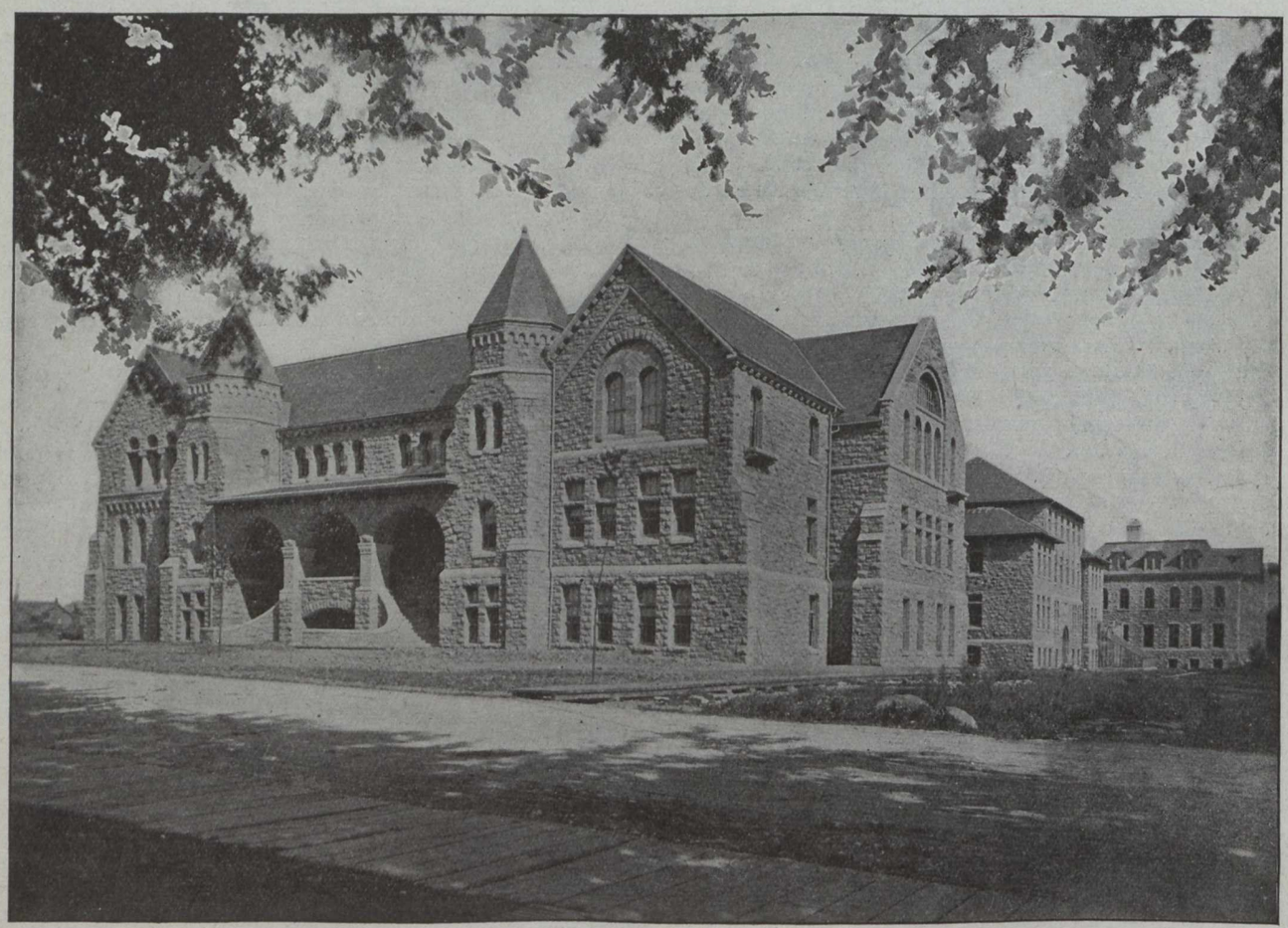
taline limestone lies in the swamp and cannot be seen, but at the southwest edge of the swamp a belt of pyroxene phosphate rock is developed, carrying mica as has just been described.

The gangue of the lead vein is coarsely crystaline calcite, which makes a very striking vein in the gneiss and crystaline limestone. It is from six to twenty feet in width, dips vertically, and shows a remarkable ribboned or banded structure with the sulphides of lead and zinc. It is evidently a typical encrustation vein.

Regarding the origin of this deposit it is evident that the opening is not the result of solution, for the vein is a distinct fissure at least one and a half miles long, and with distinct strike and dip, sharp clean-cut walls, no impregnation of the country rock by ore or gangue, and cuts at least one contact between gneiss and crystaline limestone, across their general strike. It is clearly a fracture of post-Laurentian age. Towards the southeast the vein soon meets the great Algoman batholith south of Perth Road. In other parts of southeastern Ontario north and west of this area, the Algoman has been shown to be the immediate cause of certain gold-bearing quartz bodies, and these auriferous quartz bodies often show galena as an accompanying constituent, for example, the Belmont, Deloro, Ore Chimney, Big Dipper, and other gold deposits. The Algoman granite intrusion, therefore, possibly caused the fracturing, and produced the space necessary for the orebody; while the mineralizers that accompanied the end action, or pegmatitic phase of the Algoman, could contribute the ore filling; the highly calcareous Grenville country rock would contribute the gangue of calcite.

Paving and Building Stone.

The Algoman formation around Findlay station, on the Grand Trunk railway, possesses such splendid joining that it has been quarried for building stone and the smaller blocks have been chipped to cobble-stone size and sent in car-lots to Montreal, Toronto, Ottawa and other places to be used for paving purposes. Both the granitic and syenitic phases of the Algoman have been used from this vicinity and both yield an excellent cobble stone. Larger blocks, the quality of which is excellent, have been, and are still, quarried for building purposes.



Geology and Mineralogy Building, Queen's University, Kingston, built of Black River limestone.

Building Stone.

As already mentioned, the Algoman granites and syenites around Findlay have been quarried into large blocks and shipped for building purposes. Algoman granite was also quarried at Barriefield and good red granite blocks were obtained. A solid, fresh, even-grained Algoman mass would yield good building stone in most places. Only rarely does it show any gneissic tendency, it is for the most part massive, and its remarkably good jointing makes quarrying a rather easy matter.

The Potsdam sandstones, particularly the red ferruginous sandstone, has been quarried and used for decorative stone in brick buildings, and at other times for the whole structure.

The writer suggests that the buff to white lower beds of Potsdam sandstone are so free from iron and other impurities that the refuse material from a quarry might prove very valuable as a source of glass-sand. The Potsdam exposures on the St. Lawrence waterway,