

### HOW RIGHT CARE OF FRUIT TREES PAYS



Cutting Deadwood Out of Tree.

(By J. C. WHITTEN.)

There is perhaps no phase of farming in which careful methods pay better than they do in fruit growing. There is probably nothing else grown on the farm that suffers more if neglected than does the orchard. Most of our essential farm crops are annuals.

The plants which produce their crop but a single season. If the farmer neglects them, or if the season is bad, or if mistakes are made, the misfortune which results lasts but a single season.

The farmer may plant another crop next year and start afresh with new plants. The orchard trees are perennials; once planted they should last for years. Any misfortune which overtakes them in a given season may show its bad effect for years, or even through the life history of the trees.

Mistakes made in the management of fruit trees may not easily be rectified next year.

Again, annual farm crops live during the favorable growing season of the year. They are out of the way before winter comes.

Fruit trees must not only grow in summer, but must live over winter and endure the inclement season. They should be kept in the best condition in order successfully to do this.

The grower should keep the fact in mind that a fruit tree is at all seasons a living, sensitive, plastic, shapable thing. It is affected by everything that is done to it.

It will show the results of any phase of treatment, whether of culture or pruning or of spraying. Whatever is done to it will make it different from what it would have been if left alone. The farmer should strive to do those things to it which will make it better, rather than be injurious.

The man who begins seriously to study his trees will soon begin to realize more fully that they are living, shapable things and that they easily show him by their appearance whether they are profiting or being injured by anything which is being done to them.

Right now is a good time to begin that study. One should be able to tell the age of the tree, or of any of its branches. He should determine how much of it has been produced each year.

By beginning at the outer tip of the limb he can determine how much of it grew last summer, or in any previous season, by the rings or circular scars around the twig which mark the spot where growth began in the spring.

Reflect that growth began in spring from a terminal bud. As growth began from the center of this bud its winter scales fell off, leaving semi-circular scale bud scars quite close together, around the twig.

These are the "rings" that mark the dividing line between each year's growth. The amount of length growth of each year may be associated with what was done to the tree or by the character of the season which influenced that growth.

A knowledge of the fruit buds and the wood buds is important. The former are those large, well-rounded buds which in spring will produce blossoms and fruit. The latter are the smaller, flatter and more pointed buds, which produce wood growth and leaves. Fruit-buds which will produce flowers and fruit this spring were formed the previous summer.

By their character and abundance one may in winter judge the prospect of the fruit crop the coming season.

From the blossom scars and fruit scars left on the branches one may be able to tell in what years the trees have borne fruit in the past.

If the trees have blossomed and fruit failed to set only the small blossom scar will be visible as a cluster

of little pits where the flowers fell from the twig. If the fruit set, the larger fruit scar will indicate the fact.

The character of this fruit scar will indicate in a general way whether the fruit was well developed or whether it fell prematurely.

In fact, the characters of the twigs tell pretty accurately what the trees have been doing in past years. From them the skillful grower may read the life history of the tree.

Careful reflection upon the relation between what the tree has done and what has been done to the tree may be an important guide to the best methods of treatment to be adopted.

Anything which draws the grower's attention to his trees usually results in better care, for he then sees what they need, and when they need it. Among the most urgent needs of fruit-growing trees is spraying to prevent injury from insects and fungous diseases.

The best growers are now coming to recognize the fact that spraying has become a necessary factor to success. Spraying should be looked upon as something more than merely a means of saving or better perfecting the immediate crop of fruit.

It promotes the general health and vigor of the tree and may determine the character of a subsequent crop and also promote the longevity of the orchard.

Fungous disease and insects not only injure the fruit crop, but they may seriously injure the trees by destroying the leaves or by causing them to drop too early in the autumn.

Most of the most serious diseases and insects may be controlled by spraying. Bordeaux mixture should be applied for the fungous diseases, and to this paris green or some other arsenical poison should be added for insects.

The spraying should be done at the right time. For apple scab the first spraying should be made shortly before the flowers open, just after they fall and twice subsequently, at intervals of ten days or two weeks.

The poison may be put in the two first sprayings after the blossoming period to kill codling moth and canker worm.

For bitter rot two later sprayings should be made shortly before the time when the rot usually appears in the neighborhood.

The spraying should be done thoroughly. All parts of the tree should be well covered with a fine spray.

The power sprayers are more efficient, as the work can be done far more rapidly and the spray can be broken up into a fine mist and got effectively to all parts of the tree. For all large orchards power sprayers are to be recommended.

In addition to spraying, proper pruning and general care are essential. The man who sprays is likely to prune, as it enables him to spray more efficiently and with less labor and less waste of time.

All diseased or injured fruit should be kept out of the orchard. A few infested apples left on the trees or under them may infect the orchard next year.

Those who are beginning spraying should send to their state experiment stations for free bulletins, giving detailed directions for mixing and applying the sprays.

#### Strict Orchard Pests.

Many of the common orchard pests are restricted in their range because they have not yet reached the full limit of their distribution.

