

VI.-No. II.

TORONTO AND MONTREAL, CANADA, FEBRUARY, 1898

BRANCH OFFICES:

South Broad St. Philadelphia, Pa. Mason Building, Beston, Mass. Fifth Avenue, Pitsburgh, Fa. Fremont St., San Francisco, Cal. p Buena Visin St., Los Angeles, Cal. W. ad South St., Salt Lake City, Utah. North Main St., Helesa, Montana.

CANADIAN DEPARTMENT:

Si. Sacrament Street, Montreal, teen's Hotel, Toronto. dress all communications to -

- . - Otto Brothers & Co.



THE STANDARD FOR 36 YEARS

OTIS BROTHERS & Co., v 38 PARK ROW NEW YORK:

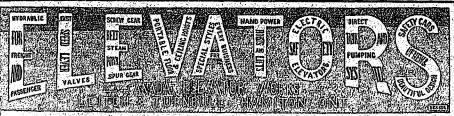
WESTERN DEPARTMENT:

HALE ELEVATOR COMPANY, 187 La Salle St., Chicago, Ill.

26 Brush St., Detroit, Mich. 415 Locust St., St., Louis, Mo. 20 Carondelet St., New Orless, La. 23 Syndicate Building, Minneapolis, Minn. American Bank Building, Kansas City, Mo.

EUROPEAN DEPARTMENT

AMERICAN ELEVATOR COMPANY 4 Queen Victoria St., London, England, 25 Rue de la Paix, Paris, France.



It กลร)een said

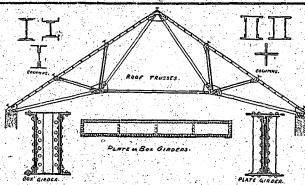
> frequently enough that it is next to hopeless to attempt the decoration of a room in a single style, because of the difficulty of getting the materials together from stock designs. You will not say this when you have consulted us.

Stained Glass. elief Ornament all Papers all Hangings

ood Ploors .

Elliott & Son

92 to 96 Bay St. TORONTO.



DOMINION BRIDGE CO. (LIMITED)

Bridges of all designs in both Iron and Steel, Roofs, Telephone Poles, House Girders, and all kinds of Structural Iron Work. OUR STOCK IN HAND COMPRISES

Rounds, Angles, Tees, Channels, Plates, Rolled Edged Flate, Bare, Rivete, Rounds, &c.; Iron Beams, Bars, Squares, Rounds, Turnbuckles, Rivets, &c.; Estimates furnished for Structural Iron Work delivered at building or creeted.

ADDRESS LETTERS TO THE COMPANY, ROOM NO. 3, WINDSOR HOTEL, MONTREAL. J. H. McGREGOR,

R. B. ROSS, Montreal Agent: 35 St. Francois-Xavier St. Bell Telephone 806. Onlarto Agency: 74 Toris Street, Toronto.

M. J. HYNES.

Contractor and Plasterer

Relief Decorations to Detail in Plaster, Staff, or Papier-Mache.

97 Winchester Street. Shop, 125 Adelaide St. West.

Telephone 3414

Contractors and Builders.

DAVIDSON & KELLY,

SON & RELLY, Carpentors and Buildors Creek. Toronto. 8, 10 and 12 Sherbourne Street, STORE AND OFFICE FITTING A SPECIALTY.

HOOD & CO.,

Engineers and General Contractors, Wellesley Street, TORONTO Estimates given on all classes of work. Superior work. Moderate charges.

WATSON BROS.

CONTRACTING PLASTERERS, Builders' Supplies, etc.

434 EUCLID AVENUE, TORONTO.

IMPORTATION ORDERS SOLICITED FOR RED SANDSTONE AND OTHER COLORS.

Copland & Company, - 163 St. James Str. MONTREAL Agents Ballochmyle Quarries.

Artistically Executed.

ELECANT NEW DESIGNS

WALL PAPER 🔆 ROOM MOULDINGS

M. Staunton & Go.

4 KING ST. W., TORONTO.

Roofers.

RENNIE, SE, ROBT. RENNIE, JR., 100 Gerrard St. East. / 278 Berkelev St.

100 Gérrard Sű East. / 376 Berkéley St. R. RENNIE & SON, TERRA GÖTTA TILE, SLATE ROOFERS, ETG.

ry description of Roofing Slate always on han pixed Iron Ridges, Valleys and Flashings supplie

WT T. STEWART

SLATE AND FELT ROOFER

aler in and Manufacturer of Roofing Mater Office, 27 Toronto St., cor. Adelaide, TORONTO Telephone No. 608.

G. DUTHIE & SONS.

Terra Cotta Tile, Slate and Felt Roofers, Cor. Widmer and Adelaide Sis., GALVANIZED IRON FURNISHINGS SUPPLIED. Telephone 1980.

TORONTO ROOFING CO.

Slate, Tile and Gravel Roofers.

Office, 5 Toronto Street, W. G. McMurchy, Manager.

ESTABLISHED 1856. DUNCAN FORBES,

Wholese and Retail Dealer in
SLATE AND FELT ROOFING.
ALL NEW WORK GUARANTEED.
TOPOLOGY
TOPOLo

REGGIN, (Successor to Win. Saulter),

REUGIN, (Successor to Was Saulter),

**SLATE, STILE AND GILBERT ROOPER

Dealer in Roofing Material.

(Room 3) 23 ADELAIDS ST. E. ... TORONTO,

Galvanized iron fumishings sapplied. Estimates

civen. Repairs to felt and gravel roofs promptly ac
ended to. Tolephone 2556.

H. WILLIAMS & CO.,
Adelaide St. East, TORONTO.
ROOFERS

With Slate, Felt and Gravel; also Williams' Flat Slate Roof-the best: We lay ROCK ASPHALT on cellar bottoms, floors and walks-the best material for this

W. D. HUTSON,

56 Cecil Street Slate and Terra Cotta Roofing ALSO FELT AND GRAVEL ROOFING Materials always on hand:

Ornamental Plasterers.

JAMES WRIGHT Ornamental Plaster Wor In Quien Anne; Romanicique ac.
other designs.
Flowers, Embosses, Emrichaens,
Capitals, etc.
Show Rooms and Residence:
Of Victoria Street. TORON?

J. D. BAKER -

Plaster and Cement,

Architectural Ornaments

Centre Flowere, etc.

RESIDENCE ; CATHCART ST MONTREAL

Cut Stone Contractors.

OAKLEY & HOLMES,

CONTRACTORS,

66 and 68 Wellington St. West, TORONT Estimates for Cut Stone, Brickwork, etc.

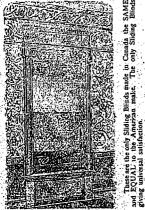
CURTIS & ROWE, Dealers in all kinds of Yard—116. Esplanade St., 2nd door wine Co., Toronto. west To

ASIRS ISAAC.

ISAAC BROTHERS,
CUT STONE CONTRACTORS,
Office and Yard: Between Scatt and Church Street
tibe Esplanade (south side), Toronto.

amant is the Best

WILLER SLIDING BLINDS



ects specify the Canadia LEE & SEAMAN.

Cor. Queen and Northcote Ave., Toronto.



THE CANADIAN CRANITE

TORONTO.

anufacture every description of marble and granite required in architecture

Columns, Pilasters, Landings and Steps, Wainscoting,

Bathroom Furnishings, Tile Flooring, etc., etc.

They make a specialty of PLUMBERS WORK, SCREEN TOPS, FURNITUE MARBLE, etc.

They contract to do ARTIFICIAL STONE or CONCRETE work that cannot be excelled sidewalks, FATHWAYS, STAIRWAYS, BASEMENT FLOORS, STABLE and COACHOUSE FLOORING, their work is unrivalied.

Municipal Engineers and Contractors are invited to note that CRUSHED GRANITE CONTRETE purposes, for SIDEWALK construction, and for ROAD MACADAM, are furnel by contract. Also GRANITE PAVING BLOCKS. Monuments of any design in

High-class monuments in numble and granite a specialty. Monum material made to order for the trade. A large stock always on hand.

Ottawa, January, 1893.

Please mention the CANADIAN ARCHITECT AND BUILDER when corresponding with advertises

FRENCH FORT QUA

JOHN LAURIE, Sole Agent,

162 St. James St., MONTREA

Used in some of the finest buildings in Canada. Standa the climate;

. improves with ago; does not absorb moisture...

CHIEF ARCHITECT'S OFFICE, OTTAWA, August 1st, 1889

FRENCH FORT SAND-STONE

e new Departmental Building in this city has been built of this stone

DEAR SIR.—The new Departmentar issueing in time and of 12 coo cubic feet having been used.

Having inspected the quarries, I um able to state that it is almost unlimited in extent, and blo of almost not size as readily be obtained; it is of a most pleasing colour, which seems to improvibing, very easily arought, and in that respect alone has the advantage of most of the sand and appears of the state was wrought and placed in this building, quite green from the query and netwithstanding that the variations in temperature during the past severe winters have been so to to to in twenty four hours, it has not been in any way impaired.

C.S. Phil. Eng. .

Revenueste, N. H. THOS. FULLER, Chief Archited.

INDEX TO ADVERTISEMENTS

Architects. Ontario Directory.... III Onebec Directory.... vi Architectural Sculp-tors and Carvers. Carnovsky, B. H.... IV Hicks, W. Stivens... xi Holbrook & Molling-Holbrook & Molling-ton.... i Turner, Frederic.... xi Wagner, Zeidler & Co...

Architectural Iron-

Bostwick, Geo. F... vii
B. Greening Wire Co xiv
Dennis, R.... x
Dominion Bridge Co. 1
Mendows, Geo.B. .. xiv
Whitfield, John... y

Art Woodwork. Carnovsky, B. H.... IV Ransom & C., C.S., xiv Wagner, Zeid er & Co..

Alabastine The Alabastine Co., Paris, Limited... vii

Dulate (Pressed).

Builders' Supplies. Builders' Supplies.
Adamsnt Mfg Co. viii
Bremser. Alex. xi
Copland & Co. II
Currie & Co. W & FP. xiv
Hyde & Co. F. xiv
Maguire, Wm. iv
Morits, E. D. iv
McNathy & Co. xiv
Morison & Co. xiv
Morison & Co. xiv
II
Rowe, Geo. III

Hailer Covering.

Building Stone

Builders' Hard-

Rice Lewis & Son.... IV Crrosoto Stains Calsot, Samuel..... v Church and School Furniture, Bostwick, Geo. F....vii Can. Office & School Furniture Co..... ii

Comente

Adamant Mfc. Co...viii
Bremner, Alex....xi
Currie&Co, W.&F P...xiv
MeNally & Co., Wm. x
Maguine, Wm. iv
Morris, E. D... iv
Morrison & Co., T A... x
Rathbun Co... viii

Contractors and Builders,

Davidson & Kelly... 11 Hood & Co., C..... 11 Roberts Wm...... 11 Turner & Co., G. W.. vi Contractors' Plant and Machinery

Copland & Co...... II Rowe, Geo! III Cut Stone Con-tractors.

Curtis & Rowe.... II Isaac Bros..... II Oakley & Holmes... II

Chimney Topping. Bremner, Alex.....III Currie&Co. W &F.Paviii

Drain Pipe

Dumb Walters King & Son, Warden xii

Elevators Fensom. John...... 11
Miller Bros. & Toms... ii
Otis Brothers & Co... I
Leitch & Turnbull.... 1

Elegator Motors Ball Electric C.....IV

Engravers. Can. Photo-Eng Bu-

Fire Brick and Clay Bremner, Alex..... xi
Colman-Hamilton Co.. iii
Currie& Co.W & F P.. xiv
Hyde & Co.. F.... xiv
McNally & Co.. W.. x
Morns, E. D.... iv Grates and Tiles.
Rostwick, G. F.... vii
Holbrook&Mollington i
Parkes, Reekie & Co. vi
Rice Lewis & Son....IV

Galnanized Iron
Warks,
Dauglas & Plunkett...111
Hedges & Lankin....111
Tucker & Dillon.....111

Tucker & Dillon. ... 111.

Heating.
Burroughes & Co.W. J. x
Gurney & Co. E & C. xii
Garth & Co. ... xii
King & Son, Warden. xii
Miller Bros. & Tems. .. ii
Toronto Rudnator Mfg
Co. ... x ii

Legal.
Denton, Duds & Denton. Motallio Lath.
B. Greening Wire Co. xiv
Metallic Roofing Co... II
Metal Lath Co..... xi

Mortar Colors and Shingle Stains. Inguire, Wm..... iv Iuirhead, Andrew... v or ato Pressed Brick

Ornamental Plas. Ornamental Plas.

tevers.
Alluisi & Son. D. . . vi
Baker I. D. . . . II
Hynes, W J I
Wright, Jas. I
Patinta & Farntshes.
Muirhead, Andrew... v

Paintness, Andrew... v
Painters.
Gilmor & Casey... x
Tourville, Chas... vi
Paving.
The Guelich Silica
Barytic Stone Co...III
Forsyth, Robert... i

Paving Materials McArthur & Co., Alex iv Pipe Covering
Can. Mineral Wool Coxiv

Plasterers
Hynes, W. J...... I
Watson B os...... II Pitato Alassa
Holbs Hardware Co... xi
McCausland & Son... v
Pilkington B-others... ix
Toronto Plate Glass
Importing Co... vii Plumbers
Bennett & Wright...xiv
McCrae & Wnt-on...vi

Parquetry Floors
Elliott & Sen..... I
Johnson, S. C....xiv Plumbing Supplies

Roofing Materials
McArthur & Co. Alex iv
Merchant & Co. . . . ziv
Metallic Roofing Co. . 11

Nettalia Roofing Co. 11
Netalia Roofing Co. 12
Duthie Roofing Co. 11
Forther, Dancin ... 11
Metalia Roofing Co. 11
Hetalia Roofing Co. 11
Hetalia Roofing Co. 11
Rennie & Son, R. 11
Regins J. ... 11
Stewart, W. T. 11
Toronto Roofing Co. 11
Wiltiams & Co. H. 11
Santitary Apptit
Malcolla Roofing
Malcolla Co. 11
Santitary Apptit
Toronto Roofing Co. 11
Toronto Steel Clad Bath
& Metal Co. 11
Shirigle Status

Shingle Stains bot, Samuel..... Shingso v. Siding Blinds ഹി

Lanot, Samuel. V
Sliding Blinds
Lea & Se-man. II
Stained and Decorative Glass
Castle & Sm... v
Elliot & Sm... v
Colliot & Sm... v
Glas Works.
Grmson i. K. J. E... v
Hobbs Hardware Co., xi
Horwood & Sons, H... v
Imperial Stained Grass
Longhares A.

Co.... v
Lonehurst & Co., H.. v
McCausland & Son... v
Spence & Son, J. C... v

Spence & Son, J. C... v
Trara Cotta
Toronto Pr. ssed Brick
& Terra Cotta
& Terra Cotta
& Brick Co..... iii
The Ont. Terra Cotta
& Brick Co..... viii
The Raritan Hollow &
Porous Brick Co...... viii

Porous Brick Co...., viii
Terra Cotta Fireproofing
Morrison & Co.. T. A. x
Rathbun Co... viii
The Ra itan Hollow &
Po ous Brick Co...., viii

Wall Paper and Ceiling Decorations Elliott & Son...... II Faircloth Bros..... v Staunton & Co.,.... II Wall Planter Adamant Mig. Co.of

America vi i Nowell & Co., B.L... xii Weather Strips St. Armour, E..... vi D. W. MOIR. President.

SIDNEY STEVENS, Vice-President. GEO. H. HOUSE, Sec.-Treasurer.

_ T H E -

Moir Granite Co.

(INCORPORATED)

Paid-up Capital, - \$100,000.

MANUEACTURERS OF

MONUMENTS

BUILDING STONE

PAVING BLOCKS

and all kinds of Granite Work.

BEEBE PLAIN, P. Q., and VERMONT.

Branch Offices:

916 SIXTEENTII ST., DETROIT, MICH. M. S. Dart, Manager. and NEWPORT, Vr.



& Mollington TORONTO.

ARCHITECTURAL SCULPTORS.

MODELLERS. ETC.

SOLE AGENTS FOR

& Co.'s and Mitten & Co.'s Artistic and Plain Tiles for Cabinets, Hearths, Floors, etc. Maw &

TELEPHONE 2490.

Stuart's Patent Granolithic for sidewalks, Floors, Steps, Landings, Areas and Stables. the test of years and climates.

No building perfect without Granolithic Footpaths.

It has stood th

IMPERIAL STONEWARE LAUNDRY TUBS

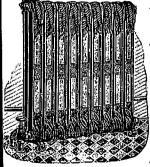
Are without parallel the finest and most complete Tubs in the Market. Guaranteed pe IMPERIAL STINEWARE LAUNDRY TUBS
Are without parallel the finest and most complete Tubs in the karket. Guananteed perfect.
Building Granite, Granite Paving Blocks, Polished Granite of every kind, Monumental
Work. Marble for Interiors, Plumbers, Furniture, Cemetery, or any
purpose, and of all kinds of Marble in the market. SEND FOR ESTIMATES.

ROBERT FORSYTH.

MONTREAL: 10 Bleury Street.



TORONTO: 14 Toronto Arcade.



THE MOST HANDSOME RADIATOR IN THE MARKET

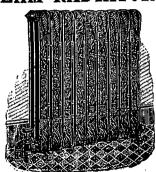
THE MOST EFFECTIVE AND QUICKEST CIRCULATING OF ANY

THE ONLY RADIATOR WITH A SEPARATE AND POSITIVE CIRCULATION IN EACH SECTION.

NO CROSS OR CONFLICTING CURRENTS OF WATER.

Send for Descriptive Price List. MANUFACTURED BY

686 to 542 Craig Street, - MONTREAL,





THE CANADIAN OFFICE & SCHOOL FURNITURE CO.

(Successors to W. STAHLSCHMIDT & Co.)

MANUFACTURERS OF

Office, School, Church & Lodge Furniture

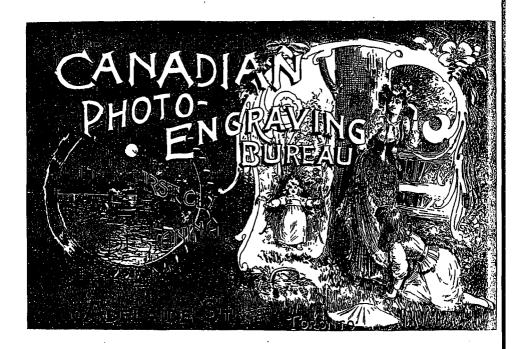
GEO. F. BOSTWICK,

DEC. I. DOCI

24 Front Street West,

TORONTO





MILLER BROS. & TOMS

(Successors to Miller Bros. & Mitchell. Established 1869.)

MACHINISTS MILLWRIGHTS AND ENGINEERS

. BUILDERS OF .

STANDARD ELEVATORS

for all purposes, of any capacity, and operated by any desired motor.

Foundry and Machine Shop Cranes, any capacity. Builders' Winches and Hoisting Engines, all sizes. Builders' Derricks, Hand or Steam, 1, 1½, 2, 3, 5 and 8 tons.

23 YEARS' EXPERIENCE.

Any one in want of anything in the above lines, or in general machine work, will save money by addressing

MILLER BROS. & TOMS, MONTREAL.

F. H. COLMAN, President.

PERCY C. HAMILTON, Sec'y-Treas

LOUIS BACQUE, Sales Agent.

Annual Capacity:

6.500 CARS.

OFFICE AND YARDS:

44 Price Street, Toronto. Telephone 3763.



Double Strength

CULVERT PIPE.

WATER PIPE.

VITRIFIED

PAVING BRICK.

Fire-Proofing, Fire Brick, Fire Clay and all Fire Clay Products.

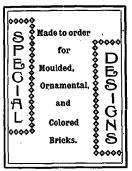
The United States Fire Clay Co.

 $\overline{f T}$ he Ohio Sewer Pipe Co.

The Toronto Pressed Brick and Terra Cotta Go.

THE OLDEST AND LARGEST PRESSED BRICK MANUFACTURERS IN CANADA. THE ORIGINAL

MILTON PRESSED BRICK WORKS



FOR SAMPLES --- LOOK AT---

BOARD OF TRADE BUILDING TORONTO. CONFEDERATION LIFE BUILDING, TORONTO. NEW GLOBE BUILDING, TORONTO. CENTRAL CHAMBERS, OTTAWA. BANK OF BRITISH COLUMBIA VANCOUVER. MR. MILLEN'S RESIDENCE, -MONTREAL.

HEAD OFFICE AND SHOW ROOM:

139 YONGE STREET. TORONTO.

R. C. DANCY, Managing-Director.

Telephone 60.

COLORED

Plain,

Moulded.

and

Ornamental.

RED CREY **BUFF** BROWN BLACK

WHITE

CHAS. SHEPPARD, 402 PARTHENAIS STREET, MONTREAL, Agent for Province of Quebec.

"CANADA FOR CANADIANS."

ALS, In White and Decorated.



. Made from best quality of Imported English Clays and manufactured on the English plan. We guarantee satisfaction in every way equal to imported goods.

Our lines include the leading English and American patterns, and are in the hands of jobbers from Halifax to Victoria.

The attention of Architects and Plumbers throughout the Dominion is invited to our goods.

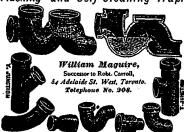
SEND FOR CATALOGUES.



"CLAW-FOOT" CLOSET, PLAIN WHITE,

E CHINAWARE Co. ST. JOHNS, P. Q.

Maguire's Sewer Gas Preventive, Flushing and Self-Cleaning Trap.



SEWER PIP

Chimney Tops, Fire Brick, Fire Clay, Portland and Native Cements.

Samuel Cabot's Celebrated Mortar Colors and Creosote Stains

ALWAYS ON HAND.

NOTICE.

BUFFALO, N. Y., December 7, 1888.

Dear Sir: I have examined the Maguire trap with great interest, and I am convinced that it combines, in a simple and complete manner all the true principles of a perfectly ventilated water-seal, and will take the greatest pleasure in recommending it to every one.

Respectfully,

A. H. BRIGGS, Health Physician, City of Buffalo, N. Y.

PORTLAND CEMENT AND PLASTER PRESSED AND MOTTLED FRONT BRICKS FIRE CLAY, FIRE BRICK AND SEWER PIPES ORNAMENTAL TERRA COTTA AND FIREPROOFING

Telephone 701.

YARD: NORTH TORONTO STATION.

MORRIS

34 YONGE STREET, TORONTO. of THE SERPENTINE GREENSTONE QUARRIES for the Dominion.

ROOFING AHD PAVING **M**ATERIALS

TARKED FELT, 2 and 3 ply. BUILDING PAPERS.

> COAL TAR, PITCH, DEAFENING FELTS

ALEX. MCARTHUR & CO.

650 Craig Street, Montreal.

Factory:

Harbour and Logar Streets, Montreal.

Paper Mills: Joliette, Que.

ESTABLISHED 1870.

Beamsville Pressed Brick Co., MANUFACTURERS OF

Fine Pressed Plain Ornamental Rock face

Farm Drain Tile. Roofing Tile, etc. other shades.

Brown Ruff

Red

Our goods cannot be excelled in quality. No lime or impurities as often found in clay.

Office and Works:

BEAMSVILLE, ONT.

ELLIOTT & MCKENNY. SALES | 34 Yonge Street, - TORONTO. E. C. HOPKINS,

145 St. James St., MONTREAL

ST. JOHNS, P. Q

The oldest manufacturers of Sanitary Earthenware in Canada.

A full line of all the BEST and MOST POPULAR

CLOSETS, BASINS, etc.

WE have selected this pattern as being one W E have selected this pattern as being one of the best of the Syphon Closets now in use. It is simple, quiet and effective in action, and has four to five inches seal of water in the bowl. The Jet, besides the Syphon, acts upon the water in the bowl, facilitating the outgo, so that a limited quantity of water is required for each operation. We make it in white and ivory water plain or embossed, and decorated in ware, plain or embossed, and decorated in colors, if desired. We make these Closets en-tirely in one piece and in one mould, so that treey in one piece and in one mould, so that there are no seams, as by the ordinary method of manufacture, thus preventing any risk of flaws or leaks from imperfect joints. The very best imported materials are used, and the Closets will not craze or discolor.

BRANCH HOUSE:

MALCOLM 89 and 91 Church St., TORONTO. QNT.

The second secon

HAMILTON STAINED GLASS WORKS

60 King William Street.

Church and 🖎 1 <u> (AINŁU</u> Nomestic

of every description.

HENRY LONGHURST,

HAMILTON.

W. J. Thomas. C. J. Gilson. R. C. Gilson. THE STANDARD STAINED GLASS CO.

CHURCH WINDOWS, Antique and Modern Designs, Plain and Ornamental, ART STAINED GLASS for Dwellings. Lead Glazing and Sand Cut a specialty. 263 JAMES ST. N., HAMILTON, ONT.

