My Farm.

As it is to be.

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Graduating Thesis.

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My Farm

My farm is located in Johnson County, Kansas. Kansas City is about 10 miles away. This with good roads means about two hours drive, or three with a light load. The place is a hilly, clayey sort of land often found near streams, especially in the eastern part of the state. The soil is fairly deep, most of it. In the south-east corner, however, the soil "crops out" and we have a quarry of fairly good building stone, and around the quarry, about an acre of shale land. This at present raises nothing but weeds and bushes. A sort of hill or ridge runs from near the south-west corner of the place in an east-north-east direction, gradually running out a little beyond the center (from east to west) of the farm. A little land on the south side of this ridge, (nine acres), is to be put into field crops to help the horses and cow on. Most of the land, however, is situated on the other side of the ridge, with an east and north-east slope. Along the north side of the place is a dry watercourse or ravine. This is perhaps seventy-five feet lower than the highest part of the farm. In a little delta-like formation at the end of this ravine near the north-east corner of the place, I shall put a strawberry bed, first digging a ditch and embankment
to run the water around. The soil here has been washed down and deposited from the higher parts of the place. South of this strawberry bed, the land rises rather steeply to the house. Here is an excellent place to raise blackberries, raspberries, currants, gooseberries, etc., as it is a north slope, and there is plenty of soil over the rocks. Up the watercourse from the strawberry bed, I intend to build a dam across the ravine, making a large pond. This pond will have two purposes: to catch my farm as it starts on a trip seaward, as it wants to do after and during every hard rain; and to furnish water for irrigation for the small fruits and strawberries just below it. Any fruit grower can testify that a little water at the right time may be the means of saving hundreds of dollars for a fruit grower. The soil, being clay, will need no puddling for the pond. All that will be needed is to grade in the dirt, and let it rain. The water will be taken from the pond by a pipe that will run under the dam. The fore-end of the pipe will join an elbow, and take the water several feet above the bottom. In this way, the mud can fill the bend and still not clog the pipe. If I wanted to irrigate higher than the water level of the pond.
the gasoline engine of my spraying outfit and a few feet of piping would do the work to a T.

South of the home, on an east slope, I will plant my cherries. The soil is only fair for cherries, but with careful cultivation, cover crops and manuring the land, I hope to raise good fruit. Just above this cherry patch, will be my vineyard. The land raises excellent grapes, as most of the neighbors can testify. With good varieties, care and treatment, I hope to raise "gift edge" fruit.

West of the cherry patch and vineyard will be the peach orchard. Here the land slopes to the B.C. And this land has been and can and will be raised the very finest of home-grown peaches. So I will raise fancy fruit for the rich men of the city, and they shall dig up the "filthy bones" for me.

On west of the peaches will be a patch of miscellaneous tree fruits, such as apricots, plums, pears, improved persimmons, etc. Here is where I expect to find my hobby, and incidentally, worlds of enjoyment.

The whole north-west part of the farm is in apples. The principal varieties there are San Missouri Pippin and Winemaster. I intend to plant more Missouri Pippins and Winemasters, and possibly
some Ben Davis, as they are good sellers. Along the
east side I will probably plant a few summer apples:
say three or four trees each of Early Harvest, Red June,
Benoni, Pom Pippins, and Seek-No-Farther. This
will give a tolerably constant supply of ripe apples
from July until frost.
In planting apples, I would plow the land up dry in
the fall, and let it winter mellow. In the spring, I
would harrow and work it down to a fine texture and
plant the trees about thirty or thirty-five feet apart
each way. In planting, each root should be straightened
out, and have the dirt firmly pressed around it.
Pruning is important, both at the time of setting
and afterward. All dead roots should be removed, and
all dead tips of live ones. The tips should be cut down
to just a switch, so that the roots shall start first.
The subsequent pruning depends on the way you
want the tree to grow. Probably the best way is
to have the tree branch low, and grow low and
spreading, thus shading its trunk at an early age
and protecting from sun scalds. As it grows low,
the wind has not such a good chance to break the
tree down. As it grows larger, it will shade the
ground sufficiently that weeds can not grow under it.
The only disadvantages of this system are that it has
a tendency to cause the tree to grow in three or four parts, and as these grow out farther and farther, they are apt to split apart, and the branches grow out so low that it is hard to get in under them to cultivate the soil near the tree. But very little pruning is necessary after the tree has been started right, simply cut off water sprouts and interfering branches. Whenever it becomes necessary to remove a large branch it should be smoothly done and the wound covered with a thick coat of paint or tar to keep fungi from getting a foothold in the tree. The main idea in pruning is to remove branches that are unnecessary, or that will be harmful when small.

