompanying table of wages paid in the various building lines in the principal towns and cities in Ontario will prove of interest. The editor of the Canadian Builder and Carpenter would be glad to hear from those who are in a position to know, giving the rates in the towns or cities in which they reside.

Red Birch Flooring

Wherever a particularly rich effect is desired to harmonize with finish and furnishing, nothing is superior to a selected red birch floor. It is as strong as maple, sufficiently hard to stand service, and of unusual beauty of figure and color. Such a floor finished natural is not out of place in the most palatial structure.

Steel Square Books

In reply to "Constant Reader," books on the steel square can be obtained from R. L. Hammond, 442 Brock Avenue, Toronto, or Industrial Book Co., New York.

It will often be found that the manager who complains most of the inefficiency of his men is one who spends but little of his own time with them.

Overwork never yet wrecked as many men physically as the things done outside of working hours.

ours per day.	11	or c	x0 00	8-10	6	ф. o	10		·, 5.	or	6	00		oc.				C			
sur	.L	C 1	60	50	60	\$5 dex	500	\$4 50 don	50*	\$6 day	45-50	\$5 \$6 day	0.9	\$U\$		And down		30		†9 hrs. *10 hrs.	
trib ters Iron Work	7.	176	.31)				3.0			37 16			35 50	561/2*		41 TO dow & B dow		30-33		*9 hrs.	
stoitus) bol	1	2000	30	30	30	25-30	0.00	1	50	30	10	27 La - 311	- C. C.	25-27 1/2	35	\$2.75 day		C	7		
erstodad 'srats)safe	ł :	3 CO	300	30	300	20100	500	08-30	22 12	23 1 20	30	27 16-30	28-35	25-27 1/2 *	43 %	\$3 day		¢.	1	*10 hrs.	
e19104.5	I	22	13 61	C.3 OC 1	00 L	20-30	20-03	95-30	22 3/2 -25 *	25-30	20-30	25	25	25 27 1/2 *		Co An day	100	₹ 1 C	1	*10 hrs	
stedsinia tuemet		50				25-35							45-50	50		•				10 hrs.	
819100\$	H	30*		20	4					30-40		37	35-40					3,1		*10 hrs. *10 hrs. *10 hrs. *10 hrs	
8 001 0 11 00[5	l	25-80*	200	50	300	22	30	35-40	30	40	30	35	34 % -37 14	45	62 1/2	\$ A A	(B)	35		*10 hrs.	
sterl Metal Workers		25-80*	40	35	40	Ť	30	40-45	37 1/2	37 1/2	40	5-10	35-40	45†		\$3.50 day	To Har	25-35		*10 hrs.	
ereinis T	L Cr	300	50	35	20 PB	dn oz	30	35-40	27.16	35	3.5	35	30-40	42 1/2	50	\$3.50 day	ton ha	88 0	,		
aretteR eldrsM	. 6	20			(19)		35		27 12-30*					55		6	on on	40		*10 hrs.	
aretinO enote	S 14	500	60	h.	55	2 45 2 46	0,0	55*	20	56 1/4	22	20	62 1/2	65	65	20 20 40 66		40		*8 hrs.	hanges.
sretneqra0) e	0 e0	101	40	2 kg	30 up	35	43-45	30 *	452	30 35‡	40	40	20x	20	\$3.50 day	3	35	*10 hrs.	18 hrs.	ders Exc
steam Fitters	3	35	50	50	44	35 up	35	40-45‡	37 12	45	101	45	45-50	55	62 1/2	\$4 Gav		61		*10 hrs. *10 hrs. x	or Bul
### ##################################	Ţ.	35	20	000	44.	Q					(c)		45-50	55	62 1/2	\$4 day		38 1/2		18 hrs.	BEOCIMULO
ereenignE Engineere		00			3.0		25-30				30		33	40-20*		\$4.80 day \$3-4 day				10 hrs.	Alberta :
eredisd	1 67	40	30	* //2 C. yd.	30.08		4 c yd.	40		ali 2.9	30	3	4 c. yd.	26 1/2	5 1/2 c. yd.	\$4.80 da		\$1.25 M		1	ed by the
\$1010jas[4	50	50	80 s	4 10 C = 0	40	50	40	+	17 1 17 1	0.5	40	55 1/2	09	6.5	0	\$5 day		40			le adopt
agosslá	20	20	\$5 day	0 to	4 10	55	201	5.5	0.00	000	X S S	55	67 %	2.0	0.5	\$5 day	1	35		#10 hrs. #9 hrs.	Wage Bea
Brioklayers	50		80				501	15	<u> </u>	000	NOOL	55	67 1/2	0.1	7.0 bia	\$5 day	aritime	50	XR hrs.	to hrs.	wimin.
	Berlin		Niagara Falls.				Strationd	St. Catharines	St. Thomas	Determine .	Feterborougn	Hamilton	Wanttoba-	Winnipeg Alberta—	See footnote . 70 British Columbia	Victoria		Halifax, N.S., Quebec, Que.,		Ē	FootnoteMaximum Wage Scale adopted by the Alberta Association of Builders Exchanges



Concrete Department



Time of Setting Cement

It was pointed out by Mr. S. M. Williams, in a paper read before the American Society for Testing Materials, that the factors accountable for the variable results obtained in the time of cement setting make a marked difference in the laboratory results. His paper summed up the results of considerable investigation throughout which the various influences were properly controlled and recognized. The following factors are enumerated as likely to cause errors of considerable magnitude:

1. Variation in the amount of work done on the material may cause a difference of more than two hours in the time of initial setting and cause a normal cement

to appear quick setting;
2. Variation in atmospheric moisture or humidity of storage during the setting period may cause the initial time of setting to vary as much as two hours;

3. Variation in atmospheric heat or temperature of storage during the setting period may vary the time of setting as much as 1 or 2 hours.

Throughout this series of determinations an attempt was made to keep all conditions uniform except the one whose effect was to be noted. In practice, the results obtained on two consecutive days may be affected by several factors which might combine to increase or decrease the range of values. For instance, a cool, damp day may be followed by a warmer day with a high relative humidity. The two factors on the first day both tend to retard the setting of the cement, while the high temperature of the second day, tending to shorten the time of setting, is opposed by the high humidity which reduces the amount of evaporation. To avoid the effects of these variables requires the use of a storage closet whose temperature and humidity can be controlled.

The variation in time of setting as determined by the same observer, thereby eliminating all errors due to personal equation introduced by several observers, is clearly shown, and indicates that neither method will give results consistent enough to justify the reporting of results within the limits of a few minutes.

The other variables, such as formation of the test specimen and manipulation of apparatus, are of smaller importance, compared with those of mixing and curing, but these errors may combine to increase those caused by the above.

The results obtained by varying the amount of work indicate that the test, as made at present, can be relied upon only to identify normal or slow-setting cements. The necessity for vigorous working in order that a normal cement may not be judged quick setting, defeats the object of the test when it is applied to a very quick setting material, and may cause the set to be broken.

Dustless Concrete Floors

By spreading dry cement and sand over burlap laid on the wearing surface coat of concrete immediately after it is struck off, sufficient moisture is removed to produce a dustless floor, according to P. M. Bruner, who controls the process. Up to the time of applying the burlap, standard specifications are followed. The dry mixture similar to that used for the wearing course is spread lightly on the burlap and distributed with a wood rake to a depth of 1/2 in. Capillary attraction abstracts the excess of water in from 20 to 30 min., as much as 25 or 30 per cent. of the water from the underlying surface being taken up in this way. mixture is then lifted by the burlap and dumped into the mixing box for the next batch. The surface of the floor is in perfect grade and ready for final finishing by wood float or trowel. At this period the whole body of the concrete topping is so stiff that no impression is made by walking over the surface or in working on the surface in the subsequent manipula-

About three years ago Mr. Bruner concluded that the dusting of concrete floors was due to the fact that the setting of the cement is disturbed during the process of finishing. Owing to the excess of water necessary for the successful manipulation of the mortar used in the wearing course, considerable time usually elapses before the surface becomes stiff enough for troweling, since this surplus water must either evaporate or be taken up by the concrete base on which the top is placed. With a concrete sidewalk the wearing course is usually placed on an absorptive base which takes care of the excess water used in the mixing. In case the surface is applied directly to a reinforcedconcrete floor which has previously hardened, there is no opportunity for disposition of this excess water. The same holds true when the top is placed on a rich, wet concrete similar to that used in reinforced work. The result is that in the interval which elapses while the excess water is disappearing the cement partly hardens and the late troweling has a tendency to break up the crystals formed. Further than this, any troweling has a tendency to bring up the excess water to the surface, forming a film of what is sometimes termed When wear takes place subse-"dro vned" cement. quently this surface film is the first to scale off, leaving a sandy finish which is subject to excessive abrasion, particularly on account of its own rough surface.

Preventing Freezing of Concrete

The use of chloride of calcium is recommended by some authorities to prevent the freezing of concrete. It is a well known fact that solutions of different salts are more difficult to freeze than pure water, for instance, a 20 per cent. common salt solution only freezes at 14 degrees C. below the freezing point of water, and a chloride of calcium solution freezes at a still lower point, or 18 deg. C. below. This phenomenon can be made use of in connection with concrete working, and such solutions are used when preparing the material so as to lower the freezing point. In this way it is possible to carry out work with concrete even during very great cold, which would not be practicable by the ordinary process. It is better to use chloride of calcium



Fig. 1-Mixer for concrete work made by London Concrete Machinery Co.

instead of common salt for such work, as the former salt increases the waterproof quality of the concrete and is much preferable for this reason.

Experiments have been made in order to determine the best amount of chloride of calcium to use in the mixing, and after a number of trials made by using bricket proof pieces and then testing these, it was clearly shown that the best resistance of the specimens was given by using 2 per cent. chloride of calcium. Since there is commonly used from 10 to 15 per cent. of water in mixing the concrete, the addition of 2 per cent. chloride of calcium means that a 15 or 20 per cent, solution is employed, and this lowers the freezing point of such water to 10 or 18 deg. C. below freezing point of water respectively. Adding more than 2 per cent. of the salt is found to increase the speed of setting, but it is remarked that concretes are less resistant as the setting is quicker, so that it is not well to go higher than the foregoing figure.—Scientific American.

* *

Correcting Damage Done by Sudden Rain on Concrete Pavement

A rather unusual experience in finishing a concrete pavement which I had, may be of interest to some other reader. The work was on a small piece of concrete pavement 10 x 20 ft., and nearly all of the top finish was in place, when it suddenly began to rain very hard. The top coat was finished in the rain, and when the rain had stopped after about two hours I found that the cement in the top coat had been nearly all washed out to a depth of half an inch. Without knowing just what the result would be, I sprinkled the top coat with neat cement to a depth of about one-eighth of an inch, floated this in thoroughly and then covered the work with canvas, because more rain was threatening. A month later, after heavy trucking, I find that the pave-

ment is in very good condition, as might have been expected, and the surface appears to be exceptionally hard.—Reader in Cement-Age.