FAIRCLOTH BROS., INTERIOR DECORATORS,

INTERIOR DECORATORS,

WALL PAPERS,
Artlate Materials, etc.
Stained Glass for churches and private residences,
House Palning, Glaing, Paperhanging, Calsomining, etc. Estimates given.
10 Shater Street, Incar Yonge), TORONTO.

Stained Glass.

EMBOSSED GLASS, SAND CUT. and LEAD GLAZING.

G. & J. E. GRIMSON, 411 St. James Street, - MONTREAL

J. C. SPENCE & SONS.

ARTISTS IN STAINED GLASS. ECCLESIASTICAL AND DOMESTIC.

Mural Decorations, Art Tiles, Brasses, Church Furniture, etc.

BLEURY STREET. MONTREAL.



MEMORIALS AND LEADED GLASS



HURCH FURNITURE **MEMORIAL BRASSES** FONTS LECTERNS

ADDRESS-20 UNIVERSITY STREET, MONTREA



B. F. Raldwin. A. A. Mackey S. A. Bradley. ESTABLISHED 1881.

Ecclesiastical & Domestic Art Glass OF EVERY DESCRIPTION. Lead Glazing and Band Out a specialty.

130 RICHMOND ST. WEST, - TORONTO.

B. F. Baldwin, Manager.

In sending inquiries about work please send size of lights, for doors or windows, also which side of house or church they go on

ART GLASS WORKS

ESTABLISHED 1876. Memorial Church Windows, Geometrical and Quarrie Windows, Art Glass for Residences, etc. Feed for designs and prices ω

H. HORWOOD & SONS, PRESCOTT, ONT., and Ogdensburg, N.Y.



CABOT'S CREOSOTE SHINGLE STAINS

Give the soft velvety coloring effect so de-sirable for exteriors,

THE ONLY EXTERIOR COLORING - -- - THAT DOES NOT BLACKEN.

Houses all over the country have been treated with this Stain in the last ten years,

For samples on wood, with book of creosoted houses, apply to

SAMUEL CABOT, Sole Manufacti

70 Kilby Street, - BOSTON, MASS.
ANDREW MURRIEAD. 82 Bay Street, Toronto.
Agent for Outaria.
WALTER H. COTTINGHAM & CO., MONTREAL,
Agents for Quebec and the Lower Provinces.

JOHN WHITFIELD.

174 and 176 Front Street East.

SUPPLIES ALL KINDS OF

IRON AND STEEL WORK

FOR BUILDERS, &c.

Telephone No. 2009.

ANDREW MUIRHEAD. TORONTO

MANUFACTURER OF

Wood Fillers, Paints & Painters' Supplies generally.

AGENT FOR

Samuel Cabot's Celebrated Mortan Colors and Creosote Stains.

OFFICE:

FACTORY:

82 Bay St. St. Lawrence St. Warehouse: 15 and 17 Mincing Lane.

A GREAT VICTORY!

Another City changes its Plumbing Laws

- AND ADMITS THE -

Sanitas Traps without Back Venting

ON Thursday, March 10th, 1892, a test of the leading Traps of the country was made before a Committee of the Board of Health of the City of Rochester, N.Y., for the purpose of ascertaining their merits as anti-siphonic fixtures. The Traps tested were the S-Trap with the McClellan Vent, the Delehanty, the Sanitas, the Puro, the Bower and the Bennor traps. The first three traps were represented by their manufacturers. The last three were not so represented, but were tested under precisely the same conditions. The Committee made its report to the Board of Health, March 21st, and the following is an extract from their report. and the following is an extract from their report:



The above report and the revised rules were adopted by the Board of Health. The SANITAS is the only Trap allowed by the City of Rochester, without venting. As Architects in other cities are interested in saving their clients the needless expense and the dangerous complications of back venting, we invite their co-operation in getting the Anti-Siphon Traps allowed in their respective cities, without venting.

Sanitas Manufacturing Company,

117 BANK ST.

OTTA WA.

Quebec Architects.

ROY & GAUTHIER

A ROHITECTS

Members Province of Québec Association ot Architects. 180 St. JAMES STREET, - MONTREAL

NELSON, A.R.C.A.,

Architect and Valuator,
Member Prevince of Quebec Association of Architects.
1724 Notre Dame Street, - MONTREAL 1724 Notre Dame Street, Bell Telephone 9305. MONTREAL

H. STAVELEY,

ARCHITECT

Member Province of Quebec Association of Architects. OUEBEC. 113 St. Peter Street,

A. C. HUTCHISON, R.C.A.,

Architect and Valuator,
Member Province of Quebec Association of Architects 181 St. James Street, Telephone 858. MONTREAL.

J. B. RESTHER & SON.

ARCHITECTS

Members Province of Quebec Association of Architects. Offices: Imperial Building, 107 St. James St., Telephone 1800.

A. T. Taylor, F.R.I.B.A. R.C.A., C. H. Gordon, TAYLOR & GORDON, London.

ARCHITHOTS
Members Province of Quebec Association of Architects. Union Buildings, 43 ST. FRANCOIS XAVIER ST.

PERRAULT & LESAGE,

Architects and Engineers. Members Province of Quebec Asso 17 Place d'Armes Hill, MONTREAL.

Telephone 1869. M. Perrault.
PERRAULT & MESNARD, A. Mesonnil.

ARCHITECTS Members Province of Quebec Association of Architects. 11 & 17 Place d'Armes Hill, .
Telebhone 696. . MONTREAL.

A. f. dunlop, R.C.A.

Architect and Valuator,
Member Province of Quebec Association of Architects. 185 St. James Street, Telephone 1627. MONTREAL.

W. E. DORAN,

Architect and Valuator,
Member Province of Quebec Association of Architect 180 ST. James Street, Telephone 1299. MONTREAL.

F. X. BERLINQUET, Architect and Valuator, Member Province of Quebec Association of Architects.

209 St. John Street, OUEBEC.

CHRIS. CLIFT,

Architect and Valuator,
Member Province of Quebec Association of Architects. 180 St. James Street, Telephone 1956. MONTREAL.

A. RAZA,

Architect and Valuator,
Member Province of Quebec Association of Architects. MONTREAL 3 Place D'Armes Hill, -Telephone 961.

T. F. FEACHY,

Architect and Valuator, Member Province of Quebec Association of Architects. 444 St. John Street, OUEBEC.

E. C. Hopkins. W. Hopkins, R.C.A. W. & E. C. HOPKINS.

Architects and Valuators,
Members Province of Quebec Association of Architects. 145 St. James Street, Telephone 959. MONTREAL.

A. G. Fowler. J. H. Bowe.

Architects and Valuators,
Members Province of Quebec Association of Architects. 198 St. James Street, Telephone 1694. MONTREAL.

THEO. DAOUST, (Formerly of Daoust & Gendron),

Architect and recommend Architects.

Member Province of Quebec Association of Architects.

Barron Block, 162 St. James St., MONTKE AL.

Telephone 9321. Architect and Valuator,

Architect and Valuator, mber Province of Quebec Association of Architects.

Bank National Building, 99 St. James St., Telephone No. 2540.

T. H. BERNARD,

Architect and Valuator,

Cor. Craig and St. Lawrence Street, MONTREAL Telephone 2783.

WRIGHT & SON,

Architects and Valuators, Members Province of Quebec Association of Architects. Mechanics' Institute Building, (Room 23) MONTREAL

G. DE G.-LANGUEDOC.

Architect and Civil Engineer,
Member Province of Quebec Association of Architects. Office: 180 St. James Street, MONTREAL.
Telephone No. 1723.

T. A. P. BULMAN,

Architect and Valuator,

156 St. James Street, MONTREAL.

CHAS. CHAUSSE,

ARCHITECT Member Province of Quebes Association of Architects. ROOM 34, IMPERIAL BUILDING, MONTREAL.

H. ROBT. FALBORD,

Architect and Valuator,

7 PLACE D'ARMES MONTREAL. Residence, 536 Amherst St. Bell Telephone 9277.

ALCIDE CHAUSSE.

Architect and Superintendent, 153 SHAW STREET, MONTREAL, QUE., and 3124 Notre Dame St., St. Cunegonde, Que. Telephone 6373.

P. Lortie. P. LORTIE & SON.

Architects and Valuators, 1933 Notre Dame Street, Telephone 1836. MONTREAL

A. Lortie.

ALPH. DUBREUIL.

Architecte and Evaluateur, Member Province of Quebec Association of Architects. 1608 RUE NOTRE DAME. MONTREAL.

L.R. MONTERIANT,

Architect and Valuator,
Member Province of Quebec Association of Architects. 42 ST. ANDRE STREET, MONTREAL.
Telephone 6703. FRIC MANN.

Architect and Valuator, Member Province of Ouebec Association of Architects.

30 St. John Street, - Montreal.

Beil Telephone 2566.

TAMES AMESS,

ARCHITECT tephone 8408. MONTREAL JUNCTION.
CITY ENQUIRY OFFICE: 26> ST. JAMES STREET.
Telephone 1882. Telephone 8408.

DAVID QUELLET,

Architecte et Evaluateur, Member Province of Ouebec Association of Archi

No. 13, Rue Saint-Jean, H.-V. Telephone 314.

H. AUSTIN JONES.

ARCHITECT (Successor to the late W. H. Hodson.)

242 St. JAMES STREET, -MONTREAL.

Montreal Contractors.

W. G. TURNER & CO. General Contractors and Builders

Room 56, Imperial Building,
107 St. James Street,
Repairs to Massony and Cut Stone Work promptly
attended to. Telephone 930.

McCRAE & WATSON,

Practical Plumbers,
Gas, Hot Water and Steam Fitters, &c.

796 DORCHESTER STREET, - MONTREAL Five doors west of Beaver Hall. Telephone No. 4188. MONTREAL.

D. ALLUISI & SON, Manufacturers of

Architectural and Plaster Ornaments

33 Bonsecours Street, Montreal.

CHAS. TOURVILLE, PAINTER AND DECORATOR.

mitation of Wood and Marble a specialty. Diploma honor obtained at the Provincial Exhibition, 1891, matation of wood. for imitation of wood.

No. 199 AQUEDUC STREET, - MONTREAL.

TO BUILDERS.

KING OF WEATHER STRIPS FOR PRIVATE AND STORE DOORS.



Prevent your sill from wearing; have comfort. No rubber! no felt! no

wood to tear, pull out, or warp! ALL METAL! Examine before putting any more sills. Sole Agent for Canada:

E. St. Amour, 242 St. James Street, - MONTREAL,

ADAMANT MFG. CO. OF AMERICA, 100 Esplanado Bast, - TORONTO.

W. McNALLY & CO. 50 McGill Street, - MONTREAL, QUE.

McRAE & CO.

16 Metoalfo Streot, - OTTAWA, ONT. W. A. FREEMAN

James Street North, - HAMILTON, ONT.

Mosaic and Tiled Floors, Vestibules, Dados, Bath-room Wall Tiling, English and American Grates.

First-class workmen. Architects Designs faithfully carried out. Large show rooms.

PARKES, REEKIE & CO. 692 Craig Street and -- MONTREAL.

The Ontario Terra Cotta & Brick Company, Limited,



RFSSFN RRICK

TERRA COTTA Strings, Panels, Heads, Cornice, Coping, Roof and Floor Tiles, Ridge Cresting and Finials.

TERRA COTTA in stock and made to Architects' details in the shortest possible time.

Office, 48 Adelaide St. East, TORONTO. C. R. S. DINNICK, Man.-Director. WORKS AT CAMPBELLVILLE, ONT.

SALES AGENT: T. A. MORRISON & CO., 118 St. PETER STREET, MONTREAL.

A mong the many recent jobs done with

ALABASTINE

are:

Dun, Wiman & Co.'s Offices

and the entire suite of rooms occupied by

Thompson, Henderson & Bell

in the

Board of Trade Building, Toronto.

M. E. CHURCH at Paris, which cannot be duplicated with any other water color known. Architects, painters, and the public generally are invited to inspect these jobs. Remember that Alabastine is the only permanent and sanitary wall coating. Ready for use by adding cold water. Color cards and full information sent on request.

THE ALABASTINE CO., Ltd.,

Paris, Ont.

TORONTO PLATE GLASS IMPORTING CO.

BRITISH, ROUGH-CAST AND MIRROR PLATE GLASS

Every kind Rolled Plates, and Plain, Colored and Ornamental Window Glass.

55 & 57 Victoria Street, - Toronto.

Plate Glass shipped to and fixed at any point in the Dominion.
TELEPHONE No. 1599.

Pilkinton's Window and Picture Glass, Plain and Ornamental. CABLE ADDRESS, "PLATE."

f Architectural f Iron f Work,

I BEAMS, COLUMNS, ETC.

Bank, Office and Vault Fittings and Furnishings

Mantels, Grates and Tiles in variety.

Church, Sunday-School, Hall, Lodge and Opera House Seating and other Furnishings.

Geo. F. Bostwick,

damant

is shipped dry in bags, like flour, and is ready for use by simply adding water. the mixing to be done in the same room where work is going on. This allows

This saves Time, Material, Money, Delays, Dirt, Labor.

You can work Adamant whether it rains, shines, snows, or hails. An Adamant wall is fire-proof, water-proof, hard, smooth, and durable. Send for our Adamant primer.

AMERICA ADAMANT 100 Esplanade East, Toronto, Can.

WM. THOMSON.

GEO. THOMSON.

A. CRAIG.

M. HALL, Sec.-Treas.

Longford Quarry and Lime Co.

DEALERS IN ALL SIZES OF

LIME STONE, DIMENSION, COURSING, RUBBLE, ETC., ETC.

The thickness in strata is very even in beds, and runs from 6 inches to 14 inches in depth. We have arrangements made so that any of the stone can be dressed in the quarry, and be a large saving in freight.

Write for Quotations.

Our address is Longford Mills, Ont.

THE RARITAN HOLLOW AND POROUS BRICK CO., MANUFACTURERS OF

FIREPROOFING.

Porous Terra Cotta and Hard Tile.

Telephone 701.

YARD: NORTH TORONTQ.

Sole Agent for Canada: 34 YONGE STREET, TORONTO,

E. D. MORRIS, 34 YONGE STREET, TORONTO New York Life Insurance Company's Building, Montreal, supplied by us, besides over 300 other buildings.

THE

Deseronto, Ont.

Porous Terra Cotta

FOR

FIREPROOFING AND.....BUILDING PURPOSES.

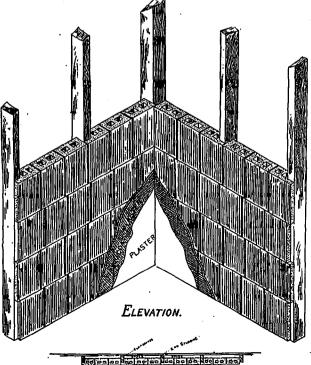
The cut shows Porous Terra Cotta Studding Blocks for frame construction.

LOW COST,

COOL IN SUMMER.

WARM IN WINTER. SAFETY FROM FIRE.

WRITE FOR PARTICULARS.



- Section of wall .-

CANADIAN ARCHITECT AND BUILDER.

Vot. VI.-No. II.

TORONTO AND MONTREAL, CANADA, FEBRUARY, 1893.

PRICE 20 CENTS

THE-

CANADIAN ARCHITECT AND BUILDER,

A Monthly Journal of Modern Constructive Methods. (With a Weekly Intermediate Edition-The Canadian Contract Record), PUBLISHED ON THE THIRD THURSDAY IN EACH MONTH IN THE INTEREST OF

ARCHITECTS, CIVIL AND SANITARY ENGINEERS, PLUMBERS, DECORATORS, BUILDERS, CONTRACTORS, AND MANU-FACTURERS OF AND DEALERS IN BUILDING MATERIALS AND APPLIANCES.

C. H. MORTIMER. Publisher.

Confederation Life Building, TORONTO, CANADA.

Telephone 2362. 64 TEMPLE BUILDING,
Bell Telephone 2299.

MONTREAL.

BUNCRIPTIONS.

The Camadian Architect and Bullers will be mailed to any address in Canada the United States for \$3.00 per year. The price to subscribers in foreign sources, is \$3.50. Subscriptions are payable in advance. The paper will be constitued as experient of feren paid for, if no subjected by the subscriber; but here no such understanding exists, will be continued until instructions to disconnect are received and all arrearinger; paid.

times are received and an arrearage past.

Prices for advertising sent promptly on application. Orders for advertising should reach the office of publication not later than the rath day of the month, and changes of advertisements not later than the 5th day of the month.

Constibutions of technical value to the persons in whose interests this journal is published, are cordially invited. Subscribers are also requested to forward newspaper clippings or written items of interest from their respective localities.

The "Canadian Architect and Builder" is the official paper of the Architectural Associations of utario and Quebec.

The publisher desires to ensure the regular and prompt delivery of this lournal to every subscriber, and requests that any cause of complaint in this particular be reported at once to the office of publication. Subscribers who may change their address thould also give prompt notice of same, and in doing so, should give both the old and new address;

ONTARIO ASSOCIATION OF ARCHITECTS.

OFFICERS FOR 1893.

D. B. DICK, Totonto.
KING ARNOLDI, Ottawa.
JOHN E. BELCHER, Peterboro'.
EDMUND BURKE, Toronto. PRESIDENT IST VICE-PRESIDENT 2ND VICE-PRESIDENT TREASURER

COUNCIL: FRANK DARLING, Toronto. DAVID EWART
S. H. TOWNSEND
W. A. EDWARDS
S. G. CURRY Ottawa. Toronto. Hamilton. Toronto.

REGISTRAR AND LIBRARIAN:
Canada Life Building, Toronto. W. A. LANGTON

PROVINCE OF QUEBEC ASSOCIATION OF ARCHITECTS.

OFFICERS FOR 1892.

V. ROY, Montreal.
J. Nelson, Montreal.
H. STAYELEY, Queecc.
A. C. HUTCHISON, Montreal.
J. Z. RESTHER, Montreal. PRESIDENT
15T VICE-PRESIDENT
2ND VICE-PRESIDENT SECRETARY TREASURER COUNCIL:

A. T. TAYLOR, F.R.I.B.A., R.C.A. M. PERRAULT A. F. DUNLOP, R.C.A. J. I. BROWNE J. HAYNES D. OUELLET iontreal. Montreal. Montreal. Montreal Montreal

TORONTO BUILDERS' EXCHANGE.

BOARD OF DIRECTORS :

WM. PEARS. President. GRO, MOIR, 1st Vice-President. GEO. OAKLEY, 2nd Vice-President. DAVID WILLIAMS, Treasurer.

WM. PARK. JAS. CRANG. WM. J. HILL WM. BOOTH.

IOHN L. PHILLIPS, Secretary.

WE have received many compliments from subscribers and advertisers upon the character of the New Year Number of the ARCHITECT AND BUILDER published last month, for which we return our sincere thanks.

SOME Toronto architects and contractors, acting upon the suggestion printed in these columns soon after the conflagration which destroyed the city of St. John's Nfld., have visited the colony, and secured a considerable amount of work. Canadian manufacturers are also supplying large quantities of materials, which are being employed in the rebuilding of the city.

REPRESENTATIVES of the Toronto Builders' Exchange recently waited upon the members of the Ontario Government and presented arguments in support of needed amendments to the Mechanics' Lien Act. It is to be hoped that at the coming session of the Legislature an effort will be made to simplify the Act and render more equitable its provisions.

THERE is reason to protest against the unfair treatment which is frequently accorded to non-resident contractors who, in response to public advertisements inviting tenders, submit bids for municipal works. A thoroughly responsible contractor of Hamilton recently sent in the lowest tender for the supply of certain iron pipe required by the city of Toronto, and was given the contract. Subsequently, we believe, a pretext was found for taking the work from him and giving it to a local firm. Since then a contract for paving has been awarded to a Toronto contractor by the Board of Works of Hamilton, and pressure is being brought to bear on behalf of local contractors with the object of depriving him of it. This is a most unjust way of doing business. Either let it be publicly understood that no outside contractor need expect to get the work, regardless of what may be his ability to perform it as satisfactorily and at less cost than local contractors, or else let each tender, by whomsoever submitted, be considered entirely on its merits. Circumstances should in most instances enable the local contractor to the work more cheaply than an outsider, but if notwithstanding this advantage, the estimate of the outsider should be the lowest, and his ability to carry out the work equally unquestionable, he most certainly should receive the contract.

THE question as to the best course to be pursued in the erection of the new city and county buildings in Toronto, has been under the serious consideration of the City Council and the architect for several weeks past. The Council have been advised by their solicitor that they are powerless under the terms of the contract to interfere in any way with the architect in any course of action which he may see fit to pursue. On the other hand the opinion is expressed that so long as the city authorities refrain from attempting to direct the architect's course, no responsibility will attach to the city for his conduct. The city's solicitor deems it improbable that the courts would in any event order that the present contractor for the work be entrusted with its completion, but that he should be otherwise compensated for any damages to which he may be found to be entitled. The Council at their last meeting adopted a resolution in which the opinion was expressed, that while fully protecting the interests of the city, the architect should at once take such steps as would insure the resumption of building operations at the earliest moment in the spring. The situation undoubtedly requires the most cautious procedure on the part of the architect in order to avoid the possibility of expensive complications. Before the publication of our March number the Courts will probably be engaged on the evidence in the dispute between the architect and the contractor.

THE third annual convention of the Ontario Association of Architects, the proceedings of which in extenso are printed in this paper, was the most important that has taken place since the time of organization. Questions of vital importance to the welwelfare and even to the existence of the Association called for consideration. One of the most important related to the dissatisfaction of the country members, as expressed in their petition to the Council, with the amount of the annual fees. In the petition referred to they pointed to the surplus of nearly \$2,000 standing to the credit of the Association in the bank, as evidence that the fees were unnecessarily high. Another question of much importance was that concerning the action which should be taken to induce the Ontario Legislature to amend the Architects' Act by striking out the word "registered" which at present appears in the Act in conjunction with the word "architect." In an ably constructed opening address the President considered at length these and other matters affecting the Association, and suggested the manner in which he thought they should be dealt with. The comprehensive and reasonable views expressed in this address, coupled with the fact that all reports concerning matters to be brought before the convention were, for the first time, placed in the hands of members in printed form at the opening of the meeting, had, no doubt, much to do with the very full and intelligent discussions which followed, and with, as we believe, the wise conclusions arrived at. It is somewhat difficult to account for the fact that only a small proportion of those who petitioned for a reduction in the fees were present at the convenvention to take part in the consideration of the question which they had been the means of introducing. There is every reason to expect that the conclusion reached with regard to this matter, will prove to them satisfactory, but should it unfortunately be otherwise, they should have no difficulty in deciding that to their own neglect is due the blame. The fees as altered would seem to be as low as could be adopted without impairing the financial standing of the Association. Time will no doubt prove the wisdom of the decision to fix the fees at definite amounts for every year rather than allow them to fluctuate from year to year according to circumstances. As to the return which outside members may receive for the fees which they are called on to pay, the benefits to be derived from a liberal use of the Association Library should alone be considered worth the expenditure. The additions which the Council have been authorized to make to the Library will render it increasingly valuable, and members would do well to take advantage of it to a greater exthan formerly. The result of the steps which are being taken to secure the amendment of the Architects' Act in the particular already mentioned, will be awaited with no little anxiety, as upon it must largely depend the future success and usefulness of the organization. The members throughout the country should lose no time in endeavoring to enlist the support of their representatives in the Legislature on behalf of the amendment. The object sought can be most efficiently promoted by this method, and at least cost. The formation of Chapters in various parts of the province, as suggested by Mr. Gregg, would, if practicable, prove most beneficial, but the experience of those who have tried the experiment, throws doubt on the probabilities of success. It might be worth considering whether interest in the Association would not be promoted by sometimes holding the meetings elsewhere than in Toronto-as for example, in Ottawa, Hamilton or London. The printed result of the tests of Canadian building stones made last year at the School of Practical Science, Toronto, under the direction of the Association, as presented by Mr. Townsend, chairman of the committee entrusted with the oversight of the work. They form a valuable feature of the proceedings, and must prove of great assistance to architects and builders. It is to be hoped that additional specimens of native stones may be tested, and also that similar tests may be applied to the varieties of native woods and other materials which enter into architectural and engineering work, in order that exactness of knowledge might characterize their use. A retrospective view of what the Association has already accomplished, despite the disadvantages under which it has had to labor, and consideration of

the many directions in which it might do valuable service on behalf of the profession and the public in the future, should assure to it at this critical period in its history the wisest counsel and earnest support of every architect in the Province.

ILLUSTRATIONS.

DESIGN FOR AN \$800 COTTAGE.

