

# Grey Medina Sandstone.

Grey Medina sandstone, which is the finest building stone at present produced from the sedimentary rocks of Ontario. While minor variations, such as greater or less development of "reed," slight difference in hardness, color and brilliancy, are to be noted, the general character of the grey Medina may be inferred from the following description. The general color of the stone is mottled grey; in places it is quite uniform, but fine horizontal lines, representing the bedding planes, may be observed in most of the stone, particularly after weathering for a short time. On treatment with carbonic acid in water, the color is not materially affected.

Under the microscope the quartz grains have an average diameter of less than one-eighth of a mm.; there is, however, a large number of very fine grains scattered between the larger ones. Considerable feldspar in a partly decomposed condition is present, as well as several other minerals in very small amount. The cement, which is largely of a calcareous character, is quite evident, but interstitial pores are not to be seen with distinctness, despite the high percentage of pore space. The physical characteristics of the stone are indicated below:

Specific Gravity .....	2.66
Weight per cubic foot, lbs. ....	146.01
Pore Space, per cent. ....	12.04
Ratio of Absorption, per cent. ....	5.16
Coefficient of Saturation .....	0.53
Permeability, c.e., per sq. inch, per hour.....	143.4
Crushing Strength, lbs., per sq. inch.....	21715.
Crushing Strength, after freezing (unsatisfactory test, probably about) .....	18000.
Loss on freezing, per cent. ....	0.072
Loss on treatment with carbonic acid, grams, per square inch .....	0.0131
Transverse Strength, lbs., per square inch.....	1614.
Chiselling Factor .....	4.02

Analysis: F. G. Wait, Mines Branch laboratory.

Cement—Calcium carbonate, with a small quantity of argillaceous matter.

Ferrous Oxide, per cent. ....	0.41
Ferrie Oxide, per cent. ....	0.14
Sulphur, per cent. ....	0.11

Buildings constructed in Medina Sandstone:

Municipal Building, Woodstock.  
Church of England, St. Catharines.  
Catholic Church, Niagara Falls.