30 30

Developments of "London" Concrete Machinery

Fifteen years ago there was not one concrete machinery manufacturer in this country. The demand for concrete at that time apparently had not been sufficient to warrant any enterprising firm going into the business.

Many readers of The Canadian Builder and Carpenter have been in the contracting business for a number of years and will remember that it is only a few years since the concrete mixing was all done by hand labor; in fact, many engineers specified hand mixed concrete on many large contracts.

The development of the concrete business within the last ten years has also been marked by similar development in the concrete machinery industry. Manufacturers of concrete machinery have kept pace with the increasing demand for concrete, and the improvements made in concrete mixing machines have been the result of machine mixing entirely taking the place of hand mixing. Engineers have now satisfied themselves that with the improved type of machines better concrete can be produced than by hand mixing, having had all standard specifications now call for machine mixed concrete.

Various types of machines have been placed upon the market, each being particularly adapted for certain classes of work. The result is that the contractor or municipality can now secure labor down to a minimum and also assuring the best of results.



Fig. 2 - Batch mixer for general concrete work.

The accompanying illustrations show the development of machinery manufactured by the London Concrete Machinery Co., London.

Figure 1 shows the London "Bull Dog" batch mixer. This is a special size batch mixer, being the smallest size of machine which the firm make. This machine makes a 6-ft. batch of 50 cu. yds. in ten hours.

It is especially adapted for small contract work as it is light and easily moved from place to place. It can be operated with one man or a number of men. This alone makes it a very suitable machine for contract

work What this machine has only been one year on the mark to the makers state that it is already being widely used. It is claimed that this machine if used at full capacity will save the price of itself over hand mixing in fifteen days' work.

Fig. 2 shows the London batch mixer. This machine is one of the standard types of machines which have been on the market for five years and is for general contract work. The machine is made in five sizes and equip-



Fig 3 Paving mixer

ped with traction drive if desired. Many improvements are also placed on this machine for the year 1915. A feature is the rigid construction of the machine for general contracting trade.

Elevated Drum Paving Mixer.

Figure 3 illustrates the London elevated drum paving mixer. This machine has a traction drive, is mounted on high wheels, and the drum is placed very high in the frame of the machine in order to give the mixed concrete a greater descent while discharging, therefore making it run easily down a discharge chute at the rear of the machine.

This machine loads in front and discharges at the rear. The discharge chute is made to swing into complete one-half circle, also opens at different points, distributing the concrete to any part of the roadway.

It is said that this machine will distribute concrete on a roadway in 10 per cent. less time than the standard size loader. It also distributes the aggregate very evenly, giving a creamy mixture, just what is required for road construction. With this type of machine there is no shoveling or wheeling required in depositing concrete on the roadway.

All machines sold to municipalities are shipped on condition that if the municipality, after six months' trial, is not satisfied with their machine, that they have the privilege of returning it to the firm at their expense. It is evident that the firm have faith in their own machines.

This company also manufactures all sizes of moulds for the manufacture of cement tile from 4 inches up to 10 feet in diameter.

Large Concrete Order

The city of Winnipeg is spending \$4,000,000 during the year 1915 on the construction of an aqueduct eighty miles long, connecting Winnipeg with Shoal Lake. This project is known as the "Winnipeg Greater Waterway." The aqueduct is constructed entirely of cement and is one of the largest undertakings in cement up to the present within the Dominion of Canada.

This aqueduct will be used to supply water to the city of Winnipeg and is constructed in the form of a large egg-shaped pipe averaging about twelve feet in diameter on the inside. This enormous concrete pipe will be carried a distance of eighty miles through marsh, hills and rocks, and is considered one of the greatest pieces of engineering yet attempted within the Province of Manitoba.

The contract for the greater portion of the work has been let to a new firm known as the Winnipeg Aque-

duct Company, Ltd., formed by the amalgamation of the Northern Construction Co. and Carter, Hall & Aldinger. The Winnipeg Aqueduct Company called for tenders for six three-quarter-yard batch concrete mixers. The entire order, amounting to about \$8,000, was let to the London Concrete Machinery Company.

Mr. Doidge, the vice-president of the London Concrete Machinery Company, who secured the order, has

just returned from Winnipeg, and states that they expect to secure some additional large orders of especial equipment for the above-mentioned project.

** ***

New Flat Concrete Reinforcement

The Page Wire Fence Company at Walkerville report a large and increasing demand for their Page Concrete Reinforcement in flat sheets for use on municipal work. This reinforcement is unique in that it is put up in flat sheets, and cut any desired length or width.

When used on the job this Page reinforcement lies flat without being weighted down (as reinforcement in rolls must be). This makes it impossible for the concrete to buckle when setting as it occasionally does when the weight is not sufficient to keep the rolled-up material flat while concrete is being poured.

It is used not only in buildings and bridges, but is also finding considerable favor for road pavements. Many car loads have been used for this purpose in Sandwich, Windsor, Walkerville, Oakville, Aylmer, and other points in Ontario, as well as in the Province of Quebec. The manufacturers state that samples will be sent on request.

Canada's Fire Losses

At the 33rd convention of the Mutual Fire Underwriters' Association, Toronto, Feb. 23, Mr. Thomas Hoskin, the president, said that Canada's fire record is the worst in the world, and her fire losses would pay off the national debt in less than 20 years. Wooden buildings, badly constructed chimneys, and sparks from engines were given as reasons for the fact that the fire losses in Canadian cities are seven times greater than in Great Britain. In the past ten years the

amount of risks had increased 50 per cent., assets 69 per cent., and losses 84 per cent.

Brick veneered and cement block veneered dwellings were placed in the second-class risks. Tenant losses, it was decided, should be two-thirds of the value, and the owners be paid in full. All outbuildings within 25 ft. of each other may be covered by a blanket policy. The association refused to prohibit the insurance of threshing machines. They favored not issuing a policy for more than three years, and favored insuring live stock to full value.

Losses due to smoking by the assured or any other person with the knowledge of the assured should not be paid, it was claimed, and application will be made to have the Act changed to this effect.

30

Improving Conditions in Lumber Industry

Conditions in the lumber industry are gradually improving. During January there was quite a revival in transactions in car lots as compared with the business done in November and December.

In Toronto not much improvement is looked for in the immediate future, as far as lumber for building purposes is concerned. But in a city of Toronto's size there is always a demand from manufacturers, and this demand has improved since the beginning of the year.

One of the most interesting features of the lumber trade is the situation in Great Britain. The demand there for lumber for construction purposes of various kinds is decidedly active, and exporters in Canada have received a number of cable enquiries from there during the past few weeks, particularly for spruce and red pine.

The war has greatly interfered with receipts of lumber in Great Britain. From the Baltic, whence large supplies come in times of peace, nothing is coming forward, and as Germany has put lumber on the contraband list little or nothing can be obtained from Scandinavian ports. On account of these sources of supply being cut off, or at any rate being greatly curtailed, large purchases have been made in the Maritime Provinces of Canada since the war broke out at material advances in price.

Unfortunately, however, the scarcity of steamers and the high rates of freight and insurance have prevented exporters reaping all the advantage they otherwise would from the situation in Great Britain. On account of these higher rates it is costing, so one exporter in

of these higher rates it is costing, so one exporter informed the writer, about 140 per cent. more to ship lumber to Great Britain than before the war broke out.

In spite, however, of the various handicaps, the fall-

ing off in the export trade of Canada has been very little, the value of the shipments of forest products during the first eight months of the fiscal year being \$32,357,299, compared with \$33,194,796 during the same period of 1913, or a little over $2\frac{1}{2}$ per cent.

As a result of the easier money market large operators are this year obtaining loans from the banks at fractionally lower rates than those obtaining year ago. The fact that banks in the United States have been offering accommodation to certain large lumber operators in Canada may possibly have induced concession in rates by Canadian banks.

When last autumn firms engaged in lumbering were making arrangements for the winter's operations in the woods, their line of credit at the banks was, like

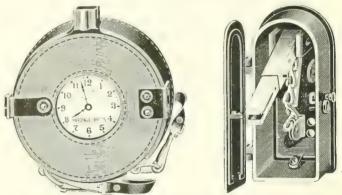
that of business firms generally, somewhat curtailed, but in spite of that, however, the cut in both Ontario and the Maritime Provinces will be larger than it was a year ago, while the heavy fall of snow is a fairly good guarantee that operators will be able to get their logs out of the woods.

¥ ¥

Watchman's Register with No Upkeep Charges

A watchman's register which is both efficient in operation and economical from a cost viewpoint, has been placed on the market by the Lintz-Porter Co., 27 Yonge Street Arcade, Toronto. It is the Hardinge Watchman's Register, and installations made in Canadian factories include the Reo Motor Car Co., St. Catharines; Quaker Oats Co., Saskatoon, and Canadian Western Lumber Co.

The Hardinge Watchman's Register consists of the Hardinge portable clock and a series of recording stations. The clock is enclosed in a leather pouch with heavy grill work to protect the crystal of the clock. There is a leather lug for hanging the clock when not



Hardinge watchman's system, including clock and station. The Lintz-Porter Co., 27 Yonge St. Arcade, Toronto, are general Canadian agents.

in use by a watchman. The key for unlocking the case is retained by the factory manager or superintendent.

One great advantage of this system is that stations may be placed in any desired position. For instance, if it is desired to have the watchman exercise special attention over any particular material or department temporarily, additional stations may be added or stations moved to suit the new conditions, without any work in connection with the establishing of the new station. The simplicity of the system means that there is practically nothing to get out of order or make the system inoperative.

Each recording station is independent of all other stations and the installation is very simple, consisting merely of fastening the recording stations in their respective positions.

The company claims that this is the only system in which no two of a series of recording stations need be alike. Instead of numerals, the Hardinge systems employ large legible letters which may be so arranged as to spell the name of the firm, of the section of the plant in which the stations are located, or any other word or phrase which may be chosen.

The record insures absolute protection by compelling the full performance of the watchman's duties. An alarm within the recording device informs the watchman when a perfect record is made. No excuses can, therefore, be offered by the watchman.

The clock is designed for accuracy and endurance.

The movement has an eleven jewel escapement. No false record can be made. The cost is practically only the original cost, but all parts are made interchangeable, so that in case of accident a part may be easily replaced.

