

tion of this report a gross injustice has been done the Grand Trunk Railway Company. It, however, is the only means whereby the public can get this information and is accepted as authentic until discredited by those compiling the figures.

"The Ontario grower is not endeavoring to raise a howl against the railroads. He realizes that some railway companies are endeavoring to keep up with increased demands on their equipment, but he also realizes that he has given too much attention to production and not enough to transportation and marketing. Improvements in packing, is one of the important matters too long neglected, but this will no doubt be greatly improved the coming season and a change made from barrel to box package. The conditions for marketing west of Winnipeg is another. It appears to the average Ontario shipper just as Mr. Johnson stated before the Agricultural Committee, and as above figures would imply viz., that the Ontario producer pays too high a rate west of Winnipeg compared with his competitors."

How to Plant an Orchard.

There are many different ways of doing most kinds of farm work, and it is not always possible to say absolutely what is the best. Often it happens that what is best for one set of conditions is not the best for another. It frequently becomes necessary, therefore, to describe a number of various practices, and sometimes in the multiplicity of methods advised there is confusion for the amateur. In this article, on orchard planting, we shall attempt to avoid confusion by describing one method only. It is, we believe, the best known, and was for that reason adopted in planting our own orchard, the plan of which appeared in "The Farmer's Advocate" of March 20th. This method obviates the necessity of staking, except for the purpose of stretching a base-line, and marking the course of the longitudinal rows of trees. First of all, square up the field to be planted. Starting, say, at a line-fence along the west side, run a base-line out at right angles to it across either end of the field, whichever may be the more convenient to work from. Running one line out at right angles to another in this way is called "erecting a perpendicular," and the practical method of doing it is as follows:

HOW TO ERECT A PERPENDICULAR.

Take a hundred-foot tape, stake one end at the point from which the perpendicular is to start, have a helper walk out with the line till he comes to the forty-foot mark, pick the other end up yourself and carry it thirty feet along the base-line to a stake previously set, and grasp it at the ninety-foot mark. The assistant, still holding the tape at the forty-foot mark, stretches it taut, and plants a stake at the angle thus made. The triangle is now 30 feet by 40 feet by 50 feet, which is according to the 6:8:10 rule. It is well to check the result by working in both directions along the original line thus constructing two triangles, the perpendiculars of which will be identical if the work has been accurately performed.

Sighting through, now, from the first stake to the stake set by the assistant, you have a perpendicular which can be extended across the field. Stretch a cord or wire along this base-line, and plant a stake for each row. Plant these stakes all on the same side of the cord or wire and close to it, bringing them thus exactly in line with each other. Upon the accuracy of this detail will depend very largely the true cross-rowing of the planted orchard.

Now go to the line-fence at the other end of the orchard and erect another perpendicular. Measure along this and set a stake for each row, corresponding to the stakes on the base-line. This second row of stakes need not be so precisely in line, but must be correctly spaced, — forty feet, thirty-five feet or whatever distance apart the rows are to be. The object of erecting a perpendicular across this end too, is to make sure that measurements for the stakes are made at right angles from the line fence. If one followed a head-land fence which happened to run a little on the bias, he would have his rows of trees a few inches closer together at this end than at the other, thus throwing the whole orchard out of square. The orchard is now staked and ready for planting.

A MARKED WIRE TO LINE THE TREES BY.

To keep the trees in line and get them spaced the proper distance apart in the rows, a marked twisted-wire cable is used. This cable can be purchased at a reasonable price. This particular kind of wire is called for because it is soft, does not coil readily, does not stretch perceptibly, and with a very little care, can easily be kept from kinking. Also the strands may be separated with a sharp awl, so as to insert a small bit of fine wire every so many feet to mark where each tree is to be planted in the row. This was the plan we followed, though

