

Good Roads in Renfrew.

Street improvement has been energetically commenced in the town of Renfrew, in the purchase of machinery and the laying of a short section of macadam roadway. The citizens of the town are eminently satisfied with the results, and already there are applications for "more."

The Renfrew Mercury, in a lengthy article, gives a detailed account of what it describes as "the inauguration of a new era in the progress of the town, and the improvement of its appearance." After preliminary remarks regarding the machinery, the article continues as to the rock crusher:

It is a wonderful machine, with large capacity, keeping a large force at work feeding it, and the rapidity with which it cracks up all sorts and conditions of stone, and sorts it out into different grades has been a matter of delight to all who appreciate the work of strong and simple machinery. The wearing parts are two jaws, which are reversible and interchangeable. They vary in their length of life, according to the hardness of the stone and of the metal in them. Sometimes they will wear out quickly, sometimes last a record length of time; but it is understood that their average life is for about 400 cords. The limestone rock that was first run through here did not affect the jaws at all; but the black rock from the Pinnacle soon wore the serrated face off one of them. However, some plates of iron were inserted at its back to take up the wear, and it now goes cracking away apparently as well as ever. We do not think that there was ever an expenditure of nearly \$1,000 made by the Town Council which has been so little criticized; and with which the ratepayers, big and little, so generally express their satisfaction.

To conform to the plan of the streets prepared by Engineer McCubbin, to make them all fit into one another at easy grades, when permanently improved, it became necessary to make considerable of a cut in Railway street at several points. To hurry on the work, some of this excavation was commenced and was under way when Road Commissioner Campbell arrived on Tuesday morning. His practiced eye readily detected many spots in the carrying on of the work where much quicker results could be secured for the amount of labor expended. As a result of his instructions the work was hustled along; although the committee found it difficult just at this time, when the farmers want men for the harvest, to get enough first-class laborers to push the work on as rapidly as Mr. Campbell desired. However, as the days went on, the force increased, and by Saturday night some 300 coats of the roadway had on it three coats of stone, and the citizens had a chance to see something of what the finished roadway would be like. The comments generally, we believe, were favorable. In fact, Mr. Campbell expressed his pleasure at the friendly

feeling there seemed to be on the part of the onlookers throughout, towards the improvements being carried on. In many places the comments while the work is in its infancy are so critical and antagonistic that he often felt impelled to utter an emphatic request to the critics to withhold their observations until the work was finished. Here, however, from the start the bulk of the crowd seemed sympathetic with the work, and made due allowance for the difficulties that beset the committee in a first attempt, and on a "rush" job into the bargain. Mr. Campbell was not a whit more satisfied with the people than the people were with Mr. Campbell. He made a good impression when he came to speak a year or so ago. He made an even better impression when he came to work, this time. He was on the ground early and late, directing operations and informing the committee; with the result that a prominent citizen in town made the remark that there was one Government official at least who earned his pay, and that one was Mr. Campbell. When he left on Saturday evening, with the thanks of the committee, and appreciative words from many citizens, he said that he thought the committee would be able to finish the work in good shape; and that after their experience with this piece, would be able to plan out to lay the macadam even more economically.

It was designed to lay about ten inches of stone in the centre of the roadway and eight inches near the curb. This for the 668 feet from the C. P. R. track to Main street would take between 90 and 100 cords of stone. Out west, in towns where there is little stone and high prices have to be paid for railway haulage, macadam costs about sixty cents a yard. Here, where there is plenty of stone close at hand, Engineer McCubbin estimated that the work should cost less than 50c a square yard. The committee set 45c a yard before them as their mark, or about \$800 for the 668 feet of 24 feet roadway. When the bills are all in, it will be seen how nearly they have been able to keep within their estimate. There is little question that with careful planning out of the work and careful handling of the men, the work can be done for an even less figure here.

And the steam road roller!—on account of which it might be said that the work was begun. Well, when it got to its proper work and was fed with locomotive fuel it did its work very well. Mr. Campbell said as a roller it did the work as well as any could. As to the condition of the boiler and engine, engineers of experience in that department could say better than he. But if the council decided to send it back, one thing they should be clear on,—and that was not to buy a roller any heavier than it was. While a heavier roller might crush the stone down more quickly, it would not make as good or as permanent a roadbed. Frequent compacting by a lighter roller was of more benefit than the fewer rolls by the greater

weight. As to the condition of the machinery, the council received opinions from Mr. John Ward, who has been handling it on the roadway, and now has it very well under control, and from Messrs. John R. Stewart, of Wright's electric station, Geo. A. Becker, E. Woods and D. Funnell. Their general report was that the machine needed some further repairs and modern attachments at a cost of possibly \$100 to put it in first-class condition. On the basis of these reports, the council is endeavoring to complete the purchase of the roller, with an allowance for the repairs yet to be made.

About the cost. If the committee manages to get the work done for the \$800 estimate, it means that the cost per year will be between \$55 and \$60, for 20 years, about half of this being borne by the town, and half by the property owners immediately benefited.

It will be a week or ten days before the road gets into really solid shape; although already with an occasional run over by the roller it hardly shows the impress of heavily loaded wagons."

Take Care of Them.

Before it is safe to trust the people of Ontario with good roads, it would appear to be necessary to teach them how to take care of good roads. A good system of maintenance will make a good road better, and a bad system will make a good road bad. In Germany one man is employed to devote all his time to a certain section of road, perhaps three or four miles in length. His time every day, winter and summer, is given to that piece of road. He is not experienced, as engineers are classed as experienced; he is a cheap man, a day laborer, but he devotes his time to his section until he is thoroughly familiar with it; the work is superintended by engineers; there is an engineering corps in charge of the roads. The roads are as smooth as floors. You can ride from Paris to Berlin over a hard, smooth road without any stops on account of rain. Weather seems to make no difference as there is no mud. In times of bad weather, when the roads soften a little, they place timbers across portions of the road to protect the soft parts and traffic is diverted to the other parts. Then when the first part becomes dry the timbers are changed to the other.

He Favored Bad Roads.

The philosophy of a good many Canadians appears to be similar to that of the French peasant, who, presiding over the municipal council of his village, gave the assembly a lecture on the lack of necessity for any more road building.

"As for the roads which are now bad," he said, "it is of no use to repair them, for nobody travels over them, and as for those which are good, why do anything to them until they get bad?"