This cottage is designed to face south, and comprises a kitchen and a living room (or parlor and dining room combined) together with three bedrooms. It is purposed to be constructed of frame on a stone foundation, and to have excavation under kitchen for cellar. External walls and roof are intended to be shingled, and the interior to be lathed and plastered throughout, DESIGN FOR CONCERT HALL AND COLLEGE OF MUSIC.—G. F. STALKER, ARCHITECT, OTTAWA, ONT.

ST. BASIL'S NOVITIATE, TORONTO.—POST & HOLMES, ARCHITECTS, TORONTO.

C. A. & B. COMPETITION FOR A CITY HOUSE—DESIGN BY "ETUDIANT" (MR. J. EUGENE PAYETTE, MONTREAL)
AWARDED SECOND POSITION.

TORONTO BUILDERS' EXCHANGE.

The annual meeting of the Builders' Exchange, of Toronto, took place on Wednesday, January 18th. The following were present:

Messrs. Wm Hill, Curtis & Rowe, J. Lister Nicholls, Wm. Booth, James Crang, D. Williams, Jno. Aldridge, Wm. Pears, Wm. Britnell, Jno. Brodigan, M. Murphy, Jno. Hanrahan, Wm. Park, Wickett Bros., J. Isaac, Bayliss & McCurdy, Jno. Price, Isaac Price, Geo. W. Gore, H. Martin, Benj. Brick, R. Robertson, Geo. Moir, Mr. Richardson, W. J. Burroughes, R. Hewitt, Oakley & Holmes, Mr. Fox, Geo. Wright, F. Lockwood, R. Chalkley, Wm. Wood, Jas. Priestley, Jas. Pears, A. E. Smythe, Jno. Maloney, M. Vokes, Jno. M. Gander, W. R. Simmons, Robt. Whittam, Jos. Brown, E. Farquhar, T. W. Self, Sanuel Young and John Barnard.

The President, Wm. J. Hill, took the chair at 3 o'clock. The Treasurer's report showed the finances to be in a very satisfactory condition. The report of the Secretary showed a membership of 146, divided as follows: Brick Manufacturers' Section, 25 members; Masons' and Builders' Section, 68 members; Cut Stone Section, 14 members. The remaining members comprise carpenters, plasterers, plumbers, stone merchants and dealers in lumber, sewer pipes and cement, etc., who have not yet organized into sections. The Board of Directors had held 36 meetings during the year, and the Finance Committee met nine times. Attention was called to the fact that the by-laws had been amended so that, when necessary, disputes between members and the expense of litigation might be avoided.

The election of officers was then proceeded with. The name of Wm. J. Hill was proposed for re-election as President, but Mr. Hill stated that his duties in the City Council would prevent him giving the time necessary for the performance of the duties of the position.

The following officers were duly elected: Wm. Pears, President; Geo. Moir, 1st Vice-President; Geo. Oakley, 2nd Vice-President; David Williams, Treasurer; Wm. J. Hill, James Crang, Wm. Park, Jno. Aldridge, Wm. Booth, Directors.

The Board of Directors will further be increased by one representative from each Section of the Exchange. Wm. J. Hill then vacated the chair, and Mr. Wm. Pears upon taking his seat as President, thanked the Exchange for the honor conferred on him, and asked for the assistance of all the members in carrying forward the work of the Exchange.

A very hearty vote of thanks was tendered Mr. Hill, the retiring President, for the very able manner in which he had performed his duties. Mr. Hill responded in suitable terms, and the meeting then adjourned.

LEGAL DECISIONS.

ROBERT A. BALLOCIL V. FRANKLIN H. HOOPER.—Where one borrowsmoney to erect houses upon land belonging to him and conveys the land before the houses are finished to another, and the latter borrows other moneys to finish the houses from the same company who loaned to the former, all which moneys are secured by deeds of trust, in an action by the first owner against the second and the company which loaned the money for an accounting, &c., such company is entitled to a lien upon the property to secure the payment of all moneys advanced by R, says the Supreme Court of the United States.

MONTREAL

(Correspondence of the CANADIAN ARCHITECT AND BUILDER.)

Of the 34.455 houses standing this year in Montreal, 25.774 are built of brick, 5.482 of stone, and 3.118 of wood.

Mr. John J. Macdonald, one of the most prominent railroad contractors in Canado, died at the St. Lawrence Hall hotel, in this city, on the 12th inst. Mr. Macdonald was of late years a partner in the well-known firm of Manning, Macdonald, McLaron & Co., who built Section B. of the C. P. railroad on the north shore of Lake Superior, a most difficult piece of work. Mr. Macdonald was highly esteemed in business and social circles.

A board of arbitrators awarded \$16.308 damages to the Trustees of Calvary Congregational Church, against the Atlantic and Northwest Railroad Co., on account of loss alleged to have been sustained in depreciation in the value of their property by reason of the running of trains close to their property since the railroad obtained its entrance to the Windsor street depot. The Superior Court has reduced the award to \$1.307, refusing to allow damages except for the right of which the church had been deprived to build over a lane, and for deprivation of light and air. An appeal has been taken by the trustees from this judgment, and the decision is expected to be given on the 28th linst.

At the last monthly meeting of the resident members of the Province of Quebec Association of Architects, Mr. Joseph Veuve gave an address on "Archicology in its Relation to Architecture." The benefits accruing from the study of archicelogy; in freeing the student of architecture from narrow-ness of ideas, were divelt upon. The paper was a most interesting one, and evoked considerable discussion. Mr. Taylor promised on his own behalf and that of other members of the Association to deliver lectures before the students during the winter, provided those for whose benefit the proposal was made, would show by their attendance that they were desirous of being thus instructed. The bill concerning laborers, mechanics and contractors, which is to be presented at the next session of the Legislature, was also discussed, and the opinion of the Association was that laborers and mechanics were quite sufficiently protected under the present code, and that no further protection should be furnished, as it would lead to fraud and would encourage the growth of an irresponsible class of contractors.

AN IMPORTANT POINT AFFECTING BUILDERS AND ARCHITECTS IN

An action was brought against the Royal Electric Co. to recover \$325 for rebuilding a chimney which had been constructed a short time previous by plaintiff, and had fallen. The plaintift alleged and proved that the defect in the construction was owing to the defective plan furnished him by defendant's architect. The Court held, however, that this did not exonerate the plaintiff from responsibility, that the law made him jointly and severally liable with the architect for the loss, and dismissed his action. This rule of responsibility appears to be hard, but it has been long settled on principles of public policy, and is or should be known to every builder, who must contract therefore with reference to it. If any one does not wish to assume the full responsibility imposed by the law he should have an express provision inserted in his contract to exclude or modify his responsibility. The decision was based upon the following Articles of the Civil Code, which are declaratory of the law of the Province of Quebec :- Art. 1688-If a building perish in whole or in part, within ten years, from a defect in the construction, or even from the unfavorable nature of the ground, the architect superintending the work and the builder are jointly and severally liable for the loss. Art. 1689.-If in the case stated in the last preceding Article, the architect do not superintend the work, he is liable only for the loss which is occasioned by defect or error in the plan furnished by him. After ten years architects and contractors are discharged from the warranty of the work they have directed or done.

USEFUL HINTS.

Granite is the lowest rock in the earth's crust. It is the bed rock of the world. It shows no eridence of animal or vegetable life. It is from two to ten inches as thick as the united thickness of all other rocks. It is the parent rock from which all other rocks have been either directly or indirectly derived.

A Pacific coast journal says: It is a well known fact among car and bridge builders that Douglas fir is stronger than white oak and will law long. Tests bear out the assertion. A recept test was made at the Northern Pacific car shops, Tacoma, with a piece of fir and one of white oak. Both pieces were of the same length, width and thickness. By laying the two pieces with the end on a piece of iron and putting weights in the centre, it was found that the white oak broke, while the fir sustained one-quarter more weight willout showing signs of breaking. In a test for eather the white oak showed its superiority on account of its fine, close grain. Therefore, where fir can be used flat, it is stronger than oak; but where the timbers are to be used in the shape of pile drivers or battering-tams, oak or other fine-grained woods are best.

To Darken Oak.—Oak for decorative wood work is produced by fumigating the material with ammoniacal vapor, which effectively produces the dark coloring so much desired. In accomplishing this, the method consists in placing the material to be darkened in an approximately air-tight room in which no light enters; or for small work a packing box will suffice, the -oluts or cracks to be well pasted over with paper. In this room or receptacle for depositing the furniture or other article is placed a flat porcelain carther vessel containing the liquid being. of course, set on the ground or floor, that the fumes or vapor may strike to advantage the articles to be darkened; if the apartment is large, two or more vessels containing ammonia may be employed and allowed to remain until the desired effect is secured. The ammonia does not touch the oak, but the gas that proceeds from it acts in a peculiar manner upon the tannic acid contained in oak, browning it so deeply that a shaving or two may actually be taken off without removing the color. The depth of shade depends upon the quantity of ammonia used and the duration of exposure.

BAY WINDOWS AND ORIELS.

The distinction between a bay and an oriel is as follows: By the former is understood a projecting window, or rather a projection pierced with window opening in its entire width and rising immediately from the ground, whether it be confined to the lower part of the building or carried up through one or more stories above the ground floor; by the latter a bay which does not descend to the ground, but is suspended over the face of the wall beneath it. Oriel accordingly corresponds with the German terms Erker-fenster and Bhor-fenster, which are almost the only ones of similar import in any foreign language. This absence of a name for it is accounted for by the thing itself being scarcely known in the architecture of other countries, and in our own it occurs only in our Domestic Gothic or Tudor, such form of window being very rare indeed in ecclesiastical structures. In our Domestic, which also comprises collegiate architecture it is, a beautiful and valuable feature, and one which admits of very great diversity of design and also imparts much variety and liveliness of effect to a building, more especially if there be ground bays likewise, the two kinds of projection both harmonizing and contrasting with each other. Internally there is no distinction between bays and oriels inasmuch as both the one and the other form a recess whose sides are filled with windows. But greater variety of plan occurs in oriels than in bays, which are usually more spacious as to breadth and of shallower proportions as to depth; they are also either rectangular in plan, or form three sides of an octagon, whether a regular one or not, whereas curved forms are of frequent occurrence in the plans of oriels and are occasionally combined with straight ones. Yet as similar plans do occur in bays no real distinction can be found upon such accident of design.-Architect.

BORED MOLDING.

Hardwood, a Chicago lumber trade paper, suggests that hardwood moldings would be much more popular if they were bored for nailing, similar to the way hardwood flooring is now bored by many first-class mills. It says: A great deal of stained softwood molding is used, simply because it is so easy to fasten in place, when hardwood would be preferred and would be used but for the extra work required in using it, much hand boring and the most careful nailing being necessary to prevent splitting. Maple makes a beautiful molding in connection with certain kinds of finish, but it is almost impossible to fasten it with. out boring to prevent splitting. This is especially true of the cleanest and whitest of soft or white maple: Much oak, both white and red, also requires boring, while chestnut, which is very desirable from its lightness and close resemblance to oak, should always be bored for every nail. Black walnut will always pay for the extra trouble even of the expensive hand boring, and such cheap and common woods as gum and basswood will be found to pay for boring, as would Norway and yellow pine. A competent machinist declares that a machine for boring can be attached to the sticker or regular molding planer, so that the stock will require no extra handling, and that can be made adjustable to any width of molding or any sized bit or any length of space between holes, varying from the finest cabinet stock to the ordinary house trim or picture molding. House trimmers and cabinetmakers are ready to welcome the first bored stock offered. They know and realize the benefit such a thing would be to them. Who will be the first to advertise molding with the catching alliterative phrase of the flooring men, "bored, butted and bundled?"

A sketch for a Canadian cottage, by Mr. Ernest Wilby, late of Toronto, appeared in the London Building News of Nov. 18th.

The medal offered by the Painters' Magazine to the pupil of the painting class of the New York Trades Schools has been awarded to William H. Leacock, of Westport, Ont.

TESTS OF BUILDING STONES.

WE present below the result of the tests of building stones conducted last year at the School of Science, Toronto, under the direction of the Ontario Association of Architects, together with the report thereon of the Committee appointed to conduct the tests. This Committee was composed of the following members of the O. A. A.: Messrs. S. H. Townsend, W. G. Störm, D. B. Dick, E. Burke and S. G. Curry, Mr. Townsend being the Chairman. The Committee was assisted by Professors Galbraith and Coleman, Messrs. Wright and



Rosebrugh, of the School of Science. We publish also several illustrations, taken from photographs, showing the appearance of some of the most perfect specimens at point of fracture.



TORONTO, JANUARY 31st, 1893.

To the President and Council of the Ontario Association of Architects:

GENTLEMEN :-

I have the honor on behalf of your Committee to lay before you the results of the tests of building stones, lately conducted at the School of Practical Science.

The stone to be tested was first sawn into cubes, then set in plaster of Paris in a steel frame made for the purpose, and brought to perfectly parallel faces by rubbing.

In placing the specimens in the machines care has been

taken that the pressure was always applied at right angles to the natural or quarry bed of the stone.

Specimens of all the stones tested have been preserved, and a complete set of these, together with all data connected with the tests, including in most cases photographs of the stones broken, will be kept at the School of Practical Science and at the office of the Association, for the benefit of those wishing further details.

Very truly yours,

S. H. TOWNSEND, Chairman of Com.



No. 1.

Connecticut Brown Sandstone from the Middlesex Quarry Co., Portland, Connecticut. Supplied by Messrs. Brown & Love.

SANDSTONE, medium grained, purplish brown, consists of quartz grains, with some grains of felspar, and many scales of white mica. Very slight effervescence with acid.

Speci- men.	Section under Pressure.	Неюнт.	CRUSHING LOAD.	Crushing Stress per Sq. In.	Average Crush- ing Stress per Sq. Inch.
A B C D	Ins. 31 × 3 31 × 3 21 × 311 21 × 3	Ins. 21 21 21 21	Pds. 89,000 92,000 78,000 64,000	Pds. 9,493 9,813 8,858 7,420	Pds. 8,896

No. 2.

Stone from the "MONO" Quarry, owned by the Owen Sound Stone Co., and situated two and a half miles north of Orangeville, Ont.

SANDSTONE, very fine grained, pale greenish grey. Effervesces slightly with acid, showing presence of carbonates. The stone is in beds of from one to four feet thick and can be got out in large sizes. It has to be teamed to Orangeville Station.

Speci- men.	Section under Pressure.	Неконт.	CRUSHING LOAD.	Crushing Stress per Sq. In.	Average Crush- ing Stress per Sq. Inch.
A B C D	Jns. 31 × 3 31 × 3 211 × 3 3 × 3	ins. 21 21 21 21 21	Pds. 139,600 130,000 111,000 131,000	Pds. 15,194 13,866 13,155 14,555	Pds

No. 3.

Credit Forks Brown Stone, from Carroll & Vick's No. 2 Quarry, Credit Forks, Ont.

Sandstone, fine grained, reddish brown. Contains quartz, and a little felspar and mica. The stone is in beds of four feet and under, and can be handled in pieces up to five tons. Quarry 300 yards from Railway.

Speci-	Section under Pressure.	Незонт	CKOSHING	Crushing Stress per Sq. In.	Average Crush- ing Stress per Square Inch.
	Ins.	Ins.	Pds.	Pds.	Pds.
В	2 X 3	21	131,000	15,188	
C	2 1 8 × 3 3 × 3	2 t	130,000	14.751	14,905

No. 4.

Stone from the St. John's Quarries, Longford Mills, owned by Messrs. A. McPherson & Co.

LIMESTONE, compact, with some fissures, pale grey, effervesces strongly with acid. The stone is in beds of from 6 inches to 2 feet, and may be loaded upon cars in quarry.

Speci- men.	Section under Pressure.	Нвібит.	CRUSHING LOAD.	Crushing Stress per Sq. In.	Average Crush- ing Stress per Square Inch.
	Ins.	Ins.	Pds. 200,000	Pds. 22,222	Pds.
B.	31'8 × 31'8	21	210,000	22,390	
Ď	3 × 3	21	175,000	19,444	21,352

No. 5

Stone from the Hope Bay Quarries, owned by Messrs, Wm. Hooson & Sons, Plumper Pass, B.C.

SANDSTONE, medium grained, with some larger grains, bluish grey. Contains quartz, with some felspar and mica, and probably hornblende. Effervesces slightly with acid. The stone is in parallel beds of from two to ten feet, and can be loaded on scows or light draught vessels at the Quarry, which is situated on the North shore of Pender Island, about midway between Victoria, Vancouver, and New Westminister.

Speci- men.	Section under Pressure	HEIGHT	CRUSHING LOAD.	Crushing Stress per Sq. Inch.	Average Crush- ing Stress per Square Inch.
A B	Ins. 31 ¹ 8 × 3	Ins. 2 l	Pds. 200,000	Pds. 21,768 1	Pds.
Č	2 1 1 × 3 3 1 × 3 1 1	21 21	186,000 176,000		20,546

No. 6.

Stone from the Parrsboro Marble Quarry, owned by Mr. Thos. Kirkpatrick, and situated two miles west of Parrsboro, N.S.

LIMESTONE, very fine grained, dark grey (almost black), on fresh surface, bituminous odor when struck, effervesces strongly with acid. The stone is in beds of from four inches to two feet, and must be teamed to Parrsboro, where it can be shipped either by rail or water.

Speci- men.	Section under Pressure.	Нвісит	CRUSHING LOAD.	Crushing Stress per Sq. Inch.	Average Crush- ing Suess per Square Inch.
A B C D	Ins. 214 × 314 3 × 314 214 × 3 3 × 3	Ins. 21 21 21 21	Pds, 199,000 200,000 189,000	Pds. 22,120 21,763 21,446 21,666	Pds. 21,750

No. 7.

Rain Drop Stone, from Fuerst, New & Co., Chicago. Supplied by Messrs. Brown & Love.

SANDSTONE, medium grained, with a few pebbles 1/2 inch in length, pale purplish brown with many darker colored spots. Contains quartz, felspar, and a green mineral, also some scales of mica. A whitish cement in the lighter portions. Argillaceous odor.

Speci-	Section under Pressure.	Нвіснт	CRUSHING LOAD.	Crushing Stress per Sq. Inch.	Average Crush ing Stress per Square Inch.
A B C D	Ins. 3 × 3 2{\$ × 3 3 × 3 3 × 3	ins. 26 27 28 28 28 28	Pds. 52,000 51,000 53,000 52,500	Pds. 5,777 5,787 5,888 5,833	Pds. 5,821

No. 8.

Corsehill (Scotland) Red Sandstone. Supplied by Messrs. Brown & Love.

SANDSTONE, very fine grained, brick red. Components hardly distinguishable with lens. Argillaceous odor, effervesces very slightly with acid.

Speci-	Section under Pressure.	Нецент	CRUSHING LOAD.	Crushing Stress per Sq. Inch.	Average Crush- ing Stress per Square Inch.
A B	Ins. 3 × 3 2	Ins. 24 24 24	Pds. 136,000 150,600	Pds. 15,111 17,461	Pds.
Č D	3 x 3	24 24	143,000	15,888	16,033

No. 9.

Ohio Blue Sandstone "BEREA." From the Cleveland Stone Co., Cleveland, Ohio. Supplied by Messrs. Brown & Love.

SANDSTONE, fine grained, pale grey, consists of quartz grains with yellow and black particles, probably oxides of iron. Argillaceous odor.

Speci-	Section under Pressure,	Неконт	CRUSHING LOAU.	Crushing Stress per Sq. Inch.	Average Crush- ing Stress per Square Inch.
A B C	Ins. 31's × 3 33's × 33's 3 × 3 3's 3 × 3 3's	Ins. 23 24 24 24 24	Pds. 79,000 92,000 92,000	Pds 8,598 9,810 10,116 11,000	Pde.

No. 10.

Ohio Buff Sandstone. From the Cleveland Stone Co., Cleveland, Ohio. Supplied by Messrs. Brown & Love.

SANDSTONE, fine grained, pale brownish grey or buff. Contains quartz, some felspar, and mica, and a rusty iron oxide in small particles.

Speci-	Section under Pressure.	Нвіснт	CRUSHING LOAD,	Crushing Stress per Sq. Inch.	Average Crush- ing Stress per Square Inch.
A B C D	Ins. 3 × 3 3 8 × 2 8 3 1	Ins. 21 21 21 21 21 21	Pds. 68,000 68,000 77,000 80,000	Pds. 7.555 7.400 8,209 8,888	Pds. 8,014

No. 11.

Stone from the Dorchester Union Freestone Co., Wallace, N.S. Supplied by Messrs.

Brown & Love.

Sandstone, fine grained, greenish grey. Grains of quartz, with a good deal of felspar and other decomposed silicates, clayey cement.

Speci- men.	Section under Pressure.	Неібит.	CRUSHING LOAD.	Crushing Stress per Sq. Inch.	Average Crush- ing Stress per Square Inch.
	Ins.	Ins.	Pds. 96,000	Pds. 10,666	Pds.
A B C	31 × 37 a	24 24	100,000 95,000	10,662	
D	•••••	ll	l		10,628

No. 12.

New Brunswick Brown Sandstone, supplied by Messrs. Brown & Love.

SANDSTONE, rather coarse grained, purplish brown. Contains quartz with much felspar, and a green silicate; also few scales of mica. Strongly argillaceous odor, effervesces with acid in spots.

Speci- men.	Section under Pressure.	Незонт.	CRUSHING LOAD.	Crushing Stress per Sq. Inch.	Average Crush- ing Stress per Square Inch.
	ins. 3 x 2}\$	ine.	Pds. 68,000	Pds. 7,716	Pds.
A B C D	3 × 31/8 3 × 31/8 31/8 × 31/8	21 21 21 21	62.000 68,000 65,000	6,748 7,401 6,930	7,198

No. 13.

Stone from the Anderson Quarries, owned by Mr. Thos. B. White, Gordon P. O., and situated two miles from Amherstburg on the M.C.R.R., and three-quarters of a mile from the Detroit River.

DOLOMITIC LIMESTONE, very fine grained, pale buff or yellowish brown, contains grains of quartz, effervesces somewhat with cold dilute acid. The stone is in beds of from three inches to five feet, and can be handled in large sizes.

Speci- men.	Section under Pressure.	Нвіснт.	CRUSHING LOAD.	Crushing Stress per Sq. Inch.	Average Crush- ing Stress per Square Inch.
A B	ins. 3 x 3 3 x 2/2	Ins.	Pds. 86,000 89,000	Pds. 9.555 10,548	Pds.
Ď	31 × 31 × 31 × 3 × 2 1 5	2 2 2 2 2 2 2 2 2 2	85,000 78,000	9,062 8,851	9,504

No. 14.

Stone from Six Mile Brook Quarry, owned by Mr. Robert L. Elliott, Stillmann P. O.

SANDSTONE, very fine grained, greenish grey. Contains grains of quartz with a large amount of green and brown silicates, a little mica, and a few fragments of gernet. The stone is in beds of from two to six feet thick, and has to be teamed ten miles to ship by rail or water.

Speci- men.	Sections under Pressure.	HEIGHT.	CRUSHING LOAD.	Crushing Stress per Sq. Inch.	Average Crush- ing Stress per Square Inch.
A B	ine. 3 × 2 § 3 × 3	Ins. 23 23	Pds, 76,000 89,000	Pds. 8,624 9,687	Pds.
C D	31 × 3	2 1 2 1 2 1 2 1 2 1 1 1 1 1 1 1 1 1 1 1	96,000 92,000	10,448	9,745

No. 15.

Stone from the Montreal and Russel Street Quarry, Kingston, owned by Mr. W. S. Shufflebotham, 466 Montreal Street, Kingston, Ont.

LIMESTONE, compact, pale bluish grey, effervesces strongly with acid. Stone in beds of from two to twelve inches, and can be obtained in large sizes.

Speci- men.	Section under Pressure.	Незонт.	
A B C D	Ins. 28 × 314 21 × 3 31 × 3 3 × 314	Ins. 2½ 2½ 2½ 2½ 2½	These stones all stood a pressure of 200,000 lbs. without crushing. B was cracked.

No. 16.

Stone from the Rama Limestone Quarry, owned by Mr. W. R. Scadding, Longford Mills.

LIMESTONE, compact, with some crystals of calcite, pale bluish grey, somewhat flawed with veins of calcite; effervesces strongly with acid. Stone in beds of 4, 6, 8, 9, 11, 12, 14, 16, 18, 24, 27 and 28 ins., and can be obtained any size up to six feet square. The Grand Trunk Railway runs through the quarry. Specimens prepared by owner.

Speci- men.	Section under Pressure.	Неібит.	CRUSHING LOAD.	Crushing Stress per Sq. Inch.	Average Crush- ing Stress per Square Inch.
A B C D	Ins. 3 × 3 3 ½ × 3 ½ 3 × 3 3 ½ × 3 ½	Ins. 3 3 3 3	Pds. 78,000 132,000 116,000 64,000	Pds. 8,666 14,219 12,889 6,967	Pds. 10,685

No. 17.

