

Making the Little Farm Pay

By C. C. BOWSFIELD

Good farming, good homes and thrift are coupled with the little farm idea. As small places are apt to have a variety of produce, they stimulate good selling methods. They are a means of developing direct marketing plans by which consumers pay reduced prices for kitchen supplies, while producers receive more than wholesale rates.

A reader who recently bought a ten acre farm a mile and a half from town asks me to make up an outline for the successful management of his little place. He wishes to keep a team of horses, two or more cows, some poultry and have as wide a diversity of production as possible in order to distribute labor evenly.

In nearly every case persons taking small farms are inspired with the need of diversified crops, so that if one thing fails there are other products to keep up the income. I will say right here that many ten acre tracts are maintaining several cows and consid-



ON THE LITTLE FARM.

erable other live stock, besides allowing room enough for a large production of vegetables and fruit.

A farm of this size may devote two acres to pasture, three acres to corn, two acres to a commercial garden, one acre to orchard, one acre to root crops and the tenth acre to buildings, poultry plant, etc. This arrangement will enable the owner to alternate the three acres of ground devoted to corn with the three used for garden and root crops. These products should be grown in rotation not only for the purpose of keeping up soil fertility, but as a means of fighting insect pests.

In the acre devoted to orchard there may be about fifty trees, which should include at least apples, pears and cherries. There will then be room for about 200 raspberry and currant bushes among the trees and around the edge of the orchard. The root crops should include carrots, beets, rutabagas and other things of the kind. The three acres of corn will supply roughage for six or eight head of stock, and between the rows rape should be sown so that after the grain has been harvested a number of hogs may graze through the fall months. The plowing can be done before the ground freezes. There will be corn enough to fatten the hogs for the winter market and to feed the horses besides supplying part of the poultry rations.

After crops of lettuce, beans, early potatoes, onions, peas and radishes have been taken off early in the season the garden can be fitted for succession crops, such as cabbage, tomatoes, celery, sweet corn and late potatoes. This program of double cropping can be widely varied. It enables a person to raise twice as much stuff as the ordinary garden produces, and as there is an extra amount of cultivation the soil does not wear out. So far as possible plowing and fertilizing should be done in the fall.

There should be earnings about as follows: Poultry plant for 200 hens, \$300; three cows, \$400; ten hogs, \$150; garden produce, \$400; fruit, \$250; one horse raised each year, \$150; total, \$1,450. Each of these estimates of earnings may be enlarged a little, as they are conservative. A little additional income may be gained from the sale of calves. It would also be possible to clean up some money by keeping pigeons. An incubator run in connection with the poultry plant ought to increase the earnings of that department a hundred or two. A gross income up around \$2,000 is not unreasonable. There must be paid out about \$500 for help in the garden and for mill stuffs for the cows and poultry. If cream is sold or butter made there will be a considerable amount of skimmed milk for the hogs and chickens.

This cannot be more than a suggestive outline for the guidance of people who are taking little farms. The problem will not be exactly the same in any two cases, and the owner of the farm must figure out methods for himself. A much wider diversity of production is feasible. For instance, twenty or thirty colonies of bees do not take up any room worth speaking about, but they may add \$300 to \$500 to the yearly income. It will be found that the above estimate of possible earnings in orchard and garden is low.

Quarters For Brood Sows.

Prepare warm, dry, but ventilated quarters for the brood sows and do so now. Cold storms will be here before we are ready for them.

DIVERSIFIED FARMING.

An apple orchard in New York state, containing fifteen acres and 527 trees, has been the object of detailed study for two years by the United States department of agriculture. Accurate records were kept of the cost of spraying, barrels, seed for cover crops and other expenses. The orchard is over fifty years old, well located and is a part of a farm of 122 acres on which potatoes, wheat, beans, sheep and horses are raised. The department experts sum up their conclusions with the advice that—

"The cost of growing apples is lessened by growing them in connection with other farm crops and utilizing the man and horse labor on these other crops also."

In other words, the farming that usually pays best is the kind where the equipment and labor of both men and horses can be used all through the year and where the owner is not dependent on one sort of crop.

Diversified farming is not always the easiest, but it is the safest and usually the most profitable, even in this era of specialization.

FOOT AND MOUTH DISEASE.

