

on lots 28, 29 and 30, concession II., township of Pittsburgh, would be worth investigation in this respect.

Kingston has long been known as the Limestone City, owing to the fact that a large number of its homes, as well as its public buildings, are built of this rock. It is doubtful if any better building stone is to be found in Canada than the Black River beds of Kingston and vicinity. They yield a beautiful dove-blue colored stone, of very even grain and of almost any desired thickness of bed. They are remarkably free from fossils and, therefore, yield uniform, even-grained blocks. They are easily quarried almost anywhere in the vicinity and are soft and easily shaped when freshly quarried. They soon lose their quarry-sap, however, and whiten, and harden very much after exposure, giving the building a greyish-white appearance that is clean and attractive. Kingston's public buildings, churches, city hall, court house, hospital, penitentiary, Rockwood asylum, and the splendid group of Queen's University buildings, are all built of this Black River limestone. It is doubtful if any finer group of buildings for uniformity of material is to be found in the Dominion. The freedom from fossils is the chief feature of this success. For uniformity of texture and evenness of grain the writer has seen nothing to surpass the limestone of this area as a building stone. The accompanying illustration, reproduced here by courtesy of the Ontario Bureau of Mines, is of a building constructed of Black River limestone.

#### Building Brick.

The Pleistocene deposits of the Kingston area are not well suited to the manufacture of brick. The surface deposits are Saugeen clay; thin-bedded interlamination of calcareous and ferruginous clay. The layers rich in lime burn to buff or so-called white brick; while the ferruginous layers burn to a rich red. The result is that the clays when dug are mixed up, and as perfect mixing is most difficult the product is spotted. The body of the brick is red, but buff spots of calcareous clay are scattered through it, in many cases spoiling the brick for any purpose except inside walls. If the clays can be thoroughly mixed together, the red ferruginous clay will mask the buff or white burning clay, and a good red brick will result.

#### Trap.

The Keweenawan trap dikes, of which many occur in the Kingston area, would yield the very best road metal procurable for macadam roads. Dikes on lot 18, concession IX., township of Storrington, have been quarried. As the product was mistaken for magnetic iron ore it is still on the dumps. This dike is most handily situated for mining and shipping by boat on the Rideau canal. Similar dikes occur at Washburn, also on the Rideau canal, and quite handy for water shipment. Unfortunately these dikes are of rather small dimensions, so that the supply of road metal is limited. Other larger areas of trap and basaltic rocks occur about Jones falls on the Rideau canal. These might prove of sufficient size to supply much needed road metal.

#### Lime.

The Grenville crystalline limestones have been much used as a source of lime. In the vicinity of Verona and Bedford, splendid kilns were erected and lime burned for shipment over the Canadian Pacific railway. The Ordovician limestones about Kingston would yield the highest quality of lime, but at present no kilns are being used on either class of rock except for purely

local supplies. It would be difficult, however, to find more suitable limestone or more favorable locations for shipping than are to be had in this vicinity.

#### Barite.

On lot 17, concession IV., of the township of Kingston, is a barite vein that cuts the flat-lying Ordovician limestone. At this point it is from one to four feet wide. It dips vertically and strikes northwest; it is claimed it can be picked up along this strike for a distance of fourteen miles. The limestone is dense and hard with shaly partings, and its contact with the barite is very sharp and clean; there is no transition whatever from the vein into the country rock. Moreover, along the contact is a coating of anthraxolite, and some fluorite, all of which the writer takes to indicate that this vein has not filled from the surrounding country rocks, but owes its origin to an aqueo-igneous source.

Approximately one hundred tons of barite have been mined from the east end of this vein. The mineral was ground in an old burr-stone flour mill near by and shipped as a mineral pigment for paint manufacture. Nothing has been done with this vein for over twenty years.

#### ENLARGING PLANT AT HAMILTON.

In preparation for the prosperous times which the company anticipate will prevail after the close of the war, the Standard Underground Cable Co. of Canada, Limited, is making an addition to its factory at Hamilton, Ont., which when completed and equipped with the necessary machinery, will represent an investment of \$50,000.

The new building will be devoted exclusively to the uses of the wire drawing department, and, in addition to housing the former equipment, will contain material additions of new machinery of the latest design capable of drawing wires ranging in size from No. 40 B. & S. C., which is about the thickness of a hair, to the largest size of trolley wire; also machines for grooving trolley wire and for rolling flats and squares such as are used in the manufacture of magnet wire. There will also be two new "Bright-annealing" furnaces for annealing or softening the wire after it has been drawn.

#### MINES BRANCH PUBLICATIONS.

Production of copper, gold, lead, nickel, silver and other metals in Canada during the calendar year 1915.

Production of cement, lime, clay products, stone and other structural materials in Canada during the calendar year 1915.

Preliminary report on the mineral production of Canada during 1916, by John McLeish.

#### COPPER PROPERTY OPTIONED.

The Victoria copper property near the Eustis mine, Quebec, has been optioned by C. H. Hitchcock, representing the Canadian Copper Co., of Copper Cliff, Ont. Exploration by diamond drilling is under way.

#### LA ROSE.

Work has been discontinued at the Maidens-Macdonald property in Deloro township, which was being explored by the La Rose Company.