MUNICIPAL ENGINEERING.

THE MANAGEMENT OF TOWNSHIP ROADS.

BY JAMES C. BURNS,

Student, School of Practical Science.

THE purpose of this paper is to discuss briefly, from a practical standpoint, the management of the ordinary township roads of the Province. To do this I have selected as a typical case the roads of Blanchard Township, situated at the southern extremity of Perth County, convinced that what is here said in regard to this township will be applicable with some little variations, from local circumstances, to most of the townships of the Province. Generally speaking, this township has a rolling clay loam surface presenting few difficulties in regard to drainage. It is traversed from north to south by the River Thames, whose banks rise to a height of sixty to eighty feet on either side, giving to road makers a little experience in hill cutting and embankment. Entirely within the limits of the township is the market town of St. Marys, which, being an excellent grain market, attracts considerable heavy traffic, rendering it necessary to keep in good repair its main entrance. All the main roads of the township lead in the direction of this town. The cross lines or side roads are little used, and consequently need little attention. The main roads are those on which nearly all the expense occurs, and it is of them I will speak principally. In order to arrive at a correct opinion as to the manner in which these roads should be dealt with it is necessary to know how they have been built and brought into their present condition.

They have been built and maintained under what is known as the Statute Labour System. Under its working all the roads of the township are divided into sections, or "beats," from one to two miles in length, depending on the position of some suitable boundary. Each beat is put under the supervision of some local ratepayer with the title of pathmaster, who is appointed annually and expected to direct all the work done on his beat during his official year. Each resident ratepayer is taxed to do a certain number of days' labour on the beat, his amount of assessed property adjoining being taken as basis of apportionment. When the work thus done is found insufficient, contracts for repairing or construction are let by the councillors who act as road commissioners. All bridges and culverts

are built and repaired by contract.

Such has been the practice in this township since its early settlement, and such is the practice generally throughout the Province for the main tenance of the ordinary township roads. Although possessing some good features, this system is not the most suitable for the construction and maintenance of good roads and should give place to a better.