centrates the labor on the making of a sound, though narrow road bed, where the wheels run. Without that, additional earth is useless, either in a rugged or dry sandy country, and even in clay soil a greater breadth of muddy surface is a poor substitute for crowning and drainage. The clearing of a greater width of road than is going to be used as such is simply wasting the money—that should be applied to making a sound, dry and even carriage way—in clearing land at the sides, to save the settlers the trouble, or to grow up again in bushes. If a road be made by merely cutting the roots and stumps close off by the surface of the ground, in the roadway—instead of thoroughly grubbing out the roots, stumps and stones from nine feet, at least, in width of the centre—the remains of the stumps will always be protruding afterwards, rendering the road bad and dangerous for rapid travelling, or should the road be subsequently re-made, they must be then grubbed out at more cost than if the trees were standing. In the same manner, if narrow causeways be made of small pieces of wood when a road is first opened, besides the risk of their being dragged into confusion by the drawing of heavy loads over them, and the impossibility of teams passing each other on them, they remain as nuisances when the road is afterwards properly made, or are thrown aside as useless, and replaced at further cost.

For these reasons, therefore, it is desirable, to avoid future loss of labor, that in opening roads, nine or ten feet of the centre should be thoroughly grubbed, and a sound road bed made of it, and the causeways and bridges be made wide enough for two vehicles to pass on them, especially on first class settlement roads leading to large areas for settlement, and likely to be much used.

Where it might be advisable to adopt an inferior description of road to that provided for in the annexed specification, to meet the requirements of economy, or for the opening of branch roads of less importance, the crowning and grading, in forming the road as mentioned in the specification, might, with the greater part of the side hill cuttings, as to width, be left to be done by the settlers, and the grubbed part of nine feet in the centre be merely solidly levelled so as to be made solidly passable for a loaded wagon. This is the least work that can be done without future loss, and it would afford a rough but passable road, with many bad spots in it, but it would be as good as the roads are, in many existing settlements. There would be labor to add, but none thrown away on it. Such work might be designated as affording a second class road.

A third class road might be opened in an inferior manner, the width of the road and causeways to be fourteen feet, at most; no grubbing done; the stumps to be cut close to the surface, and a passable track for a lightly loaded wagon made throughout.

In this case the causeways and bridges would be the only part of the work that would be of value in future making of the road, as, till the stumps and roots become completely rotten, the grubbing and grading would all have to be done as if in standing woods.

The cost of making roads of either of these descriptions depends altogether on the nature of the ground and timber where they pass, and the prices of provisions and labor in the locality. As pine trees (whose stumps are expensive to grub) are so frequent in the Ottawa country, and so very much of the land is stony, rocky and uneven, and as the great market occasioned by the lumber trade sustains the highest prices for produce and labor known in the Province, the cost of making any kind of road should be very much greater here than is usual elsewhere.

In ground of the usual ruggedness, a road of the first class mentioned, made according to the accompanying specification, would cost, as stated, $500 a mile, causeways and bridges included.

The second class described would cost $380.

The third class, or ungrubbed passage for a wagon, would cost $300 a mile.

The bridges and causeways in the two last would be nearly equal in quality to those on the first, and be serviceable when the roads were completed and enlarged to the usual width.

Having made this long digression, as it seemed to be necessary in explanation of proposed future work, I beg to revert to the north road, from the Township of Masham to the Pickanock, which intersects the end of the part of the Gatineau and Coulonge road made this season. As presenting the best site for immediate settlement on the Gatineau, it is the first in importance to be opened as a colonization road. But it will be sufficient to open it on the scale of the second class road mentioned, at a cost of about $380 a mile,