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DEPARTMENT OF AGRICULTURE

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THE BOY WE WISH TO REACH.

Simple Lessons in Agriculture

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INTRODUCTION.

The study of agriculture will soon be made a required part of rural school courses of study. This will not be a hardship when teachers begin to see what splendid material is at hand for study, and to realize that the material is just what is needed to put new life into school work. Many are willing to undertake the new work, but do not understand how to begin. The chief purpose of this bulletin is to aid in this very beginning. The soil, the plant and a few type studies are given. When these are covered, the field will be opened and an abundance of matter will present itself for consideration.

Some of the following books should be added to the school library, and a set of texts may be provided. Free bulletins from the Department of Agriculture, Washington, D. C., and from ths Experiment Station, St. Anthony Park, Minnesota, may be had for the asking.

Practical Agriculture, Wilkinson.....American Book Co.
Introduction of Agriculture, Goff & Mayne.....American Book Co.
Agriculture for Young Folks, Wilson.....Webb Pub. Co.
An Introduction to Agriculture, Upham.....Appleton & Co.
Elementary Agriculture, Hatch & Hazlewood.....Rowe, Peterson & Co.
Agriculture for Common Schools, Fisher & Cotton .....Scribners
Elements of Agriculture, Warren.....Macmillan Co.
The Soil, King.....Macmillan Co.
Manual of Agriculture, Barto.....D. C. Heath & Co.
Among Country Schools, Kern.....Ginn & Co.

Refer to Extension Bulletin No. 2.

THE SOIL.

What is the soil? Where did it come from? Is there anything to it but a lot of black, dirty stuff that sticks to your shoes when it rains, or fills your eyes when the spring winds hurl it over the fields and along the roads? Ask yourselves these questions now, and then, again, when you have studied this commonplace substance for a few days.

What is the soil, and where did it come from? Bring to school samples of all the kinds that you can find, and try the following experiments with them:

1. Place a little of the blackest soil you have in a dish, and heat it very hot for a few hours. Since it becomes lighter in color and less in weight, something must have burned out of it besides the moisture which is driven off. If black soil is separated into its parts we should find small particles of sand, some clay and small portions of plants that have lived in it. Sand and clay are pulverized rock. Clay is very much finer than sand. As the sand and clay do not burn, vegetable matter must have been consumed by the heat. Indeed, this is true, for it is these particles of plants that rot and make the soil rich and black.

You have seen pictures of mountains. Through many years the fall of rain and snow, and the freezing in cold weather, have caused the rocks in the mountains to break up into small pieces. These are carried down the mountain side by the streams, and are spread over the flat, level places; sometimes at the bottom of gulfs, bays or oceans. They are the sand and clay-like particles you saw after the black soil was burned. So it is that the soil is composed of sand, clay and vegetable matter. The first two came from the breaking up of rocks, and the last from plant life. Sandy soil has little clay or humus; clayey soil has little sand. Not many soils have too much humus, but soils can easily have too much sand or clay.

2. In the bottoms of three small tin cans, of equal size, punch holes. Fill one can with sandy soil, one with clayey soil, and the other with loam. Pour one or two dipperfuls of water into each, catching what drips through. Which soil keeps the most moisture?

3. Take two cans, as above, without holes in the bottoms. Place equal amounts of wet, black soil in each. Stir the top of one twice a day with a pencil. After several days, determine which has lost the most water by evaporation. Stirring the top kept a dust blanket on the soil so that less water evaporated from it than from the can that was undisturbed. Why should a cornfield that is free from weeds still be cultivated?

Good soil must contain sand, clay, humus and water. Of what are these substances made? If you were to take a hundred pounds of good black soil to a chemist to analyze, he would find that it contained the following:

Silica	80 lbs.	Soda	1/2 lbs.
Iron Oxide	4 "	**POTASH**	1/2 "
Lime	1 "	**PHOSPHORIC ACID**	1/6 "
Magnesia	1 "	**NITROGEN**	1/10 "
Acids	3/4 "	Miscellaneous	12 "

Some of these substances you have seen at home; iron oxide is simply another name for iron rust. The water from some wells has iron rust in it. Silica is sand.

