

order to make the print equally intense in every portion and is left for from fifteen to thirty minutes or longer, according to the strength of light and the intensity of the negative. In order to ascertain if the exposure is sufficient the frame may be removed to a place where the light is weak or subdued, one-half of the back opened and the paper bent back in order that the print upon its surface may be seen. If it is clear and distinct the paper may be taken out and placed in a pan of clear water, where it should be left until the whites of the print are clearly brought out. The paper being no longer sensitive may be dried wherever most convenient. The paper should soak from fifteen to thirty minutes, when it may be taken out of the pan and washed a few seconds in water. After the print is dry it may be neatly trimmed and mounted on card-board if desired. If the printing frame containing the paper is not exposed long enough the picture will very likely have a pale blue instead of the indigo hue desired. If what should be white in the picture has a blue tint it indicates overprinting or that the picture was exposed to a bright light before the paper was washed. The blue print can be conveniently written on by using a solution of common soda-thickened with gum arabic. Adding the soda to red ink will give a fluid by means of which a brilliant red line may be made on the print. From these suggestions we think our correspondent will be able to make blue prints which will serve his purpose.

**ELECTRIC MOTORS IN BUILDING OPERATIONS.**

"An ingenious application of electricity has recently been made at the hotel Cecil which," says the Builder, "as it may often save time and labor, is worth recording. In the marble staircase of this building the balusters had been placed so far apart that it was quite possible for a child to slip through between them, and so in order to make it perfectly safe it was resolved to put a brass baluster between every two marble ones. In order to do this as quickly as possible with the minimum of noise and dirt, Mr. Jacob, of Messrs. Waring & Sons suggested an electric motor with flexible shaft and twisted drill. A small iron-clad motor

was used of about 1 h.p. which could be run from the house mains at 110 volts and could be started and stopped by an ingenious switch worked by the foot of the operator. The holes in the lower side of the handrail are 1/4 inch broad by 1 inch deep; on the steps smaller holes were made. The rate at which they were drilled was 25 of the large ones and 30 or 40 of the smaller ones in a day. The mere drilling took very little time but arranging the guide for the drill had to be carefully done, as the balusters were often at different distances apart. The holes made were neat and clean, with very little fracture at the edges. It is an admirable method for rapidly drill-

ing holes in marble when electric power is available and is capable of many other applications."

**ARTIFICIAL STONE PAVEMENTS**

SIDEWALKS A SPECIALTY

CORPORATIONS Will do well to consider our work and prices before letting contracts

The Silica Baritic Stone Company of Ontario, Ltd.

WALTER MILLS, General Manager. Head office: INGERSOLL, ONT.

FOR ARTIFICIAL STONE PAVEMENTS, ROOFING GRAVEL, CONCRETE, ETC.

**USE CRUSHED QUARTZITE**

SILICA SAND & GRAVEL CO.

Telephone 2444

MONTREAL

15 Mill Street

..... Write for prices delivered in your town. .

**Drummond McCall Pipe Foundry Company,**

Canada Life Building - MONTREAL.

MANUFACTURERS OF

**CAST IRON WATER AND GAS PIPES**

WORKS: LACHINE, QUE.

PRICES ON APPLICATION.

**THE THREE RIVERS IRONWORKS CO.**

Montreal Office: IMPERIAL BUILDING.

THREE RIVERS, P. Q.

MANUFACTURERS OF

**Cast Iron Water and Gas Pipes**

of best quality, from 2 inches in diameter.

HYDRANTS, VALVES and GENERAL CASTINGS.

**ST. LAWRENCE FOUNDRY COMPANY, LTD.** Manufacturers of



Front St. East  
TORONTO, ONT.

--- BRAND "SIEMENS" ---

**CAST IRON WATER PIPES**

From 4 in. to 36 in. Diameter.  
BELL AND SPIGOT • TURNED AND BORED  
AND EVERYTHING NECESSARY FOR

**A Complete Water or Gas System**

SUPPLIED BY **The LONDONDERRY IRON CO., Ltd.**

LONDONDERRY, NOVA SCOTIA

THE MOST COMPLETE IRON WORKS IN CANADA (ESTABLISHED 1852.)

Send for Drawings and Estimates of our work.

ALL PIPES CAST VERTICALLY

- WE MAKE
- PIG IRON . . . . .
  - WATER PIPES . . . . .
  - PUDDLED BAR . . . . .
  - HYDRANTS . . . . .
  - VALVES . . . . .
  - PIPE SPECIALS . . . . .
  - HEAVY CASTINGS . . . . .
  - STRUCTURAL WORK . . . . .
  - ARCHITECTURAL WORK . . . . .
  - MACHINE WORK . . . . .
  - HYDRAULIC MACHINERY . . . . .
  - TURBINES . . . . .

**MUNICIPAL DEBENTURES** wanted for foreign clients. We can place Debentures direct with foreign clients without charge to municipalities.

: : : Commission allowed to persons introducing new business : : : :

**AEMILIUS JARVIS & CO.** (Member Toronto Stock Exchange) Stock and Bond Brokers. Investment Agents. 23 King St. West, TORONTO

ELECTRIC RAILWAY BONDS PURCHASED.

STOCK EXCHANGE ORDERS PROMPTLY EXECUTED.