Pelee Island Limestone, supplied by Messrs. Brown & Love.

Linestone (probably somewhat dolomitic), very fine grained, pale buff or yellowish brown, effervesces somewhat with cold dilute acid

Speci- men.	Section under Pressure.	Наздит	CRUSHING LOAD,	Crushing Stress per Sq. Inch.	Average Crush- ing Stress per Sq. lach.
A B	Pds. 3 X 3 31's × 31's	Ins. 218 28	Pds. 61,000 72,000	Pds. 6,777 7,676	Pds.
1			∭I	[7,226

No. 18.

Stone from the Queenston Limestone Quarries, owned by Messrs. P. A. Johnson & Co., Queenston.

LIMESTONE, rather fine grained, pale grey, effervesces strongly with acid. The stone is in beds of from one to five feet, and can be handled in large sizes. 'May be shipped on G. T. R. cars in quarry, or by water, 1½ miles from quarry.

Speci- men.	Section under Pressure.	Ниюнт		Crushing Stress per Sq. Inch.	Average Crush- ing Stress per Sq. Inch.
_ <u>_</u> _	Inc. 3 x 3	Ins. 2 8	Pds. 134,000	Pds. 14,888	Pds.
B C D	3 x 3 's 3 x 3 's	21 21 21	122,000 135,000 130,000	13,555 14 694 14,444	14,395

No. 19.

Stone from the Victoria Limestone Quarry, Cookston, North Hastings, owned by Messrs. Brodigan & Co., Madoc, Ont.

LIMESTONE, very fine grained, with some crystals of calcite, rather dark grey, slightly brownish on fresh surface, bluish grey on dressed lace, slightly bituminous, effervesces strongly with acid. Stone in beds of 6, 10, 12, 14, 16, 18, 20, 24, 28, 38 and 48 inches, and can be got out in any sizes possible to handle. Quarry on main line of G.T.R.

Speci- men.	Section under Pressure.	Неюнт	CRUSHING LOAD.	Crushing Stress per Sq. Inch.	Average Crush- ing Stress per Square Inch.
A B C	Ins. 3 × 3 3 × 31 v	Ins. 218 28	Pds. 183,000 147,000	Pds. 20,333 16,000	Pds.
Ď	24 x 3	21	181,000	21,939	19,424

No. 20.

Red Granite. From the New Brunswick Red Granite Co. Mr. F. T. C. Burpee, Manager, St. John, N.B.

Granite (var. Granitite or Biotite Granite), coarse grained. strong flesh red, appears fresh and takes a good polish. Contains quartz (grey), orthoclase (red), plagioclase (yellow), and blotite (black). Specimens prepared by owner.

Speci- men.	Section under Pressure.	Нвіснт	CRUSHING LOAD.	Crushing Stress per Sq. Inch.	Average Crush- ing Stress per Square Inch.
A B C	Ins. 28 x 27 29 x 21 21 x 21	Ins. 2 21 21	Pds. 68,000 84,000 69,000	Pds. 13,837 17,568 13,629	Pds.
D	218 X 216) ž	79,000	15,617	15,162

No. 21.

Grey Granite from the New Brunswick Red Granite Co., Mr. F. T. C. Eurpee, Manager, St. John, N.B.

Granitz, (var. Granitite), medium grained, grey, fresh looking. Contains quartz, orthoclase in greyish white, silghtly porphyritic crystals, black biotite, and some reddish brown titanite. Specimens prepared by owner.

Speci- men.	Section under Pressure.	Нвіснт	Caushing Load.	Crushing Stress per Sq. Inch.	Average Crush ing Stress per Square Inch.
A B C D	Ins, 2 X 2 2 X 2 2 X 2 2 X 2 2 X 2	Ins. 21 2 2 2	Pds. 69,000 68,000 79,200 61,000	Pds. 16,235 15,059 18,635 13,917	Pds.

No. 22.

Grey Granite from the Stanstead Quarry, owned by Mr. James Brodie, Lineboro, P.Q.

Granitte (var. Granitite), rather coarse grained, grey, fresh looking. Contains quartz, white orthoclase, white plagioclase, greenish black biotite, and a trace of pyrite. Stone in beds of from one to ten feet, and can be obtained any size up to 40 feet long. Specimens prepared by owner.

Speci- men.	Section under Pressure.	Няцит		Crushing Stress per Sq. Inch.	Average Crush- ing Stress per Square Inch.
	Ins.	Ins.	Pds.	Pds.	
В	21 X 21	2	32,000	6,321	*
C D	21 × 2, 8	2 2	30,000	6,844 8,865	7,343

No. 23.

Stone from the Cumberland Basin Brown Stone Quarry, owned by the Atlantic Brown Stone Co., Box 118, Sackville, N.B.

SANDSTONE, medium grained, purplish brown. Contains quartz, much reddish felspar, and a few grains of a green silicate, and scales of mica. Strong argillaceous odor, effervesces slightly with acid. Stone in beds of from four to ten feet, and can be got out up to twelve tons.

Speci- men.	Section under Pressure.	Некент	CRUSHING LOAD.	Crushing Stress per Sq. Inch.	Average Crush- ing Stress per Square Inch.
A B	Ins.	Ins.	Pds. 30,000 42,600	Pds. 3,333	Pds.
Č	2 x 2 x 2 x 3 x 3 x 3 x 3 x 3 x 3 x 3 x	310 317 3	38,000 41,500	4.735 4.311 4.517	4,224

No. 24-

Indiana Oolitic Limestone, from Perry Bros'. Quarry, Eliettsville, Monroe Co., Indiana. Supplied by Messrs. Brown & Love.

LIMESTONE, very fine grained, oolitic globules easily seen with a lens, pale yellowish-brown or buff, effervesces strongly with acid.

Speci- men.	Section under Pressure.	Неіснт	CRUSHING STREES.	Crushing Stress per Sq. Inch.	Average Crush ing Stress per Square Inch.
A	Ins.	Ins.	Pds.	Pds.	Pds.
A B C D	3 × 3	3	56,900	6,322	6,322

No. 25.

Miramichi Stone from the "French Fort" Quarries on the Miramichi River, owned by Mr. C. E. Fish.

SANDSTONE, somewhat fine grained, yellowish brown, Contains quartz, a good deal of felspar, and a few scales of mica. Stone in beds of from one to eight feet, and can be quarried up to ninety cubic feet.

Speci- men.	Section under Pressure.	Неібііт	CRUSHING LOAD.	Crushing Stress per Sq. Inch.	Average Crush- ing Stress per Square Inch.
A	Ins. 3 × 3	Ins.	Pds. 41,000	Pds. 4-555	Pds.
B C D	24 × 3 24 × 3 3 × 3	3 3	36,000 42,000 47,500	4.174 4.870 5.277	4,719

No. 26.

Sandstone from Thomas Gatelawbridge Quarries. Supplied by Messrs. W. M. Knowles & Co., Agents, Montreal.

SANDSTONE, rather fine grained, brick red, reddish quartz grains, with a few whitish grains of felspar. Argillaceous odor. No effervescence with acid. Specimens prepared by owner.

Speci-	Section under Pressure.	Нвіснт	CRUSHING LOAD.		Average Crush- ing Siress per Square Inch.
A B C D	Ins. 3 x 3 27 x 27 28 x 27 28 x 27 27 x 3	Ins. 27 3 3 3	Pds. 37,500 40,000 46,000 37,000	Pds, 4,166 4,839 5,818 4,289	Pds.

THIRD ANNUAL CONVENTION ONTARIO ASSO-CIATION OF ARCHITECTS.

THE third annual convention of the Ontario Association of Architects was held pursuant to announcement, on Tuesday and Wednesday, the 7th and 8th inst.

FIRST DAY.

The chair was taken by the President, Mr. S. G. Curry, at 3

The following members were present:
S. G. Curry, Toronto; K. Arnoldi, Ottawa; W. A. Edwards, Hamilton; J. E. Belchen, Peterboro': F. H. Herbert, Toronto:
E. L. Rastrick, Hamilton; H. C. McBride, London; Jos. W. E. L. Rastrick, Hamilton; H. C. McBride, London; Jos. W. Power, Kingston; M. B. Aylesworth, Toronto; J. A. Ellis, Toronto Junction; A. F. Wickson, Toronto; John Gemmell, Toronto; Mark Hall, Toronto; Geo. Gouinlock, Toronto; F. S. Baker, Toronto; W. A. Langton, Toronto; Fred. Henry, London; W. L. Symons, Toronto; Frank Darling, Toronto; Edmund Burke, Toronto; W. R. Gregg, Toronto; A. H. Gregg, Toronto; John Kay, Paris; J. W. Kenny, Collingwood; Frank Helliwell, Toronto; S. H. Townsend, Toronto; H. J. Webster, Toronto: R. J. E. Edwards, Toronto; N. B. Dick, Toronto; T. J. Ruttley, Chatham; H. Simpson, Toronto; Commander Law, Toronto; H. B. Gordon, Toronto.
The minutes of the last meeting having been read by the Registvar, the President read his address, as follows:

PRESIDENT'S ADDRESS.

The minutes of the last meeting having been read by the Registrar, the President read his address, as follows:

PRESIDENT'S ADDRESS.

This is the third nanual meeting of the Ontario Association of Architects, and I believe that it will be considered in the future as having been weighted with most important issues. At this meeting, many questions of vital interest must come up for discussion and settlement. The life of the Association depends upon the action which the members may take during his convention. We have nearly reached the critical point in our existence which many of us have seen coming from the beginning, and which if safely passed will carry the Association forward to a period of great usefulness. This Association is working under an Act of the Provincial Legislature which, to all intents and purposes gives us neither benefits nor privileges, while it impores on us the duty of educating the future members of the profession, that the public may be benefitted in the future. The Act is of so little practical benefit that it was only after considerable discussion and consideration was arrived at only when it was pointed out that we could expect to obtain all that we desired in our first effort, and that there was reasonable hope that we should eventually associated in favoring the back changed so that it would really see rettine prosector in flaving the back changed so that it would really see rettine prosector in flaving the back changed so that it would really see rettine flowers and the opposition from the argistrate of hive the Council, and flow was declared to the last session of the Legislature to have the Act amended. We found the last session of the Legislature to have the Act amended. We found the last session of the Legislature that be a shallowed to the profession in that State greater privileges than yendression or organic story of the Act and there was read to the profession in that State of New York Legislature, but was veroed by Governor Flower on representations made to him by five

the city architects but all the architects in the Province, while at the same time benefiting the public, nearly all opposition would be removed. I do not think it unreasonable that the Council should expect some assistance from the individual members of the Association; but I regret to say that very little assistance has been given; the majority of the members seeming to bink that the Council required no assistance. There are even a few who apparently take del ght in placing stumbling blocks in the way, if the course of the Council does not meet with their entire approval, no matter how much or how little they may know of the inward condition of affairs. There is not the slightless tobjection to any member having opinions of his own, but he should advocate them at the proper time and in the proper place. If his suggestions are accepted by the majority, he should be more than satisfied, but if not, he should be willing to abide by the decision of his fellow-members and loyally aid in carrying out that decision until he is able to win over a majority by fair and open criticism. No good is gained by personal op-

position but much injury is done and as a result all suffer—the obstructionist along with those to whom he has placed himself in opposition.

The Connell interviewed the Government two weeks ago, and have reason to believe that we may succeed in having the Act amended by the striking out of the word "Registered" where it occurs in the Act if each member will do his duty in the premises. The Council ask that every member will do his duty in the premises. The Council ask that every member will do his ulmost to util them in obtaining the amended legislation. Let no one believe that his assistance is of no importance. Every member of the Legislature who is convinced that the changes which we suggest in the Act will be of benefit to the public, is just one opponent gained over to our side to give us his assistance. us his assistance

us his assistance.

The first examination of the Association was held last April in the examination half of the School of Practical Science. The report of the Council gives a clear statement of the number of students who came up for examination and of the number who passed. A supplemental examination was held in September which is also reterred to in the report. The Association is to be congratulated on the success of its first examination, as a large number of those who should have taken the examinations presented themselves. I am aware that many of the members look upon the educating and examining of the students as a work the expense of which should not be borne by the Association. Some of them hold that the student should pay sufficient fees to clear expenses—that since they receive the direct benefit

sufficient fees to olear expenses—that since they receive the direct benefit they should be made to meet the cost. This argument may be a very good one on general principles, but it is imparticable. If the suder it asked to pay high fees on presenting himself for examinations, he will decline to take them, and the educational work of the Association will be blocked. No them, and the educational work of the Association is will be blocked. No doubt it would be urged that if the students should not present themselves they would be the principal sufferers and that the Association could wait unli they recognized the value of the ream nation; but how long could the Association wait under the present condition of affaits? It could wait, it is true, but while it would be waiting there yould be formed a body of architects outside its influence and opposed to its principles. It is evident that until we get greater power, we must be content to bear the expense of the examinations or give them up allogether, for the students will not assist to any appreciable extent. As a matter of fact, there were a number of students who refused to present themselves for examination last April stating that they could not see that they would be placed in any better position as architects by taking the examinations. This feeling on the part of the students is more likely to increase than diminish until the Association is in a position to ofter greater inducements to bring the students up for examination their own free will or is enabled to force their compliance.

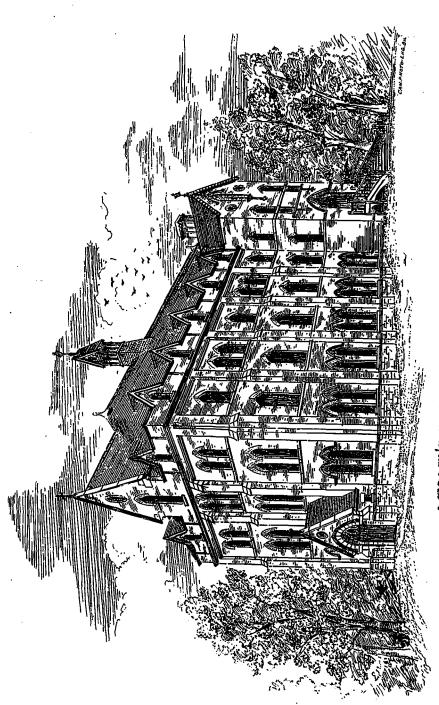
Before dropping this question I should like to state that in my opinion

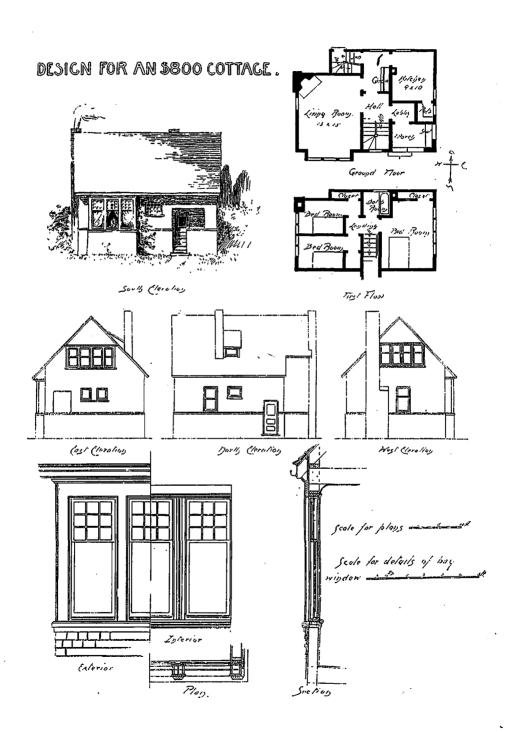
Before dropping this question I should like to state that in my opinion every member is interested more or less in the better education of the sudents. A student who studies systematically in order to pass an examination will be of more service while under indenture than one who is idle and every member is interested more or less in the better education of the susdents. A student who studies systematically in order to pass an eramination will be of more service while under indenture than one who is idle and
indifferent. The drughtsunan who has acquired his training under the
above conditions will be able to render more valuable services than the nan
who has picked up his knowledge without method. The architect who has
students, or who employs drughtsmen should derive some benefit from
heir greater efficiency. There is another way in which he will derive a
benefit, and that is in the fact that the better the man is educated for his
work the more likely he is to insist upon receiving proper and suitable compensation, thus reducing competition as to the amount of commission to be
received by the nrchitect. It is true, however, that while the competition
as o the amount of commission to be paid may be reduced, the competition
as on the amount of commission to be paid may be reduced, the competition
so the amount of commission to be paid may be reduced, the competition
so the amount of the strength of

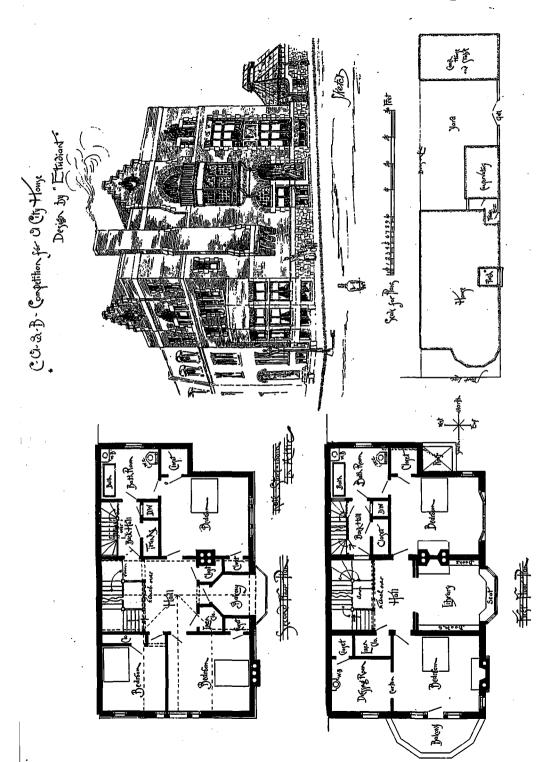
ronized as it would be if all were anxious for instruction. I he library, it is true, is not of very much benefit to the members as yet, except in so far as it enables them to supply their students with standard architectural works suitable to their attainments. Still, at the same time, there are books in the library which would be very useful to all of us if we would but read them. It was the intention of the Council, when we established the library, that us It was the intention of the Council, when we established the library, that is soon as such books as were absolutely necessary to the advancement of the students had been acquired, to purchase by degrees, as the finances of the Association would allow, the more expensive standard works which are not within the means of the average architect. Such books, under our method of sending them to members, would be of very great value, but they can only be acquired by years of effort on the part of the Association. Owing to the condition of the Association, the Council have not, during the past year bought any more books than they found absolutely necessary.

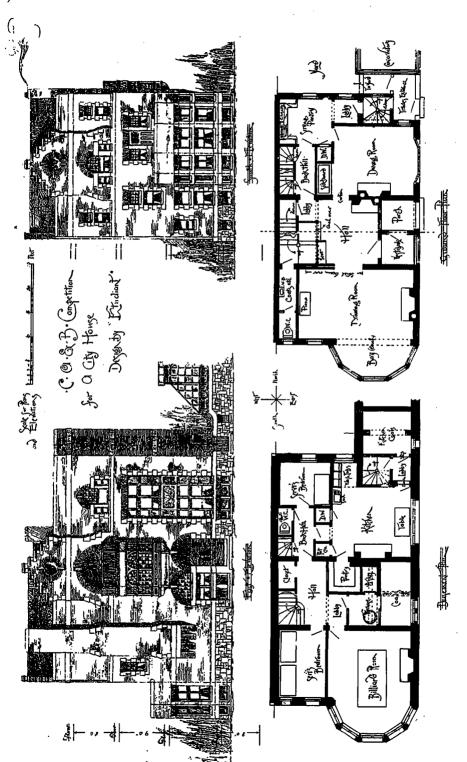
year bought any more books than they found absolutely necessary.

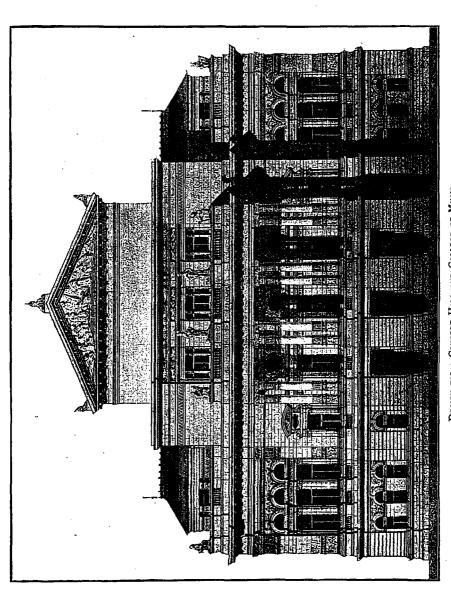
The Council is able to, at last, present the report of the committee appointed to test the stones used in this Province in the erection of the more important buildings. This report has been long delayed and some compaints have been made that it was not published months ago. But I should like to point out that the preparing of the report has almost entirely devolved upon the chairman of the committee. Mr. Townsend. It has taken up a large amount of his time, as he had all the computations and tabulations to make, as the other members of the committee only assisted in making the tests, which occupied several days. You can hardly expect a man to completely neglect his own private work to do that of the Association. I for one consider that all the members of the Association are greatly inducted to Mr. Townsend for the work he has done, at so much sacrifice of time. We as an Association must not expect that these who do our wow without temuneration should do it as if they were paid officials. It is largely a work of love on the part of such members and it should be accepted as such











DESIGN FOR A CONCERT HALL AND COLLEGE OF MUSIC. G. F. STALKER, Architect, Ottawa, Ont.

by us, with proper acknowledgement of our indebtedness. This report is a most valuable one and should be useful to each and every member of the

Association.

During the past year the Council sent a deputation to Ottawa to interview the Government, relative to the fact that plans were admitted into this country practically duty free. It was in many respects a disacreeable duty which the Council had to perform, but as many of our members were compatining of the unjust competition with which they had to contend, the Council determined to make an effort to mend matters.

We as a section of the community paying our due proportion of the duties levied by the Dominion Government under the National Policy, up an the mecsasaries and luxuries required by us in living comfortably, have every whit as much right to the consideration of the Government, as the manufacturers or other bodies of the community. I am pleased to inform you that the Manufacturers' Association recognized the spoint and gave us such assistance as they could, in presenting our case before the Hoo. Ministers, when the desired the such as the could in presenting our case before the Hoo. Ministers, sistance as they could, in presenting our case before the Hoo. Ministers, Messrs. Foster and Bowell. While as you may see by the report, we were promised something—indefinite it is true—we have received nothing so far as we can discover.

as we can discover.

The Council were also instructed by the last convention to determine what could be done to protect an architect's design from being used by a second party without compensation. You will see by the very thorough report of Messrs. Arnoldi and Ewart that under the present copyright law, nothing can be done to remedy the evil, and it is more than hopeless to have the matter dealt with in a way that would be satisfactory to us and to the cathless the same time.

nothing can be done to remedy the evil, and it is more than hopeless to have the matter dealt with in a way that would be satisfactory to us and to the public at the same time.

At the request of the British Columbia Institute of Architects, the Government of British Columbia requested the Council of the Ontario Association to mane experts to decide the competition for the new Legislative and Departmental buildings proposed to be erected in that province. The Council eslected Mr. Andrew Taylor, F.K.I.B.A., R.C.A., of Mostreal, and myself to act as the experts, and the appointment was immediately confirmed by the Government of 'ritish Columbia. The fact that the Government of British Columbia. The fact that the Government of British Columbia. The fact that the Government of British Columbia asked our assistance on this most important occasion, shows that they had confidence in us as an Association of Architects. We can therefore congratulate ourselves that our efforts to improve our professional standing have received recognition, while at the same time we were enabled to render some small assistance to a sister Association.

The Council arranged during the vear that the Registrar should keep a list of draughtismen who desired employment. Very little advantage was asken of this arrangement, owing, probably, to the fact that, as there was so little work in progress during the summer, the draughtsmen deemed it uses to register their names. However, it was the means of several draughtsmen obtaining positions during the year.

Vou are no doubt aware that the Association has a regular indenture for students, which was approved of at the last convention.

The "Conditions of Competit on" which were approved by the Association have not been printed as the Council deemed it unnecessary to incur that expense unit an occasion should arise for their use.

The Association is now in possession of a seal, which was designed by Mr. Edmand Burke.

The Association is now in possession of a seal, which was designed by Mr.

Edmund Burke.

I had the pleasure last September of attending the annual meeting of the Quebee Association, and cannot speak too highly of their hospitality, which, no doubt, was extended to me as your representative. I believe it would be of great benefit to both Associations if each would send at least two representatives to take part in the convention proceedings of the sister Association. They should have every privilege extended to them except the power of woiling. By such means we would be brought closer together and each would have a better knowledge of the work carried on by the other Association.

ciation. They should have every privilege extended to them except the power of voiting. By such means we would be brought closer together and each would have a better knowledge of the work carried on by the other Association.