You notice that there are three things that are found in very small quantities. Phosphorus comes from the rotting of bones of animals; potash comes from decayed wood and its ashes; nitrogen comes from manure, from clover and other sources. Fertilizer is put upon a field to add humus and nitrogen, potash and phosphorus. These substances are very necessary in growing our grains, and the wise farmer is he who knows how to grow his crops and still retain these elements in his soil.

THE PLANT.

Is soil anything more to you now than mere dirt? Perhaps it will mean still more to you when you see just how the plant comes from it. But the beginning of the plant is in the seed; and herein is one of the greatest wonders of the universe.

"Only a shriveled seed,
It may be a grass, a flower, or a weed;
Only a box of earth, on the edge
Of a dusty window ledge;
Only a few scant summer showers;
Only a few clear shining hours;
That was all, yet out of these
God could make,
For a sick child's sake,
A blossom wonder, as fair and sweet
As ever broke at an angel's feet."

Before the seed begins to grow, if we could look inside of it, we should find a very small plant all ready to spread out and develop into a full-grown plant. So it is perceived that in studying a seed and its growth you are studying life. The soil seemed dirty and dead, but that is not true. It is full of life, and supports a new life in the growing seed and plant.

4. Gather samples of all the kinds of seeds grown on your farm. Do not fail to get weed seeds as well as wheat, corn, barley, flax, lettuce, beets, radishes, etc. Make drawings of several and describe them fully.

5. Take a hundred seeds of wheat, of corn, of flax, and of oats. Separate each lot into three piles of good, fair and poor seeds. Plant each in boxes, so that you can tell just how good,

fair and poor seeds compare in growth. If the weather were not quite right, which would be most apt to be stunted or killed?

6. Look over the seeds in your father's bins, to see if the wheat, oats, barley, flax, etc., have other seeds mixed with them.

7. Buy two or three dozen small round bottles at the drug store, and put the various seeds in them. If you will send a few seeds, in numbered envelopes, to the Botanist, at University Farm, St. Paul, Minnesota, he will name them for you, and you can label the bottles and show them at the county fair. How many seeds can you find on a tumble-weed?

8. In each seed is a little germ. In the corn it is at the pointed end. Cut it off with a knife. What part of the whole kernel is it? What is it for? What is the other part of the kernel for? Place various seeds between two damp blotters or cloths, and watch them germinate. What happens to the portion of the seed outside the germ? Does it really rot, or it is just changing, so the little plant can have food to make it grow?

If corn germinates in the ground, how long before the rootlets can get food for the plant directly from the soil?

Some seeds have more food outside of the germ than others. Some have harder coats than others, making it possible for them to live a long time in the ground before sprouting. Wheat lives only a few days, and mustard seeds may not germinate for seven years. How long do you think a hickory nut would have to lie before the little plant could get through to take root in the soil?

9. In order to grow a good plant, you need good seed. Small and irregular wheat and flax grains are very liable to produce small or stunted plants. Moreover, your seed should be free from other seeds. If you have wild oats among your oats seed you will certainly reap what you sow. It is best not to sow wild oats. Try to get good, clean, strong seed, and your crops will be enough better to pay. Grow your own seed, on clean plots of ground, and then you can be sure of what you are raising. Take tablespoonfuls of the seeds you father intends to sow next spring and with a knife select out the very best grains. Also, sort out any foreign seeds that may appear. Are you satisfied with his selection and preparation of seed?

You have seen a willow post sprout, send out branches and grow into a tree. If you cut a twig from a willow tree, it will grow. This is not a seed, but a cutting. Some plants grow from cuttings as well as seeds. The potato is such a plant. You do not plant the seed of potatoes; that seed grows on top of the vines. You do, however, plant cuttings from the tubers, which

are underground-stems of potato plants. The underground-stems have swollen up into what are called tubers. These tubers have buds or "eyes," which start to grow in the spring, and it is from these that the new plant comes. Are apple trees grown from apple seeds?

From the seed the plant starts. For a few days the new growth is so weak and tender that it can only live on the food prepared for it within the kernel; soon, however, that food is used up, and meanwhile small roots and root hairs have been formed, and then the plant begins to get food from the soil. If the soil is good and has the right sort of food, the sun and air can build from it the completed plant. Just how is all this done? Part of the process we can understand and part we cannot.