Danger of Contaminated Milk Spreading the Disease Overcome. [Prepared by United States Department of Agriculture]

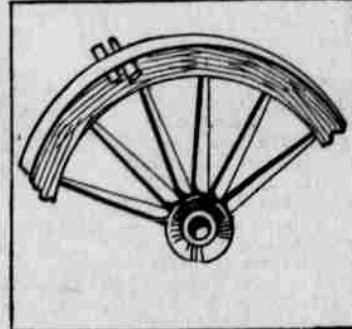
The anxiety that has been expressed in several quarters in regard to the effect upon human health of the present outbreak of the foot and mouth disease is regarded by government authorities as somewhat exaggerated. The most common fear is that the milk supply might become contaminated, but in view of the precautions that the local authorities in the infected areas are very generally taking, there is comparatively little danger of this. Milk from infected farms is not permitted to be shipped at all. The only danger is, therefore, that before the disease has manifested itself some infected milk might reach the market. For this reason experts in the United States department of agriculture recommend pasteurization. As a matter of fact, however, pasteurization is recommended by the department anyway for all milk that is not very high grade and from tuberculin tested cows.

It has been demonstrated by experiments which have been made in Denmark and Germany that pasteurization will serve as a safeguard against contagion from the foot and mouth disease just as readily as it does against typhoid fever, but in any event it must be thoroughly done. The milk must be heated to 145 degrees F. and held at this temperature for thirty minutes.

In this country the foot and mouth disease has been so rare that there are few recorded cases of its transmission to human beings. In 1902 a few cases were reported in New England, and in 1908 in a few instances eruptions were found in the mouths of children which were believed to have been caused by contaminated milk. In both of these outbreaks the sale of milk was stopped as soon as the disease was found among the cattle. As long, therefore, as the disease can be confined by rigid quarantine to certain specified areas the danger from this source is very small. Should the pestilence spread all over this country and become as general as it has been at various times in larger areas in Europe the problem would become more serious. Under any circumstances, however, pasteurization would be an efficient remedy. Where pasteurization is not possible and where there is any reason to suspect that the disease may exist the precaution of boiling milk might be advisable.

To Tighten Wagon Tires.

A southern Iowa farmer, says the Farm Progress, uses a very ingenious scheme for tightening loose wagon tires. As is often the case with all farmers, this man is troubled with loose tires on some of his wagons, which when the weather becomes wet again are perfectly tight. He takes a long, tapering cold chisel (an old buggy



spring would answer admirably) and drives it between the filler and tire directly over a spoke. He then makes a wedge of some hard wood, which he drives in as tightly as possible beside the chisel. The chisel is then driven out and the wedge cut off evenly on both sides, and the job is done.

Any one who has never tried this would be surprised at the degree of "set" that can be given to tires by thus wedging them. In fact, until the wedges loosen by wear they are almost as tight as if set by the usual method.

Remove Dead Leaves.

If you find bunches of dead leaves hanging in the trees remove them. They contain destructive young larvae. Spray if you see evidence of the scale.

Scientific Farming

ORCHARD COVER CROPS.

Rye, Vetch or Bur Clover Will Conserve and Build Soil Fertility.

An orchard cover crop should be sown at once if it has not already been, says the Home and Farmstead. To neglect this is to fall to do one's duty to the orchard. When the green crop is turned under in the spring it will contribute organic matter to the soil, a thing so much needed by many soils. It will improve the moisture holding content of the soil and result in releasing a greater amount of the soil's plant food to the growing trees.

If it is a clay soil it is close and water percolates down through it quite



COVER CROPS ADD TO ORCHARD PROFITS.

slowly. In fact, much of the water runs off the slopes where much of the clay lands of America exists and does not get down to the tree roots as it would if it were a cultivated orchard and especially if cover crops have been turned under.

If it is a sandy soil where the orchard exists the cover crop will improve the texture of the soil, add to its water holding capacity and check the leach of the soil fertility.

Rye, vetch, bur clover or other of the usual winter cover crops will add materially to orchard profits if they are given a chance to conserve and build soil fertility in the orchard tract.

CROSSING ALFALFA.

Experiments That Promise to Improve the Plant For Grazing Purposes.

Alfalfa is such a well known forage crop that little has been done to improve it by scientific breeding. But alfalfa has several serious defects. It is not well adapted to grazing, and it does not produce seed freely.

William Southworth of Ontario Agricultural college, Guelph, Canada, has been making some experiments that promise greatly to improve alfalfa in these respects. He picked out as the plant most likely to fulfill the conditions, the common yellow trefolium, known as black medick (*Medicago lupulina* L.)

