

to a state of profitable production. Especially is this true in the more mountainous sections of the State.

If any attempt is made to rotate crops, and hay and small grain crops are grown, seeding and harvesting machinery cannot be used without large loss of space around the stumps. There is hardly any doubt that a reasonable expenditure of time and money in removing the stumps would pay. The saving of the patience and good disposition of the farmer is worth something.

However, the object of this bulletin is not so much to advise the removing of stumps as it is to give some exact and detailed information on the use of dynamite in blowing stumps.

Two different lots of stumps were blown by the Experiment Station in the spring of 1911. One lot consisted of 102 stumps on the soil experiment field at London, Ky. The other lot was made up of 16 scattered stumps on the Experiment Station farm at Lexington.

Before giving the detailed statement of the size and kind of stumps and the cost of blowing them, it may be well to give some directions for doing the work.

In the first place one cannot be too careful in handling the dynamite and the caps used to set it off. Yet if good judgment is used it may be handled with safety. It should be stored in a dry, well ventilated place, where the temperature will not rise above 90 degrees F. The caps should be kept in a separate place, as they are much easier set off than the dynamite. It is unnecessary to tell most persons that dynamite should be protected from heavy jars, and should not be stored where any shooting is likely to be done. Some years ago a carload of dynamite was exploded at Jellico, Tenn., by a boy firing into the car with a 22 calibre rifle.

Most dynamite freezes at a temperature between 40 degrees and 50 degrees F. Some brands do not freeze above the freezing point of water. Frozen dynamite should not be used. Directions for thawing are generally sent out with each box of dynamite. Do not attempt to thaw it until printed direc-