10. Stir some sugar into a glass of water. Taste it. Do sugar and water make food for your growth? What are some of the things that the baby needs to make him grow? Watch mother fix his bottle of milk. First, she takes a little cow's milk and adds a little water. To the water and milk she adds lime water, sugar and sometimes soda. After these are well shaken and warmed, the mixture is ready for the baby. Let us see what happens in the soil. When it rains, the water soaks downward, getting lime, sugar, iron, phosphorus, potash and nitrogen mixed with it. Then the top layer of soil dries out; and this soil-water, containing plant food in solution, works upward again and settles around the roots and root-hairs of the plant. When you are hungry, something inside of you seems to call for food. So it is with the plant. There is a call in the leaves, the stem and the roots for food. The food that will satisfy these organs lies outside, in the soil-water. To satisfy the demands from within the plant, the soil-water begins to soak through (osmosis) the root-hairs, and work upward through the stem and branches, leaving food for the hungry parts as it passes along. Most of the water taken up by the plant evaporates from its leaves, but the real food remains and becomes a part of the plant.

11. Pour a small amount of water on a cup of beans, and notice what becomes of the water after a few hours. Break dry beans open, and compare with those that were soaked. The dry bean wanted water, and it drew it through the thin surrounding coat. If the water were soil-water, the food held in solution would also have passed into the bean. This is just what happens in the roots of plants.

12. Draw a picture of any plant as it stands in the ground. Name the parts as follows: leaves, stem, roots, rootlets and root-

hairs. Can you see how the sun, shining on the leaves, calls the soil-water with its plant-food upward; and then, with the aid of the air, changes that food into the plant itself?

In order for a seed to germinate, it must be kept warm and moist. In order for a plant to grow, the soil must have plant-food and moisture. The sun and the air must also partake in the work. You can easily see that it will take lots of food to produce plants year after year. Imagine just how much must be needed to grow one good stalk of corn, or an oak tree. The corn does not need so much as the oak; therefore its roots do not go so deep. Imagine, also, how much water is needed to carry all this food to the different parts of the plant. If you could take all the leaves from a tree, and lay them side by side on the ground, how many square rods would they cover? And remember that the sun is constantly drawing water from this great leaf-surface. A good many gallons will evaporate in a day; a good many barrels in a season. On a warm summer day, when corn is making ears, an acre of corn will use a hundred barrels of water. If this is all true, how important it is that none of the soil-water, that comes so plenteously in June, shall go to waste in July and August. If you keep the top soil stirred, as in the experiment with the soil in the tin cans, you will save much moisture that would otherwise dry up through the untilled ground.

But what is the plant growing for? To reproduce seed like those from which it started to grow. But the miracle lies largely in the fact that it reproduces itself many fold. One kernel of corn will grow one stalk, upon which two ears may form. Each ear may have six hundred kernels upon it.

This leads us to the study of the formation of the seed. Before the seed comes the flower. All flowers in nature are preparations for seeds. Let us examine any complete common flower. In it we shall find the following parts:

1. Calyx—the green leaves outside of the main parts of the flower.
2. Corolla—the white or colored leaves inside the calyx.
3. Stamens—the pollen-bearing organs within the corolla.
4. Pistils—the organs which connect with the seed and receive pollen to fertilize the seed.
5. Ovary—lower end of pistil in which seeds are formed.

When the flower is just right, the pollen will shake off. Some of it falls on the pistils, and sends a little growth down to mix with the seeds at the base of the pistils. Later, the calyx and

corolla fall to the ground, and leave the seed to complete its growth. Unless this process of pollination takes place, the ovaries will not ripen seeds that will grow.

CORN.

Civilized people did not know about corn until America was discovered. The colonists learned from the Indians how to grow it; and doubtless the Pilgrims owed their lives, during the first winter or two, to this new food, that so splendidly supplemented the wild game and fish which were their chief diet. The Indians had cultivated it for many years; using the ears for roasting, or the dried kernels for Indian meal. The squaws usually grew the corn. With a stick they dug up the soil and scraped a small hole, in which they placed a handful of ashes and sometimes laid a fish. After having covered these with a thin layer of dirt, they planted the corn. While the plant was growing, they kept the soil stirred, retaining the moisture and keeping the weeds down. To make the Indian meal, they ground the corn between two stones, one of which was hollowed to prevent the wasting of the meal. What splendid food this must have been, when there was so little else to eat!