I also had an invitation to attend the second annual meeting of the South-random of the A. I. A. which net in Birmincham, Alabama, on the rath of January has. I was unable to accept the invitation owing to lack of time and the distance to be travelled.

The extending of invitations by the representatives of one Association to those of another, to be present at the annual conventions, is a very friendly and effective way of showing our interest in each other's work. This spirit of mutual interest should be cultivated by the accepting of such invitations on all occasions when possible.

I now wish to refer to a petition for a reduction in the annual fees, which was received by the Council during the year. This petition was sent in so very late in the year that it was impossible for the Council to take any accion on the lines suggested, even though they had deemed it desirable. The annual fees had been fixed by the first Council and practically approved by the Association, as no objection had been raised by any member until the petition had been sent in. By referring to the by-laws of the Association and Council, you will find that the entrance fee was placed at \$45,00 for Toronto members and \$10.00 for members residing in other portions of the province. Such being the case, it was unwise to circulating the petition was to delay the payment of fees in very many cases, and to induce some not to pay them at all.

Such questions as this, should be brought up at the annual meetings, where there is an opportunity for a full and ample explanation and intelligent discussions and stellement; and one and effectively; but I am opto on the part of anyone which tends to unsafer that the fees are too brigh, it is his place to bring the question herein the nonesting the harmonic of the province. Such lead

the membership of the Association would diminish each year. Many of the

the membership of the Association would diminish each year. Many of the members joined, under the impression that it would benefit them in some direct way, since the Association was formed under a spec al Act of Parliament; they have since tound that our position is not what they supposed and are now allowing their membership to lapse.

The reduction in membership has naturally reduced our receipts, and we are therefore in a position in which we must not only consider the minimum amount at which our annual fees should be fixed, but also in what respects the work of the Association can be reduced with the least possible injury. Some will hold that by reducing our fees we may retain our full membership, but the trouble is that if we reduce our fees to a point sufficiently low to retain our membership, we shall receive a very small total income; whereas if we hold our fees at the present amounts we shall have a larger total income on a very much reduced membership. With a small membership our numbers will cons is of men who are entibusiant. In the work of the Association, and I believe greater progress will be made.

one on a very much retreated membership. With a small membership our numbers will cons so of men who are enthusiast.c in the work of the Association, and I believe greater progress will be made.

We have now reached a condition where careful study of our position, and a far sighted pohey is required to carry us safely into port. It will also require on the part of each member a willingness to do all that he possibly can, to tide the Association over present difficulties. It is for this meeting to take such action as it may deem best in the interests of the Association. To ald in the solution of our difficulties, I would suggest that the fees payable to the Association of our difficulties, I would suggest that the fees payable to the Association be changed to the following amounts, graded to represent the interests of the different classes of members, viz.—Hembers residing in Toronto of five years standing and over, or those who are members of firms of five years standing, \$10.00; members residing in Toronto of less than five years standing, \$10.00; in members residing in the province, of five years standing and over, or who are members of firms of five years standing and over, \$10.00; other members in these cities \$5,00; it members in towns, villages, etc., \$5,00; it is not all sing members or those not residing in the province, \$5.00; draughtsmen who have passed the final examinations, \$5.00. If the fees were thus graded, no member would have any reasonable ground of complaint, since the members a hoo derive most benefit from the Association would pay the highest fees. The short of the country members for the transaction of business whenever they were in the city. The library would save members, while it would be at the service of the country members for the transaction of business whenever they were in the city. The library would save members have complained that they were not receiving anything in return for their fees.

room with much advantage to themselves, while it would be at the service of the country members for the transaction of business whenever they were in the city. The library would save members buying expensive books for which they have comparatively little use.

During the year some of themselves have complained that they were not receiving anything in return for their fees. If they meant they were not receiving anything in return they were probably right. This Association was not formed on the basis of giving values for fees in a direct and tangible form, but rather in an ind rect and possibly intangible form. But I think that anyone who is impartial and reasonable will be table to discover that he has received some benefit even now, and that there is every hope of his receiving greater benefit in the next future, if the members of this Association are true to it and themselves. Do those who join the many fraternal societies hope to receive any monetary return for their fees? I know of none except possibly those who tuse these societies for their own personal advantage. The greater number of our members, I am sure, joined this Association, and the procession they make he had been advantaged to the form the highly desirable work. This work is the rating of much needed and highly desirable work. This work is the rating for much needed and highly desirable work. This work is the rating for much needed and highly desirable work. This work is the rating of the received and they may be a sure of the sound of the sure of the sound of the sure of th

ward if possible along the road which will carry us to the goal of our aims and desires.

I have spoken planly, but I hope without offence to anyone. I have no desire to hurt or offend any member, but I think that platit dealing with difficult questions at a serious period is the only way in which we can acquire a firm foothold on a sound foundation. My anxiety to see this Association secure in its position is my excuss for stating my epinions planly, and I only hope that others will do the same and then we shalk know exectly where and how we stand.

I regret that it is my said duty to refer to the serious loss which our Association sustained in the sudden and lamented each of Mr. W. G. Storm, R. C. A., the first P. esident of this Association, Little we thought one short year ago, when Mr. Storm took his position on the platform in the from below this one, as President of the Association, that he would ere another year had passed, have departed from this word and his work to that other world of which we know so little and to which we are all travelling. Of his skill as an architect I will not speak, but will leave the buildings which he erected during his busy life, to speak for me, since you are as capable as I am of estimating his professional attainments through them. For the advancement of this Asso intom he worked earnestly and at considerable sacrifice of his meterial interests. He did not work in hope of any personal gain or benefit; but out of love for his profession. Many times, he stated that it was more than likely that he would have passed away, long before

06.1

the Association would be enabled to do very much for the advancement of the profession. But he cherished the hope that the students of the present day, who will be the architects of the future, would derive some benefits from his labours. He did not live for himself alone, but for the good of his fellow-men and especially for those engaged in his chosen profession. He set us, one and all, an example which we could follow with much advantage to this Association and purselves.

to this Association and ourselves.

Many of us hoped, when he retured last year from the Presidency, that we should see him again in his old position as President of this Association, but it has, however, been ordered otherwise. But while we will never again see him in body, we may keep him in remembrance by taking him for our example, and carrying through the work which he supported so loyally. Let not his name nor his works pass out of our remembrance.

The President then called upon the Actine Treasurer to read the Treasurer's report.

Mr. Burke, who stated that he had been requested by the Treasurer, Mr. Dick, when that gentleman was leaving for the report, read the report as follows:

THE TREASURER IN ACCOUNT WITH THE ONTARIO ASSOCIATION

1892	Keceipis.			
Jan. I-To	balance in_bank	\$2,163	15	
Feb. 10-Tu	cash from Registrar	32		
July 26-	" receipts 1st February	•		
	to 30th June	901	65	
Sent. 16-To	cash from Registrar, receipts for July	6 6	ŏ	
Sept. 16-	Aug	12	00	
Oct. 18-	" " Sept	10	00	
Nov. 21-	" " Oct	32		
Dec. 12	" " Nov	115		
	terest on bank account to date	75		
Dec. 31	•••••			\$3.438 16
	F. 14 . 11 . 2 . 11 . 11 . 11 . 11 . 11 .			43.43
1892	Expenditures.			
Feb. 19-By	cash to Registrar for disbursements	\$ 28	7I	
	W. A. Langton, Registrar's salary to			
	Feb. 19th. 1892	100	00	
Feb. 10-By	W. A. Langton, Librarian's salary to			
	Dec. 315t, 180t	50	00	
Feb. 10-By	cash to Registrar for Disbursements	200	00	
June 22By	W. A. Langton, Librarian's salary to			
,	June 30th, 1892	50	00	
July 26-By	cash to Registrar for disbursements	488		
Aug 16-B	James Pape, Floral Cross, funeral Mr.	4	- 4	
	Storm	15	90	
Sent ro-Bu	cash to Registrar for disbursements	120		
Sept 16-B	W. A. Langton, Registrar's salary to		••	
ucpt. to-D	August 19th, 1892	100	00	
Dan at B	balance in bank	2,285		
Dec. 31-103	CARRIES III DAIR	2,205	35	£2 400 +6
	•		_	\$3,438 16
Wa have	examined the books vouchers etc. of	the Ass	noi-	ation and

We have examined the books, vouchers, etc., of certify that the above is a correct statement thereof.

HENRY LANGLEY Auditors. The Registrar then read the following report:

Signed

REPORT OF THE REGISTRAR AND LIBRARIAN FOR 1893.

Members.

The roll of membership of the Association on January 1st, 1892, contained 73 resident members and 74 non-resident members, in all 147, Of these, 11 resident members and 74 non-resident members, in all 147, Of these, 11 resident members and 74 non-resident members, in all 18 members, were in arreats with their fee for the portion of the year 1891 between August 7th, the anniversary of the date of registration, and December 31st, the close of the financial year of the Association. Thus, though the Council decide to assume the continued membership of all and continue all mames on the roll, the number of members in good standing at the close of the year 1893 of the same standard of all and continue all mames on the roll, the number of members in post of the number of members in post these arears. The remaining 15 form part of the number of members to be subtracted, as not in good standing, from the roll of membership at the close of the year 1892 and part of the number of membership at the close of the year 1892 numbered 120, there having been a registration in the close of the year 1892 numbered 120, there having been a registration in the close of the year 1892 numbered 120, there having been a registration in the close of the year 1892 numbered 120, there having been a registration of increases at the time of the passing of the Act admitted to registrations of the passing of the Act admitted to registrations of the passing and their fee, but thave not signified their intention of withdrawing from the Association.

Since the beginning of the year there have been 2 more membership fees and and 180 contents.

Association,

Since the beginning of the year there have been 2 more membership fees
paid and 2 registrations as architect on the part of students, so that the roil
of members in good standing at the time of publication of this report numbers 108, consisting of 44 resident members, 59 non-resident members,
and 5 members not practising in Ontario. This latter class of members
was created by the Council to meet the needs of members who found it
necessary during the present depression of business to seek employment
elsewhere, but who did not wish to give up their membership of the Asso-

Students.

There were 96 students on the roll at the beginning of 1892, classified ac-

ording to the examination required or them, as ionows :	
First intermediate	
36 students came up for examination in April, classified as follo	ws:-
First intermediate	
Of these the Board of Examiners recommended and the Council	passe
First intermediate 2 Second intermediate 3 Final 13	•
11 were conditioned for a supplementary examination in Septer	nher.
g came up for examination, viz. :	
First intermediate 2 Second intermediate 4 Final 3	

iese were passed :—		
First intermediate	 	2 -
Second intermediate	 	4
Final	 	2

In all there were 15 students who passed the final examination, and are attitled to register. Of these only 2 have registered.

The new form of indenture, approved by the last Convention, came into se as soon, after as it could be lithographed, and there are now 9 students articled under this form

articled under this torin.

The register of draughtsmen out of work, which is open at the, office of the Registrar, and of which notice was given at the last Convention, and in the CANADIAN ARCHTECT by the publication of the Registrar's report, has been practically unused, 4 students only and t architect, who was in search of a superintendent's place, having entered their names. I think I may say that it was in consequence of this application that the architect is at present that it was in consequent prosperously employed.

Proceedings of the Council.

Proceedings of the Council.

The Council have held three meetings; the first on February 4th, the second on May 5th, and the third on Cotober 18th.
Following instructions from the Convention, the Council appointed a Committee to investigate the possibility of obtaining copyright for architectural plans. The report of the Committee has been printed, and is in the hands of the members of the Association.
The Convention had further instructed the Council to procure, if possible, amendment to the Act of Incorporation, by striking out the word "Registered" before the word "Architect." Application to this **rad was made to the Minister of Education, who replied that it would not be prudent to attempt any amendment in the current session.
A deputation in conjunction with the Province of Quebec Association of Architects, went to Ottawa with a memorial to the Minister of Customs. The memorial and report of the depaution have been printed, and are in the hands of the members of the Association,
A design has been adopted for the seal of the Association. It has been cut and is now in use.
Subsequent to the May meeting of the Council a memorial signed by 40

the nanos of the members of the Association. A design has been adopted for the seal of the Association. It has been cut and is now in use.

Subsequent to the May meeting of the Council a memorial signed by 49 non-resident numbers of the Association was received by the Registrar. The President called a meeting of the Toronto members of the Council, who instructed the Registrar to send out the circular letter to members of the Council, which has been printed and is in the hands of the members of the Association. The non-resident members of the Council wrote in reply their opinion as to the right course to pursue. The Council agreed that the fee should remain as fixed by by-law until the next Convention. Pursuant to this decision the Registrar sent out the circular detect July 18th, to all non-resident members, which has been appended to the printed copy of the circular fetter to the nembers of the Council concerning the protest.

The register not being fully signed at the close of the last Convention, it was first sent to the larger cliets to procure signatures of the members residing in them. Afterward, a slip with a headline, "Signature for Register of Ontario Association of Architects," was sent to all members whose signature had not been received. Many signatures were thus returned, and have been pasted in the register; but there still remain 23 niembers who have paid all fees, but have not signed the register. Of the signatures received, there are 13 of the members who are in arrears for the fee of 1893, and 2 of members who have paid no fee since registration.

A letter was received in October from the Commissioner of Lands and Works, of British Columbia, asking the Council of our Asvociation to select two architects to set with the Department of Lands and Works, and these ceredial to examining the plans sent in for competition of designs for new Government Buildings, to be erected at Victoria. The Council selected Mr. Curry, our President, and Mr. A. T. Taylor, of Montreal. The selection was necepted by th

The Library contains the following works:-Bayles. "House Drainage and Water Supply."
Baillairgé. "Geometrie and Toise Tables."
"Clef du Tableau Stereometrique."
"The Stereometricon."

Cuer du fabreau Succeometrique.

"The Stereometricon."

Papers read before the Royal Society of Canada and the Quebec Literary and Historical Society.

Baldwin. "Steam Heating for Buildings."

Blings.

"Ventilation and Heating." 2 copes.

Bloxam. "The Principles of Gothic Ecclesiastical Architecture." 2 vols.

Chambers. "Civil Architecture."

Clark. "Building Superintendence."

Cotterill & Sinde. "Lessons in Applied Mechanics."

D'Avesnes Prisse. "La Decoration Arabe."

Fergusson. "History of Architecture," 2 vols.

Gerhard. "Drainage and Severage of Dwellings."

Gerbons. "Law of Contracts."

Gruner. "Specimens of Ornamental Art with Descriptive Text by Emil Braun."

Braun.
Gwilt. "Encyclopedia of Architecture."
Hendrick's Architect's and Builders' Guide and Contractors' Directory of

America.
Jenkins & Raymond, "The Architects' Legal Handbook."
Kidder, "Architects' & Builders' Pocket Book."
Macassey & Sarahan. "The Law Relating to Civil Engineers, Architects

Jenkins & Raymond. "The Technicet's Book."

Macassey & Surahan. "The Law Relating to Civil Engineers, Architects and Contractors, 4 copies.

Mitchell. "Building Construction."
Osborne. "Notes on the Art of House Planning."
Paley. "Gothic Moldings."
Parker. "A. B. C. of Gothic Architecture."
"Concise Glossary of Architecture."
"Concise Glossary of Architecture."
Parkes. "Practical Hygiene."
Pavell. "Foundations and Foundation Walls," 3 copies.
Pugin. "Apology for the Revivat of Christian Architecture in England."
"True Principles of Fointed Christian Architecture."
Reid. "The Manufacture of Cemunt."
Ricker. "Trussed Roos."
Rickers. "Styles of Architecture in England."
"Rickers." "Trussed Roos."
Rickers. "Grussed Roos."
Rickers. "Grussed Roos."

Rickman. "Styles of Architecture in England."
Royal Institute of British Architects. "Journal of Proceedings from October, 1891."
Rosengarten, "A Handbook of Architectural Styles."

Society of Architects (Eng.) "Proceedings from November, 1891."
"South Kensington Notes on Building Construction," 3 vols.
Stevenson. "House Architecture," a vols.
Stoney, "The Theory of Stresses in Girders and Similar Structures,"
Stuart & Revett. "Antiquities of Atthens,"
Taylor & Cresy. "Rome."

Stuart & Revett. "Antiquities of Athens, Taylor & Cresy. "Rome." Vignola. "The Five Orders of Architecture." Vicilet ie Duc. "Lectures on Architecture," 2 vols. "The Habitations of Man in all Ages." Wightwick. "Hins to Young Architects." Wright. "Architectural Perspective."

The sum of \$235.50 has been spent in the purchase of books; \$184.05 in 1891, and \$51.25 in 1892.

The Lubrary was opened for lending on October 1st, 1891. Since that time there have been 203 books borrowed; 31 in 1891, 187 in 1892, and 15 in January of the present year. Of the 203 borrowings, 31 were by architects, and 172 by students.

On motion of Mr. Burke, seconded by Mr. Belcher, the report of the Treasurer was adopted.

On motion by Mr. Gemmell, seconded by Mr. Edwards, the

report of the Registrar and Librarian was adopted.

The Convention then proceeded to the consideration of "Business arising out of the minutes."

DISCUSSION.

Mr. Edwards called attention to the desirability of having the "Conditions of Competition" printed and circulated among the members of the Association, so that they might be in a position at any time when called upon to hand those Conditions to perat any time when called upon to hand those Conditions to persons seeking competition. He would, if necessary, move that the Conditions be printed, though it was merely a suggestion on his part, as he recognized that it was the work of the Council. The President replied that although the action to be taken was a matter for the Council, it was within the province of the members assembled in convention to instruct the Council to

take any steps thought advisable.

Mr. Edwards: Then I will move that the "Conditions of Competition" be printed and circulated among the members of the Association

Mr. Helliwell, in seconding Mr. Edwards' motion, stated that there was much force in that gentleman's arguments as to the importance of having the Conditions of Competition printed, not merely for the reason given, but also that the matter might be kept before members themselves. While speaking of printing, the desired to bear testimony to the great advantage of having the various reports printed and placed in the hands of members attending the Convention, as had been done on the present occasion, as it enabled them to follow and discuss the matters in question more intelligently than would otherwise be the case. He thought the slight expenditure this incurred was a very wise

Mr. Wickson inquired if another benefit arising from the printing of the Conditions would not be that members who were aping of the Conditions would not be that mentioers who were approached and asked to submit competitive sketches would find it a very easy and concise method of replying, to forward the printed Conditions to such applicants, stating that under those Conditions only, they submitted competitive drawings.

Mr. Gordon thought the proposed action of printing and circulating the Conditions would have a valuable educational effect.

Mr. Burke believed that not only the public, but some of the members, would derive an educational benefit from the perusal

of the Conditions, if printed and circulated as proposed.

Mr. Edwards expressed his gratification at finding his views so generally endorsed, and his ideas elaborated upon by the members present. He thought what had been said covered the

ground admirably.

The President: I certainly think it would be a decided advantage to have the Conditions of Competition printed as has been suggested. I may say the only reason they have not been printed is, that the Council, having received a petition to reduce the fees, felt that for the remainder of the year it would be well to conduct the affairs of the Association as economically as possible, and meanwhile to ascertain what was really the feeling of the Association with regard to expenditure. It is, of course, impossible to go on making expenditures unless we have an income. As far as the surplus is concerned, it will not be difficult to dispose of that, but at the same time, I think we should make

our income and our expenditure as nearly equal as we can.

The President then put Mr. Edwards' motion to the conven-

Mr. Edwards suggested that sufficient copies be printed to enable a few copies to be in the hands of every member.

Mr. Simpson thought it would be well to have printed on the same sheet the scale of architects' fees.

The President said that there was no tariff adopted by the Association.

The motion was then carried.

THE LIBRARY.

Mr. Aylesworth, referring to the advisability of reducing expenditure, said he had been struck by the idea that the money expended on the library might not perhaps be well applied. For his own part, while aware of its existence, he did not know where it was, or of what it consisted, and he wondered to what extent it was known of by other members. If it was not of any particular lar advantage, was it well to continue to expend money on it in the meantime?

The President: The meaning of the last speaker, to me, not very plain. The announcement of the library's existence has been placed in the hands of every member, with information as to the conditions, etc., on which books can be obtained. While perhaps not in constant use for purposes of reference, the library certainly has been made use of in that way to some extent. The only trouble is that it is in need of improvement to be of advantage to members, its advantages at present being almost entirely confined to students preparing for examinations. What I, for one, would advocate is the application of a portion of our surplus to the purchase of books of greater value to members of the Association. I may say that every member of the Association, no matter where he resides, can have any book sent to him, and is allowed to keep it for a certain length of time, the only obligation cast upon him being to pay the postage and preserve the book in proper condition.

Mr. Aylesworth: What I meant to say was, that so far I have

not looked up the library, and I understood from others that they were in the same position; and I did not know whether it had been of service to anyone. There are a number of valuable books both in the School of Practical Science and in the Public Library, but how many of them are being used? If they are not used, our small library would be less made use of, and if it is not of practical benefit, why should we continue to expend money on it? Of course, if it is being made use of, well and good, and if additions to it will enhance its value, it is merely a question of how useful it will be.

Mr. Gordon: If I may criticize in any way the financial aspect of this matter, I would say that I cannot see the wisdom of hav-ing \$2,000 odd lying in the bank, when a portion of it might be much better utilized in procuring for the library works which might be looked at by architects with advantage. While it is true Toronto members have access to the Public Library and other collections, certainly those residing in the country should be very anxious for the improvement of the library, and I may say, speaking of my firm, that we have occasionally made use of the Association Library, and I think the city members should the Association Library, and I think the cuty memoers shound also be anxious to increase its efficiency. I think we should instruct the Council for the coming year to expend more money upon this library, and, if a motion were in order, or necessary, I would move that the Association, recognizing the desirability of the library recommends the Council increasing the efficiency of the library, recommends the Council to make such judicious expenditure of the moneys in their hands as may to them seem advisable to that end.

Mr. N. B. Dick: I do not quite agree with what Mr. Gordon says about increasing the expenditure. I am not one of the forty-nine kickers against paying fees, but it is evident from the results of high fees that we are diminishing our membership, and I think we ought to move in the direction of reducing expenses, for that seems to be the trouble with many of the outside members, and, indeed, many in our own city. It seems to me that the expenses of the Association have been unnecessarily large. I think something may be done in the way of reducing the expenses of meetings of the Council. I hardly see the necessity of bringing in members from a distance to consult on matters of minor importance, and paying their railway and travelling expenses. I think most members of the Association will be satisfied to appoint men in Toronto, or in some other city. Then I would like to ask what the expenses are in connection with students? There is an item of, I think, \$250 in connection with the examination. Are examiners paid for their services?
The President: Yes.

Mr. Dick: Don't you think members of this Association ought to take sufficient interest in its affairs to be willing to give their necessary time gratuitously? Let us cut down expenses in that way. (Hear, hear,) I know, for my own part, though I fear my usefulness would not be great, that I should be very glad to do anything I could without remuneration. While I am not sufficiently conversant with the matter to enter into its minutiæ, I believe it would be possible to reduce our expenses by one half, and thus not only retain our present membership, but add to it, instead of having it decrease from year to year.

The Registrar: 1 think 1 had better explain to Mr. Dick that

the amount of labor involved in connection with the examinations is very great, and means a great deal more than a few days' attendance here. There was at first the arranging of the curriculum, then setting papers and attendance during the examination, afterwards the labor of examining the papers. The fee of each examiner was \$25, for which some of them examined on four or five subjects. That sum is entirely out of proportion to the fees paid to an examiner in the School of Practical Science the fees paid to an examiner in the School of Practical Science or the University, and, as far as being any adequate return for the services rendered in connection with the examinations, might almost as well be dispensed with, but I think it would be most unreasonable to expect four or five members to do all this work for the whole Association for nothing, and also, if the examiners are paid, it establishes better the business character of Association. Some other way out of the difficulty must be found. A proper way, would be to increase the charge to students, but that is a matter for future consi leration.

Mr. Edwards called the attention of the chairman to the fact that proceedings were becoming somewhat irregular, there being two subjects under discussion at one time, the reduction of fees and the augmentation, or otherwise, of the library.

The President, while admitting the discussion to be slightly irregular, thought it would do no harm, as the matters under

consideration were intimately related, to spend a little time in that way.

Mr. Gregg suggested that, as the next report was that of the Committee appointed to make tests of building stone in use in Canada, it would be well to hear that report and then devote the remaining time to the discussion of the state of the Associ-

The President concurring,
Mr. Thompson moved that the report be taken as read. Carried.

Mr. Gregg moved the reception and adoption of the report, together with a vote of thanks to Mr. Townsend and the other members who assisted in its preparation.

The motion being seconded by Mr. Belcher, was carried.

THE STATE OF THE ASSOCIATION.