#### Neglected Pigs.

Young pigs kept in dry, dusty lots and fed on corn exclusively will not make money for their owner.

## GOOD ROADS

### WIDE TIRES IMPROVE ROADS

Mechanical Expert of Kansas College Gives Farmers Advice Based on Practical Experience.

"Wide-tired wagons pull more easily than narrow-tired ones 90 per cent of the times when they are used," says F. A. Wirt, instructor in farm mechanics in the Kansas state agricultural college. Professor Wirt has just completed experiments with wide and with narrow-tired wagons.

Narrow tires pull harder than wide tires, says Professor Wirt, because the narrow tire cuts deeper into the top soil. The wide tire does not cut so deep and makes a better track on roads which are traveled while the ground is soft. The wide tire packs the surface into a firm roadbed.

The experiments show that in corn-fields, plowed fields, field lanes, and on pasture and on alfalfa land, the draft of the wide tire is considerably less no matter what the condition of the soil.

In places where the mud is deep and rolls up on the wheels, in ruts made by narrow wheels, or in a surface of mud with a hard ground beneath, the narrow tire will pull more easily. The narrow wheel fits the rut, on the hard bottom of which it runs, and it collects less mud than the wide tire.

Width of tire and height of wheel have a great effect upon the draft. The usual width of the narrow tire is one and three-fourths inches, while the wide tire is usually three or four inches wide. The tires used in the tests were one and three-fourths and four inches wide respectively. Six-inch wheels are used only on low trucks. One type of wheel rarely found is the low wheel with narrow tire. The draft with this is so great that a team can hardly pull a load in soft field surfaces.

A farmer who can afford only one wagon will find many factors entering into his selection. If he has to go on the roads in all kinds of weather, he will find the narrow tires better because they will collect less mud when the roads are bad. On the other hand, if he goes only when the roads are good, or uses the wagon in the fields a great deal, he will find the



Well-Kept Country Road.

wide tire will be preferred because of the lighter draft and less damage to the fields.

One of the main points in favor of the wide tires is that their use greatly improves the roadbed, as they will pack the top soil making the roadbed firm and thus enabling it to drain well in time of rain. The wide tire will not cut up the meadow or field as does the narrow tire. This is also important, as a smooth surface in the meadow is much easier to mow over.

### BAD ROADS CAUSE ACCIDENTS

Claims Made on Insurance Company for Four Deaths From Mishaps Due to Faulty Highways.

Do we need good roads? The report of a Chicago traveling men's insurance organization covers the payment of ten death claims for the first 59 days of the year, and of these four were deaths resulting from motor-car accidents due to bad roads.

It is singular that these four deaths occurred one each in the four northwestern states of Minnesota, the Dakotas and Montana.

In each case the traveling men's organization paid \$5,000.

This furnishes a striking example of the financial and economic loss charged up directly to bad roads.

#### Meeting of Builders.

The American Road Builders' association and the American Highway association are to meet together for the first time next September, Gov. C. W. Gates announces. The convention will be held either at Oakland, Cal., or San Francisco.

#### First Eggs to Hatch.

The freshest eggs are the first to hatch. In buying eggs it is well to bear this in mind, and stipulate that all one shipment shall be of about the same date, say within three days.

The General says: "Cut Price" Roofing means "Cut Price" Quality. Trying to save money by purchasing cheap roofing is penny-wise foolishness.

## Certain-teed Roofing

This Roofing—Certain-teed—is guaranteed 5, 10 and 15 years for 1, 2 and 3 ply respectively, and this guarantee is backed by the world's largest manufacturers of roofing and building papers. You can save only a few dollars on a cheap roof, but Certain-teed is always least expensive in the end. Buy it from your local dealer.

General Roofing Manufacturing Co. World's Largest Manufacturers of Roofing and Building Papers.  
New York City Chicago Philadelphia St. Louis Boston Cleveland Pittsburgh Detroit San Francisco Cincinnati Minneapolis Kansas City Seattle Atlanta Houston London Hamburg Sydney

The shorter a young man is on brains the longer he is on collars.

#### Drink Denison's Coffee.

Always pure and delicious.

The virtues of some men are never apparent until brought out by the criminal lawyers who defend them.

Most particular women use Red Cross Ball Blue. American made. Sure to please. At all good grocers. Adv.

It's usually too late for congratulations when the happy couple have been married more than a week.

#### At the Dance.

"Have you learned any new steps?"  
"No, but I've stepped on a lot of new feet."—Life.

#### Lucky.

"I hear your old flame, Maud, is a widow."  
"I always was lucky. Just think, if I'd married her I'd be dead now."

#### The Trouble.

"Did you see where the Anglo-German knight in London was told he could not resign his baronetcy?"  
"Yes, that was not a title he could surrender."

#### The Borrower.

"Mr. Brown called today and returned that umbrella he borrowed from you a year ago."  
"Huh! I suppose he's heard I've bought a new one."

#### More Practical.

"I see where King George has taken away the Garter from the Kaiser and other German rulers."  
"It would have done more good for him to have turned the hose on 'em."

