

The figures given and conclusions drawn in the preceding paragraph are representative only of one instance, and to many who have had actual experience in such work, may at first sight seem to present an impossibility. Such, however, is not the case, as they are the result of correct calculation, etc., of all labor expended in clearing said land. Circumstances will of course influence ones chances of realizing similar results. They may be represented by quality of timber, distance from a market, knowledge of the work and individual effort. Unless one has the ability, knowledge and individual effort necessary to properly take advantage of the best means at hand, he cannot hope for best results. Why is it that one man succeeds where another fails? What the settler may or may not realize on capital, time and effort expended, depends largely on his ability to best fill the position he occupies. Of course circumstances, over which a person has little or no control, may arise to handicap one, but these are exceptional. In order to succeed one must know and in order to have knowledge one must learn. This sometimes requires years of costly experience that should, if possible, be prevented. The settler should first familiarize himself with the timber situation, keeping in mind future demand and prices, then figure on the prospects of conserving or marketing his timber or whether he would be further ahead in the end to clear the land as soon as possible and get it into crop. He will have to decide which scheme will be the most lucrative over a period of years.

#### STUMPING.

The great majority of virgin forest throughout Northern Ontario consists of trees averaging from six to twelve inches in diameter and the nature of the timber will influence the time and cost necessary to clear land of stumps. There are exceptions to this where heavy hardwood timber is found, and also where areas of white and jack pine are found, but generally speaking the timber is much smaller on an average than that of "Old Ontario." Then, the different root systems of different kinds of trees influence the cost of their removal. Practically all evergreen trees have a spreading root system that spreads out through the topsoil, while nearly all deciduous or broad-leaved trees have a tap-root system that penetrates quite deeply into the sub-soil. The latter are more difficult to remove than the former. The time allowed to lapse between the cutting of green timber and removal of stumps will have a decided influence on the cost of stumping. Usually a great many small stumps are partially burned out with the first big fire, and can be pulled with one horse or removed by hand at the time the land is logged-off. Stumping machines may also be used to advantage where the stumps are small and thick and also on sandy land. It is not advisable for a settler to purchase a stumping machine until he is sure he can use it profitably and to good advantage. Stumps are naturally more easily removed after two to four years have elapsed, as this allows the roots to rot and makes pulling a great deal easier. This is an important factor in land clearing and should have a tendency to make a settler do his best to systematically cut so many acres of green timber each year, seed down the slashing to pasture, or hay land and allow the stumps to decay. By so doing there will be a certain number of acres coming on every year to be freed of stumps and put into tillable condition. The acreage slashed and made ready from year to year will of course depend on the amount of capital and labor on hand.

Stumping or blasting powder is being used to quite an extent to-day for removing stumps, and it is a very cheap and efficient means of getting rid of large stumps. Any person of average intelligence can handle this explosive without danger of serious results. Care and precaution in warming the powder, placing