

the horses in good condition is believed to be the frequent use of the currycomb and brush. Every horse in the stable is cleaned twice each day, and is given a thorough brushing which keeps their skins sleek and clean. The entire thirty were clipped early in the spring before going to work on the land. This also facilitated the matter of keeping their coats in good condition.

In the working of the horses a system is used which is not common, even on fruit farms. With such a large acreage cultivated, it is necessary to use big implements and experienced orchardists know with what difficulty these are operated around and under trees. Most growers, therefore, choose to use two-horse implements only. On this farm, however, four-horse implements are used whenever possible, two horses making a team to draw these where trees interfere with the progress of the work. A regular four-horse team is kept, two of them being worked in the forenoon and two in the afternoon. These teams get no more feed and get the same care as the regular four-horse teams which work the land not already planted to trees, and to all appearances are in just as good condition for work. When in the field they are kept steadily going, but as stated they only work half a day at a time. It is thus found possible to keep the four-horse implements going in the orchard by the use of two-horse teams half a day about.

All harness used in operating this big farm is kept in small harness cupboards. At first hanging on pins behind the horses was tried but it was not satisfactory; now every team has a separate cupboard which cost only about \$6.00 for labor and material in making, and in which the harness is hung and closed up. These stand in the wide alley behind the horses, take up little room, are inexpensive, and one of the best methods we have seen of preserving harness and keeping it in good condition.

A REPAIR SHOP A NECESSITY.

With twenty-five men and thirty horses, and all the necessary implements and machinery, and the multiplication of problems which come up, it is necessary to have a complete system on the farm, otherwise the work would eventually develop into a hopeless muddle. Few indeed are the farms large or small which have everything so systematized as is the case on this fruit ranch. Adjacent to the horse barn stands the large implement shed, 150 feet long, and every noon and night all implements which it is possible to draw to the building without loss of time are brought to this shed and backed under cover. Here a mechanic is in readiness to go over every implement and machine, tighten all loose nuts and make necessary repairs. In this manner the implements and machines are always ready to take the field, and not a moment is lost through small breakages. This mechanic is an all-round handy-man. He makes double-trees, neck-yokes, tongues for the implements, and repairs all sorts of small and large breakages of iron or wood. This bringing the implements in also insures their being handy when next needed, and preserved from the elements which so soon destroy them. Besides this each group of men working together is provided with a leather tool sack of necessary tools to take to the field with them. A small, inexpensive blacksmith shop with a forge and necessary blacksmith and carpenter tools is provided. This handy-man is one of the busiest men on the place, and saves more time and money than perhaps any other of the hired men. With thirty horses and the necessary implements, one can readily understand that there is work to do in the repair shop most of the time.

HOW SPRAY TANKS ARE FILLED.

This man also looks after the mixing of spray materials, and a tank of well-mixed spray material, during spraying time, is always ready to go to the orchard. While on this point we draw attention to our illustrations which show the method of filling the spray tanks. A two-hundred-gallon tank is placed on top of this blacksmith shop, the roof of which is double boarded with a prepared roofing between. Two pumps lead from the roof of this shop, one to a large cistern which holds nearly 28,000 gallons, and which is situated under the end of the implement shed, next the blacksmith shop. This cistern is kept full of water from the eaves of the large horse barn and the big implement shed. From it the water is pumped into the 200-gallon tank on top of the blacksmith shop. The other pump leads to a vat of commercial lime sulphur used in spraying. The spray material is mixed in the tank by the handy-man, and when the proper outfit comes from the orchard it just takes about a minute to fill the tank from this elevated preparation tank, so no time is lost in preparing material, and the outfits are kept going all the time. The other illustration shows the method of filling on the farm, which was formerly the Johnson farm; a windmill and gasoline engine are used to pump the water up into a tank. A preparation tank is filled at the end of the barn from the tank into which water is pumped. This is drawn around on the

barn approach, and, as shown in the illustration, the material already mixed is run from this tank into the spraying outfit, which, in this illustration, is the compressed-air outfit, in which the water and air are mixed at the nozzle and a finer spray results with much less pressure on the hose. This is one of the simplest methods of filling spray tanks we have seen, and is just as quick as most. The spray materials are always well mixed, and the idea is an all-round



Going to Dinner.

A fine four-horse team on Lynndale Farms.

commendable one. It costs very little to collect the water, the walls of the implement shed being the walls used for the cistern, which is seven feet deep and twenty feet by thirty feet. The cement for these walls was mixed one to four with a floor six inches deep, and the side walls reinforced and ten inches thick with no plaster. So far it has not leaked a drop. This cheap method of getting water is practicable and in every way efficient.



A Good Team.

All implements go in when the horses go. The corn planter on the road at dinner time.

THE ORCHARDS.

The plantation comprises most of the well-known standard varieties of apples, with some of the earlier varieties used as fillers. The standard trees are planted forty feet apart under the filler system. Peaches are used as fillers over a great deal of the orchard and up to last winter's hard frost had done very well, but cold weather froze them back considerably, and it will take them at least a year to regain their past vigor.

With the standard winter varieties there is also a large number of trees of the earlier varieties, such as Transparents, Duchess, Wealthy, etc. On the Johnson place there is a block of sour cherries comprising some 300 trees, which, unless all indications fail, will give a very heavy crop as the young fruit is set and growing rapidly. Just east of this is a block of Keiffer pears, one of the finest young pear orchards it has ever been our privilege to see. The trees are

kept fairly well headed back, are uniform in size and shape, and well lined up at all angles.

Planting these orchards so as to get the trees straight for such long distances was no easy task, especially when one takes into consideration the fact that the land is very rolling in spots, and that also small acreages had already been planted here and there over the land which now comprises the large farm. The wire-cable system was used throughout. To hasten planting and allow of no loss of time a double cable was used, so that while one cable was being strung men could be setting on the other cable. These cables were seven-strand wire instead of six as is so often used, the six strands in this case being wound

around the seventh. This makes a much stronger cable than the other, and there is not so much danger of stretching or breaking.

Fences have nearly all been removed along the highways as well as those separating the land into small fields. The fence rows have been cleaned up, and all is now one large field divided here and there by private driveways or public highways. A great deal of rye is grown in the orchards on the sand land, and this is ploughed down to maintain fertility. Besides the manure made at the place over forty tons of home-mixed commercial fertilizer have been applied this spring. About ten acres of strawberries were just coming in bloom last week, and promise a crop of anywhere from 30,000 to 40,000 baskets. Between twenty and thirty acres of potatoes are grown and a considerable acreage of corn, some for the silo, but most of it is sweet corn for canning purposes. Tobacco has been a paying crop on the place, and this year late tomatoes for the canning factory are to be planted quite extensively. During the spring season it is sometimes necessary to get on extra help, and a few teams are hired to get the orchards ploughed and cultivated before the weeds make too much of a start.

SWEET-CORN SILAGE.

In one of the barns we noticed a number of heifers which had been fed all winter on silage fed all winter on silage. Most feeders still believe that corn should be pretty well cobbled up to make the very best feed for cattle or even to make suitable silage, but the silage upon which these heifers were fed was made from sweet corn stalks, from which all cobs had been removed and sold to the canning factory. Besides this this corn was frozen two or three times very badly before being ensiled. A stream of water was run into the box when it was being cut and put into the silo, and last