The black medick is looked upon as a weed in the United States and Canada. It grows profusely in meadows, generally almost or quite flat upon the ground. It has slender stems and produces an abundance of fine leaves, which yield good grazing, but not good hay.

In the Journal of Heredity Mr. Southworth reports on the success of his experiments. While alfalfa seeds poorly, its cousin, the black medick, produces an abundance of seeds. Alfalfa seems to need the help of bees in its pollination, while the black medick is generally self fertilized.

Mr. Southworth began in 1911 with mother alfalfa plants obtained from the United States department of agriculture, Washington, but, owing to the hot season, not one of the crosses set seed. In August of that year he picked out an alfalfa plant growing in a discarded grass plot with rich green foliage and an abundance of healthy, vigorous, violet flowers. These flowers were fertilized with pollen from black medick growing as weeds. From these he obtained five healthy pods.

Sowing the seed from these in the fall of 1912, he raised twenty-four plants, nineteen of which he removed to the open field. These were allowed to fertilize themselves, and the plants from their seed were raised in the autumn of 1913 in the greenhouses of the department of plant breeding, Cornell university.

Without going into the details of the growth of each plant the results may be summarized by saying that 72 per cent of the plants grew above the average (5.5 inches) in height and about 78 per cent were not erect in growth.

Mr. Southworth says the cross is difficult to make. He is continuing his experiments and urges others to investigate along the same lines.

He notes also that the difficulty in getting hard alfalfa seeds to germinate may successively be overcome by immersing them for ten minutes in strong commercial sulphuric acid and then washing them free from the acid. This method was invented by Professor H. H. Love of Cornell.

Prune the Grapevines.

Prune grapes as soon as foliage is off. Lay them down and cover with earth before the ground freezes.

DAIRY WISDOM.

Uniformity in the time of milking and order of milking will have the best effect on the cows.

The fact that a man keeps a cow does not prove that he is a dairy farmer.

The fodder that does not find a place in the silo should be shredded, and then the part of it not used for feed becomes excellent bedding.

There is no line of work where thought pays better than in dairy farming.

A cow's possibility for production is a heritage that she brings into the world and takes out again with her. It cannot be controlled or influenced materially by feed.

PREPARING THE COW FOR MILK MAKING

The proper time to begin feeding a cow for milk production is six to eight weeks prior to freshening. She should have at least this length of time to rest and prepare for the next lactation period. The feeds given at this time should meet the following requirements: Rest and cool out the digestive tract, supply nourishment for the growth of the fetus or unborn calf and build up the flesh and strength of the cow herself.

Cows that are to freshen during the winter should receive from twenty to twenty-five pounds of corn silage, all the clover or alfalfa hay they desire and a grain mixture of three parts ground oats, two parts bran and one part oil meal. The amount of grain per day is to be governed by the individual animal. Animals thin in flesh may be given a small quantity of corn, but should not be crowded, but rather fed up gradually. Timothy hay and cottonseed meal are not desirable, as they are rather constipating, while laxative feeds are needed at this time. Too large a quantity of corn is likely to have a bad effect upon the system. It is well to reduce the ration slightly just prior to calving, as by so doing the danger of milk fever and after calving troubles is decreased to some extent.

A few days before calving put the cow in a clean, disinfected, well bedded box stall. If her bowels are not mov-



When the farmer wants to raise both meat and milk a dual purpose breed should be selected, such as are the Shorthorns, Red Polls, Devons or Brown Swiss. One should not expect a dual purpose cow to produce as much butter fat as a highly specialized cow of producer from such a cow be expected to equal in weight at maturity a steer of pronounced beef type, but in the extremes may not lie the greatest profit.

ing freely a dose of three-quarters to a pound of epsom salts or a quart of raw linseed oil will prove very beneficial. A grain ration of two parts bran and one part oilmeal is very good at this time.

For a few days after calving the cow's drinking water should be lukewarm. In addition to alfalfa or clover hay and a small quantity of silage she should be fed bran mash or a small allowance of bran, oilmeal and ground oats. If the cow does not pass the afterbirth promptly and the man in charge does not understand the anatomy of the reproductive organs a competent veterinarian should be called. That should be done also when the cow has difficulty in calving.

If the cow has been properly cared for the first three days she may then be placed on dry and of beef food. Experienced feeders of beef cattle realize that thirty days are required to get steers on full feed, and likewise the dairy cow needs to be given thirty days.