A feature which is claimed to be exclusive with the Hardinge is that the movement of the clock is independent of the recording device, so that an extra movement or entire clock may be kept on hand as a safe guard against interruption of service in the event of accident or when necessary to remove movements for cleaning

News of Builders' Exchanges

Annual Convention of Provincial Builders' and Supply Association

The third annual convention of the Provincial Builders and Supply Association was held in Ottawa, Ont., on February 24 and 25. Mr. Matise, of the Ottawa Builders' Exchange, welcomed the delegates and President Crane, of the same association, opened the meeting.

The first business done was the reading of the minutes of the last meeting and the appointment of committees. The president, Mr. Crane, then read his report, and deplored the state of trade from the war. He touched on the Workmen's Compensation Act, but left this for the secretary to go into more fully. called attention to the affairs of the Canadian National Association of Builders' Exchanges. He pointed out that at the Calgary convention this association was formed into an executive body only, with two locals, eastern and western divisions, but there did not appear to be any record of the minutes of the eastern section, and it was in such a disorganized state that there was a question whether it was advisable to continue the eastern section or whether the different provinces should rule their own affairs.

Mr. Crane also mentioned the wage schedule recently gotten up by Mr. A. E. Flower (published in The Canadian Builder) and congratulated the association on the completeness thereof. He continued further about the organization question, and the need of spending some money to organize the province into builders' exchanges. He suggested that during the convention a sum of money should be set aside to pay the expenses of the secretary and others who were visiting cities for the formation of builders' exchanges. A resolution was brought in that two members from the exchange closest to a point which, in the minds of the executive, would be benefited by having an exchange, be sent to aid in the organization of that exchange, and that the expenses of these members be borne by the provincial association. This was carried unanimously.

Secretary's Report.

Secretary A. E. Flower read his report, and covered fully the work done by the association in respect to the Workmen's Compensation Act. It was pointed out that clause 98 of the Act, referring to the assessment being a lien on the building, was placed there at the instigation of this association. Another suggestion was

in regard to the certificating of all employers, i.e., on each job the builder will be forced to place a certificate showing that his men are insured. This the Government has promised to do and Mr. Flower urged upon the secretaries of the various exchanges the necessity of watching for the certificates and reporting to him any contractor who has not got a certificate, so as to insure getting him under the Act.

Treasurer's Report.

Geo. Oakley, Jr., treasurer of the association, read his report and showed a balance of about \$450 in the bank

Conditions in Various Centres.

Reports on business conditions were read by the representatives from the different centres, all showing that trade was very dull, labor was quiet, and a number of them again asked for a visit from somebody to help them liven interest in their organizations. A pleasing feature of this was the interest shown by St. Catharines and Galt, two places where exchanges have recently been organized.

The following cities were represented: Sarnia, Galt, Peterboro, St. Catharines, London, Toronto and Ottawa, and regrets were read from Hamilton, Chatham, Owen Sound, Lindsay and Berlin.

Wednesday Afternoon's Session.

On Wednesday afternoon the meeting convened in the Y.M.C.A. Building. The whole session was devoted to Workmen's Compensation matters, and a stirring talk was given by Mr. Hinsdale, an expert on this subject. The first point brought out by Mr. Hinsdale was that the Act was compulsory; second, that it was administered by a board appointed for the express purposes and with full authority to give binding decisions; third, that the constitution of the board is non-political. Then Mr. Hinsdale went on to point out that the groups could form accident prevention associations and appoint an inspector, such inspector to be paid by the board, and by the reduction of accidents brought on by this inspection, lower rates of insurance would necessarily follow. He gave a full and lucid explanation of the Act and answered all questions thereon, with the result that the minds of those present were very much cleared as to the objects and the working of the Act. Very great results have been arrived at through Mr. Hinsdale's presence at the convention.

Theatre Party on Wednesday Evening

On Wednesday evening the delegates were guests of the Ottawa Builders' Exchange at a theatre party.

Thursday Morning.

Greetings were extended to two visitors from Montreal who were at the meeting to attend an executive meeting of the eastern section of the Canadian National Association.

Ine president read a letter from Hamilton, Ont., inviting the association to meet in that city next year, and this was unanimously accepted.

The committee on the formation of accident prevention associations reported and, after much discussion, a committee composed of Messrs. Gander and Elgie, of Toronto; Gould, of London; Matise, of Ottawa; and Nicholson, of St. Catharines, was appointed to meet in Toronto and draw up a scheme and apply for charter for the formation of such an association.

The committee on resolutions reported as follows:

Official Report by A. E. Flower, Secretary

First, that we memorialize the Department of Public Works for the Dominion and others who may have public buildings under construction or consideration, that they will, as much as possible, further the use of Canadian materials and labor, it being the united feeling that Canada should be for Canadians. Carried.

Second: That this association extend to the Workmen's Compensation Board a hearty vote of thanks for Mr. Hinsdale's attendance at the convention, as great good has and will result. Carried.

Officers for 1915

Officers were elected as follows: President, George Gander, Toronto; first vice-president, T. R. Wright, London; second vice-president, Charles Chapman, St. Catharines; secretary, A. E. Flower, Toronto; treasurer, George Oakley, Jr., Toronto; executive committee, J. S. Webster, Galt; G. A. Crane, Ottawa; George Metcalfe, Hamilton; J. Norton, Sarnia; C. Bulley, Toronto; Mr. Bogart, Chatham; J. Shultz, Brantford; J. L. Youngs, Stratford; J. Green, St. Thomas; Casper Braun, Berlin; H. P. Nicholson, St. Catharines; L. H. Martyn, London, and O. Bogue, Peterboro.

The new president, in addressing the members, outlined the business that it was intended to go on with, especially the continuance of the work of the Workmen's Compensation.

A hearty vote of thanks was then moved to the Ottawa Builders' Exchange for the entertainment they had given and were going to give.

A strong vote of appreciation of Mr. Crane's work since the association was formed was unanimously carried.

Other Entertainment Features

In the afternoon the delegates had a very interesting automobile trip, including visits to the Mint, the E. B. Eddy factory, in Hull, and other places of interest. In the evening they were entertained to a banquet at the New Russell Hotel, by the Ottawa Builders' Exchange. A most enjoyable evening closed at 10 o'clock to enable some of the delegates to return to their various homes and others to visit the House and hear a session.

During the evening an invitation was received from the officer commanding the troops at Ottawa, for the convention to inspect the Canadian Engineers, who were proceeding to the front. This was accepted, and all delegates who stayed over had the pleasure of seeing the men on Friday morning.

* *

Noonday Luncheons at Toronto Exchange

The Toronto Builders' Exchange has inaugurated a series of noonday luncheons, at each of which it is intended to have some prominent speaker. The first of these was held in the association's quarters on February 17. W. W. Pearse, City Architect of Toronto, was the speaker, and he outlined the changes he would like to see made in Toronto's building by-law at present under revision. One of the chief points suggested by Mr. Pearse was the arrangement of the new by-law into distinct classifications, i.e., one section for stores, another for residences, another for apartment houses, etc. In this way the contractor would not be forced to wade through volumes of matter (as he must do now) and much time would be saved. Methods of construction in Toronto and other cities were compared and certain changes advocated.

Mr. Pearse suggested that a committee from the Exchange be appointed to work in conjunction with him in the arrangement of a new by-law.

The inaugural luncheon was a decided success, about 150 being present. This goes to show that it only requires some little entertainment, with good speakers, to bring the members out and it is felt that the meetings in future will be well attended.

W W

Builders Postpone Convention for a Year

The annual convention of the Western Canadian Builders' Exchanges, which was to have been held at Saskatoon during the current month, has been postponed for a year. The statement was issued by Mr. J. P. O'Leary, vice-president of the association.

Saskatoon will, in any case, be the city where the next convention will be held. This place was chosen as the next place of meeting at the last annual convention, which was held at Edmonton.

Local sentiment was strongly against the holding of this year's convention, owing to the very poor season just experienced in the building and allied trades. It was thought at the very best, each exchange could only afford to send one delegate—at the very most two, and, consequently, any meeting which might have been held would have been absolutely unrepresentative.

* *

New Officers of Regina Exchange

At the annual meeting of the builders' exchange the following officers were elected: President, W. Whiteford; vice-president, D. Smith; directors, G. Minkley, M. L. Moyer, A. M. Fraser, R. Nelson. G. Powell was re-elected secretary.

Corrected List of Toronto Exchange Officers

Through an error, the list of newly-elected officers of the Toronto Builders' Exchange was given wrongly. The corrected list is as follows:

President, George Oakley, Jr.; 1st vice-president, S. R. Hughes; 2nd vice-president, G. W. Britnell; treasurer, John Aldridge; secretary, A. E. Flower; directors, Edward Gearing, Charles Bulley, George Gander, Fred Armstrong, A. Matthews, W. E. Dillon, A. E. V. Hemmingway, William Pears, Walter Page, Harry Taylor, S. H. Hurst, and A. Welch. Walter Page will represent the masons' section; Harry Taylor, plasterers'; S. E. Hurst, cut-stone contractors; A. Welch, carpenters, and A. Matthews, sheet metal workers.

30

Vancouver Builders' Exchange Annual Meeting

This association held its annual meeting in the handsomely furnished suite of rooms secured in the Duncan Block, Pender Street. on February 2. The following officers were elected for the year 1915: President, J. L. Skene; first vice-president, J. G. Anderson; second vicepresident, A. G. Brown; directors, W. M. Horie, J. O. Perfect, T. Borgford, D. H. Wilkie, C. T. McPhalen, J. Tucker, T. G. Bird, W. C. Greer, R. H. Gale, W. N. O'Neil A P Bogardus, H C Douglas, J Bain, F. A Worth, W. O. Marble; secretary, W. Hamilton Lindsay

The president said that although the times had been strengous yet the membership had been recently in in sed by fifteen and they had now sixty eight members in good standing. There had been little building gong on, but during the present year they hoped to see work being done on the Great Northern depot, the Second Varrows bridge, some new schools and banks,

Tributes were paid to the secretary, to Mr. Wilkie, Mr. Bogardus and others who had been active in furnishing the rooms, arranging excellent smoking concerts and increasing the membership, and the association was to be congratulated on the fact that in spite of the pressure of the times the association was in a sound -- indeed, a flourishing-financial condition.

Speaking on the policy of the exchange, Mr. Skene said the wage scale they had put forward was the outcome of much thought and an earnest desire to be fair to employes and men. He deprecated the "election speeches" which had been made promising working men wages which the conditions of trade did not The Builders' Exchange stood for efficient work fairly remunerated and what they advocated was based on business methods, ignoring appeals to sentiment and will o' the wisp promises which could not be fulfilled.