There are many crops that are used to cover the ground between the trees. I believe, considering the soil and situation, that cowpeas would be best for this purpose. A crop of hay could be cut from them in the late summer, and another crop will grow up to be left on the ground over winter and plowed under in the spring following. In this way I would add nitrogen and humus to the soil. If, after a few years of cowpeas, the trees show too much of a tendency to grow late in the fall, I would change the cover to rye, or raise corn in between the rows.
The windfalls could be gathered up and sold in Kansas City or the market square. The fruit that hung on the trees until ripening should be hand-picked, sorted, and with careful handling, put in the cellar to keep until the market was favorable. I think it would pay a man to sell stone commissary merchants, directly to consumers, but to sell nothing on the market to brokers except the windfalls and proper fruit.

Spraying the apples for any kind of ailments is important. Paris green on the fruit just as the blossoms fall will get the colling moths, and have a strong tendency to prevent any or lowny fruit. Spraying the foliage with a poison when they is in attack, or when you have reason to fear an attack of leaf-eating insects is a good idea. Kerrene emulsion is excellent for any sucking insects such as aphids.

In planting the vineyard, I shall plow deeply in the fall, leaving a deep dead furrow where each row is to be. After the frost reduces the land to a fine condition, the young vines may be planted in rows six feet apart, and about three or four feet apart in the row. The next fall, the vine should be cut back to a little stem or two about a foot
in length. The following spring, no fruit should be allowed to stand (grow). The plant should be cut back to two or three short vines. A little fruit may be allowed to set the third year, although the vine must not raise all it will set. After that, prune according to the low renewal or fan system. This consists in getting the branches to start down close to the ground, and leaving only young wood, three or four canes, each two to three and one half feet in length. The cultivation of the vineyard will mostly be with a five-tooth harrow or cultivator. The 2-horse cultivator may be used in some cases.

As I intend to raise fancy fruit, I will thin the grapes down to a very few of the choicest clusters to each vine, as these approach maturity, they will be encased in sacks to prevent the birds and wasps injuring the grapes and to allow them to get thoroughly ripe before picking. I shall experiment upon growing fine clusters and wrapping them in tissue paper to sell. I have noticed that when a grower thinks enough of his fruit to wrap it in tissue paper and put his name on it, the consumer will do his part nobly.

Although diseases of grapes are rather rare in that immediate neighborhood, I think it would be

well to spray, from time to time, with Bordeaux mixture.

Of the common varieties, I shall plant Reden, More's Early, and Kezra. Of the more tender varieties, Diamant, Brighton.

In planting my cherries, much the same plan shall be followed as for the planting of apples.

The varieties will be: Early Richmond, a few, English Morells, and Montmorency. These are 'four cherries' and can be planted 18 feet, each way.

As the situation is not very favorable, the cultivation and care will have to make up for it. With cow-pies for a cover crop, and the occasional application of manure, and constant application of Campbell's method of soil culture, I think I can make my cherries above the best pears in the county.

The pruning is very small in amount, only enough to cause the tree to grow low and spreading, and to remove water sprouts and interfering branches. The cultivation and cover crops will be much the same as for apples.

After getting the soil in a good condition, I will plant my strawberries. The rows are to be four feet apart, and the plants eighteen inches in the row. They will grow here for about three seasons, and then I shall renew by
allowing the plants to run out in the row, and then cut out the old plants and removing and burning them. This will be a little dangerous on account of the fungus diseases, but the situation is so favorable that I shall run the risk, just for that one time. When the bed has run out after this renewal, I shall take up plants from runnins and plant them out in the new situation, just west of the barn.

The varieties that I would raise would be early and late, mostly. At the I cannot tell exactly what varieties will do best on my soil. I think I shall try, if the imperfect flowering varieties, Bajantine, Warfield, A. of the perfect, Croell, Capt. Jack, and Gandy.

The cultivation will mostly be by a few tooth cultivator and hoe.

The small fruits that I shall plant upon the hill side will be mostly blackberries and raspberries, also the strawberry, gooseberries and currants.