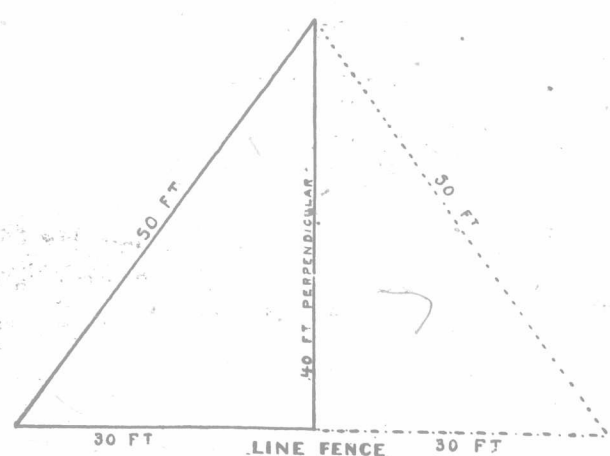
we believe the orchardist from whom we learned of the method has found hot solder marks an improvement. These may be broken off when desired.

HOW TO USE THE WIRE CABLE.

Attach one end of the cable securely to a stout stake, drive the stake at the base-line where the smaller stake has been set marking the first row of trees, stretch the cable to another stout stake at the other end of the orchard, tightening it with a double pulley or a wire stretcher. Now mark the wire in one of the ways indicated above, or in any better manner that the planter's ingenuity may devise.

SETTING THE TREES.

You are now ready for planting. Set every tree on the side of the wire towards the line-fence, so that the latter may be shifted without hindrance to the next row. If the stake at the



To Erect a Perpendicular.

base-line is carefully driven each time, the wire kept free from kinks and always about equally stretched and the trees are placed with care, the result is bound to be a perfectly-rowed orchard. Our own, though planted by a number of men, some of them very ordinary day laborers, is nicely lined, lengthwise, crosswise and diagonally. The method is simple, speedy and independent of wind at planting time, as there are no tall stakes to keep erect. It is better adapted to square planting than to other systems, but could be adapted to others by having two or more base-lines to work from, or by having two distinct sets of marks on the wire. The base-line, by the way, should be a good half space from the first cross row of trees.

CARE OF THE TREES.

As for the trees, we presume that they have been ordered in good season, and when received have been heeled in by digging a trench, laying the trees in an inclined position with roots in the trench, (each variety by itself) and covering roots well with earth. When ready to plant have a rough chart prepared on a card-board, showing the number, kind and position of trees in each row. A small or large gang may work to advantage. Three can do nicely, one to hold the tree and two to fill in the dirt, which should be carefully filled in around and among the roots, a certain amount of surface mold being first selected for this purpose. The holes may have been dug a few rows in advance, their position being approximately gauged by sighting, after the first two or three rows have been planted. The trees should be brought out a few at a time, and kept in a bunch with loose sacking around and over the roots. If conditions are such that they dry out excessively, they may be moistened occasionally and a little water put into the hole before the last few inches of earth are filled in. Before setting a tree, prune off with a sharp knife the ends of the larger roots, leaving fresh, smooth surfaces from which rootlets may be sent out. Press the soil firmly about and work it well among the roots, but leave the top two or three inches loose to form a mulch. See that the roots are spread out in a natural position, and the tree planted an inch or so deeper than it grew in the nursery. Out of some 350 trees which we planted in this way last year all lived but two, which were practically dead before being planted, and were only set in mid spaces to give them a chance to grow if they would. Practically, we might say, every tree lived. The season, of course, was favorable. Promptly after planting, the trees were headed, care being taken to encourage a growth toward the west, by choosing for the most part branches pointing this way and trimming them back to terminal buds directed outwards, whereas the arms on the east and south-east sides were usually trimmed back to terminals showing an upward tendency. We might add that the trees had been set, inclining uniformly toward the west. The wind soon forces them back.

THE FARM BULLETIN.

A Bank Commission Advocated.

