## OUR COUNTRY ROADS.



OW that wheeling is such a popular and convenient mode of locomotion, the rough condition of our country roads becomes the more conspicuous, and if the agitation of the wheelmen for an improvement results in improved roads, they will have the lasting thanks of the farmers and fruit-growers of Ontario.
-We are pleased to notice the interest now taken in road improvement by the Ontario Department of Agriculture which has appointed Mr. A. W. Alexander, Civil Engineer, Provincial instructor in road making. Road Bulletin No. 2 is just to hand and we have pleasure in giving our readers the folowing paragraphs and illustrations from it.


Fig. 1018,-Cross Section of Colntry Road.
Common field tile underneath open ditches. Gravel or broken-stone roadbed, eight ft. wide.

## Forming a Roadbed.

In making a road the grading and draining should be carried on during the same season, first the draining, then the grading. A road which is graded only, and then subjected to the traffic of fall and spring before draining is undertaken, is generally a shapeless mass by the ensuing summer, and a large amount of grading musí necessarily be repeated. A road should also be drained and brought to the grade which it is to retain permanently before the road metal (gravel or crushed stone) is placed on it. Metal placed on an undrained roadway is so mixed with mud in the spring and fall as to be almost wasted. The natural soil under the gravel must be sufficiently firm to sustain not only the gravel, but the weight of traffic upon the gravel. No soil will do this unless it is sufficiently drained.

The roadway must be crowned, or rounded up towards the centre, to shed the water from the surface; the surface must be kept smooth and free from tracks, and it is as much the duty of gravel or crushed stone placed on a road to form a smooth, hard surface that will permit the water to flow readily off from it, as it is to form a durable covering to resist the wear of wheels.