Mr. Edwards, referring to the proposed changes in the Act, spoken of in the President's address, expressed a desire for a little more information on the subject. He thought it would be a matter of congratulation if they were as successful in the near future as the President's address seemed to contemplate. wished to say that the Council had not, as stated in the address, been laboring unaided, for he felt sure that outside members had been bringing to bear what influence they could towards the desired end. At the same time, would it not cause a good deal of kicking throughout the country if the change were effected? He thought it well not to be too sanguine in regard to this matter, but if the President had any reasons for the hope he had express-ed, which could be made public, the members would no doubt be glad to hear them.

The President: With regard to the change and amendments, there is really no deviation from the policy adopted in the be-ginning. We sought to procure an Act conferring upon quali-fied members of the profession the right to use the word "archified members of the profession the right to use the word "archirect." The Government, or some one connected with the Government, inserted in the Act the word "registered," which had
the effect of destroying its force, and which we desire to have
removed from it. The sooner that word is removed, the sooner
will the opposition we encounter be decreased. If it is allowed
to remain five years, there will be so many more outsiders opposed to it, or who will have to come in, because, practically,
when that word is knocked out, we will have to admit every man who at that time is working at the profession; we could not at the end of that time interfere with the men who had started up in practice, and had made use of the word architect. That would be interfering with a vested right, which is something we could not do.

Mr. Edwards: Then anyone commencing business now as a practising architect can join the Association, and all we have done to the contrary is of no effect. In other words, we just place them where we ourselves stood at the time of the formation

of the Association; they just come in as we did on organization, without passing any examination?

The President: Of course, I am only speaking of what I think myself. I think it would be unwise for us to adopt any other course, or to ask the Government to do anything else; it

would only stir up opposition.

Mr. Aylesworth: I think this is a very important point. It is the first time it has been raised, and I think it would be well if all the members present would make themselves acquainted with that phase of the question, and, of course, it should also be early explained to the Government, that no one practising as an architect would be interfered with, even if they should not come in for several years. Of course, we did not contemplate this at first, but time has passed now, and probably more time will pass, so it will be well to keep in view this fact, that everyone now practising will have the same right he would have had a year or two using win have the same right he would have had a year of two
ago. I think the matter should be thoroughly discussed and
understood, and I think if the matter were presented to the Government in that light, it might have the effect of hurrying matters up.

The President: It has been placed before the Government in

that light.

Mr. Gregg: It should be a matter of paramount importance with the Association to push this through, for until that word "registered" is struck out we will have accomplished practically nothing. With that object in view, I think it would be well for outside members to use their influence with members of the Legislature in their districts, so that when the matter comes before the House they will be properly acquainted with the nature of it.

Mr. Burke: The point with regard to members outside can-not be too strongly emphasized. Members outside of Toronto not be too strongly emphasized. Memoes outside of 100 not can approach thirty or forty members of the Legislature where the Association in Toronto can only approach three or four. I think, therefore, that our success in securing this amendment rests largely with the country members, for if they can favorably influence thirty or forty members of the Legislature the thing will go through without any trouble.

Mr. Gordon suggested sending to each member of the Legis lature a printed statement of the argument in lavor of striking out the word "registered." He thought if this was done it would make the work easier for members of the Association who

approached them regarding the change.

The President said that a plain statement of the facts had been prepared for the purpose of forwarding to members of the

Association, but no attempt had been made at any argument in it; that had been left to those who would approach the membe in a better position to judge of the best standpoint from which to present the argument. He feared a printed argument might possibly give rise to some misapprehension.

Mr. Helliwell thought the work of interviewing members of

the Legislature could be better carried out by a Committee specially appointed for that purpose, as what was everybody's business often proved to be nobody's business. He would move

the formation of such a committee

The President replied that such a Committee already existed, in the Council of the Association, but it was better the work should be done by individual members, residents in the districts of the members of the Legislature it was desired to influence, and who, by reason of that fact, could appeal to them more foreign the contractor. forcibly than a stranger.

Mr. Belcher expressed the opinion that if properly approached the members would offer very little opposition. He had seen the members for both ridings of Peterboro, and also for the County of Victoria, and they had expressed themselves favorably. He thought if each individual member of the Association would put his shoulder to the wheel, very few could be found who would seriously oppose their wishes. He might add that both of the gentlemen he had spoken to were opposed to him in politics, but nevertheless the result had been as he stated.

Mr. Burke added that whereas in a city like Toronto many of

the members of the Association were quite unacquainted with their representatives in the Legislature, in the smaller towns it was quite the reverse; probably they met these gentlemen almost every day, and on quite familiar terms. He thought, however, it would be well for a deputation from the Association to wait on the Attorney-General.

Mr. Helliwell explained that he had not meant that members of the Committee he suggested should personally wait on members of the Legislature, but rather that it should be their province to ascertain that they were seen by the members of the

Association resident in their respective districts.

The President said the opposition which the Association might expect to encounter would arise from the prevalent feelinigit expect to encounter would arise from the prevalent feeling against close corporations, and instanced the opposition which was last year offered to the Surveyors' Bill. That opposition was engendered by want of knowledge and understanding of the object of the legislation sought, and that knowledge could be best imparted by the members of the Association who had opportunities of meeting with their representatives in the Legislature in their own districts.

Mr. Edwards reminded the Association that the apposition to

Mr. Edwards reminded the Association that the opposition to close corporations was not confined to the Legislative Assembly, but was to be met with in the community generally. If the architects were influential in political circles, and could influence votes, it would go far to remove any opposition on the part of

Witch legislators.

Mr. Helliwell disclaimed any desire to push his motion; he thought the publication of the discussion would serve to awaken the publication of taking the requisite action. He members to the necessity of taking the requisite action. He would, under the circumstances withdraw his motion.

Mr. Gregg urged the necessity of reaching all the architects in the Province. If the proposed change would have the effect that had been stated on members of the profession outside of the Association it would be well they should know it, and they night assist in making a big push up the hill. He would sug-gest a petition, to be signed by all the architects in the Province.

Mr. Butke expressed approval of the last speaker's idea, and, as a member of the Council, he desired to see a large Committee entrusted with the matter, embodying, perhaps, the present Committee of the Council, and as many more members from the Association. He thought there could not be too many interest-

Association.

The President thought Mr. Gregg's suggestion a good one; but notwithstanding that course had been followed before, with notwithstanding that course the Government passed the Act reference to the desired change, the Government passed the Act without making the alteration. He thought he was correct in saying that members of the Association in default for fees still remained on the list of members.

The Registrar said nothing had been done towards removing such members' names, and they had been furnished with all mal-

ter connected with the present meeting.

Mr. Burke said if the request for the change were signed by every member and every ex-member of the Association, it would

disarm all opposition. Mr. Townsend expressed himself as being in favor of action in the line of Mr. Greeg's proposal; he would suggest that it be an instruction from this meeting to the Council to consider the advisability of obtaining such a petition.

Mr. Gregg stated that his object was that it might go out from this Convention that it was the desire of those present to secure the co-operation of all the members in the Province, whether they had attended the Convention or not, and whether they had paid their fees or not. He wished to preserve the friendship for the Association of every man who was practising in the Province and to have it conveyed to them that the Association bore no illwill against those who for various reasons might have dropped

Mr. Edwards believed that that line of conduct would defeat the objects of the Association. He advocated an adherence to the policy at first proposed, that each member should leave the convention animated by a determination to influence those with whom he came in contact who were in a position to further the end desired. It was all very well, he thought, to be generous and magnanimous, but he disapproved of soliciting the co-operation of those who had separated themselves from the Association, many of whom would stay out under any circumstances; he thought the desired object could be attained by other means.

The Registrar said that the question of the proposed change

would come before the Legislature at the approaching session. Members of the Government had already been seen by the Council, and had expressed themselves favorably towards the proposed change, although stating their inability to vouch for the opinion of the House on the subject. The matter was probably the most important with which the Convention had to deal, and the course which to him appeared most desirable, was that suggested by Mr. Burke, that the Committee of resident members should be requested to add to their number, so as to form a large Committee, and that the present discussion should form a portion of their instructions from the Association. If Mr. Burke saw fit to make the motion he would have pleasure in seconding it.

Mr. Burke accordingly moved that five members of the Association be added to the five members of the Council now constituting a Committee to interview the Legislature with the object of preparing for legislation in order to drop the word "register-ed" from the Act.

ell' from the Act.

Mr. Gordon seconded the motion, and in doing so said that he was very loth that it should go out that they were prepared to surrender everything at the very outset. While fully appreciating the generosity and liberality of the views given utterance to by the President and the very nice way in which he had put things, and also believing that perhaps, in the end, those views might have to be adopted, he still believed that they ought not at the very beginning to be prepared to make that surrender. (Hear, hear.) He thought that in seeking to make confidants of the gentlemen who had elected to remain without the ranks of the Association, and, as it were, almost begging of them to come in, the dignity of the Association would be lowered without accomplishing the object which Mr. Gregg so earnestly desired. He gave that gentleman full credit for the object he had in view, viz, the disarming of opposition, but at the same time did not viz, the diarming of opposition, but at the same time did not think it would be effected by such a policy. He thought the instructions of the Committee should be, first of all, to endeavor to get the word "registered" struck out of the Act without agreeing to any conditions, reserving assent to such conditions as a last resort, the supreme object being to get the objectionable word "registered " removed.

Mr. Aylesworth inquired if there was any number of the older members of the profession who were not members of the Associa-

The Registrar replied, that, as far as could be gathered from letters be had received, all or at least all but a few of the older members of the profession were included in the Association.

Mr. Sinpson asked if those who were practising as architects before the inception of the Act, and had failed to register, could, in the event of the word "registered" being struck out of the Act, be debarred from calling themselves architects?

The President thought they could not, unless the Legislature

so provided.

Mr. Burke's motion was then put to the meeting, and carried.

COPYRIGHT AND CUSTOMS DUTIES.

The President called attention to the instructions given to the Council last year in regard to copyright, and asked if anyone was sufficiently interested to be desirous of making any remarks on the subject of customs dues.

Mr. Aylesworth remarked that he was so far interested in re-

gard to the latter that he would like to hear how the proposition

was received by the Minister of Customs.

It was explained to Mr. Aylesworth that the information with respect to the reception which the deputation met with was to be found printed in the report.

Mr. Gordon asked if it would not be well to express to the in-coming Council the desirability of following up the question dur-

coming Council the destrainity of following up the question dufing the present year.

The President: It is a matter for the Association.

Mr. Gordon moved, seconded by Mr. Edwards, "That it is desirable that the matter of customs dues upon plans, etc., of foreign architects be again brought before the notice of the Canadian Government by the incoming Council." Cairied.

GENERAL CONDITION OF THE ASSOCIATION.

The President: Some months ago the Council had sent out to each member of the Association a request that he would send in any suggestions which occurred to him regarding the better management or working of the Association. The Registrar will now read the realise to that season.

management or working of the Association. The Registrar with now read the replies to that request.

The Registrar having read the letters in question:—
Mr. Gordon said, that in view of the many feeling—with the emphasis on the last syllable—replies, the suggestion embodied in the address of the President as to grading fees was a good one. So far as he could see, the fees could not be very materially reduced without endangering the financial standing of the As-

sociation. In approving of the suggestion in question, he claimed credit for being disinterested, as he would still have to pay
the larger amount. He thought the suggested plan of rating
outside members from \$10 down to \$5 would remove the hardship under which, to judge from the communications received, some of them were laboring.

Mr. N. B. Dick said that it was evident there was much dis-

satisfaction among outside members and opposition to the fees now charged. He again advocated retrenchment in expenses. He would not like to see a motion passed to reduce the fees to any stipulated amount, but thought the matter should receive from the Council careful consideration, in view of the desirabil-

ity of retaining in the Association as many members as possible, instead of having the membership reduced year by year.

Mr. Edwards, speaking of himself as a "country member," said he did not object to paying \$15 as his membership fee, nor did he object to the reduction of the fee to \$10 if it would help did he object to the reduction of the fee to \$10 it it would help anyone to do right, but if the reduction was going to help men such as he knew of, who while too poor to pay the fees of the Association were rich enough to offer to give \$1,000 to procure a \$20,000 work of church alteration, he most decidedly objected. He was quite willing to help those who could not help themselves, but he entertained a decided aversion to helping others

Mr. Belcher expressed his satisfaction personally with the existing scale of fees. He was not aware that any of the so-called

isting scale of lees. He was not aware that any of the so-called county architects were grumbling at the fees.

Mr. Aylesworth said that in order to test the feeling of the Convention he would move that the scale of fees suggested in the address of the President be adopted by the Association.

Mr. Burke thought that the fact that the older members had

to pay the highest fee might in some instances be productive of

hardship.

Mr. Darling said it was evident from the letters read that the matter called for consideration. The Association was yet in matter called for consideration. The Association was yet in need of being fostered and nursed along, and while he did not express any opinion as to whether or not the fees were too high or otherwise, he advocated whatever would best do that. If would be a very great thing if they could stick together until the word "registered" had been got rid of. He did not think the question was one which could be disposed of off-hand at a meeting like the present, but that it would be better left to the Council.

Mr. Gregg thought one objection to the graded fees would be found in the extra labor entailed on the Registrar in keeping an account of the exact length of time members had been in business. He thought the best thing to be done was to drop the idea of augmenting the library, and some other things, draw on capital and reduce the fees for one year, boping that with improving times, and the securing of the amendment, more interest would be manifested in the Association.

Mr. Edwards was opposed to asking Toronto members to pay any more than those outside.

The President explained that the scale of fees suggested in his address was prompted by information he had obtained from representatives of different sections to which the membership of the Association extended. He thought there was a great deal to be said in favor of only assessing members in proportion to the amount of benefit they derived from the Association. To men living in the smaller towns and villages, whose practice was limited, \$10 was quite a serious item. He did not, however, think that the reduction would have the effect of keeping men in the Association—there would always be defaulters even if the fee was only one dollar. He thought that on the whole they might congratulate themselves that really very few members were retiring. On the formation of the Association a great many rushed in and registered, under the impression that by not doing so they would lose some right, and, not finding things just as they expected, after a time fell away. Yet there were 80 per cent. of those who had registered in good standing, so he thought the Association was really in very fuir condition.

Mr. Burke suggested that a reduction of the fee by \$5 be

made all around.

The President said that would leave the Association without an income to meet necessary expenses

Mr. Greeg thought a less reduction than that proposed by Mr. Burke would suffice, but thought the Association could afford some reduction.

Mr. Baker thought it was not so much a reduction of fees the non-resident members desired as something in the way of a re-turn for them. He thought if meetings could be held three or four times a year, at which papers of interest could be read, and minutes published in pamphlet form, it would be regarded as some return for the fees.

Mr. Belcher agreed with the last speaker, that the periodical reading of interesting and instructive papers, and their distribution among the members who had not the opportunity of hearing them read, would stimulate interest in the Association. The members of the Society of Engineers received two reports a year, which contained a large amount of very valuable matter.

Mr. Gordon said there seemed to be some misapprehension MI. Corton said there seemed to be some misapprenension existing in the minds of non-resident members as to the benefits derived by resident members from the Association. He in common with other architects in Toronto, belonged to three distinct organizations. As members of this Association, resident architects received no more benefits in the way of meetings or papers than were enjoyed by those living at a distance. But there was the Architects' Guild and the Architectural Club, each having fees of their own, and whose members received certain benefits. The only advantages enjoyed by city members of this Associa-tion over their brethren in the country, was that they had no rail-way fare to pay in coming to attend the annual meetings, and it was thought when the fees were fixed that a slight reduction in the fees of those outside might have the effect of equalizing matters in that respect.

Mr. Belcher said he had been under the impression that quarterly meetings were held by local members of the Association as was the case with the Engineers' Association. In that Association, papers were read in various towns before local branches of the organization, and then forwarded to the central society, and

the organization, and then forwarded to the central society, and there discussed, and, if approved, printed and forwarded to the members of the Association generally.

The Registrar said that the suggestion made in Mr. Gregg's post card, and that made by Mr. Baker tallied very well with a letter which appeared in the CANADIAN ARCHITECT AND BUILDER a couple of months ago. The Association might encourage the delivery of ganges on various exhibitions which the statement of the second courage the delivery of papers on various subjects, which would be published in the CANADIAN ARCHITECT AND BUILDER and thus reach members who had not an opportunity of hearing them read. He noticed that all the members who did not pay their fees had something to say about hard times, and it must be borne in mind that the present was undoubtedly a time of con-siderable depression in business, many architects having very little work. As to advantages, it was true the resident members had the advantage of access to the library, but of that they had availed themselves to a very limited extent. As a matter of fact, the country members have been far more regular in the payment of their fees than the city members—the proportion of those who had not paid in the city being as 13 to 25, or almost one half not paid, whereas in the case of outside members the proportion was as 20 to 25, a very much better showing. Times, however seemed to be improving, and some architects who wrote to him spoke of being very full of work. Something had been said in regard to civil servants. He was not convinced that they were a class who should be conceded any special privileges. Twee were in receipt of a salary from the country for performing certain duties, and being in that way secured in a living, were able to make plans at a very low rate, and had in several cases come the country members have been far more regular in the payment to make plans at a very low rate, and had in several cases come to make plans at a very low rate, and had in several cases come into competition with members who wished to receive adequate remuneration for their servlees. If any reduction was made in the fees of civil servants, some provision ought to be made to protect members from that kind of thing.

Mr. Gregg said that after what Mr. Dick had said, he would venture to ask him to second his motion, that for this year the fees of city members be reduced to \$12 and those of country

members to \$8.

Mr. Dick regretted his inability to comply with Mr. Gregg's equest; the motion did not coincide with his views at all. He did not think that anyone sitting in the present convention was sufficiently conversant with the details of the working of the Association to be able to say what the fees should be for the coming year. If a seconder could be found for the motion, he would move that the question of fees to be paid for the coming year be left to the decision of the Council with a recommendation from the Association to make them as low as possible, consistent with the proper management of the affairs of the Association.

The President expressed himself as not in favor of any tem-The President expressed nimself as not in lavor or any term porary reduction of fees; he thought there should be a fixed and definite sum arranged which would carry along for at least some considerable time. The Association was not in a position to make any material reduction of the fees, and if it was the opinion of the Association there should be such reduction, the expendi-

ture would have to be reduced.

Mr. Dick was unable to see the necessity of the fees being the Mr. Dick was inable to see the necessity of the rees being the same every year. He thought in a year when there was special legislation going on, or other action involving larger expenditures, the fees might be increased, and reduced again in years when no such need of the money was apparent. That plan was adopted in some of the friendly associations; in some instances the assessments for the coming year were based on last year's the assessments for the coming year were based on last year's expenditures.

Mr. Kenney thought a great deal of discussion, was being devoted to a matter in regard to which there was very little com-plaint. He thought the most expeditious way of settling the

matter was to leave it in the hands of the Council.

The President said that the fact must not be lost sight of that if the amendment to the Act was secured, members coming into the Association in order to be enabled to retain the right to call themselves architects, ought to do so on a definite understanding that they would be liable for certain fees right along. He thought it would be better to maintain a definite fee. He could understand that after running for a period of five years it might be possible to make a reduction, but he thought it would be inadvisable to drop them from year to year on the experience of

On motion of Mr. Gordon, the meeting then adjourned.

THE BANQUET.

On Wednesday evening about thirty members of the Association spent a thoroughly enjoyable time in the dining hall of

the Oueen's hotel in connection with the annual banquet. occasion was made as informal as possible and its enjoyability seemed thereby to be enhanced.

Among the toasts, in addition to those of a patriotic character, were the following: "The Province of Quebec Association of Architects", responded to by Messrs. Gordon and Arnold; "The School of Practical Science," responded to by Prof. Galbraith; "The Ontario Association of Architects," responded to by Mr. Langton; and the CANADIAN ARCHITECT AND BUILD-ER," responded to by Mr. C. H. Mortimer. The company lis-tened with pleasure to songs by Messrs. Webster, Gouinlock, Baker, Belcher and Commander Law, Mr. Belcher also giving in good style a recitation.

SECOND DAY.

The first article on the programme was the testing of some material in one of the testing machines of the School of Practical Science. A $\delta'' \times \delta''$ pine post and a 3 inch wrought iron pipe were subjected to the test and broken. The members then as were subjected to the test and broken. The members then as-sembled in the room of meeting to hear an interesting paper on "Iron Fireproof Construction in New York," sent by Mr. J.C.B. Horwood, a Canadian student in New York. The paper was read by Mr. Edmund Burke, who had had enlarged drawings made from Mr. Horwood's sketches, so that each point in the construction described was clearly illustrated. After the conclusion of the paper, the subject was discussed at some length by the members present, the discussion occupying the remainder of the morning. The paper and the discussion thereon will be printed in a succeeding issue.

AFTERNOON SESSION.

The President: According to this Agenda, we are now to take up new business. Any member who has any new business to bring before the Association will please mention it now. You are aware the discussion of yesterday afternoon was postponed until this afternoon, and it would be as well, perhaps, to have

the whole matter gone into at the same time.

until this afternoon, and it would be as well, perhaps, to have the whole matter gone into at the same time.

Mr. Gregg then affixed to the blackboard two maps of the Province of Ontario, and explained that he had prepared them for the purpose of illustrating a suggestion he had made to the Registrar for the division of the Province, for the purposes of the Association, into districts. He thought it would be of great advantage if the country were organized into centres. For instance, in Ottawa the Association had ten members, and in the neighbourhood there were two members. This would constitute one district. Then, in Kingston there are five members, and in that neighbourhood, in Napanec and Descronto, two members. He would suggest that as the next division. The third would be Peterboro', in which there were only seven members. Then dame Toronto with seventy-two members, including Toronto Junction, and with Toronto he had connected Barrie and Owen Sound. Hamilton, Paris, Guelph, Galt, Welland and Thorold would form another district. The London Centre would comprise London, Stratford, St. Thomas, Petrolea, Charham, Ridgetown, Kingsville, Windsor and Port Elgin. This was the least satisfactory division of all, because the places were so far separated, but there were not enough members to justify the formation of two Chapters. In view of the proposed legislation, he proposed the immediate taking up of this idea in connection with making a canvass in support of the proposed amendments to the Act. For instance, upon the Ottawa centre or Chapter would devolve the duty of interviewing members, stornont, Lanark and Renfrew. He thought no more efficacious plan than this could be devised for accomplishing the present object of the Association, to say nothing of what might be accomplished in other ways in the future.

Mr. Paull suggested the appointment of a committee, to see

Mr. Paull suggested the appointment of a committee, to see what could be accomplished along the proposed lines.

The President thought it would be better for the Convention,

if the proposal was approved of, to make a recommendation to the Council for the division of the Province into these districts, and that they get the thing into working order. It would not do and that they get the thing into working order. It would not do the vocammittees working who were not under the control of the Council, which was responsible to the Association. There was no doubt the Council would attend to it if such a recommendation was made. He thought if the divisions were constituted, they ought each to have an organization of their own, subject of course to the Association. Mr. Gregg moved that the Council be requested to divide the

country into districts and centres, in which meetings are to be held, such divisions to be called Chapters, and that the action be taken at once, with a view to such divisions being utilized in the canvass for the desired legislation.

Mr. Paull seconded the motion.

Mr. Belcher said he understood the proposal only to refer to the mode of obtaining the support of the various members of the Legislature in those districts.

Mr. Gregg replied that the formation of the Chapters was not for that express purpose; his idea was that if the country ever grew, and continued to grow, the architects, draughtsmen and young men in architects' offices in these districts might form branches of the Association in these centres, having libraries and reading rooms of their own. In the meantime, until the legislation sought was obtained, the machinery of these Chapters

ight be utilized in furthering the desired cause.

Mr. Gordon considered the proposition a very radical one, and of great importance, as it would change the whole complexion of the Association, and was of opinion that it was something which ought not to be put through hurriedly. For his own part, he could perceive many points cropping up in rehis own part, he could perceive many points cropping up in regard to which he was not prepared to come to a decision. He
questioned whether the plan would work outside of Toronto and
Hamilton. While the idea was no doubt a good one for the
consideration of the governing body, he thought it was something which ought not to be decided upon at the present convention, certainly not without a great deal more consideration vention, certainly not without a great deal more consideration than it had yet received. For one thing, it would necessitate further expense on the part of the members, in the way of travelling expenses going to and from the respective centres, rent of rooms, etc., and it was not well in any way to interfere with the financial position of the Association. On the whole, he hought the motion premature, and he would rather, if it were permissible, move that the whole matter be left to the consideration of the growering they grater see the exercise theore of ation of the governing body, rather as a suggestion than as a resolution carrying instructions.

Mr. Burke suggested that members from the districts proposed be heard as to the practicability of the proposition. Mr. Belcher, while regarding the plan as a good one as far as endeavoring to secure influence towards the passage of the pro-posed legislation was concerned, and believing that some such

plan might ultimately be made to work with advantage to the Association on the lines foreshadowed by Mr. Gregg, still thought it better to wait until the affairs of the Association were in a rather more fixed condition than at present.