The Canadian House of Commons Committee on Banking and Commerce, which is considering the bill introduced into Parliament by Hon. W. T. White, Minister of Finance, along with various amendments thereto which have been proposed, recently invited some fifteen witnesses to appear before it and state their views. The hearings commenced last week, the first and most important witness called being H. C. McLeod, Ex-General Manager of the Bank of Nova Scotia, who has for twenty years been urging a compulsory system of governmental inspection or external audit of affairs as shown at the head offices of the banks in addition to the present system of internal inspection, by means of which the banks keep check upon the operations of their branches. Other witnesses invited as representing the rural, or, more broadly, the public interest, were Gordon Waldron, Editorial writer of the Weekly Sun, Mr. Chipman, Editor of the Grain Growers' Guide, and the Editor of "The Farmer's Advocate." We requested the privilege of nominating as a substitute Peter McArthur, who has studied the question broadly in its large public aspects, and whose articles in "The Farmer's Advocate" have done a great deal to form public opinion. The editor accompanied Mr. McArthur to Ottawa, being subsequently invited by resolution as an extra witness to substantiate Mr. McArthur's testimony that the regular display advertising of the banks had been dropped from "The Farmer's Advocate" upon the expiry of then-existing contracts, although other advertising had rapidly increased. Mr. McArthur also writes for a syndicate which supplies his articles to a chain of fifteen or more daily and weekly Canadian newspapers. In a recent letter he dealt with the banking question. The letter was complimented by the editor of the syndicate and duly forwarded, but not a line of it appeared in any of the chain of publications. It was the first and only article rejected. Mr. McArthur also dealt in his evidence with the tendency of a centralized banking system towards centralized industry, and united with the editor of this paper in urging the establishment of a banking commission similar in function to the railway commission, and justifiable on similar grounds of public interest. Mr. Waldron had also favored government inspection, but had not elaborated his idea.

The hearings of the committee were very informal, unbiased by party affiliations, and conducted in a sympathetic manner. The chairman, Herbert B. Ames, and Hon. Mr. White attended throughout, giving respectful attention to all evidence, and directing questions from time to time designed to draw out the views of the various witnesses. A synopsis of the evidence will be presented later.

The Belleville Holstein Sale.

The Belleville consignment sale of Holsteins drew a large crowd to that city on April 1st. Bidding was brisk and competition for the good things very keen. Most of the cattle were taken by Ontario buyers, although some of the good ones went to Quebec. Thirty cows in milk made the good average of \$278 each. May Echo Verbeke consigned by F. R. Mallory, Frankford, a daughter of May Echo, which sold some time ago for \$1,400, made the highest price of the sale going to the Allison Stock Farm, Chesterville, Ont., at \$1,500. This firm also secured a daughter of this cow, Lawncrest May Echo Posh at \$700. Ten head sold for over \$300 each. Heifers not in milk averaged \$190 each, and fifteen young bulls averaged \$85. Seven head consigned by G. A. Brethen, Norwood, averaged \$148.57; seven consigned by F. R. Mallory, Frankford, averaged \$442.14; eighteen head consigned by W. G. Huffman, Gilead, averaged \$191; thirteen consigned by Archibald Parks, Napanee, averaged \$125.76; four consigned by Wesley Dawson, Napanee, averaged \$176.22; four consigned by C. H. Saylor and P. Cave, Bloomfield, averaged \$177.50; five consigned by G. A. Kingston, Campbellford, averaged \$250; two consigned by B. R. Leaven, Bloomfield, averaged \$162.50; three consigned by Wm. H. Gough, Bloomfield, averaged \$181.66; eight consigned by Bertram Hoskin, The Gully, averaged \$123.75; four consigned by B. E. Hagerman, Minto, averaged \$250; three head consigned by S. J. Foster, Bloomfield, averaged \$523.33; and one consigned by W. A. Hubbs, Bloomfield, sold for \$115. These prices show that the sale was an unqualified success.

Those hideous looking eye-protectors, motor goggles, really have some value. A Quebec correspondent, Alfred Chaplin, writes that in his orchards they have been a great help in protecting the eyes from the solution while spraying fruit trees.