#### An Added Bit of Realism.

While watching an educational film a little girl's sympathy was aroused through the affection a handsome dog was showing his master.  
"Why doesn't he love the pretty doggy, mamma?" she asked.  
"S—h," returned the parent. "He is scenting a polecat."  
"Oh," answered the child. "I never saw a polecat before, but I've smelled them."

### SOLDIERS WHO WEAR VEILS

British Troops in Southwest Africa Have to Conduct Campaign Under Difficulties.

One of the hottest places where the British are fighting is in German Southwest Africa, where General Botha is in command of an expedition against the enemy. The habitable part of German Southwest Africa lies in the center of a sun-scorched, waterless, shadeless desert of shifting sand, and General Botha's men have to carry everything they need, for nothing whatever can be obtained from the country, not even fodder for the animals.

The sand penetrates everywhere, and the heat of the sun is so terrific that all the troops fighting with General Botha have been served out with veils and "goggles." Without them, indeed, it would be impossible to get along at all, and, as it is, hundreds of the Boer burghers, though hardened campaigners, have been so blistered by the sun that they are in hospital.

The heat at midday is 122 degrees in the shade and the "shade" is a sweltering tent. Many of the troops pass that time of the day with nothing on but a sun helmet and a pair of boots.

#### Horae Chestnut.

"I was sitting on the bootblack's stand," said the story-teller, "when the parade came along, the grand marshal riding a big bay horse at its head. Well, just as the head of the parade came opposite me, it stopped. The grand marshal's horse wouldn't go another step."

"Recognized you as his long lost half brother, I suppose," said one of his listeners maliciously.

"Think you're smart, don't you? Well, I'll tell you, anyhow. It was pride that made that horse stop—nothing but pride. He wanted his shoes shined."

#### Not to Blame.

A large map was spread upon the wall and the teacher was instructing the class in geography.

"Horace," she said to a small pupil, "when you stand in Europe facing the north you have on your right hand the great continent of Asia. What have you on your left hand?"  
"A wart," replied Horace, "but I can't help it, teacher."—Brooklyn Eagle.

#### He'll Get It.

"How about going to a show tonight, Jim?"  
"Not for me. I'm going to Jiggins' party."  
"Oh, come on with me. The Jigginses are dead slow. You never have any fun at their house."  
"I know, but I need a new hat."

#### His Busy Day.

Mrs. Dixon—Why do you let your husband growl so much when you have company?  
Mrs. Vixen—That's the only time he gets to grumble.

The man who chews fine cut tobacco considers himself higher up in the social scale than the man who chews plug.

#### Delays Are Dangerous.

"How is it that Jones always acts before he thinks?"  
"If he thought first he'd never act."

No bother to get summer meals with these on hand

Vienna Style Sausage and Potted Meats

Just open and serve. Excellent for sandwiches.

Insist on Libby's at your grocer's.

Libby, McNeill & Libby, Chicago

#### Homely.

"Can you give me any ideas about making my yard more beautiful?"  
"Yes. Remain in the house?"

### ECZEMAS AND RASHES

Itching and Burning Soothed by Cuticura. Trial Free.

The Soap to cleanse and purify, the Ointment to soothe and heal. Relief, rest and sleep follow the use of these supercreamy emollients and indicate speedy and complete healings in most cases of young and old, even when the usual remedies have utterly failed.

Sample each free by mail with Book. Address postcard, Cuticura, Dept. X7, Boston. Sold everywhere.—Adv.

#### Just Like a Man.

"Tom," said the bride of a week, "didn't you promise faithfully to give up smoking the day I married you?"  
"Yes, my dear," replied Tom, "I believe I did."

"And now," she continued, "I find you puffing a cigar, just as though I weren't in existence. What explanation have you to offer?"

"Well, I kept my promise," replied the husband. "I didn't smoke a single cigar on our wedding day."—Philadelphia Public Ledger.

#### Oh, That Lash!

Tommy had watched the high-hatted and frock-coated ringmaster for some time. He was particularly interested in the way he handled the whip with the long lash.

"Well, Tommy," said his father, "what do you think of that fellow?"  
The whip cracked again as Tommy replied: "I'm glad he isn't my father."

#### Proper Course.

"You, a Briton, and so unpatriotic as to order all those German dishes?"  
"But I am about to do the proper thing for a Briton and intern them."

#### Her Objection.

She—I don't mind late callers.  
He—Oh, thank you,  
She—It's late stayers I object to.

At sixty a man knows that he didn't know what he thought he knew at twenty.

## Makes a Healthy Appetite

## "One for Breakfast-



## and One for Work"

LOOK for the man who eats Grape-Nuts, and relishes his meals, and is keen and fit for a hard day's work.

## Grape-Nuts

FOOD

is made from whole wheat and malted barley with all the essential mineral phosphates retained.

A 10 days' trial of Grape-Nuts may show how to make yourself fit to do things that bring money and fame.



## "There's a Reason" for Grape-Nuts