Mr. Power endorsed everything that had been said by Mr. Gordon. It was difficult to get members sufficiently enthused to come to the conventions, and he thought it would be upfill work to get them together in smaller numbers at local centres.

The proposition might have the effect of bringing together outside members in their districts for a time, but little local troubles would crop up and put the members at loggerheads, and the thing would fail to work satisfactorily. But with a view to canvassing the country at present, he thought the proposition was a good one, although it sufficient enthusiasm existed in the districts the canvass might be carried on by individual members without the expense attendant upon any special organization.

Mr. Gouinlock seconded Mr. Gordon's motion, and expressed his entire adherence to the views of that gentleman.

Mr. Arnoldi, while approving of the idea for the purpose of in-

terviewing and watching the members of the Legislature in connection with the effort to secure the desired change, was doubtful of the success of the other features of the proposal.

Mr. Gregg expressed his entire willingness to accept Mr. Gordon's amendment. The only objection that had been made to his proposal, however, was that the branches might be started and then die. He did not think there was any harm in starting them if they were only effective in the one thing of working for the required legislation.

Mr. Gordon described what in another organization with which he was connected are called District Conferences, in which members from the central body at stated times visit certain points in the province, and co-operate with local members in holding meetings. Perhaps some such plan might be made to work well in connection with this Association, that one or two members of the governing body should meet with local men in that way, and a deputation wait upon the members of the Legis-lature. He threw out this suggestion merely to show what was

done in other organizations.

Mr. Wickson was of opinion that the matter might safely be left in the hands of the Council.

The President thought Mr. Gregg's idea was a good one, as was also that just suggested by Mr. Gordon. He thought the organization of the proposed chapters should be proceeded with if at all workable. If the country could be divided up as proposed, and arrangements made that some person in each district should attend to the matter of seeing the members of the Legislature, attend to the matter of seeing the members of the Legislature, the Association could pay the actual expenses incurred in doing so. For instance, if Mr. Arnoldi, at Ottawa, could arrange to see several of the members for constituencies in that district, let his expenses in doing so be paid. The same might be done by Mr. Power in Kingston, and by others in various places. He thought, however, it would be better to leave the matter to the Council. A great many members of the Council were present, and would through the medium of the present debate be fully aware of the wishes of the Association in regard to it.

Mr. Gordon's amendment was then put to the meeting, and carried.

CHANGE OF TIME OF HOLDING CONVENTION.

Mr. Arnoldi said he experienced a great deal of inconvenience in attending the Convention at the time at which it was now held, and thought that others must be similarly inconvenienced. He, therefore, moved that the by-laws of the Association be changed, so as to admit of the Convention being held at some time in the month of December.

Mr. Townsend said he thought a notice of motion would be

necessary.

Mr. Belcher seconded the motion, though personally he found

no difficulty in attending in February, but he thought the general convenience might be better served by the change.

Mr. Darling thought it would be convenient to hold the Convention just before Christmas; many people during the holiday time were in the habit of visiting Toronto, and that arrangement would enable them to kill two birds with one stone.

Mr. Power preferred some time in January. Members had not always their old work finished in December, and he thought the latter part of January, before new work began coming in, was

a more convenient time.

The Registrar, as a point in favor of January, said by that time the books would be closed, which would not be the case in December, unless the beginning of the financial year was changed.

Mr. Henry expressed himself in favor of the change to De-cember, and moved that the Council be requested to consider the desirability of making the alteration. Mr. Townsend agreed with Mr. Henry that the matter had better be left to the Council.

Mr. Darling thought the Council was being loaded up alto-gether too much; surely some business at least might be done in the Convention. If a change was to be made he believed in doing it now.

Mr. Burke spoke in favor of January; he thought about the middle of that month would be an opportune time. He noticed, too, that the examinations came on at a very awkward time : perhaps a change could also be made in regard to them.

perhaps a change could also be made in regard to them.

The President said he thought objections to coming to the Conventions would be raised by some members, no matter at what time it was held; they were always busy when the Convention took place. As the financial year ended on the 1st of January, it would be better to have the Convention as soon after that as was reasonable and convenient. At that time members generally had their previous year's business wound up, and had not yet got into the spring work. An objection to December would be found in the fact that although at the present meeting little had been done in the way of reading papers, one of the objects of the Conventions was to secure the preparation and reading of papers of interest, and members could hardly be asked to prepare them for December. A certain amount of preparation had also to be made by the Council, which would make December inconvenient. He thought from the 7th to the 15th of January would be a convenient time.

isth of January would be a convenient time.

Mr. Power moved in amendment, that the Convention be held on the third Tuesday in January, but at the suggestion of another member changed it to the second Tuesday in January.

Mr. Aylesworth seconded the motion.

After some further discussion, the President suggested the first Tuesday in January after the 10th, and Mr. Power consenting to that change in his motion, it was put to the meeting, and carried.

VOTING BY LETTER BALLOT.

Mr. Arnoldi said that even after every provision had been made for the convenience of members attending the Convention there was still a number who really were unable to come, and in order to sustain their interest in the affairs of the Association, he thought they should not be debarred from voing; he would therefore move that the by-kaws of the Association be so amended as to admit of such members voting for members of the Council by letter ballot.

Council by letter ballot.

Mr. Edwards had great pleasure in seconding the motion, he was really very much pleased with the motion, for, as things are at present, the nomination really carried with it the election of the nominees. Somebody knew how the thing was, but the candidates themselves did not know, nor did the Association. He therefore thought that voting by letter ballot would be a step in the right direction, as it would extend the franchise to those when were magazidably absent from the convention. He heartwho were unavoidably absent from the convention. He heart-

ily endorsed the proposal.

Mr. Gouinlock differed from the mover and seconder of the motion. He regarded the opportunity of voting as an incentive to the members to attend the Convention, and, as it was difficult enough, even with the existing inducements, to get them to attend, he was opposed to doing anything like placing a premium

on absence from the meeting.

Mr. Burke thought the attendance of members at the convention afforded an index as to how the Association ought to vote for members of the Council; the men who were to be found attending the meeting were those who ought to be in the Council.

Mr. Power foresaw that there would be a difficulty in connection.

Mr. Power foresaw that there would be a difficulty in connection with the letter ballot which was now experienced in reference to the nomination papers sent out; that is, there would be voting for persons who lacked the necessary qualifications, and who were ineligible. Of course such names would be struck off by the Council, but it might engender ill feeling.

The President did not think that would be found an insuper-

able difficulty.

Mr. Kay had no faith whatever in the letter ballot. Odd Fellows, to which he belonged, that method had been tried, and on two successive years had resulted in an abortive election. He saw by the newspapers, that the same trouble had been experienced by the Medical Association, and the Druggists also had the same trouble.

Mr. Belcher said that the Society of Engineers sent to each member a list, such as the members present now had, and they just marked with a pen through each name other than those they voted for, and returned the paper to the Secretary, and on that the members of the Council were elected.

Mr. Darling enquired how many of the people to whom nomination papers had been sent had filled them up and returned them; he thought that would be some guide.

Mr. Arnoldi did not think that would furnish any guide.

He

Mr. Arnoldi did not think that would lurinish any guide. Hence that in Ottawa a good deal of interest was taken in this matter of election of members to the Council, the members there consulting with each other in regard to it. As to members not showing enough interest to come to the Convention, in the case of Ottawa there were sixteen members residing there, of whom he was the only one on the committee. Now it was not that these men had no interest in the Association—they had a great interest. With public to the nature of their during -but, owing to the nature of their duties, they really

interest—but, owing to the nature of their duties, they really could not get away.

The Registrar, answering Mr. Darling's question, said that out of 105 nomination papers sent out, 27 had been returned. The President said that what had just been stated by Mr. Arnoldi was in itself a possible ground of objection to the letter ballot. If the members in Ottawa united on a candidate, and determined to elect him, and there was no such combination in other places, the cundidate so supported would be sure of election. Of course, if there was no such arrangement and concentration. Of course, if there was no such arrangement and concention. Of course, it there was no such a rangement and concern tration of the vote, and each member voted as the expression of his individual opinion, that trouble would not exist, but there was that possibility. Sixteen votes concentrated in that manner would have a very decisive effect on the election. Of course, what he had said regarding Ottawa might apply to Hamilton, London, or any other place, where there were a number of members.

Mr. Townsend thought the meeting together of the members in the annual convention was a matter of great importance, and the introduction of the system of letter ballot would have the effect of reducing the number of those attending the Conventions. He instanced, in support of his contention, that yester-day there were not nearly so many members in attendance as to-day, the reason being that the election brought out the mem-bers. He would regard the adoption of the letter ballot as a

very great mistake.

very great mistake.

The President said that there was no doubt a degree of hardship to the Ottawa members, in the fact that they were practically shut out from the Convention. He would now put the motion: "That the by-laws of the Association be so amended as to enable members to vote for members of the Council by letter ballot." Losf.

ELECTION OF PRESIDENT.

Mr. Darling said that if the growth of the Association continued, and it attained the position which was looked forward to, tinued, and it attained the position willich was looked forward to, it would be an honor anyone might cover to be its President, and he felt that it would be very much better that the President should be elected by the open vote of the Association, and not merely by a vote of the Council, as was now the case. He therefore desired to offer a motion to that effect.

Mr. Edwards asked if it was the intention to have an open

vote?

Mr. Darling said that was not the intention, but that the election of the President should be decided by the vote of the Asso-

tion of the President should be decided by the vote of the Association at large, not merely by the Council.

Mr. Gordon wished to second the motion; like Mr. Darling he thought it far better that this should be a matter in which the Association at large would take an interest, and that the man placed in the position of President should be chosen by them as the one they thought best suited to fill the office.

Mr. Darling said the proposition might necessitate some change in the constitution, because the President was the one who had it sinc beckes etc. and if the President secret lived

change in the constitution, because the President was the one who had to sign checks, etc., and if the President elected lived at a distance away, it would be a serious obstacle unless some alteration was made. His idea would be to elect the President more as an honorary thing and let the Vice-President to the work. Mr. Townsend, while admitting there was a good deal to be said in favor of Mr. Darling's proposition, called attention to the fact that the Association had not the power to make such a change without first getting the Act of Incorporation changed to allow of it.

to allow of it.

The President suggested that Mr. Darling should change his motion to a request that the Council would try to secure the change in the Act necessary to admit of voting for the President by the Association at large.

Mr. Darling thought be would make the motion as one of instruction to the Council.

Mr. Wickson questioned the wisdom of bothering the Government about any more changes to the Act.

Association suggest to the Council the mame of the person they desired to see elected as President?

They instructed the Council in regard to other matters, why not in regard to this? (Laughter.)

Mr. Darling urged as his reason for bringing the matter forward, that he thought such a mode of electing the President would carry with it greater honor. He had conceived that idea and one or two other members to whom he had spoken seemed to entertain the same view. For that purpose he made it a motion that the Council take the matter up, and endeavor to secure

the necessary change in the Act.

Mr. Belcher inquired if it would not be prejudicial to the ob-

ject in view, of getting the word "registered" withdrawn from the Act, to make too many suggestions to the Government at the present time?

Mr. Darling said if he for one moment thought that would be the case he would not press the matter. The one essential thing at present was to get rid of that word, and if that could be secured he was willing to abandon anything else.

Mr. Belcher said it had been suggested to him by Mr. Ar-

noldi, who was a more wily politician than he could claim to be, that the more changes they could suggest at the one time the better, as that would have the effect of concealing what was the real point they wanted, to which there might then be less opposition. (Laughter.)

Mr. Townsend seconded Mr. Darling's motion.

Mr. Power suggested that no action be taken until the two things could be brought forward together.

Mr. David staken and odobt if the Council found that seeking the change in regard to the mode of electing the President at all prejudiced the prospects of the other change, they would at

all prejudiced the prospects of the other change, they would at once drop it.

Mr. Kay thought there was a great deal of sentiment about this matter. The present method of electing the President was the one pursued by all Joint Stock Associations, Agricultural Associations, and almost every other incorporated body.

Mr. Pault said that in the Old Country the Mayor of a Corporation was elected by the Councilmen in just the same manner the President said that while he personally had a good deal of sympathy with the idea, it was still the fact that if a man could be elected to the Council by the Association, he should also be capable of securing election as President of the Association as a body was prepared to elect any member capable of securing election as President of the Association. If the Association as a body was prepared to elect any member on the Council, they would likely also elect him to the Presidency as well, and the Council would certainly be in a much better position to elect a President than the members as a whole. At the same time, as far as sentiment was concerned, he favored the election of the President by the Association rather than by the Council. As a pure, downright, business question it was another matter, and he did not know but what the president performance was the most straightforward arrangement. How, ent method was the most straightforward arrangement. ever, if the feeling of the Convention was in favor of the change, he did not anticipate any trouble on the part of the Gonange, who he thought were desirous of meeting the wishes of the Association. He then requested the members who were in favor of the motion, "That the Council be requested to consider this matter, with a view to having the Act changed so as to permit of the election of the President by vote of the Association," to

signify their approval of it.

Mr. Townsend said he understood Mr. Darling's motion to be that the office of President should be purely honorary, and that the work should be done by a Vice-President elected by the

Conneil?

Mr. Darling replied in the affirmative.

The President did not think that would be right; he thought the man who did the work should enjoy the honors; he did not think any man would care to do the work on any other terms. Perhaps, after all, the best plan would be, after the nine mem-bers of the Council had been elected, to have a vote of the Asso-ciation to elect a President from among them. He thought that would be practicable.

Mr. Henry thought it would be sufficient if the Association

expressed its wishes to the Council.

Mr. Burke said that there were three members retiring from the Council each year. By the plan proposed, the Council might elect one of those men President, which would give him a fourth year, and debar another man from coming in. The President pointed out that the Council would be elected

first, and when elected would bring on a vote for the Presidency.

Mr. Burke said he was referring to Mr. Darling's motion.

The President asked Mr. Darling if it would meet his idea, to let the Association elect a President from among the nine members elected to the Council?

Mr. Darling replied that it had occurred to him that it would be adding honor to the office of President if the election was by the Association. Of course the matter was one which would

have to be put in workable shape by the Council, and he was satisfied that the Council should undertake it. The motion as last amended was then carried.

A CIRCULATING LIBRARY. Mr. Arnoldi said he thought it would be pleasing to the country members if the books of the Association in the library could be sent holus bolus to Peterboro', Hamilton or other places, and retained there for a stated time, say three months, to enable the local members to enjoy the advantage of using them. He tendered a motion to that effect.

The motion having been seconded by Mr. Power:

A member inquired if it was not the fact that members residing outside of Toronto could have any of these books by simply

ing outside of Toronto could nave any or these books by simply writing to the Registrar.

The President said that was the fact; any member, no matter where he lived, by sending a card to the Registrar, could have any book in the library sent to him at once, if the book was in the library, and if not, as soon as it was returned by the member then having it out. Of books for which the demand was great, there were three or four copies in the library.

Mr. Edwards said, while the proposition seemed all right on its face, it would be necessary to send along the Librarian with the books, and to engage a room in which to keep them. The matter was now in a practicable shape, and he advised keeping

Mr. Gouinlock said the proposition suggested to him the idea

of a travelling dairy.
The motion was lost.

ADDITIONS TO THE LIBRARY.

Mr. Gordon brought forward a motion of instruction to the Library Committee, coupling with it a vote of thanks to that committee for the manner in which they had in the past served the interests of the Association. He thought it was highly desirable to make the library as complete as was consistent with the state of the funds of the Association, and he therefore asked that state of the funds of the Association, and he therefore asked that they would take into their consideration the desirability of applying a portion of the capital account to the purchase of books. (Hear, hear). It was along that line that members could be shown they were getting something for their fees. He believed that the members who had received books from the library would feel at the end of the year that they were getting a very tangible return for their money.

angiole return for their money.

Mr. Paull seconded the motion.

The President stated that it was the intention of the Council that the library should be increased, but that before taking action in that direction they wished to feel that they had behind them the support of the Association in making the necessary expenditure. He quite agreed that it was better to invest some of the capital in books rather than have it lying in the bank.

Mr. Gordon said that at all events the interest on the invest-

ment in the bank, and whatever was cleared from revenue above the necessary expenses, should be applied in this way. Mr. Burke directed attention to the fact that it would be necessary this year to draw upon capital account for legislation expenses.

The motion was carried.

REDUCTION OF FEES.

Mr. Edwards asked if anything had been done towards the reduction of fees.

The President said that matter was now before the meeting;

it was open to anyone to bring in a resolution regarding it.

Mr. Gregg moved that the fees for city members be \$12 per
annum, and for country members \$8 per annum, and that the
Council consider the advisability of making those fees permanent.

Mr. Edwards was opposed to making any distinction between city members and others.

Mr. Helliwell suggested that, instead of making any general reduction or changing the amount definitely, for the present year the Council should allow a certain discount to be fixed upon the fees

Mr. Darling thought the idea a good one, and that the discount should only be given to those who paid their fees at the first

part of the year.

Mr. Burke also thought the suggestion a very practical one.

The President thought there would be difficulty in enforcing the latter part of the proposition.

Mr. Dick asked why could not the fees for the present year be reduced as suggested in the President's address, or upon that line. Then, if any moneys were wanted for legislation, or any other special purpose, he thought members would be only too

glad to respond; he knew that as far as he was personally con-cerned he would be very happy to do so.

Mr. Baker thought the present fee was a very reasonable one.

The President said the suggestions he had made were based upon a fairly wide knowledge of the feelings of outside members, and he thought they were reasonable in every way. The proand he thought they were reasonable in every way. The pro-posed arrangement was one which would enable the Association to retain its members. He certainly thought the amount paid in fees ought to be proportionate to the benefit derived by the member. Then, at the present time men came up for the exam-inations, and did not enter as members, and he thought the As-sociation ought to be in a position to force them to become members as soon as they had passed the examination. To draughtsmen who laid passed the examination the payment of draughtsmen who had passed the examination the payment of \$5 would not be a serious thing, whereas \$15 was a considerable item. He also thought that for members working for corporations, or the Government, \$5 would be a very fair fee, so long as they did not practice professionally; those who put themselves in competition with other architects ought, of course, to pay the full fee. It would not be difficult to establish whether they were full fee. It would not be difficult to establish whether they were doing that. He thought it would be a mistake to have the fees fluctuating from year to year, and it would also be lacking in dignity. If the fees at present were too high, he was in favor of dealing with the matter in such a way as to satisfy the members. If there was any discontent, let them state their views. As a matter of fact, he thought there was very little dissatisfaction, when it came to the point, for nearly all the members who had signed the petition had paid their fees. He knew there were some who considered their fees too high, some in the city of Ottawa, and he felt that their complaint was not without reason, because they were in the employ of the Government, and paid because they were in the employ of the Government, and paid their fee of \$10 to the Association without receiving any direct benefit in return for it.

The President then read again that portion of his address in which the fees were referred to, and continuing, said he had made the suggestions after consideration of information he had received from various sources, and he thought while the proposed reduction was a reasonable one it would not so seriously diminish the revenue of the Association as to cripple it. He thought it might at all events be made to work for four or five years, and then, if it was found desirable, the higher fee could be reverted to.

Mr. Kenny seconded Mr. Gregg's motion.
Mr. Arnoldi moved that instead of reducing the subscription. e Council be recommended to make a rebate to each of the different classes mentioned by the President, on their making application for the same.

The Registrar seconded the motion.

Mr. Arnoldi said by that method, if a man was a civil servant, and only wanted to pay the smaller fee, he could secure the rebate by asking for it.

Mr. Gouinlock was unable to see why civil servants should get

any reduction.

The President said that any such reduction to members of the civil service would be on the express understanding that they were not to practice outside of their departmental work. If they were known to take even one job, they should pay the higher fee. Another point which occurred to him was, that young men starting in the city of Toronto would find an assessment of \$15 would come rather beavy on them, and he thought in such cases, if they desired it, the fee should be only \$10.

The President then said he would submit Mr. Gregg's motion in amendment as opposed to the other ideas, and then, if that was lost, a decision could be made between the other two.

Mr. Gregg's amendment was then submitted to a vote, and was lost.

The President then said the vote would now be between a straight fee and Mr. Amoldi's motion,

Mr. Gordon corrected the President, and said that his resolution was, that the Council be recommended to grade the fees in general accordance with the suggestions contained in the Presi-dent's address, not necessarily binding them on that line.

The Registrar suggested the amalgamation of Mr. Gordon's motion and Mr. Arnoldi's amendment.

Mr. Gordon said, there was nothing in Mr. Arnoldi's motion

which conflicted with his.

Mr. Burke did not think the Council should be hampered with anything of this kind. There had been a very general expression of opinion, and he thought the matter should now be simply referred to the Council to thresh out and decide what was

Mr. Arnoldi thought it would be well, there having been so

much talk, to have a motion carried.

Mr. Burke pointed out that there would be difficulty in the

grading.

The President thought these matters would straighten themselves out; it would not do to object to a straight principle be-cause there might be difficulty in carrying it out. He thought the best way now would be to take a vote of those generally in favor of Mr. Gordon's motion.

The vote being taken, it was shown that the meeting was generally in favor of the motion of Mr. Gordon.

Mr. Gordon brought forward a motion in favor of holding future Conventions at some place down town, which would be more convenient than the School of Practical Science.

Mr. Darling, on the score of convenience, favored the proposal to hold the convention down town, at the same time expressing his sense of the obligation the Association was under to the Government for having placed at their disposal the room in which the present meeting was held. He thought, however, if the meetings were held down town, members would be able to attend them, and at the same time give some little attention to the business of their offices.

the business of their offices.

The Registrar thought that would be a decided disadvantage, for members would then be trying to attend to things which might very well be left to another day; he thought it was better they should prepare to devote the whole day to the business of the Convention. Further, it was not well to lose sight of the advantages accruing to the Association from being in this manner affiliated with the School of Practical Science, which was the basis of their education, and the practical advantages afforded by the use of the magic lattern, which in the able hands of Mr. Wright was of such service in illustrating papers. With it he very smallest drawing could be reproduced on a very large scale on the screen, to say nothing of the many beautiful architectural illustrations, some of which Mr. Wright had kindly exhibited during the present meeting.

hibited during the present meeting.

Mr. Burke also deprecated the idea of removing the Convention from the School of Practical Science, on account of the intimate relations existing between it and the Association, and in view of the future objects of the Association.

No action was taken in regard to the proposal.

ELECTION OF MEMBERS OF THE COUNCIL.

The election of three members of the Council was then proceeded with. Mr. Wright, of the School of Practical Science, and Mr. Emerson, stenographer of the Convention, quested to act as scrutineers

Three ballots having been taken, the scrutineers declared that

Messrs. Darling, D. B. Dick and Edwards had been elected to

Mr. Symons then moved that the Council be recommended to elect Mr. D. B. Dick to the office of President.

Mr. Kay seconded the motion.
Mr. Townsend, while expressing himself fully in sympathy with the result of the balloting, and the recommendation it was desired to make, did not think in the present state of the Act it would be a proper course to adopt; he objected to the principle.

The President said if that was the case the motion would have to be dropped, as there was no power on the part of the

Association to pass such a motion.

Mr. Symons being desirous, on account of the delicate health of his partner in business, to relinquish the duties of auditor, it was moved by Mr. Gordon, seconded by Mr. Burke, that Messrs. Langley and Gemmell be the auditors for the coming year. Carried.

Mr. Baker inquired if it was not in order now to nominate the committee to assist the Council in the legislation which was

the committee to assist the Council in the legislation which was being sought.

Mr. Townsend asked if it had not been decided that the Council should appoint members of that committee.

The Registrar said the sense of the meeting, at the time the question was being discussed was, that the selection should be made by the Convention, but no vote was taken on the subject. The President said it was better to have a vote on the subject, which being taken, it was found that the meeting favored leaving the appointment in the hands of the Council.

leaving the appointment in the hands of the Council.

The President remarked that he felt it incumbent upon him to thank the Association for the unlimited confidence they seem-

ed to repose in the Council.

During the progress of the balloting for members of the Council, the Registrar read a paper contributed by Mr. R.C. Windeyer, which was listened to by those present with marked interest. At its close a vote of thanks, moved by Mr. Townsend, and seconded by Mr. Belcher, was accorded to Mr. Win-deyer. This paper, owing to lack of space, is held over for future publication.

On motion of Mr. Baker, seconded by Mr. Power, the thanks of the Asrociation were tendered to Hon. G. W. Ross and the Faculty of the School of Practical Science, for the use of the building, and the courtesy extended to members by Prof. Galbraith and Mr. Wright.

On motion of the Registrar, seconded by Mr. Burke, a vote

of thanks to the retiring Auditor, Mr. Symons, was carried.
On motion of Mr. Gregg, the Registrar took the chair, and a vote of thanks was then tendered to the President, amid hearty

applause.
On motion of Mr. Belcher, seconded by Mr. Arnoldi, the Convention then adjourned sine die.