Soon the colonists gave special attention to raising corn, and it was not long before it was a common crop upon all the farms along the coast. From those early days, corn growing has spread over a large part of the United States. Find from your geographies what states raise most corn today. Also make a list of the things that can be made from corn. Include the following:

Stalks, - - - - - paper.
Seed, - - - - - starch.
Germ, - - - - - - oil.

Corn is one of the most interesting plants grown on the farm. It responds so quickly to good usage; and, on the warm summer days, while working with it, before you realize what you are about, you may be talking to it and listening for answers. Yes, this very communion may lead you to believe that God lives and governs in this world, not only among the great of the earth, but in and through the life that exists in the plants that sustain the nations.

Let us set aside an acre of land, this coming spring, for an experiment. It should be good land, and located where the pollen from other fields of corn will not blow over it. If the land had clover on it last year, all the better. Plow it reasonably deep in

the fall, leaving it unharrowed all winter, so that the frost and snow can aid in getting it into the best possible shape.

With the spreader, scatter fine fresh manure over the frozen ground; and, when spring comes, disc the fertilizer thoroughly in. Let the field lie until early in May, when it may be disced again, or harrowed, to kill the weeds that have started to grow. After all is ready, mark the field both ways, and prepare to plant the seed by hand.

But, before planting, you must have good seed. If your father or neighbor has a field of unmixed corn, get permission to select fifty ears from it. Sometime in September, when you feel that the frost may come almost any night, go into the field and husk the ears that you want. Choose the best ears you can find. Look also to the stalk upon which the ear grows. It should be well-formed and strong. The ear should be about hip high on its stalk, with a shank only long enough to allow the ear to bend slightly downward. If an ear stands straight up, the fall rains will enter the tip and cause it to mould at its base. Avoid, also, those hills that produce suckers. You need to remember to choose well-formed ears, with good kernels, from good stalks.

Hang the corn in a dry place and be sure it is thoroughly dried out before freezing weather comes. Freezing is liable to crack the germ, and prevent its growing if the kernels are not dry. If possible, keep seed corn where it will not freeze. Next March, lay the ears side by side in rows, and number each ear. Prepare a testing box. It should be about three inches deep and any convenient length and width. Fill it nearly full of sawdust or sand. Place a white cloth over the sawdust. This cloth should be marked off with a pencil into 2x2 inch squares and the squares numbered. Let the number on each square correspond with an ear of the same number in the rows of corn. Place six to ten kernels, from various parts of each ear, in the square set aside for the particular ear. Wet the sawdust thoroughly, and then cover the box with another cloth, over which another thin layer of sawdust or sand may be sprinkled. Keep the tester damp for five to seven days; then uncover, and see if any square has kernels that are not well sprouted. Throw aside any ears that do not show a complete test.

From what remains of the fifty ears after testing, select as many ears as there are rows across your field. Shell, and discard the tip and butt kernels from each ear. Use one ear for each row, three good kernels to each hill. Plant only on well prepared land. When the corn begins to come up keep it will cultivated,

not only to get rid of every weed, but to maintain a dust blanket over the field. This will aid in maintaining a supply of moisture, that will be so much needed later in the season. The cultivation should be shallow after the corn is a few inches high, so as not to injure the roots.

When the tassels begin to form, go through the field and pull all of them from the stalks in the even numbered rows. Repeat this several times, to be sure no tassels will remain in those rows. Cut off all suckers, and detassel all barren stalks in odd rows. The tassels are the stamens which produce the pollen; the silks of the ear are pistils which receive the pollen. The pollen lighting on the end of the silk sends a little growth down to the kernel and fertilizes it so that it will grow the next year. Self pollination tends to make the seed from that plant weaker; so, if seed is selected from the detasseled rows, we get corn that was fertilized from a plant grown from corn on a different ear. This gives it strength and vitality.

Now again, before the first frost, go through your field and select from the detasseled even rows all of the good ears that grow at the right height on good stalks. Keep in mind that the form of the plant and the hanging of the ear are nearly as important matters as the shape of the ear or the germination test. All of this work can be done only on a small scale; but from the acre or two you can raise your own seed, and can soon be supplying the neighborhood with better corn than they have ever before planted.

Do not select seed corn from the bin or crib. Do not let it freeze. Do not be satisfied with 95% test when you can have 100%. Do not be satisfied with less than eighty bushels of good corn to the acre. Do not plant more acres than you can attend to well. Do not let your seed get mixed.

