

## Orchard Tillage and Management

H. P. Gould, assistant pomologist in the United States Department of Agriculture, in Farmers' Bulletin 161, "Practical Suggestions for Fruit Growers," treats on tillage as follows:

As a fundamental factor in progressive orchard management, systematic tillage is a practice of comparatively recent introduction. While the practice has become quite general during the past few years, and is growing more so, the principles underlying the operation are not so fully understood as they should be. A better understanding of these principles will make the operation more effective, because it will be more thorough.

The offices of tillage are several. Among the more important ones are:

1. The setting free of plant food by increasing the chemical activities in the soil.

2. The soil is made finer and hence presents greater surfaces to the roots, thus increasing the area from which the roots can absorb nutriment.

3. The surface of the soil is kept in such condition that it immediately absorbs all the rain that falls during the summer, when it is apt to be dry. Little is lost by surface drainage.

4. Moisture is conserved thereby. Where the surface remains undisturbed for weeks the soil becomes packed, so that the moisture from below really passes to the surface and is evaporated, thus being lost to the growing crop. If the surface is kept light and loose by tillage, so that the capillarity is broken, but little of the soil moisture comes to the surface and evaporation is not so great. In this way nearly all the moisture remains in the soil, where it can be used by the plants.

5. Thorough tillage has a tendency to cause deeper rooting of the plants. The surface of the soil is made drier by tillage during the early part of the season than it would otherwise be; hence the roots go where the soil is moist. The advantage of deep rooting during drouth is obvious.

The relation of plant food and moisture to the welfare of crops and the influence of tillage thereon should perhaps receive some further attention. Doubtless all farm crops—not excepting the tree fruits—suffer more from lack of moisture than they do from lack of plant food in the soil. All of the nourishment which the plant gets from the soil is taken in solution, and unless there is an abundance of soil moisture to dissolve the mineral plant foods it is evident that their presence in the soil, even in limitless quantities, could avail nothing for the good of the crop. The ideal tillage, then, is that which begins as early in the season as the soil can be worked, while there is still an abundance of moisture in it, and continues until mid season—that is, through the

growing season of the plant. The aim should be to keep the surface, to the depth of 2 or 3 inches, as light and as loose as possible. This will be equivalent, so far as conserving the moisture is concerned, to spreading a mulch of straw or sawdust over the soil. The constantly moist condition of the soil under such a mulch is a matter of frequent observation.

But tillage, to be of value in fruit growing, must be practiced judiciously. If the soil is tilled when it is too wet, more damage may be done by a single cultivation than a whole season's effort in corrective methods can overcome.

There are cases where conditions will suggest that tillage of any kind is unwise. Such fruits as the strawberry, which produces its crop close to the ground and early in the season, obviously should receive little, if any, cultivation before the fruit is harvested. The practice of tillage, however, is correct in principle. The wisdom of the grower must suggest the proper application of it.

### A Business Education

This is an intense age when men in all walks of life realize the importance of having a good business education. In the ranks of com-

merce 97 out of every 100 men fail. It sometimes happens that circumstances are against them, but as a rule this record of disaster and



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ruin is due to a lack of a proper business education. Professional men of all kinds are usually poor business men. Farmers are the worst of the lot. How many farmers can tell how much it costs to raise a pound of pork or a bushel of grain? Every man should take a business course. The Canadian Correspondence College of Toronto, offers excellent courses in these important subjects by mail.

## In the Maritime Provinces

### Prince Edward Island

Our farmers are busy working on the land and some seed was sown the 1st of May. Cool, backward weather, very little growth. Jack Frost paid us a visit on the night of May 1st. The roads are pretty good, and business is rushing. The market was well attended on May 1st. Pork sold from 7½c. to 8c. per lb.; oats 38c. to 40c. per bus.; potatoes 50c. per bus. with few offerings. Hay 38c. to 60c. per cwt. Eggs, 11c. to 12c. per doz. Creamery butter 26c. Very little dairy butter offered. No tub butter in market. Fresh lettuce and radishes on sale. Fresh herring 8c. per doz., fresh codfish, 10c. to 15c. each. Turnips 14c.

On April 24, the steamer Elliott sailed for St. John's, Nfld., with 2,562 bags oats, 1,030 bags potatoes, 50 bags turnips, 30 boxes cheese shipped by Carvell Bros.; 47 head cattle, 52 bags turnips, 8 sundries shipped by Sellers & Henderson. Shipping is brisk.

J. W. Calbeck, Augustine Cove, is the owner of two fillies one year and eleven months old, and one colt eleven months old, that make a total of 3,327 lbs. These colts are all by the noted Knight of Ardgowan. Mr. Calbeck was offered \$130 for one of these fillies.

A meeting was held in Montague Hall for the purpose of considering the Dominion Government's offer to establish a chicken fattening station in Montague. Immediate

action was the result. Some excellent addresses were delivered.

The lobster fishing season opened on April 20. Lobsters are plentiful and prices high.

Twelve boxes of young hogs were offered on April 28, at from \$4 to \$7 per pair. On May 2nd, Mr. David Keele took over 25 head of cattle to St. John's, and Mr. McKie 4 horses.

On April 30th, Mr. Wm. Irwin, a resident of Charlottetown, drank an ounce of carbolie acid and died almost instantly.

A. R.

### Nova Scotia Travelling Dairy

The Nova Scotia Government will have two travelling dairy outfits on the road this summer. One of these will be in charge of Miss Laura Rose, of Guelph, who so successfully operated the travelling dairy in that province during the past two years. The other will be in charge of Miss Annie Rose, sister of the above. The Misses Rose are expert dairymen and will do good work in the province down by the sea. Though the routes have not been definitely laid out yet, they will probably be in the counties of Hants, Kings and Lunenburg.

Teacher—Correct the sentence, "The liquor what the man bought was soon drank."

Bright Pupil—The man who bought the liquor was soon drunk.