

the surface a hard stone crust, and the work while new, and in dry season, presents a fairly good appearance, but in wet weather, owing to the undrained foundation and soft stone base, under traffic, will settle, rut, and lose its crown, material will be picked up by muddy wheels, holes and depressions will be formed, and extensive and costly repairs will be necessary. There are many small places in Ontario, such as Renfrew, Smith's Falls, Perth, Cornwall, Brockville, Belleville, Peterborough, Barrie, Galt, Berlin, Owen Sound, Welland, St. Thomas and Stratford, that would afford you profitable object lessons in how this particular class of pavement should be laid, and this is true of even smaller places. In a place the size and ambition of Winnipeg, with your means and equipment, it is regrettable to find such faulty work carried on so extensively. The short life and imperfect service of these pavements, the cost of repairs and maintenance, will make them very expensive and unsatisfactory. The building of a good macadam street is a simple process, and with all the implements necessary for good work in the hands of your authorities, I can see no reasonable excuse for this treatment of those citizens, who, with so much loyalty for the City's interest, have pledged themselves to pay for the work.

A first-class quality of material for making macadam roads is not to be found in the vicinity. The limestone at the City quarry is of two grades, the upper and lower formations. The lower formation is so soft as to be useless for any part of the work. Unfortunately, this has been used largely in the work of the past few years. The Council, I understand, has passed an order prohibiting its future use, which was a commendable step. The upper formation is of a much harder and tougher quality, and when properly prepared by crushing and screening, and applying according to correct principles, will make a serviceable and cheap pavement. The crushing plant in the quarry seems to be an ideal equipment and does it work admirably, preparing the material at a very reasonable cost. A large quantity of gravel is to be found a few miles east of the City, and on some of the lightly travelled streets this material could be used to advantage in making what might be called gravel pavements. If a crusher were placed in the pit and the material passed through, breaking the stones into cubic fragments, grading them and by screens eliminating the sand and dirt, a quality of stone superior to that in the quarry would be provided. A considerable quantity of hornblendic schist has been