Be sure to select your seed corn before the first frost, direct from the field. Be sure to test each ear in March, when work is not pressing. Twenty ears or less will plant an acre. Be sure to shell off tip and butt kernels. Be sure to cultivate to retain moisture as well as to kill weeds. Be sure to have a small selection plot from which to raise your own seed.

WHEAT.

Primitive men lived upon wild animals, fish, roots, berries and herbs. They probably learned to like the wild rice that grew along the swampy shores. It was but a step from this to cultivation of small patches of wheat, which could be gathered and kept for the long, cold winters. At first, the heads of the wheat plant were

picked and shelled by hand. Later, a rude, crooked knife cut the stalks; then they were gathered in bundles and finally treaded out by beast or man, on some hard dirt floor. For thousands of years wheat was sown by hand, on ground that had been rooted up with a crooked stick drawn by oxen. For a drag, a limb of a tree with many branches scratched the dirt over the scattered seeds. Each person could raise, at most, only a very few acres. The chief difficulty in raising larger amounts was in harvesting. The cradle, the reaper and the modern self-binder have made it possible for each person to gather much more than in those olden times; so that now wheat is one of the most important crops of the farm; and, instead of one or two acres in a field, some farmers cultivate hundreds of acres.

The milling of wheat, too, has been an interesting development. At first the berries were eaten whole or ground into a coarse flour, between two stones. There was no way to separate gluten, bran or shorts; and all went into the simple bread that was made. One stone was usually hollowed out, and another rolled around upon the wheat, crushing the kernels. Later, water power was brought into use, turning one stone upon the other; and all over our eastern states the mill-pond and the mill became common sights. After the stone mill came the rollers; and now the process is very complex and interesting. There are some sixty or seventy steps before the splendid white flour is ready for use. At first, each family ground its own flour; then there arose the mill for the neighborhood. Now, the flour from the great Minneapolis mills goes all over the world. Next time you go to town, ask your father to take you through the mill. It will be a valuable experience for you.

If we are to have the best flour, we must raise the best wheat possible. How can this be done? First, get acquainted with all the parts of the wheat plant. Study the root, stem, leaves and flowers. Watch carefully the formation of the seed. How tall is the plant? How long is the head? Are all heads of the same length? How many kernels in each head? Are all the kernels just alike? Bring a handful of seed to school. Look over the kernels carefully, and see if they are mixed.

How does Fife wheat differ from Blue Stem? What other kinds can you name? Will a weak, shrunken kernel produce a strong, tall stalk, with a good head upon it? If one-fourth of your seed is poor, what part of your crop is liable to be poor?

Beside the selection of good seed, you must have a good seed-bed. Plow your ground a little deeper each year, until you get

down seven or eight inches. The top should be well fined, ready for the little plants to get their food. Many of them will not live unless they obtain a good start; so take a little more time, and, if necessary, sow a few less acres.

The crop does not seem to do well if you raise wheat on the same piece year after year. In a later chapter, you will learn that wheat is best grown in a rotation once in four or five years.

From your geographies, learn where the great wheat areas are found. Do not forget the Argentine Republic, India and Russia. Have any of your relatives or friends moved to Canada lately, to raise wheat?

POTATOES.

Corn and wheat are grown from seed. Potatoes are not. They, like a willow, are grown from cuttings. The potato is not a seed, but an enlarged stem, with buds or eyes on it. These grow in just the same way the buds on the willow cutting do. If you were to plant the little seeds that grow on the top of the potato vine, you would be surprised to find the potatoes that grew from the seed were not at all like the potatoes on which your seed grew. Find some seeds, if you can, this summer, and plant them next spring. You might be able to grow a new potato that could be better than any you have seen. This would be only a very few hills, just as an experiment. For your main crop, plant pieces of tubers.

It is probably best that you plant some one kind, preferably one that has been grown in your neighborhood for several years. Select well shaped potatoes with shallow eyes. Cut them so as to leave at least one eye on each piece. Soak them a few minutes in formaldehyde water (druggist will tell you how to prepare it) to prevent scab. Do this before you cut the potatoes. Plant the pieces about fourteen inches apart, in rows 3 feet to 3½ feet apart. Cultivate them often, but not deep. Keep weeds out, but do not hill the rows. When the vines are well up, spray with Paris green, to kill the bugs.