Send in News of Builders' Exchanges

The Canadian Builder & Carpenter is in receipt of a letter from Mr. T. R. Wright, president of the London Builders' Exchange, which we hope will be taken to heart by members. Items of news regarding the work of Builders' Exchanges will be welcomed and published in a department devoted to this organization. Editor:

Canadian Builder and Carpenter.

Dear Sir: I take this liberty of dropping you a few lines to let you know that I appreciate the Canadian Builder & Car-I have been looking over the February number and find many items of interest to builders. One house plan for a medium-priced house and for convenience of layout it would be hard to beat. I am of the opinion, Mr. Editor, that our builders in Canada should take more pride in our own trade journals, and give the men who are worrying their brains to produce what, in their opinion, is for the best interests of the building trade, a little encouragement, by sending from time to time, items of news that would be instructive to those engaged in the building industry

Our trade journal is one of which every Canadian builder

might well be proud.

I must say I think it has been keeping abreast of the times in building industry since its introduction to the trade, and I can see great advancement in the journal in the past few years. I am a charter member of the American Carpenter & Builder, which is a first-class journal, but I say Canada first for the Canadians. I think there might be some missionary work done in all our exchanges to increase the circulation of our Canadian Builder and Carpenter.

(Signed) T. R. WRIGHT,

President, London Builders' Exchange.

Toronto Exchange Members Play Hockey

The members of the Toronto exchange are taking an active interest in the "King of Winter Sports." Recently a game of hockey was played on Harry Jennings' private rink on St. Clair Avenue, between a team composed of the cut stone contractors and a team picked from the rest of the members of the exchange. The "Hardnuts" (cut stone men) won by a good margin. Their victory, however, may be ascribed to good fortune, rather than to good playing, for, while Eddie Forbes was in the nets for the "Yannigans" the score was close, but when Jim Munro replaced Forbes he found it easier to sit on the ice than to stand on his skates, and the result was that the cut stone men ran in tour goals in less than ten minutes, and put the game on ice. In this game Jack Scott attempted to play the puck with his face rather than with his stick, with the usual result (three stitches in his face).

A return match was arranged, to be played at Jim Ilewitt's private rink on Roncesvalles Ave., but whether or not the extent of their former victory overcame the stone men, the fact remains that a full team did not show up and a scratch game was played. teams were captained by Harry Jennings and Stewart. Jennings' team won-12-5. Mr. Hewitt provided the players and spectators with luncheon, a feature that was much appreciated.

Annual Convention of C.N.C.P.A.

At the annual convention of the Canadian National Clay Products Association, officers were elected as follows: Immediate past president, Chas. A. Millar, Toronto; president, J. Edward Frid, Hamilton; first vicepresident, A. F. Greaves-Walker, Toronto; second vicepresident, Thos. Kennedy, Swansea; third vice-president, Wm. Burgess, Toronto; secretary-treasurer, Gordon Keith, 32 Colborne Street, Toronto; councillors, C. B. Lewis, Milton; D. A. Lochrie, Toronto: W. McCredie. Lyons; Angus German, Toronto, and John S. McCannell, Milton; auditors, D. O. McKinnon and J. P. Still-

The convention was the best the association has held

so far.

Winnipeg Exchange holds Bonspiel

The annual bonspiel of the Winnipeg Builders' Exchange was held in the Thistle Curling Rink during the last week in January. Despite the fact that the weather was thirty below zero, 57 rinks participated in the fun, and a "roarin" time was held. Many of the participants were "green" curlers, and for this reason rinks that were eliminated in the first game of the Carter Challenge series were given an opportunity to try their skill in a consolation series. In the final for the Carter Cup, C. W. Sharpe beat McLeod, while M. C. Wood defeated Laing Campbell in the consolation series.

The prizes were presented at a smoker and card party held in the association's quarters on February 1.

WOOD MANTELS WANTED

Canadian Manufacturers: Englishman wishes to communicate with Canadian manufacturers of "wood mantels" for fire-places, also closet seats for sale in England. Apply, Excellent, Box 23, c.o. Ratcliffes, 36 Gracechurch Street, London, England.

CLOSET SEATS WANTED

Canadian Manufacturers: Englishman wishes to communicate with Canadian manufacturers of "wood mantels" for fire-places, also closet seats for sale in England. Apply, Excellent, Box 23, c.o. Ratcliffes, 36 Gracechurch Street, London, England.

For Sale-Clover Leaf Cement Mixer, complete with engine, tongue, water tank, loader frame and loading bucket. Capacity 8 cu. ft. Only used once. Is in first-class condition. Will sell cheap. For further particulars apply to The Stratford Manufacturing Company, Limited, Stratford, Ont.

Price List of Building Materials Revised to Date

EDITOR'S NOTE—Great care is exercised in obtaining prices for this department. They are as accurate as it is possible for us to make them. We know, however, that because of varying conditions, different dealers' prices are bound to vary somewhat; and our purpose in publishing this department is to give readers an idea of prices, rather than absolutely definite information.

In some cases a range of prices appears. This is given to cover the variation in quotations given by different dealers, and also to cover slight variations in conditions of measure-

ment or purchases, which space will not permit us to specify in detail.

We will be glad to give readers prices on materials not appearing here (hardwood flooring and hardware trim for instance), and also the names of dealers from whom such materials can be obtained. Such information will be supplied promptly if you write us specifying in detail what is desired.

PRICE AT MONTREAL

Price at Montreal-Continued

Hemlock Lumber		Cement, Plaster, Stone, Etc.
2 x 4 in. to 2 x 12 in., 8 to 14 ft. 2 x 4 in. to 2 x 12 in., 16 ft. 2 x 4 in. to 2 x 12 in., 18 ft. 1 in. hemlock No. 1 No. 1 hemlock decking No. 2 hemlock dimensions and 1 in.	\$24.00 26.00 28.00 to 30.00 22.00 23.00 to 25.00 26.00 to 30.00	Cement (bags extra)
Pine		Crushed stone 2 in
1 in. common and better pine 8 to 12 in. wide, rough 2 in. white pine, mill stock % x 8 and 10 in. pine shelving % x 12 pine shelving No. 1 white pine flooring	\$32.00 to 40.00 29.00 to 33.00 36.00 to 45.00 42.00 to 50.00 40.00	Crushed stone, 1 in. 1.00 Crushed stone, % in. 1.75 Hardwall plaster \$9.50 to 12.00 neat 6.50 sanded ton 1.35 yard Hair (plaster) .03 per lb.
No. 1 spruce flooring	30.00 40.00 40.00	PRICE AT TORONTO
No. 2 pine V. or beaded sheeting	30.00	Hemlock Lumber
Pine Trim for Paint Finish 4 in. casing, per 100 ft. 5 in. casing, per 100 ft. 8 in. pine base, per 100 ft. 10 in. pine base, per 100 ft. 4 in. pine window stool, per 100 ft.	\$1.75 2.10 3.25 4.20 2.75	2 x 4 in. to 2 x 12 in., 8 to 14 ft. \$23.00 to 20.00 2 x 4 in. to 2 x 12 in., 16 ft. 23.00 to 29.00 2 x 4 in. to 2 x 12 in., 18 ft. 25.00 to 30.00 1 in. hemlock No. 1 23.00 to 26.00 No. 1 hemlock decking 25.00 to 28.00 No. 2 hemlock dimensions and 1 in. 19.00 to 23.00
Shingles, Lath Roofing, Etc.		Pine
No. 1 pine lath No. 2 pine lath No. 1 spruce lath	5.00 4.50 4.00	1 in. common and better pine 8 to 12 in. wide, rough
Cedar Posts-Fence		% x 12 pine shelving 45.00 to 48.00 No. 1 white pine flooring 34.00 to 37.00
5 in. at small end	5c. foot 7c. foot	No. 1 spruce flooring 27.00 to 32.00 No. 1 pine decking, D2S 26.00 to 31.00 Spruce decking 27.00 to 32.00 No. 1 pine V. or beaded sheeting 35.00 to 39.00
Hardware		No. 2 pine V. or beaded sheeting 30.00 to 33.00
Nails, wire, common Nails, cut, common Sash weights, cast iron Tarred felt paper Building paper	\$2.30 base keg 2.50 '' '' 1.50 per 100 lbs. .43 roll .35 roll	No. 1 Common Yellow Pine 2 x 4 in. to 2 x 14 in., 10 to 16 ft \$24.00 to 36.00 2 x 4 in. to 2 x 14 in., 18 to 20 ft 29.00 to 38.00 2 x 4 in. to 2 x 14 in., 22 to 24 ft. 31.00 to 40.00
Brick, Tile, Terra Cotta, Sewer Pipe		Yellow Pine Finish
No. 1 dry pressed red bricks No. 1 dry pressed buff bricks Red stock bricks Grey stock bricks Wire cut brick for foundation work. Fire brick Sewer pipe, 4 inch Sewer pipe, 6 inch	17.00 21.00 11.50 12.00 10.00 25.00 10c. foot 15c. foot	4/4 x 6, 8, 10 and 12 B. & B. smoke finish 5/4 x "" "" "" 45.00 6/4 x "" "" 45.00 8/4 x "" "" steam finish 5/4 x "" " 48.00 to 50.00 6/4 x "" " 48.00 to 50.00 8/4 x "" " 48.00 to 55.00

NOTE TO READERS. We would be glad to have suggestions from readers as to the extension or modification of this list.

Introducing

The Schultz Urothers Company

LIMITED

BRANTFORD

CANADA



Our Planing Mill, Lumber Yards and Brick Plant.

STABLISHED in 1869, we have achieved a Dominion-wide reputation as manufacturers and dealers in Lumber, Planing Mill Products, Builders' Supplies and Novelties, and as one of the few really progressive and successful contracting and building firms in Canada. Heretofore, our business has been more or less local, but as we are now offering our products to the building trade generally in the Dominion, we also offer a resume of our various activities as an introduction to the trade, who will now require a few details before deciding on placing orders with us.

As general contractors we erected the major portion of the large public buildings for which Brantford is noted, Carnegie Library, Y.M.C.A., Churches, Schools, Hospitals, Factory and Office Buildings, as well as many of the handsomest residences, and many in other cities as well. This includes a rumber of Post Offices and other Government Buildings, such as the four belonging to the Experimental Farm at Guelph, namely MacDonald Institute and Woman's Residence, Massey Library and the Consolidated School.

THE manufacturing plant is of modern brick construction, and is equipped with large dry kilns and the latest woodworking machinery. Besides the Planing Mill Products, Joinery and Cabinet Work we manufacture Packing Cases, Box Shooks, and a wide line of Novelties, including the Knoll Washing Machine, Contractors' Wheelbarrows, Rocking Horses, Games, Etc.