A Good Dairy Ration.

A very good ration can be made by letting each animal weighing 1,000 pounds have thirty pounds of silage daily and a liberal allowance of alfalfa hay. A mixture consisting of 200 pounds of ground barley, 100 pounds of ground wheat and 100 pounds of bran will supplement this roughage well. Feed about a pound of this mixture for each three and a half to four pounds of milk produced.

System in the Dairy.

There are many ways of making the dairy work easier. Perhaps no one is better than to systematize the work and get it into such a shape that it moves with the regularity of a clock. There are many conveniences that can be had in the dairy without any serious expense and yet they will save many steps.

Cold Rains Injurious.

The cold rain will stop the milk flow if the cows have to stand all day without shelter.

A Belgian Lullaby

Hush; cease your hunger cry; Sleep, baby mine
Your father lights tonight
On battle line
Far from a distant land
Over the sea,
Ships are a-sailing, babe,
To you and me

Ships are a-sailing, love,
Out of the west,
Bearing the very things
You like the best.
God grant them safe escort
Through tempests wild
That from their bounty I
May save my child.

Hush; cease your hunger cry; Sleep, baby dear,
There will come food and warmth
Soon to us here,
Far from a distant land,
Over the sea,
Ships are a-sailing, babe,
To you and me.

—New York Times.

TELLS HOW IT FEELS TO BE HIT BY BULLET.

Wounded French Officer Thought He Had Found Perfect Death.

An officer who was wounded while leading a charge at the head of his company has given in a letter to Le Temps, in Paris, his impression at the moment when he was struck. He says: "The ball which struck me was fired from a distance of about fifty feet. I suddenly seemed to feel a tremendous blow in the back, although in fact I had been struck in the breast. I spun completely round on my heel, and my saber, which I had lowered for the charge, was thrown twenty feet away from me.

"The ball continued its course and wounded in the shoulder a soldier who followed me. I made every effort to keep my feet. I realized that I was fainting and tried to prevent myself from losing my senses, but little by little I felt consciousness going from me, and I had the impression that I was dying in a paradise of unexampled beauty.

"It seemed to me that I had found the most perfect death possible—struck when at the head of my company, saber in hand and ordering the charge against the Germans. But then I realized the possibility there was that I might fall into their hands, and I sought my revolver, but before I could use it was taken from me by one of my own men, and I was raised and carried to the rear through a storm of rifle bullets and exploding shells.

"I understood then how well I had gained the confidence and love of my men, for though I ordered them to leave me they would not obey my commands. In the evening I received a visit from the sergeant of the company, to whom I had turned over the command. He came to me in the ambulance in which I was about to be carried to the base hospital. He had prepared a little speech, but when he saw me so pale he believed that I was dying and only asked permission to embrace me, and as he did so I felt the warm tears flowing down his face."

VICTORIA CROSS FOR INDIAN.

First One to Be Recommended Killed Eleven Germans.

The correspondent at Boulogne of the London Times says that Havildar Gagna Singh of the Fifty-seventh Wilde's rifles is the first Indian to be recommended for the Victoria cross. He arrived in a hospital ship a bundle of splints and bandages, but very cheerful and full of heart. He has five bullet wounds—one in a leg, one in the chest, one in each hand and one on the scalp—from a revolver fired point blank.

The havildar and fifteen men of his regiment were attacked in their trench before dawn. The Germans were stopped for some seconds by barbed wire entanglements and lost heavily before they broke through. In the hand to hand struggle that ensued the havildar shot the German officer, whose bullet grazed his head. He took his sword from him and killed ten more before he was brought down by a bullet in the foot.

"Otherwise," he said, "I should have killed more. It was a heavy sword."

FEARS SHORTAGE OF MATCHES

Germany Unable to Get Materials For Manufacture.

Germany is facing a shortage of material used in the making of matches. At the recent conference of match manufacturers it was announced that the price of this indispensable article will shortly be raised from 30 pfennigs (about 7 1/2 cents) to 82 pfennigs.

About six years ago the German government levied a tax on matches to help defray the expenses of national preparedness. The price was then raised 5 pfennigs (1 1/4 cents).

Russian wood is generally used for matches, and since the beginning of the war the importation of this wood has ceased. Chemicals used in the manufacture also are imported.