In the fall, when the vines die, dig the potatoes. Place them in a dry hollow in the field, and cover with straw. Later, you can crate what you want to keep, and place in the cellar so the air can pass through and around them. When crating them, select as many of the nicest ones as you want to use next year for seed. Potatoes are best raised after clover, and should be a part of the cultivated crops passing from one field to the other in the rotation.

If you want to know how the varieties of potatoes compare, it would be interesting to make a variety test. Get some seed of

each of all the good kinds you can. Six to ten varieties will be as many as you will care to try. Plant them in equal-sized plots. Take good care of all of them, and notice which ripen first. Keep a careful record of each kind as you dig them. Determine which yield the best and which are best for food during the fall, the winter, and the spring months. Be sure to make an exhibit of the various kinds at the county fair. Do not select the biggest, but chose those of uniform size that are smooth and with shallow eyes. Crates are easily made from laths and inch boards.

CROP ROTATION.

So far we have studied something of the soil and plants. It is impossible to study one without referring to the other. The soil exists for plant production; but we must remember that good soil will not always remain good unless we take care of it. We learned, earlier, that nitrogen, phosphorus and potash were found in small amounts; and, since wheat, corn, potatoes and similar crops need so much of these elements, the farms must be worked to preserve them. We can and must farm so that each generation finds the soil a little richer and better, instead of all worn out, as are some of the old farms in the East.

In order to keep the soil rich, the farmer must rotate his crops. That is, he must not raise the same crop on the same piece year after year. He should divide his farm in such a way as to raise wheat on one piece, clover on another, corn and potatoes on another, and some other grain on still another portion. By changing these each year, he can grow all the crops he needs, and yet not grow one crop twice on the same piece within four years. Following is given a common crop rotation. There are many different schemes, and each farm will need a plan of its own; but this will help you to understand the principles of crop rotation.

1910 Flax and grains. 1911 Clover. 1912 Clover. 1913 Corn and potatoes. III		1910 Barley and clover. 1911 Clover 1912 Corn and potatoes. 1913 Flax and grains. II
1910 Corn and potatoes. 1911 Flax and grains. 1912 Barley and clover. 1913 Clover.	DRIVEWAY	1910 Clover. 1911 Corn and potatoes. 1912 Flax and grains. 1913 Barley and clover.
IV	BUILDINGS	I

FARM ACCOUNTS.

The farmer, as well as the storekeeper, should be a business man. He should at least keep simple accounts with his neighbor, his crops, his dairy, etc. Try to make up examples like any one of the accounts below. Perhaps you can get to keeping simple records for your father and mother. It will be worth a great deal to learn how, and to practice what you learn.

CASH ACCOUNT.

Paid Out.				Received.			
Jan. 1	Shoes	$ 2.50		Jan. 1	Cash on hand	$ 187.00	
3	Overcoat	15.00		5	Sold 2,040 lbs. hogs at $6.00	122.40	
5	20 bu. oats at 30c	6.00		10	Creamery check	90.15	
12	Cow	40.00		16	Helped neighbor	3.00	
18	Horse	150.00		20	Cash from note	200.00	
20	Flour	2.80					
25	Groceries	3.00					
	Balance	383.25					
		$ 602.55				$ 602.55	
				Feb. 1	Balance on hand	$ 383.25	

MR. NEIGHBOR.

Paid to Him.				Received from Him.			
Jan. 1	100 bu. oats at 30c	$ 30.00		Jan. 2	Bought colt	$ 85.00	
7	8 cows at $40.00	320.00		10	Cash	200.00	
10	Helped haul wood	12.00		15	Helped me haul lbr	15.00	
17	Sleigh	15.00			Balance	81.00	
28	Flour	4.00					
		$ 381.00				$ 381.00	
Feb. 1	Balance due me	$ 81.00					

CORN FIELD.

Paid to It.			Received from It.		
	Rent on 40 acres	$ 100.00		Seed saved and s'ld	$ 200.00
	Plowing	60.00		1,500 bu. sale corn	750.00
	Preparation	40.00		Fodder	150.00
	Planting	10.00			
	Seed	18.00			$1,100.00
	Cultivation	50.00			
	Harvesting	50.00			
	Balance	772.00			
		$1,100.00		Profit	$ 772.00