The stocks of lumber are quite complete. This includes immense reserve stocks in dimension stuff of all kinds and particularly long bill stuff, Hemlock, Spruce, Pine, Yellow Pine and other soft woods, and a full assortment of Maple, Birch, Oak, Ash, Chestnut, Gum, Cypress, Mahogany and other local and Southern hardwoods. This stock is kept up at all times and frequently amounts to over six million feet. More than one thousand incoming cars of all kinds of materials are handled annually.

The Schultz Portable Sectional Buildings comprise a line of Summer and Shore Cottages, Hunters' Cabins, Chicken Coops, Garages, Stores and the Brantford Portable Churches, all of which are to be found throughout Canada, giving excellent service and satisfaction.

Seven years ago we installed a modern Silica Pressed Brick Plant with a normal capacity of 22,000 bricks per day. Besides these we handle shale pressed face brick, cement, and all kinds of masons' and plasterers' supplies.

Recently the capacity of the planing mill plant was greatly increased in order to supply the rapidly growing general demand for our goods. With 46 years' experience in building operations, and the preparation of the necessary materials in our own planing mill, working to the details of many of the best known architects of Ontario, we have learned to manufacture and serve to the best advantage, especially where intricate detail is involved. We have an efficient corps of experts in charge of the draughting room.

We cannot emphasize too greatly our tremendous advantage in our central location at Brantford—the Home of the Telephone, the Manchester of Canada, where so many large industries are located, on account of the great shipping facilities. With railroad lines radiating in all directions and trunk lines running east and west, we can secure prompt transit in addition to our own service—and this is highly important, especially to consumers in the further reaches of the province.

The watchwords of the business upon which it has been built and upon which it is to-day conducted are—Quality—Service—Square Dealing.

The Schultz Brothers Company

LIMITED

BRANTFORD

CANADA

Price List of Building Materials-Continued.

Price at Toronto Continu	and	Price at Toronto—Continued				
		no .				
Pine Trim for Paint Finish 4 in cassing, per 100 ft. 5 in cassing, per 100 ft. 8 in pine base, per 100 ft. 10 in pine base, per 100 ft. 4 in pine window stool, per 100 ft.	\$1.80 to 2.00 2.00 to 2.50 2.75 to 3.25 4.00 to 4.50 3.00	Lime Hydrated lime (Canadian) Hydrated lime (American) Mortar color Plaster of paris Crushed stone, 2 in. Crushed stone, 1 in.	.38 cwt. 10.60 ton 11.60 '' black, 3; red, 2 \$1.50 to 2.50 1.20 1.25 1.25			
Hardwood Trim, Flooring, Etc.		('rushed stone, % in	9.10			
Quotations will be given on request. See editor's note above.		Gravel	5,00 sanded 1.50 ,07 lb.			
Shingles, Lath Roofing Etc.						
	\$3.35 per M	PRICE AT WINNIP	EG			
N. B. extras	4.00 00 to 6.00 per M	Hemlock Lumber				
No. 2 pine lath No. 1 spruce lath Roofing	4.75 to 5.00 4.25 ty\$1.60 per sq. ty 2.00 '' ty 2.40 ''	2 x 4 in. to 2 x 12 in., 8 to 14 ft 2 x 4 in. to 2 x 12 in., 16 ft	\$29.00 29.00 20.00			
	.25 each	Shingles, Lath Roofing, Etc.				
5 in. at small end	.50 each	XXX B. C. cedar shingles No. 1 pine lath Metal lath	\$4.00 & 3.50 per M 5.75 per M .16 to .20			
	\$2.35 cwt. 2.95	Roofing felt (2-ply)	2.50 per roll			
Sash weights, cast iron	2.00 .60 roll	Hardware	40.50			
Building paper, plain	.50	Nails, wire, common	\$3.70 per keg 3.70			
	Star D.D. \$6.50 8.60 \$7.00 10.00	Sash weights, cast iron Tarred felt paper Building paper Insulating paper	2.75 cwt. 1.00 per roll .75 1.25			
41-50	7.40 11 70 8.00 12.00 8.75 12.75 9.50 13.85 10.50 17.50 18.85 19.20 22.75 32.00 36.00	United inches Up 25 26-40 41-50 51-60 61-70 71-80 81-85 86-90 91-95 96-100	Single Double \$6.00 S.00 6.50 9.00 7.00 10.25 7.50 11.00 8.00 11.75 8.50 12.75 15.76 16.75 17.75 21.00			
Brick, Tile, Terra Cotta, Sewer Pipe		101-105	23.50 27.00			
No. 1 dry pressed red bricks \$1 No. 1 dry pressed buff bricks	4.00 to 18.00 pr M 14.50 to 18.00	Brick, Tile, Terra Cotta, Sewer Pipe				
Red stock bricks Sand lime brick Grey stock bricks Sewer brick Wire cut brick for foundation work Porous terra cotta bricks No. 1 enamelled bricks, all colors, from Fire brick Sewer pipe, 4 inch Sewer pipe, 6 inch Verandah post caps, 16 in.	10.00 to 12.50 8.50 10.50 to 12.50 8.75 to 9.50 8.00 to 9.00 12.00 to 15.00 80.00 to 150.00 26.00 to 30.00 10c. foot 1.45 each 1.75	No. 1 dry pressed red bricks No. 1 dry pressed buff bricks Red stock bricks Sand lime brick Porous terra cotta bricks No. 1 enamelled bricks, all colors, from Fire brick Oriental brick Sewer pipe, 4 inch Sewer pipe, 6 inch	\$25.00 to 50.00 30.00 to 40.00 25.00 12.00 18.00 per M 100.00 52.50 35.00 .11 per ft. .18½ per ft.			
Verandah post caps, 20 in	2.00 "	Cement, Plaster, Stone, Etc.				
Chimney caps, 2 flues in 2 pieces Chimney caps, 3 flues in 3 pieces	3.50 ··· 5.00 ···	Cement (bags extra)	\$2.60 per bbl. 1 85 a yard			
		Lime	.34 per bu.			
Cement, Plaster, Stone, Etc.		Mortar color	12.00 per ton .05 per lb.			
Cament (bags extra)	\$1.85 bbl. (1.55 in car lots) 1.20 a yard	Plaster of paris Crushed stone, 2 in. Crushed stone, 1 in.	.75 per bag 2.65 per yard 2.90			
		ons from readers as to the extension or modif				

Price List of Building Materials-Continued.

11100	DL L	** mmpeg	Continued	
Crushed stone, %	in.		2.90	
Hardwall plaster			13.00	per ton
Gravel			1.85	per yard
Hair (plaster)			1.25	per bale

Price at Winnings-Contleved

PRICE AT VANCOUVER

Shingles, Lath Roofing, Etc.

XXX	B. C.	cedar	shingles	 	\$2.20 & 2.10 per M
No. 1	pine	lath.		 	2.25 per M
	-				

Hardware

Hardware	
Nails, wire, common	\$3.25 per keg
Nails, cut, common	4.25
Tarred felt paper	.90 per roll
Building paper	.70

Price at Vancouver-Continued

Brick, Tile, Terra Cotta, Sewer Pipe

No. 1 dry pressed red b		\$42.00 per M
No. 1 dry pressed buff	bricks	42.00
Red stock bricks		13.00
Fire brick		45.00
Sewer pipe, 4 inch		.25 per ft.

Cement, Plaster, Stone, Etc.

The state of the s	
Cement (bags extra)	\$3.00 per bbl.
Lime	1.35 per bbl.
Hydrated lime	4.25 per bbl
Plaster of paris	4 50 per bbl.
Hardwall plaster	14.50 per ton
Hair (plaster)	14.50 per ton

W. J. Hynes, Limited

The Largest Staff Manufacturers in Canada

We Manufacture:

Plaster Relief Decorations
Cornices ready to nail in position
Exterior Caps for Columns and Pilasters
Indirect Lighting Fixtures
Imitation Marble or Scagliola
Castings in any kind of Cement

Write us for further Information.

720 Dupont St.,

Toronto



The "Peace" Patent

Metal Weather Strip For Windows and Doors

To Carpenters and Builders this weather-strip constitutes a necessary part of the equipment in the building of factories, offices and residential property. It is wind and dust proof, and reduces fuel bills. Windows work easier with than without it. It does away with storm sash, and lasts a lifetime. Write for illustrated pamphlet or further information to

WILLIAM PEACE CO., LIMITED

Bank of Hamilton Building, Hamilton, Ont.

Phone 286

Live Agents Wanted



essional Directory

**

Architects; Engineers, Patent Attorneys, Etc.

PATENTS A good Patent is a property of great value.

A new invention requires protection. Patent your ideas, and we will sell it for you. Expert advice free to inventor. We cheerfully and promptly give information concerning Patents, home or foreign. Twenty-four years experience. Send sketch with description for free reports and leaflets. Write or call J. Arthur Macmurtry & Co., Patent Attorneys. 154 Bay St., Toronto, Can. Patent obtained, bought or sold.



ALFRED A. GILMORE, Architect

Preston, - Ont.

Specializing in

Rinks, Exhibition Buildings, Sanitary Dairy and Stock Barns.

This Paper costs \$1.00 per Year—less than 10c. each month. If you are not now getting it regularly, will it not pay you to subscribe?

The Canadian Builder & Carpenter

32 Colborne Street, Toronto

CLASSIFIED DIRECTORY A BUYER'S GUIDE FOR BUILDERS IN CANADA

Air Compressors Stuart Machinery Co., Ltd., Winnipeg.
Alabastine

Alabastine Co., Paris, Ont. Asphalt

Canadian H. W. Johns-Manville Co., Ltd., Toronto.

Walkerville Roofing Mfg. Co., Walkerville, Ont.

Asphalt (Mastic)
Canadian H. W. Johns-Manville Co., Ltd., Toronto.

Walkerville Roofing Mfg. Co., Walker-

ville, Ont.

Asphalt (Paint) Canadian H. W. Johns-Manville Co., Ltd., Toronto.

Walkerville Roofing Mfg. Co., Walkerville, Ont.

Automatic Gas-Steam Boilers Consumers' Gas Co., Toronto. Barrows and Concrete Carts London Concrete Machinery Co., London, Ont.

Beaded Sheets Metal Shingle & Siding Co., Preston. Belting

Stuart Machinery Co., Ltd., Winnipeg. Bevels

Henry Disston & Sons, Philadelphia. Blinds

Benson & Bray, Ltd., Midland. Georgian Bay Shook Mills, Midland.