A NEW DEPARTURE.

The suggestion was made in this journal that an exhibit of materials employed in building construction would form an interesting and instructive feature in connection with the annual convention of architects.

The idea was this year taken hold of by Mr. Taylor, manager the total was this year taken note of by Mr. Taylor, manager of the Toronto Radiator Manufacturing Co., who invited and received the co-operation of the following firms: The Gurney Foundry Co., James Morrison, Rice Lewis & Son, Warden King & Son, the Steel Clad Bath & Metal Co., and the Canadian General Electric Co.

The architects were given an invitation to make an inspection of the establishments of the firms mentioned on the day following the close of the convention, which invitation was largely ac-

cepted.

Entering sleighs at half-past nine in the morning, they were manufactory of the Gurney Entering sieigns at nail-past nine in the morning, they were conveyed first to the extensive manufactory of the Gurney Foundry Co., on King street west, through which they were personally conducted by Mr. Edward Gurney and Mr. Carrick, the manager. They were shown the various styles of hot water water boilers, radiators, etc., manufactured by the company and had explained to then as far as the time at their disposal would allow the details of construction.

The next stopping point was the factory of the Toronto Radiator Míg. Co., on Dufferin street, where with a few words of welcome they were received by Mr. Taylor, the manager, who explained that the establishment was the most extensive in America manufacturing only radiators. Beginning with the show room where finished radiators in variety of design and adapted for almost every conceivable position were exhibited, the visitors were guided through the various departments and shown the methods employed in their manufacture. In many respects these were similar to those already witnessed, but in a few important particulars, as for example the method of jointing the sections of radiators, they differed.

It was a matter of observation in both establishments that It was a matter of observation in both establishments that the utmost thought and attention are given to perfecting the article manufactured, while at the same time by means of labor saving machinery and devices reducing to the lowest possible point the cost of production.

At Messrs. Rice Lewis & Sons' extensive hardware establishment on King street east the company next alighted, and were shown the newest things in this important department of interior finish. Amongst these were locks of the finest quality and

mechanism, door finishings of aluminum, and bronze goods with sand-blast finish and having pleasing variation in col which the visitors were assured would never tarnish. These goods are excellent in design and are adapted to the principal architectural styles.

Fifteen minutes after leaving this interesting establishment, the company found themselves not less interestingly employed in discussing amid artistic surroundings, the merits of one of Webb's choicest menus. The proceedings were presided over by Mr. Taylor, having on his left Mr. Gurney, and on his right Mr. Curry.

right Mr. Curry.

Due appreciation having been shown to "material" things, brief speeches were made by the chairman, and by Messrs. Gurney, Lee (of Rice Lewis & Son.) James Morrison, Gregg, of Warden King & Son, Booth, of the Steel Clad Bath & Metal Co., Andrews, of the General Electric Co., and Cassidey, Secretary of the Canadian Manufacturers' Association.

On behalf of the Ontario Association of Architects, Messrs. Curry and Burke expressed appreciation of the hospitality of the manufacturers and of the opportunity of acquiring information which had been afforded to the members. Mr. Curry took occasion also to thank the Manufacturers' Association for the occasion also to mank the Manufacturers Association for the assistance which they had given at Ottawa to the deputation of architects which some months ago waited on the Government to urge that a proper duty be imposed upon the plans of foreign architects. He hoped that in any future efforts which the architects might make in this direction they would have the support of the manufacturers.

It was pointed out by some of the manufacturers present that American and not Canadian materials had usually been employed in buildings erected in Canada by American architects, and that in consequence the manufacturers were directly interested with the architects in endeavoring to have the present condition

of things remedied.

Mr. Gurney was of the opinion that the remedy would only be found in the passing of a contract law similar to the alien labor law existing in the United States. The architects were assured of the support of the manufacturers in their endeavors to secure the enforcement of a more equitable tax on foreign plans.

After a couple of hours had been pleasantly and profitably

spent the round of inspection was resumed.

In the establishment of the Steel Clad Bath Co., on Queen street east, was found a young, rapidly developing and prosper-ous industry, vigorously managed and equipped with every facility for achieving the maximum of efficiency at the minimum of cost. The enterprise of the company extends also to the other side of the line, another factory being located in Detroit, from which the American market is supplied.

Considerable time was spent to advantage in going through the various departments of Mr. James Morrison's brass manu-facturing concern, on Adelaide street west, it being one of the

largest of its kind on the continent.

The show rooms of Messrs. Warden King & Son, of Montreal, manufacturers of the well known "Daisy" hot water boiler, are situated on the opposite side of the street, and here a pleasant half hour was spent. This agency is in charge of Mr. Fairbairn.
A visit was likewise made to the offices and show rooms of

the General Electric Co., at 95 Front street west, where a hand-some exhibit of electric fixtures was shown.

The manufacturers having engaged a section of the theatre for the benefit of the visitors, quite a number witnessed the Duff Opera Company's performance of "The Basoche."

This closed a day of unusual interest, and so agreeable and profitable did the occasion prove to all who participated,

that we are assured the first attempt in this direction is likely to be repeated at regular intervals in the future.

PERSONAL.

Mr. D. B. Dick, Treasurer of the O. A. A., is at present in I urope.

Mr. J. A. Pearson, of the firm of Darling, Sproatt & Pearson, architects. Toronto, is in St. Johns, Nfid., where the firm have secured considerable

Messrs. Edmund Burke and W. R. Strickland have been appointed representatives of the Toronto Architectural Guild on the Toronto Technical School Board.

Robt. J. McCallum, architect, son of Robert McCallum, engineer of the Public Works Department of Ontario, died at his father's residence, Toronto, on the 12th inst.

The dead black finish which so often is used for east iron backs and jambs for freplaces, as well as for the ornamental iron work sold by the grate manufacturers, is not only always much admired, but it is quite durable as well. Painters are frequently asked to finish old iron work, that is to be repaired, in the same way, but they almost always look upon it as some secret process, the knowledge of which seems to be confined to the beater men. The process is really neither difficult nor secret, but is simply not a paint at all. The iron is first of all heated to redness and then plunged into a bath of linseed oil. Some of the oil appears to unite with the iron on the surface in some way, to form a chemical compound, similar in a measure to the black oxide produced by the Bower-Barff process-Another portion seems to be actually baked upon the surface of the iron, forming a sort of coating, which might perhaps be compared to the glaze which is baked upon porceluin.—Painting and Decoration.

USEFUL HINTS.

One square foot of glass will lose as much heat as six square feet of 12 in. brick wall. If closely fitted double sashes are used, 75 per cent. less heat will be lost than with the single sash.

Copperas will remove odors from drain pipes. Put one pound of the crystals in a quart bottle and fill up with cold water. Cork tightly and label. Write "Poison" on the label, Pour a little of this into the pipes whenever there is any odor.

A petrifying process consists of immersing for several days, any object of wood, in a bath, the ingredients of which are rock salt alum, white vinegar, chalk and pebbles pulverized, in equal parts.

A cement invented by Prof. Alexander Winchell, the noted geologist, which adheres perfectly to glazed surfaces, and is excellent for mending broken minerals or fossils is made as follows: Pulverize two ounces of gum ambic and dissolve it in a quantity of water a laundress would use for the same bulk of starch. Dissolve half an ounce of fine starch and half an ounce of white sugar in the gum solution; cook the mixture in a vessel set in boiling water till it becomes clear. A little gum camphor, oil of cloves or sassafras, will keep it sweet. A little aluminum adds to the effectiveness and helps preserve the coment.

For the protection of chimney stacks against lightning, a wire rope or cable, weighing four pounds per yard, is said by a contemporary to be the most efficient conductor. There is no necessity for the expense of insulators which, it is asserted, are useless on lightning conductors, and the cable may be fastened direct to the chimney by staples or small eyebolts. Connection should be made with a cast-iron plate at the top of the chimney, and a good plan is to tap in one eyebolt and then solder the cable to the eyebolt. If desired, a second cable may be attached and the two connected by iron rods

Messrs. Taylor Bros., of Toronto, are import-

ing machinery from Europe for the purpose of manufacturing paving brick. A company is also

being formed to establish works for the same

The Toronto Steel Clad Bath and Metal Co. lately received a request from Italy for a copy

of their memorandum book, accompanied by the

statement that the writer had seen mention of the book in the CANADIAN ARCHITECT AND BUILD-ER. Advertisers will please note this evidence of

Architectural Student Wanted. Youth who has fair education, desirous of

t he cosmopolitan character of our circulation.

purpose at Toronto Junction.

WE

know many people who think it wise to buy an article because it is cheap. That is poor policy. We is poor policy.

SELL

the highest grade of mortar known in the trade, and anyone who has used Adamant will back up this statement. Use Adamant and get full value for

MONEY.

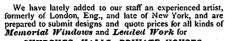
ADAMANT MFG. CO. OF AMERICA.

100 ESPLANADE EAST.

- TORONTO. Telephone 2180.

becoming an architect, and willing to do his ut-most to make himself useful to his employer and qualify himself for future practice of the profes-sion. Address, with full particulars, Box 100. CANADIAN ARCHITECT AND BULLDER.





CHURCHES, HALLS, PRIVATE HOUSES,

&c., &c., &c.,

Also Wheel Cut, Sand Blast and Embosed Glass, Bevelled and Silvered Plate.

A. RAMSAY & SON MONTREAL

GLASS PAINTERS AND STAINERS.

Manufacturers of White Leads, Colors, Varnishes, &c.

placed sufficiently close to form steps, which make a good ladder. If copper is not used, soft Swedish iron is better than steel,

Kitchen salt mixed with whitewash-the result in the first instance of an accident-has been found to render the whitewash hard as varnish or cement. This was due, says T. Koller, a German scientist, to the hygroscophic action of the salt, which absorbs water and permits of the speedy combination of the lime with the carbonic neid of the atmosphere. A trial of this composition upon a brick wall of a well-hole or shaft for light-in which case it was applied with a syringe to save scaffolding-stcod extremely well, and after the lapse of four years the coating was as good as ever. The use of three parts of quicklime to one of common salt is recommended.

KALSOMINING IN WINTER .- About this time in the year, kalsomining, or wall coloring in distemper, is best done when the walls are not too cold or too hot. It may be done any time during the winter, so that the walls do not freeze. There are a good many preparations put up for this purpose and called by various names. However, if you are where you cannot procure this, it may be prepared in the following manner, says The Plumber and Decorator: White to 10 lbs, best whiting use 14 lbs. white glue, 4 lb. ground alum and a little ultramarine blue. Put the glue in cold water, set it on the fire and stir until dissolved. Put & gal, of hot water over the whiting, and when dissolved add the glue, the blue and the alum, which must be dissolved in hot water. Stir this mixture well and run through a sieve, For first coating this may be used while hot, but the other coats must be cold. If your color works too stiff, a little soap will help. All colors and shades are made by adding the dry colors. Before kalsomining, the cracks and nail holes should be filled with plaster of Paris. Mix this with paste and it will not dry so quickly. If you have a good brush and work as quickly as possible to avoid laps, you will have a good job of kalsomining. A nice stencil border run around the top of the wall makes a nice finish.

Works: ST. HELENS, ENGLAND.

POLISHED PLATE

Rolled and Rough Cast Plate,



FANCY CATHEDRAL

ENAMELLED, GROUND

and all kinds of ornamental WINDOW GLASS

Depot: BUSBY STREET, MONTREAL.

Don Valley Pressed Brick Works



TAYLOR BROTHERS.

TORONTO.

SPECIALTIES FOR 1892: RED, TROJAN, CARTHAGINIAN, ROMAN, POMPEHAN, OBSIDIAN, AND FANCY COLORS.

Our goods are now acknowledged by the leading Canadian and United States Architects to be the highest grade manufactured in America to-day.

OFFICE AND SHOWROOMS:



J. H. NEW, Vice-Pres.

THE HAMILTON AND TORONTO **SEWER PI**



WATER PIPE

CULVERT PIPE

FLUE LININGS

CHIMNEY TOPS

HENRY NEW, Pres.

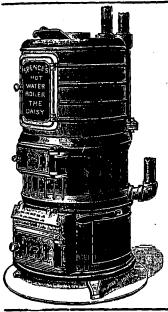
SMOKE PREVENTIVES

INVERTS, &c.

Write Head Office for Discounts:

HAMILTON.

ONTARIO.



SPENCE

ATER HEATER

Still acknowledged to be the best in the market.

Imitation is the best proof of excellence.

Be not deceived,

the "Daisy" is no experiment; it has been thoroughly tested during the past six years. There are thousands in use and all giving satisfaction. There is no other in the market with the same record.

Its Construction

is unexcelled, its circulation perfect. The only boiler that can be repaired without disturbing the piping. It does the best work in any position. Heats on its own level.

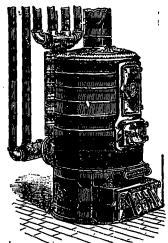
Send for descriptive pamphlet and cold weather references.

Warden King & Son.

Toronto - Winnipeg

MONTREAL.

OXFORD HOT WATER HEATER



LATESTANDBEST

EGON OMY

DURABILITY

and EFFIGIENCY

WE CHALLENGE THE WORLD.

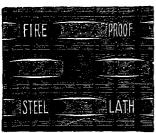
Examine the **Oxford** before deciding or placing your order for any other, as it combines all the best features of modern construction. Very large ash pan; the most perfect combustion chamber; quick and positive circulation. Sold by the leading fitters throughout the Dominion.

MANUFACTURED BY

THE GURNEY FOUNDRY CO., LTD. Montreal, Gurney-Massey Co.

Toronto.

BOSTWICK PATENT.



A Great Saving of Material and Labor.

Recommended by Architects and extensively used by Builders.

HAVING purchased the Canadian Patents from the Bostwick Metal Lath Co., of New York, and having the latest improved machinery, we are in a position to supply orders promptly, and solicit a trial order.

Illustrated pamphlet and sample free.

BOSTWICK METAL LATH CO. 118 St. Peter St., Montreal.

Architectural Books

We handle a large list, treating on Architectural Designing, Planning, Drawing, Details, Construction, Drainage and Ventilation etc., etc.

Drawing Paper,

Drawing Instruments,

Tracing Linen,

Tracing Paper, etc.

The Best Quality at Reasonable Prices.

We are

CANADIAN HEADQUARTERS

for the above, and will make . . . special discount to our subscribers.

WRITE FOR CATALOGUE.

The Canadian Architect and Builder,

C. H. MORTIMER, Publisher.

CONFEDERATION LIFE BUILDING, TORONTO.

MONTREAL OFFICE: 64 TEMPLE BUILDING.

ALEXANDER BREMNER,

Scotch Drain Pipes and Connections

FIRE BRICK.

FIRE CLAY.

FLUE COVERS,
CHIMNEY TOPS

VENT LININGS.



ENAMELLED SINKS,

CALCINED PLASTER, WHEEL-BARROWS,

GARDEN VASES.

COAL OIL, &c.

PORTLAND, ROMAN AND CANADA CEMENTS.
Telephone 359, 50 Bloury Street, MONTREAL, P. Q.

Architectural Sculptors and Carvers.

W. STIVENS HICKS.

Architectural Sculptor and Modeller, 13 RICHMOND ST. EAST, TORONTO. All kinds of Stone and Wood Carving.

FREDERICK TURNER,

—) Architectural (—

STONE CARVER AND MODELLER.
WOOD CARVER.

to Rebecca St. (near James), HAMILTON.

HOBBS HARDWARE CO.

LONDON

HEADQUARTERS

Building Paper,

Roofing Felt,

Coal Tar Pitch,

Coal Tar, etc.

Painting

If you are about to have your house painted, whether it is new or old, and would like to have the services of an expert in advising you as to the color that will look best, write to us and we will send you

Free of Charge

A color combination that is most snitable. Send us a photograph or sketch of the house if possible.

ADDRESS

Editor, Painting and Decorating,

Master Builders' Exchange, Philadelphia, Pa.
PAINTING AND DECORATING is a high class monthly
magnaine containing information as to the latest styles
of decorating, a colored plate and many practical hints
of value alike to the house owner and practical man.
\$1.00 a year. 10 cents a single number.

\$2,000 BRICK HOUSES

8 complete sets of plans, elevations and specifications published in one special Nov. and Dec. double number sent postpaid for 60 cents or

FREE TO NEW SUBSCRIBERS FOR 1893.

Subscription price, per year, \$2.50.

THE BRICKBUILDER,

Box 3282, BOSTON, MASS.

LEGAL DECISIONS.

V. ROY ET AL. VS. G. W. PARENT.-In this action, which came up for hearing recently in one of the Superior Courts in Montreal, the plaintiffs claimed \$220 for services as architects, viz., \$120 for preparing the plan of a house which the defendant proposed to erect, at a cost of \$6,000, but which was not built; and \$100 for plan, furnishing quantities, and partial supervision of a cottage built by the defendant at Montreal South. The defendant pleaded, as to the first item, that the plan was not furnished, but was only a copy taken from an architectural publication furnished by the defendant. As to the second item, the defendant pleaded that the plaintiffs were only entitled to \$66 for the plan, and that they had never given the quantities. The court held that the plaintiffs had sufficiently proved their demand, and that the defendant had failed to prove his plea. Judgment was therefore rendered in favor of the plaintiffs for \$220, the amount demanded by the action.

GILMOR & CASEY.

House and Sign Painters,
Telephone 149. 47 VICTORIA STREET.

RENNETT & WRIGHT,

Steam and Hot Water Heating,
Sanitary Plumbing, Gas Fixtures

72 Queen St. East - TORONTO.

Legal.

FRANK DENTON, B.C.L., ANDREW DODS
J. HERBERT DENTON, L.L.B.

DENTON, DODS & DENTON,

Barristers, Solicitors, Notaries, etc.

10% Adelaide St. East. TORONTO.

Money to loan on buildings in course of erection.

FOR EVERY BUSINESS

TAT TA

Interested in any branch of the Hardware Wrought, Cast Steel or Spun Metal Trades, he will find

"The Hardware Merchant" acts like a right bower, and keeps you posted on all business changes and items of note. Its market quotations are reliable. \$2 per year.

THE J. B. McLEAN CO., Ltd.,
10 Front Street East,
Published weekly. TORONTO, ONT

PORTLAND CEMENTS

All the best known brands at from \$1,80 per cask.

ROMAN CEMENT

KEENE'S Goarse, Superfine and Parian CEMENT.

CALCINED PLASTER

We are Agents for the best Nova Scotia

N. MCNALLY & CO.

SEWER PIPES

Standard and Scotch,

FIRE CLAY

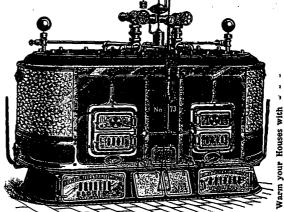
FLUE COYERS
CHIMNEY LININGS
AND TOPS

Scotch Derricks, Building Sandstones, and all kinds of Builders' and Contractors' Supplies.

The largest stock in Canada of these Goods, and at bottom prices.

MONTREAL.

W. J. BURROUGHES & CO.



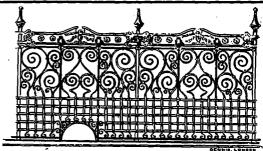
353 Queen Street West,

Send for Illustrated

Catalogue.

TORONTO.

33



Bank Railings, Tellers' Cages (with roor), Grilles, etc., in iron, steel or brass.

Our work combines artistic design, superior workmanshop, fine finish and strength in construction.

DENNIS WIRE AND IRON WORKS - LONDON, ONT.

Plaster Your Building With

ACME CEMENT PLASTER

"NATURE'S PERFECT PLASTERING MATERIAL."

Is not an artificial compound, but perfect in its natural state, requiring only calcining to prepare it for use. No acids chemicals, hair, fibre or ingredients of any kind used in its manufacture; requires only the addition of sand in its application to the wall. More simple in application, uniform, reliable, durable, stronger, cheaper and requires less labor than any plastering material ever produced. Most perfect, fire-proof plastering material on the market. 30,000 tons used in the United States in 1891 (1 ton Acme will cover same surface as 3 tons of the patent materials that are furnished to the trade mixed with sand.) Nearly 2,000 tons used on the World's Fair buildings at Chicago.

used on the World's Fair buildings at Chicago.

Does not require skilled labor. A house plastered with this material can be occupied 4 to 6 weeks sooner than if plastered with Lime Mortar. Owing to its density it makes a house warmer in winter and cooler in summer. But little more expensive than common lime mortar.

Send for samples, &c., prices delivered at any point, and further information to

B. L. NOWELL & CO., AGENTS

12 & 14 NAZARETH STREET, MONTREAL.

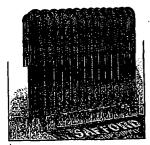
We Lead-Others Follow.

HEATING - SEASON

893

SAFFORD RADIATORS

for Steam



Most Efficient. Best Constructed.

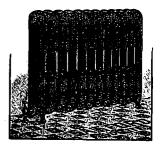


LATEST

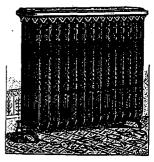
--- AND ----







All sizes and styles.



Daily output, over 4,000 square feet.



The ONLY Radiator on the

The only Radiator made with Screwed Nipple Joints.

1893



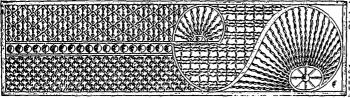


Bolts,
Packing,
Red Lead,
Smooth Thimble.

OF RADIATORS IN CANADA.

THE LARGEST MANUFACTURERS

The Toronto Radiator Mfg. Co., Ltd.



THIS Beautiful, Ornamental and Decorative Wood, Work, kr Doors, Transoms, Arches and Windows, known as Magridh Fret-Work, is manufactured

C. S. RANSOM & CO.,

CLEVELAND, OHIO, New York Office, 10 West 28th St.

The c is no limit f design into which this ork can be made. It is made cf any inestic or imported words, finished natural, aimed or in white and gold or bronzes. All anding decorating, drapery or furniture outset will supply you. Patented as an inticle of manufacture, September 18, 1885.

a great loss!

If you have any pipes or boilers uncovered, you are losing on same at the rate of 80 cents every year on each square foot of surface exposed. By having them covered with our

Mineral Wool Sectional Coveringyou will save 85% of this loss. The saving thus effected in fuel will in one year more than pay the cost of covering, which we guarantee to last as long as the pipes. Our covering is the best fuel saver on the market.

MONTREAL AGENT: GEO. A. GOWAN, Room 23, 204 St. James Street. CANADIAN MINERAL WOOL CO., Ltd.,

122 Bay Street, Toronto.

Darquetry Floor Wax and Weighted Brushes SEND FOR NEW CATALOGVE S.C. HOHNSON. RRCIME WIS.



Established 1854.

TORONTO WIRE WORKS

128 King Street West, Toronto.

(TEO. B. EADOWS

(Successor to T. G. RICE)

MANUFACTURER OF

Wire Work, Wire Cloth, Wrought Iron Work, Artistic Bank and Office Railings, Elevator

Guards, Forgings, Iron Fencing,

Grille Work, etc.

ESTIMATES GIVEN - -

Please mention the CANADIAN ARCHITERT AND BUILDER when corresponding with advertisers.

The "STAR VENTILATOR Down Draughts Prevented. Ventilatis s, Factors

on Merit only—believing the first cost secondary consideration. d for a copy of our little book entilation.

MERCHANT & CO.

FRANCIS HYDE & CO.

SCOTCH FIRE CLAY BRICK, DRAIN AND WATER PIPES, ETC.



Double Strength Fire Clay Pipes For railway culverts.

For railway culverts. Unglazed Fire Clay, Flue Lining, Sewer Bottoms or Invert Blocks, Stable Paving, Bricks and Tiles, English and Scotch andstono, Glazed and Files for internal lining of baths and wals, English Art Tiles, Floor Tiles, Sanitare, Earthern was.

Norg. - Only pure, SCOTCH, unglazed Fire Clay Linings will be kept

Bank and Office



WINDOW BLINDS AND SIGNS

Basement Window Guards.

Write for Catalogue and Price List.

MANUFACTURED BY

THE B. GREENING WIRE CO.

HAMILTON. CANADA.

SCOTCH BRAIN PIPES.

CHIMNEY TOPS. VENT LININGS. FLUE COVERS. FIRE BRICKS.

FIRE CLAY.

WHITING.

MONTREA

Importers of

PORTLAND CEMENT.

ROMAN CEMENT. CANADA CEMENT.

WATER LIME.

PLASTER OF PARIS.

BORAN.

CHINA CLAY.

MANUFACTURERS OF BESSEMER STEEL, SOFA, CHAIR AND BED SPRINGS.

A LARGE STOCK ALWAYS ON HAND