Of the blackberries, I shall take some medium growing sort, some descendant of the old Kittatinney. If the raspberries, probably the Kansas, or some other promising black cup.

My peach orchard will be something to be proud of. The trees should be about fifteen feet apart each way, the same care being taken as for the planting of the apple.
As in the case of strawberries, I don't know what varieties would be best, but the five varieties I would give first trial to would be, in the order of ripening, Mountain Rose, Alberta, Mrs. Brett, Picquette's Late, and Saladie.

For cultivation, I would give them clean culture during the spring and early summer, beginning deep and getting more shallow as the season progressed. Later in the season, I would put in a crop of cowpeas for ever.

In ordinary years I would do but little pruning. If the fruit buds had been killed, it might be well to cut back pretty severely to stimulate new growth. If the wood had been killed by a very severe winter, it would be better to cut back to stumps than not cut back at all or just cut off the killed part.

There is one thing about peaches that the ordinary grower does not seem to understand. At first sight, it seems so illogical to suppose that by pulling off part of the green fruit in order to get a better yield a man can get more money for his crop, that I can't blame him for being slow to accept it. The fact stands just the same. You not only get better fruit, and more valuable fruit, but in many cases you actually get more by thinning. The freshest fruits should be removed - this process and taken away and buried or burned.
Let us look into the expense account.

For tools:
- Extensive chisel: $3.0
- Plow, 12-inch: $1.5
- Spraying outfit: $2.50
- Spring wagon: $1.00
- Light "...
- Outfit for blacksmith shop: $5.0

Tools & horses:
- Harness: $7.5
- Farm wagon: $6.0
- 5-tooth cultivator: $1.5
- Horse cultivator: $1.0
- Miscellaneous: $2.5

Now let's look at the other side of the account after the farmer had worried along somehow until his trees were bearing for fruit soon:

- 700 sq. apples @ 30 C each: $210.00
- 1,500 peaches peaches @ 20 C each: $300.00
- 2,000 " pears @ 15 C each: $300.00
- 6,000 boxes strawberries @ 10 C each: $600.00
- 3,000# cherries @ 6 C each: $180.00
- Miscellaneous fruits: $100.00

Total: $830.00
This is a very conservative estimate, for instance, 50 bu. per acre of apples would only be 1 bu. per tree, while reports are that 18 or 20 bu. per tree is not uncommon yields. 130 baskets (500 pecks) peaches per acre would be less than a bucket per tree, while, as a matter of fact, we gathered 5 baskets from a 5 year tree last summer. The grapes, strawberries and cherries may be nearer their real value, but under miscellaneous fruits there is two acres gland, in blackberries, raspberries, plums, etc. and $100 is a very low estimate.

Let's look at the other side of the account:

<table>
<thead>
<tr>
<th>Item</th>
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<tbody>
<tr>
<td>Interest on investment, 2000 @ 6%</td>
<td>120</td>
</tr>
<tr>
<td>Help during busy season</td>
<td>250</td>
</tr>
<tr>
<td>Wear and breakage of tools</td>
<td>75</td>
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<tr>
<td>1 year's share of expenses for unproductive years</td>
<td>100</td>
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<tr>
<td>Cost of spraying, etc</td>
<td>50</td>
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Gains, wages for myself and team, $123.5 and over. The team would live on the 9 acres of field, 4 acres of woods pasture, and the growth of the evergreen tree living of the man (myself) alone comes out of the $123.5. Leaving $100 profit and wages.
Thus you see how I will run my farm. How for a few additional thoughts or items. With the skills obtained at industrial work here, I expect to be able to raise my own trees, grafting on my own stocks of scions from the most promising trees. Budding is easily learned, so I can propagate my own peaches and plums.

In the blacksmith shop that I propose to have, I can save many ten-cent pieces and quarters and maybe dollars in repairing old and making new tools. Of course, if I make all the money that seems reasonable, just to look over the yields and prices I could afford to have a salaried blacksmith on the farm just for the pleasure of sitting and seeing him work, but the best laid plans of mice and men oft gang agley. So it probably will be here. Insects and fungi will come in and spoil promising crops. Seven winters and untimely frosts will blight many hopes.

And so it will go, yet, the occupation of fruit raising is one that for pleasure and profit can seldom be equaled.