The R. Laidlaw Co., Limited, Toronto.
Wilson Bros. Ltd., Collingwood.

Blinds, Venetian
Benson & Bray, Ltd., Midland.
Georgian Bay Shook Mills, Midland. The R. Laidlaw Co., Limited, Toronto. Wilson Bros. Ltd., Collingwood. Boilers

Stuart Machinery Co., Ltd., Winnipeg. Brick

Brick
Sun Brick Co., Ltd., Toronto.
Milton Pressed Brick Co., Toronto.
Bronze Cast
W. H. Thornhill Co., Winnipeg.
Dennis Wire & Iron Works Co., London.
Builders' Supplies
Benson & Bray, Ltd., Midland.
Bournival & Co., Montreal.
Georgian Boy Shock Wills, Midland.

Georgian Bay Shook Mills, Midland. Wilson Bros. Ltd., Collingwood.

Cast Stone Block Machinery Cast Stone Block & Machine Co., Ltd. Windsor, Canada.

Cars (Contractors) Stuart Machinery Co., Ltd., Winnipeg. Casement & Sash (Steel and Bronze) W. H. Thornhill Co., Winnipeg.

Carts (Concrete) London Concrete Machinery Co., London, Ont.

Ceilings (Metal) Metal Shingle & Siding Co., Preston.

Cement (Portland) Braid & McCurdy, Winnipeg, Man. Ontario Lime Association, Toronto.

Cement Castings W. J. Hynes, Limited, Toronto.

Cement Tools Wettlaufer Bros., Toronto, Ont. Coment Stain.

London Concrete Machinery Co., London, Ont.

Chain Hoists Stuart Machinery Co., Ltd., Winnipeg.

Ohain Sprockets
Stuart Machinery Co., Ltd., Winnipeg.
Colors for Concrete
Ideal Concrete Machinery Co., London.

Columns Batts, Limited, Toronto. Benson & Bray, Midland. Georgian Bay Shook Mills, Midland. The R. Laidlaw Co., Limited, Toronto.
Wilson Bros. Ltd., Collingwood.
York Lumber Co., Toronto.
Combination Woodworkers

W. A. Elliott, Toronto. Hutchinson Woodworker Co., Toronto. Parks Ball Bearing Machine Co., Cincinnati.

Composition Capitals for Columns W. J. Hynes, Limited, Toronto. Concrete Block Machines

Cast Stone Block & Machine Co., Ltd. Windsor, Canada.

Exeter Mfg. Co., Limited, Exeter, Ont. Ideal Concrete Machinery Co., London. London Concrete Machinery Co., London, Ont.

Wettlaufer Bros., Toronto, Ont. Concrete Brick Machine Exeter Mfg. Co., Limited, Exeter, Ont. Ideal Concrete Machinery Co., London. London Concrete Machinery Co., London, Ont.

Wettlaufer Bros., Toronto, Ont. Concrete Mixers Bournival & Co., Montreal. Eureka Machine Co., Lansing, Mich. Ideal Concrete Machinery Co., London.

London Concrete Machinery Co., London, Ont.
Stuart Machinery Co., Ltd., Winnipeg.
Wettlaufer Bros., Toronto, Ont. Concrete Forms

Exeter Mfg. Co., Limited, Exeter, Ont.
Concrete Tile Machines Exeter Mfg. Co., Limited, Exeter, Ont. Ideal Concrete Machinery Co., London. Wettlaufer Bros., Toronto, Ont.

Concrete Reinforcements Metal Shingle & Siding Co., Preston. Concrete Sill, Step and Lintel Machines London Concrete Machinery Co., Ltd., London.

Exeter Mfg. Co., Limited, Exeter, Ont. Contractors' Machinery

London Concrete Machinery Co, Ltd., London. Stuart Machinery Co., Ltd., Winnipeg. Wettlaufer Bros., Toronto, Ont.

Contractors' Plants London Concrete Machinery Co., Ltd.,

London. Stuart Machinery Co., Ltd., Winnipeg.
Conveying Machinery
Stuart Machinery Co., Ltd., Winnipeg.

Cornices (Galvanized Iron)

Metal Shingle & Siding Co., Presten.
Corrugated Sheets (Steel) Metal Shingle & Siding Co., Preston.

Cranes and Hoists Stuart Machinery Co., Ltd., Winnipeg. Crestings

Metal Shingle & Siding Co., Preston.

Cross-cut Saws

Henry Disston & Sons, Philadelphia Crushers

London Concrete Machinery Co., Ltd., London. Curb and Gutter Forms

London Concrete Machinery Co., Ltd., London.

Wettlaufer Bros., Toronto, Ont. Curb Stone Machines

Ideal Concrete Machinery Co., London. Daylight Rods

Consolidated Plate Glass Co., Toronto. Derricks

Ideal Concrete Machinery Co., London. London Concrete Machinery Co., London, Ont.

Stuart Machinery Co., Ltd., Winnipeg.
Doors Batts, Limited, Toronto.

Benson & Bray, Midland. Georgian Bay Shook Mills, Midland. York Lumber Co., Toronto. Doors (Veneered)

Batts, Limited, Toronto.
Benson & Bray, Midland.
Georgian Bay Shook Mills, Midland.
Wilson Bros. Ltd., Collingwood.
York Lumber Co., Toronto.

Door Trimmings Metal Shingle & Siding Co., Preston. W. H. Thornhill Co., Winnipeg.

Drag Scrapers London Concrete Machinery Co., London, Ont.

Drawing Materials Eugene Dietzgen Co., Ltd., Toronto. Driers

London Concrete Machinery Co., London, Ont. Dumbwaiters

Chelsea Elevator Co., New York, N.Y. Eavestrough and Conductor-Pipe Metal Shingle & Siding Co., Preston. Electrical Fixtures and Specialties

Duncan Electrical Co., Montreal. W. H. Thornhill Co., Winnipeg. Canadian H. W. Johns-Manville Co.. Ltd., Toronto.

Electrical Machinery Stuart Machinery Co., Ltd., Winnipeg.
Elevator Fronts Dennis Wire & Iron Works Co., London.

Elevators (Passenger and Freight)
Chelsea Elevator Co., New York, N.Y.
Stuart Machinery Co., Ltd., Winnipeg.

Emery and Emery Wheels
Stuart Machinery Co., Ltd., Winnipeg. Engines (Steam)
Stuart Machinery Co., Ltd., Winnipeg.

Engines (Gas and Gasoline) Consumers Gas Co., Toronto.

Ideal Concrete Machinery Co., London. London Concrete Machinery Co., London, Ont.

Stuart Machinery Co., Ltd., Winnipeg. Wettlaufer Bros., Toronto, Ont. Excavators

Stuart Machinery Co., Ltd., Winnipeg.

CONTRACTOR AND STATE OF THE PROPERTY OF THE PR

Advertisements that Remind You

R. Laidlaw Lumber Co., Limited

Everything in Lumber
Timbers, Sash Doors, Columns, Etc.
Head Office: 65 Yonge St., TORONTO

Powell Lumber and Door Co., Ltd.

KORELOCK and KLIMAX Doors In Oak, Birch and Fir

LARGE STOCK RIGHT PRICES PROMPT SHIPMENT
310-12 Front Street West, TORONTO

CHELSEA

Dumb - Waiters

This style is built especially for high class residence and apartment house service. Easy to operate, fast and safe. Write our Canadian Agents for catalogue and prices.

Chelsea Elevator Co., New York

AGENTS

Hardware Co. of Toronto, Limited

46 Adelaide St. West, Toronto



No 4 Band Brake Dumb-Waiter, 50 to 150lbs, capacity.

SPECIFY USE DEMAND SMASHING GLASS FOCKET FRAMES SASH WEIGHTS RATTLING BINDING CORDS with AUTOMATIC SASH HOLDERS P. L. Schmidt Hardware, Ltd Montreal, Quebec

WINDOW LETTERS

BRASS PLATES ENAMELLED IRON SIGNS WOOD & GLASS

HOUSE NUMBERS

J.E.RICHARDSON&C? 147 CHURCH ST. TORONTO.

GOODELL MITRE BOX

Made of STEEL

Cannot Break

For years this Box has been recognized as being first in quality and improvements, and the new STEEL BOTTOM



PLATES with ANG-ULAR SERRA-TURES to prevent the work from slipping add still more to its convenience and attractiveness. Write for new Circular D. describing this and many other features.

GOODELL MFG. CO., Greenfield, Mass., U.S.A.

7% INVESTMENT

PROFIT-SHARING

Series \$100 \$500 and \$1,000.

Business at back of this investment, established 28 years. All or any part of investment may be withdrawn at any time after one year on 60 days' notice. Safe as any mortgage. Send for special folder.

National Securities Corporation

Limited

Confederation Life Building, Toronto.

"Simonds Guide For Carpenters"

That is the title of a booklet we will send free to any Carpenter or Contractor who will write for it. It is vest pocket size and contains many useful tables, much valuable information, also instructions regarding filing and caring for Hand Saws.

Simonds Canada Saw Co., Limited

St. Remi St., and Acorn Ave., Montreal, Que.



NOTE - NAIL PASSES THROUGH BOTH MOYLDING AND FELT.

The Most Effective Weather Strip Made

It'will thoroughly exclude Wind, Cold, Snow, Rain and Dust and the fact that the felt is glued to the bottom of the moulding makes it the only dust-proof weather strip on the market.

Write for Free Sample to N. L. Alderson, 186 Evelyn Ave West Toronto, Reptive for Ontario. Beware of Imitations: For Sale at all Leading Hardware Stores.

Made by—W. J. Dennis & Company
2222-24-26 W. Lake St. Chicago, U.S.A.

CLASSIFIED DIRECTORY-Continued

Felts (Asphalt) Canalian H. W. Johns Manville Co., Ltd., Toronto. Felts (Hair)
Canadian H. W. Johns-Manville Co.,

Ltd., Toronto.
Felts (Plain Building)
Canadian H. W. Johns-Manville Co.,

Ltd., Toronto.

Felts (Tar)
Canadian H. W. Johns-Manville Co., Ltd., Toronto.

Dennis Wire & Iron Works Co., London. Dominion Ornamental Iron Co., Ltd., Toronto.

George B. Meadows, Toronto. Fence Post Mould

London Concrete Machinery Co., London, Ont. Files

Henry Disston & Sons, Philadelphia. Finials

Metal Shingle & Siding Co., Preston.

Fire Brick and Fire Clay

Stuart Machinery Co., Ltd., Winnipeg.

Fir Doors

Georgian Bay Shook Mills, Midland. Fire Escapes

Dominion Ornamental Iron Co., Ltd.,

Toronto.

George B. Meadows, Toronto.