Match manufacturers are being warned in circulars by the government not to undertake unjustified increases in the price of matches.

Extend Naval Shore Schooling.

Apprentice seamen in the future will receive six months' academic and professional instruction at naval training stations instead of four months as heretofore. In announcing this change Secretary Daniels said it marks an extension of the general educational plan of the navy.

The Wig.

Now, why did I buy it, I wonder? I must have been crazy, I know. But the papers are full of the fashion, and the saleswoman flattered me so! I dread for my husband to see it. He's certain to grumble and scold. He used, in the days of our courtship, To liken my tresses to gold.

How Midge and Louisa and Gladys And the rest of the women would stare if I should appear in the tango. Oh, caramels, out of my hair! But I'll bet they would go in convulsions Of jealousy over my wig. And I guess, after all, that I'll wear it To spite them, my new purple wig. —Minna Irving in Judge.

She Understood It.

"Who is that man with the blue suit on just behind the catcher?" "That, my dear, is the umpire." "What does he do?" "He calls balls and strikes and tells whether or not a man is safe at the plate."

"Oh, I see. He is there to warn the batsman when the news the pitcher is going to hit him with the ball." "You grasp the idea perfectly, my dear," he said, "choosing the easiest way of dropping the discussion."—Detroit Free Press.

Vehicles For Compliments.

What can with limousines compete? Well, auto I do not disparage, But when I'm carried off my feet It is by Mary's charming carriage!

What's nicer than a motorboat, In which you skim the ocean briny? Better than any craft afloat I love my Mary's smack, so tiny!

What fight outsmiles the aeroplane? What is more graceful, what more airy? Here I must answer, once again, A night of fancy of my Mary. —Town Topics.

Manners.

A young woman, her arms filled with packages, slowly entered an elevated car, followed closely by a gruff looking man, who in his rush to get the only vacant seat trod on the young woman's dress and nearly toppled her over. He received a cold stare, but it brought forth only a grunt. Flopping into the seat and leaving the heavily burdened woman standing, the man growled:

"Why don't you hold up your skirts?" —New York Post.

Ambition.

No dual crowns nor laurel wreaths Nor vast estates for me, But a few old friends, a few old books, A little home—and these! —Rocky Mountain News.

Bills.

Some pretty crowns in shape of hats, Some real estate will do, Some friends, a good fat pocketbook, An auto car—and you. —Yonkers Statesman.

Mean Man.

Employer—Good morning, Robert. I hope all your family are well this morning. Office Boy (unsuspectingly)—Yes, sir, thank you.

Employer—I'm glad to hear it, Robert. There is to be a baseball game this afternoon, and I was afraid it might have a fatal effect on some of them.—Boston Transcript.

Banling.

Put away the panache batter. We want panache nevermore. We have grown so fat and fatter Than we ever were of yore. Put away the red-hot biscuit And the sausage. Though we fret, We're afraid that if we risk it Our shape will grow rounder yet. You may fetch a grapefruit, dearie, Set it here where we are at. Though it makes us sad and dreary, No one could get fat on that. —Houston Post.

Wrong Guess.

Bill—And so you proposed to her? Jill—Yes.

"Was her answer in two or three letters?" "Three."

"Good! Then it was 'yes'?" "You're wrong. It was 'nix.'"—Yonkers Statesman.

Cheer Up!

If you're nursing a big boil, Try to grin. If you're taking castor oil, Try to grin. If you owe a million bills, If you have a million ills, Don't stop to chew your pills. Try to grin. —Cincinnati Enquirer.

More Impractical Advice.

"I should advise you to gamble rather than grin," said the man of conspicuous opinions. "Yes," replied Mr. Fenwiggie, "but a gambler has to have money to start with."—Washington Star.

It Scratched.

When little James saw the cat she murmured, "Here's a treat!" And then We heard her say, "That wretched thing has splinters in his feet Again!" —Philadelphia Ledger.

Force of Habit.

"My neighbor used to be a farmer, but now he wants to go into Wall street."

"Then the first thing he will proceed to do will be to water his stock." —Baltimore American.

O-ho!

There was a young woman whose eye-brow Quite worried a gentleman highbrow. "Though I've written a sonnet," He murmured, "upon it, 'Tis really less classic than my brow." —New York Sun.

No Smoking Allowed.

Medium—Shall I call up the spirit of your dead wife? "Half a moment while I put out my cigar. She never allowed me to smoke."—Pele Mele.