Dennis Wire & Iron Works Co., London.

Eberhard-Wood Mfg. Co., Toronto.

Fireproof Windows

1. & Siding Co., Preston.

Flooring

Batts, Limited, Toronto. Benson & Bray, Midland. Canadian H. W. Johns-Manville Co..

Ltd., Toronto. Georgian Bay Shook Mills, Midland.

The R. Laidlaw Co., Limited, Toronto.
Wilson Bros. Ltd., Collingwood.
York Lumber Co., Toronto.
Floor Scrapers
Exeter Mfg. Co., Ltd., Exeter, Ont.
Fox Supply Co., Brooklyn, Wis.

Frames (Knockdown)
York Lumber Co., Toronto. Frames and Sash

Benson & Bray, Ltd., Midland.
York Lumber Co., Toronto.
Wilson Bros. Ltd., Collingwood.
Forms (Concrete)

Exeter Mfg. Co., Ltd., Exeter, Ont. Ideal Concrete Machinery Co., London. London Concrete Machinery Co., London, Ont.

Vettlaufer Bros., Toronto, Ont.

Framing Tools G. A. Topp & Co., Indianapolis, Ind.

Gas Lighting Appliances Consumers' Gas Co., Toronto.

Gas Ranges Consumers' Gas Co., Toronto.

Gates Dennis Wire & Iron Works Co., London. George B. Meadows, Toronto.

Glass Consolidated Plate Glass Co., Toronto. The Toronto Plate Glass & Importing

Co., Toronto. Gravel Screens (Power) Ideal Concrete Machinery Co., London.

Grills (Steel and Bronze) Dennis Wire & Iron Works Co., London.

Hair (Plasterers') Ontario Lime Association, Toronto.

Hand Scrapers Fox Supply Co., Brooklyn, Wis.

Hard Wall Plaster Crown Gypsum Co., Lythmore, Ont.

Hardwood Flooring Batts, Limited, Toronto. Georgian Bay Shook Mills, Midland. The R. Laidlaw Co., Limited, Toronto. Wilson Bros. Ltd., Collingwood.

Heating Apparatus Stuart Machinery Co., Ltd., Winnipeg.

Heaters (Glue Pot)

Consumers Gas Co., Toronto.

Heaters (Gas)
Consumers Gas Co., Toronto.
Herringbone Lath
Metal Shingle & Siding Co., Preston.
Hoists

Ideal Concrete Machinery Co., London. London Concrete Machinery Co., London, Ont.

Wettlaufer Bros., Toronto, Ont.

Hoisting Engines

London Concrete Machinery Co., London, Ont.

Stuart Machinery Co., Ltd., Winnipeg.
Imitation Marble

W. J. Hynes, Ltd., Toronto.
Interior Trim

Batts, Limited, Toronto. Benson & Bray, Midland. Georgian Bay Shook Mills, Midland. The W. A. Moore Co., Ltd., Meaford. Wilson Bros. Ltd., Collingwood. York Lumber Co., Toronto.

Interlocking Hollow Building Tile Sun Brick Co., Ltd., Toronto.

Iron Fences Dennis Wire & Iron Works Co., London. Eberhard-Wood Mfg. Co., Toronto. George B. Meadows, Toronto. Joiners' Work

Benson & Bray, Ltd., Midland. Georgian Bay Shook Mills, Midland. Wilson Bros. Ltd., Collingwood.

Keene's Cement

Braid & McCurdy, Winnipeg, Man.
Lath

Batts, Limited, Toronto. Benson & Bray, Ltd., Midland. Georgian Bay Shook Mills, Midland. The R. Laidlaw Co., Limited, Toronto.
Wilson Bros. Ltd., Collingwood.
York Lumber Co., Toronto.
Lime

Ontario Lime Association, Toronto.

Lockers (Steel)

Dennis Wire & Iron Works Co., London.
Geo. B. Meadows, Toronto.

Lumber

Batts, Limited, Toronto.
Benson & Bray, Ltd., Midland.
Georgian Bay Shook Mills, Midland.
The R. Laidlaw Co., Limited, Toronto.
Wilson Bros., Ltd., Collingwood.
York Lumber Co., Toronto.
Machinery (Brick and Tile)
Stuart Machinery Co., Ltd., Winnipeg.

Machinery (Woodworking)

Stuart Machinery Co., Ltd., Winnipeg. Marble (Imitation)

W. J. Hynes, Limited, Toronto.

Mineral Wool Canadian H. W. Johns-Manville Co., Ltd., Toronto.

Mortar Colors Ontario Lime Association, Toronto.

Mitre Box

Goodell Mfg. Co., Greenfield, Mass. Moulds (Concrete)

Ideal Concrete Machinery Co., London. London Concrete Machinery Co., Ltd., London.

Mortar Gauges Ideal Concrete Machinery Co., London. Mortar Mixers

London Concrete Machinery Co., London, Ont.

Mouldings

Batts, Ltd., Toronto.

Batts, Ltd., Toronto.
Georgian Bay Shook Mills, Midland.
Wilson Bros., Ltd., Collingwood.
Ornamental Iron Work
Dennis Wire & Iron Works Co., London.
Eberhard-Wood Mfg. Co., Toronto.
George B. Meadows, Toronto.
Ornamental Bronze Work

Dennis Wire & Iron Works Co., London.
Ornamental Moulds

London Concrete Machinery Co., London, Ont.
Ideal Concrete Machinery Co., London.

Paints (Asphalt)
Canadian H. W. Johns-Manville Co.,
Ltd., Toronto.

Walkerville Roofing Mfg. Co., Walkerville, Ont.

Paper (Asbestos) Asbestos Mfg. Co., Montreal. Canadian H. W. Johns-Manville Co., Ltd., Toronto.

Paper (Felt Building)
Canadian H. W. Johns-Manville Co.,

Ltd., Toronto.
The R. Laidlaw Co., Limited, Toronto.

Paper (Insulating)
Canadian H. W. Johns-Manville Co.,

Ltd., Toronto. Walkerville Roofing Mfg. Co., Walker-

ville, Ont.
Paper (Waterproofing) Braid & McCurdy, Winnipeg. Canadian H. W. Johns-Manville Co.,

Ltd., Toronto. Patent Attorneys

J. A. MacMurty & Co., Toronto. Stanley Lightfoot, Toronto. Pile Driving Machinery Stuart Machinery Co., Ltd., Winnipeg.
Plaster

Crown Gypsum Co., Lythmore. Ontario Lime Association, Toronto. Plaster (Hardwall)

Crown Gypsum Co., Lythmore. Ontario Lime Association, Toronto.

Plaster (Inside, Asbestos)
Canadian H. W. Johns-Manville Co., Ltd., Toronto.

Plaster Ornaments W. J. Hynes, Limited, Toronto. Plaster Paris

Crown Gypsum Co., Lythmore. Ontario Lime Association, Toronto. Plaster (Stucco Asbestos)

Canadian H. W. Johns-Manville Co., Ltd., Toronto.

Frank Sand Mfg. Co., Windsor, Ont.
Plumbs and Levels Henry Disston & Sons, Philadelphia.

Plumbing Supplies Canadian H. W. Johns-Manville Co., Ltd., Toronto.

Portable Saw Rigs Oshkosh Mfg. Co., Oshkosh, Wis. Pulpstone

Alabastine Co., Paris, Ont.
Pulleys
Stuart Machinery Co., Ltd., Winnipeg.
Pumps

London Concrete Machinery Co., London, Ont.
Stuart Machinery Co., Ltd., Winnipeg.
Wettlaufer Bros., Toronto, Ont.

Quarrying Machinery
Stuart Machinery Co., Ltd., Winnipeg.
Receptacles (Electrical)
Duncan Electrical Co., Montreal.

Red Slate Roofing Walkerville Roofing Mfg. Co., Walkerville, Ont.

Ridge (Galvanized) Metal Shingle & Siding Co., Preston.

CLASSIFIED DIRECTORY-Continued Sheeting

Ridgings Metal Shingle & Siding Co., Preston. Rock Crushers Wettlaufer Bros., Toronto, Ont. Stuart Machinery Co., Ltd., Winnipeg. Roofing (Asbestos Corrugated)

Asbestos Mfg. Co., Montreal. Canadian H. W. Johns-Manville Co., Ltd., Toronto.

Roofing (Asbestos Shingles)
Canadian H. W. Johns-Manville Ltd., Toronto.

Roofing (Prepared Asbestos)
Canadian H. W. Johns-Manville Co., Ltd., Toronto.

Roofing (Rubber)
Canadian H. W. Johns-Manville Co... Ltd., Toronto.

Roofing (Sand Surface Felt)
Canadian H. W. Johns-Manville Ltd., Toronto.

Roofing (Smooth Surface Felt)

Canadian H. W. Johns-Manville Co.,
Ltd., Toronto.

Roofing Tile Machines
Ideal Concrete Machinery Co., London. Sand Sifting Machines London Concrete Machinery Co., Lon-

don, Ont.

Sash Batts, Limited, Toronto. Benson & Bray, Midland. Georgian Bay Shook Mills, Midland. The R. Laidlaw Co., Limited, Toronto.
Wilson Bros., Ltd., Collingwood.
Saw Mill Machinery

Stuart Machinery Co., Ltd., Winnipeg.
Saws (Band)

Henry Disston & Sons, Philadelphia. Simonds Canada Saw Co., Montreal. Saws (Hand)

Henry Disston & Sons, Philadelphia. Simonds Canada Saw Co., Montreal. Saws (Circular)

Henry Disston & Sons, Philadelphia. Simonds Canada Saw Co., Montreal.
Saws (Hack)

Henry Disston & Sons, Philadelphia. Simonds Canada Saw Co., Montreal.

Scraper Knives Fox Supply Co., Brooklyn, Wis. Scrapers

Fox Supply Co., Brooklyn, Wis. Scrapers (Drag)

London Concrete Machinery Co., London, Ont.

Scrapers (Wheel) London Concrete Machinery Co., London, Ont.

Scraper Sharpening Device Fox Supply Co., Brooklyn, Wis.

Screens (Sand) London Concrete Machinery Co., London, Ont.

Screens (Window and Door) Batts, Limited, Toronto. Georgian Bay Shook Mills, Midland. The R. Laidlaw Co., Limited, Toronto. Wilson Bros., Ltd., Collingwood.

Sewer Pipe Ontario Lime Association, Toronto.

Sewer Pipe Moulds London Concrete Machinery Co., London, Ont.

Ideal Concrete Machinery Co., London.

Shingles Batts, Limited, Toronto. Benson & Bray, Ltd., Midland. Canadian H. W. Johns-Manville Co.. Ltd., Toronto. Georgian Bay Shook Mills, Midland. Wilson Bros., Ltd., Collingwood. York Lumber Co., Toronto.

Batts, Limited, Toronto.

Benson & Bray, Midland. Georgian Bay Shook Mills, Midland. Wilson Bros. Ltd., Collingwood.

Sidewalk Dividing Plates London Concrete Machinery Co., London, Ont.

Sidewalk Forms (Steel) London Concrete Machinery Co., London, Ont.

Sidewalk Prisms Consolidated Plate Glass Co., Toronto.

Siding Batts, Limited, Toronto. Benson & Bray, Midland. Georgian Bay Shook Mills, Midland. Wilson Bros., Ltd., Collingwood.

Sill and Cap Moulds London Concrete Machinery Co., London, Ont.

Ideal Concrete Machinery Co., London. Silo Block Machines

London Concrete Machinery Co., London, Ont.

Soldering Iron Heaters Consumers' Gas Co., Toronto.

Shooks Georgian Bay Shook Mills, Midland. Skylights

Metal Shingle & Siding Co., Preston. Staff Plaster

W. J. Hynes, Limited, Toronto.

Stairs Batts, Limited, Toronto. Georgian Bay Shook Mills, Midland. The R. Laidlaw Co., Limited, Toronto.
Wilson Bros., Ltd., Collingwood.
Stairs (Iron)
Dennis Wire & Iron Works Co., London.

George B. Meadows, Toronto.

Stanchions Metal Shingle & Siding Co., Preston. Steel Buildings and Garages

Metal Shingle & Siding Co., Preston. Steam Shovels Stuart Machinery Co., Ltd., Winnipeg.
Stone (Crushed)

Ontario Lime Association, Toronto. Stone Crushers

Stuart Machinery Co., Ltd., Winnipeg. Store Fixtures

Batts, Limited, Toronto. Canadian H. W. Johns-Manville Co., Ltd., Toronto.
The R. Laidlaw Co., Ltd., Toronto.
Metal Shingle & Siding Co., Preston.

Wilson Bros., Ltd., Collingwood.

Store Front Bars Consolidated Plate Glass Co., Toronto. Storm Sash

Batts, Limited, Toronto. Georgian Bay Shook Mills, Midland. The R. Laidlaw Co., Ltd., Toronto. Wilson Bros., Ltd., Collingwood.
Surveying Instruments
Eugene Dietzgen Co., Ltd., Toronto.

Tanks, Steel

Stuart Machinery Co., Ltd., Winnipeg. Tanks, Galvanized Iron Metal Shingle & Siding Co., Preston.

Terra Cotta Toronto Plate Glass Importing Co., Toronto.

Thimbles Metal Shingle & Siding Co., Preston.

Tile, Block and Brick Cars London Concrete Machinery Co., Lon-London, Ont.

Tile Machine, Drain London Concrete Machinery Co., London, Ont.

Tile Machine, Sidewalk London Concrete Machinery Co., London, Ont.

Timber Georgian Bay Shook Mills, Midland. The R. Laidlaw Co., Ltd., Toronto. Transfer Cars

London Concrete Machinery Co., London, Ont.

Transmission Apparatus Stuart Machinery Co., Ltd., Winnipeg. Trowels, Brick and Plastering Henry Disston & Sons, Philadelphia.
Trucks

Stuart Machinery Co., Ltd., Winnipeg. Turbine Pumps

Stuart Machinery Co., Ltd., Winnipeg.
Valley, Galvanized
Metal Shingle and Siding Co., Preston.

"'V" Crimp Roofing and Siding Metal Shingle & Siding Co., Preston.

Veneered Doors The W. A. Moore Co., Ltd., Meaford. Batts, Limited, Toronto. Georgian Bay Shook Mills, Midland. Benson & Bray, Midland. Ventilators

Metal Shingle & Siding Co., Preston. Verandah Columns Batts, Limited, Toronto.
Benson & Bray, Midland.
Georgian Bay Shook Mills, Midland.
The R. Laidlaw Co., Ltd., Toronto.
Wilson Bros., Ltd., Collingwood.

Wall Board

Canadian H. W. Johns-Manville Co., Ltd., Toronto. Georgian Bay Shook Mills, Midland. The R. Laidlaw Co., Ltd., Toronto.

Wall Plugs Ideal Concrete Machinery Co., London.

Waterproofing
Canadian H. W. Johns-Manville Co., Ltd., Toronto.
Ideal Concrete Machinery Co., London.

Watering Bowls for Stock Metal Shingle & Siding Co., Preston

Waterworks' Supplies Stuart Machinery Co., Ltd., Winnipeg.

Weather Strips Eberhard-Wood Mfg. Co., Toronto. William Pease Co., Hamilton.

Weather Strip "Felt." W. J. Dennis & Co., Chicago.

Window Frames, Complete
Batts, Limited, Toronto.
Benson & Bray, Midland.
Georgian Bay Shook Mills, Midland.

Window Frames Batts, Limited, Toronto. Georgian Bay Shook Mills, Midland. Wilson Bros., Ltd., Collingwood.

Window Trimmings Metal Shingle & Siding Co., Preston.

Window Screens Batts, Limited, Toronto. Georgian Bay Shook Mills, Midland. The R. Laidlaw Co., Ltd., Toronto.

Wire Rope London Concrete Machinery Co., London, Ont.

The Stuart Machinery Co., Winnipeg.
Wire Work, Special
George B. Meadows, Toronto.
Dennis Wire & Iron Works Co., London.

Wood Mantels The W. A. Moore Co., Ltd., Meaford.
Woodworkers, Combination
Elliot Woodworker Co., Toronto.

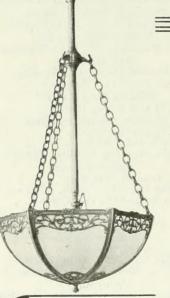
M. Hutchinson, Toronto. Woodworking Machinery Stuart Machinery Co., Ltd., Winnipeg.

INDEX TO ADVERTISERS

В	
	5
C	
	1
	4
	5
Actual Control of the	4
Ceresit Waterproofing Co i.b. Consolidated Plate Glass Co	0.
	18
Crown Gypsum Companyo.b.	
D	
	4
Dission, Henry, & Sons	*
E	
Elliot Woodworker, Ltd 6-	7
G	
	15
Gilmore, A. A	63
H	
Hutchinson Woodworker Co. i.b. Hynes, W. J., Co	c.
L The Control of the	
	13
Lightfoot, Stanley	
London Concrete Machinery Co	U.

M	
Macmurtry, J. A., & Co	33
N	
National Securities Corporation, Ltd	35
0	
Oshkosh Mfg. Co	10
P	
Page Wire Fence Co., Ltd.	10
Powell Lumber & Door Co., Ltd.	35
R	
Richardson, J. E., & Co	35
S	
Schmidt, P. L., Hardware, Ltd	35
Schultz Bros. Co., Ltd	35
	00
Teronto Plate Glass Co.	10
Toronto Plate Glass Co.	10
w	
Wettlaufer Bros. Wilson Bros.	14
	1
Y	10
York Lumber Co	12

Gas Lighting in the Modern Home



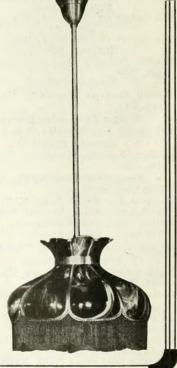
AT no time has the importance of the proper lighting of the home been appreciated as it is to-day. One reason for this is the vast improvement in lighting fixtures. In planning a house nothing needs more careful attention than its illumination. The occupants of homes that are fully piped for gas have at their disposal artistic fixtures, reading lamps, domes and semi-indirect lighting pieces, which shed an abundance of soft, restful light so agreeable to tired eyes. The modern Gas Lighting Fixtures handled by us are real works of art, and specially designed to meet the needs of our most exacting customers.

Modern Gas Lighting Fixtures are readily and conveniently lighted or extinguished by a turn of a button or a pull of a chain. Modern Gas Light in any house means an abundance of mellow eye-pleasing illumination, and by its use is obtained a continuous, artistic, convenient and dependable service.

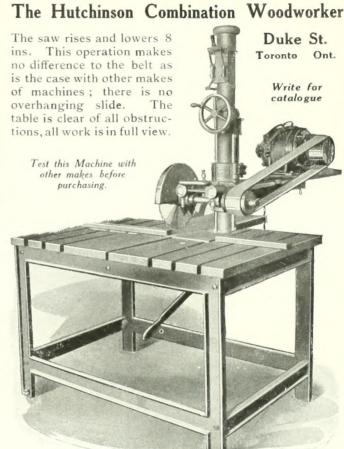
The Consumers' Gas Company

12-14 Adelaide St. W.

Telephone Main 1933-1188









How to Make Basements Waterproof

¶ Cement is the best possible insurance against loss by fire—CERESIT WATERPROOFING COMPOUND effectively insures against loss from dampness or seepage of ground water. ¶ Basements, stucco walls, tunnels, coal pits, boiler pits, and conduits are made DUST-DRY by its use. ¶ CERESIT WATER-PROOFING COMPOUND is a plastic paste which readily

Warehouse built on filled ground with a boat slip on both sides. Basement about three feet below water level and subject to heavy hydrostatic pressure. Effectively waterproofed by using CERESIT in top finish of floor and in a cement mortar coating on inside of walls.

RESULT — A permanently DUST-DRY basement affording valuable storage space.

PROOFING COMPOUND is a plastic paste which readily dissolves in the water used for tempering the cement or concrete mixture. UNIFORMLY distributed, it eliminates ALL dampness or seepage. ¶ Do not risk cheap substitutes—CERESIT always proves to be the most economical in the end.

Send for Description of all Ceresit Products

Ceresit Waterproofing Company

982 Westminster Bldg., Chicago, Ill.

lade in U.S.A.

Five Reasons for Subscribing to The Canadian Builder

It publishes plans of actual buildings suitable for erection by the average builder. It aims at raising the standard of the trade in Canada. It contains items of practical value in every department of the trade. It furnishes special articles by leading experts every month. It gives news of Builders' Exchanges throughout the country.

Crown Gypsum Co., Limited

MANUFACTURERS

HIGH GRADE GYPSUM PRODUCTS



Hard Wall Plasters
Finishing Plasters
Plaster-Paris

Concrete Plaster

For plastering directly on Concrete Ceilings, Beams and Walls. In 100 lb. bags ready for

"BEAVER" Cement Plaster

A neat hair fibred base coat

Mines, Mills and Office located at Lythmore, Ontario, Canada

CROWN GYPSUM CO., Limited, Lythmore, Ont., Canada