

Filling the Silo.

Considerable equipment is necessary for silo filling, and the help needed will depend on the rate of filling. A cutting box fitted with carriers is serviceable when the silo is not too high. A disadvantage is having to set so far from the silo in order to give pitch enough to the carriers. The cutting box, equipped with a blower which drives the corn through a pipe to the silo, is in most general use. The chief objection to it is the extra power required to drive the blower, especially if a large sized machine is worked to its capacity. An elevator constructed of large buckets, attached to chain belting and enclosed in a wooden case, gives good satisfaction and requires less power to run than does a blower. The cutting-box knives should be kept sharp, and if set to cut one-half inch lengths, the corn packs better in the silo than if the lengths are longer. The small pieces of stalk and cob are more palatable than the larger ones. When setting up the cutting box, it should be in a convenient place for unloading the corn and made level and firm. A little extra time taken at the start in getting every thing solid and the engine in line often saves time later on.

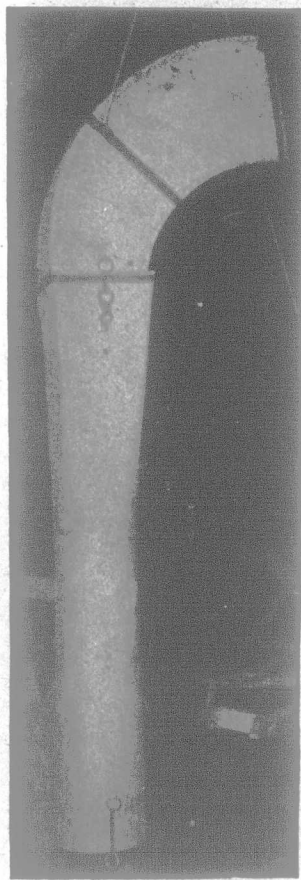
With everything working smoothly and sufficient help, a 12 by 35 foot silo can be filled in eight or nine hours. If the corn is green, it is advisable to cut it a day or two before filling, in order that it may wilt a little. A slight frost doesn't injure corn for silage, provided it is cut a few days after the frost. In fact, some feeders claim that frost improves its quality. At least, danger of having sour silage is largely eliminated. When corn is frosted or nearly matured, it can be cut and ensiled the same day. However, it is advisable to have some cut in advance, so as to run no risk of delaying the filling. There is a corn harvester on the American market which is equipped with an elevator which loads the sheaves on the wagon as fast as they are cut. This saves a lot of hard work in loading, but silo filling can not be rushed with this method to the same extent as when loading by hand.

To keep the machinery running to its capacity, four or five wagons and teams will be required. Besides the men with the teams, there should be two assisting with loading and one unloading. One man's time is taken up looking after the cutting box, and two can be kept busy tramping in the silo. This makes a force of nine or ten men, without counting the engineer or the man on the binder.

There is a tendency for leaves to separate from the stalks when dropping into the silo. If they are left in one place, there is danger of fire-fanging due to lack of moisture. It is difficult to keep them spread evenly without using a distributor. This consists of a line of pipes attached to the blower pipe at the top. One man moves this around as he is tramping, and there is an even mixture of all parts of the corn plant. As the silo fills, sections of the pipe are removed. Thorough tramping, especially around the edge of the silo, is essential to making good silage.

A flat-bottom rack, set on a low-wheeled wagon,

is serviceable for hauling corn. Some use a rack just the width of the wagon bolsters, and find it very handy. Others have a rack swung between the front and rear axles of the wagon, and within two feet of the ground. This makes loading quite easy, but what is gained in loading is lost in unloading. Where two are unloading, the load should be built from each end; then unloaded



Corn Distributer.

from the centre. This is convenient and saves pulling one sheaf from under another. If one man unloads, it is preferable to load from the rear, so that he may start unloading from the front and step the horses up in order to keep the point of unloading even with the cutting box table. This saves time and makes the work easier.

With a large outfit and a gang of men, the silo is filled in a short time. However, farmers who have a power outfit of their own claim that it is as economical

to do the work with their own help. Two or three men with a couple of teams can store away a lot of corn in a day. Although it may take ten days or two weeks to harvest the crop, it nearly balances with the time spent assisting neighbors to fill their silos or with the expense of hiring a gang. There is also the advantage of being on the farm to look after the stock, etc. Of course, where the outfit must be hired, it is more profitable to secure plenty of help and complete the work in as short time as possible.

The corn is bound to settle considerably in the silo, the amount depending on the extent of tramping, the time taken in filling, and the depth. Where a silo is filled in a day, the corn may settle ten feet the first week. The outward pressure on the walls is many pounds to the square inch, and in a wooden silo the boards take up moisture and expand. If the hoops have been tightened during the summer, it may save trouble to slacken them at time of filling. Neglect of this has resulted in hoops breaking, allowing the walls to spread, and the air coming in contact with the silage has spoiled it.

There is always a small amount of spoiled feed on the top. This can be minimized by putting a foot or more of cut straw on top and sowing a few oats in it. The steam from the heating silage moistens the straw and starts the oats germinating. This practically seals the top and prevents waste of feed. The same principle can be followed at any time it becomes necessary to cease feeding for a few weeks.

It sometimes happens that an outfit for filling the silo cannot be secured at the time corn is ready to ensile. Under such circumstances it may pay to cut and stook the crop. Good silage has been made from dry corn. Of course, if put in the silo too dry, it fire-fangs and is spoiled. This difficulty is overcome by running a small stream of water into the blower pipe. The size of stream depends on the dryness of the corn. Some feeders claim that silage made this way is better than that made from green corn. Stooked corn ensiled in December and January has made splendid feed. The silo is a safe and convenient place in which to store the corn crop.

The acreage devoted to this crop is increasing each year. The crop is winning on its merits. Stockmen realize that no crop they can grow gives as large a yield of fodder as does corn, and if stored in a silo, no crop comes so near furnishing a winter substitute for grass. Until recent years the idea was prevalent among stockmen that corn was a warm-climate crop and that silage was unfit for feed. However, corn is now grown in a northern latitude, and the predictions that silage would decay animals' teeth and destroy their digestive organs were not well founded. Corn silage is good feed for bovines, summer and winter, and when fed judiciously gives fairly satisfactory returns with other classes of stock. The crop can be harvested and stored in a few days, and is ready for use at all times. Not only is it a feed in itself, but it aids in making dry feed with which it is mixed more palatable and digestible.

Automobiles, Farm Machinery and Farm Motors.

Handling the Misfires.

A person's real temperament is shown when a car stops on the road. Some men jump out, lift the hood, lose their patience, use profanity, and give a general exhibition of themselves that is not pleasing. Others review the situation very carefully, and whether they succeed in making the motor move or not, they prove themselves courteous and dignified at all times. Now, let me tell you what you should do if the engine goes dead. With your limited knowledge of its mechanism, you must decide in your own mind how difficult the trouble may be. Of course, you have previously seen that there is enough gas, water, oil and grease for the requirements of the machine. If the stoppage is caused by some very technical trouble, you will be compelled to have the car towed in or a man brought from the garage, but do not take any drastic steps, because a careful examination may show you that misfiring is the real trouble. Defective spark plugs have frequently stalled a motor.

Your first motion will be the cranking of the car a number of times, or the turning of it over with your electric, air pressure or other starter. If you do not achieve any results, it will be evident that the cylinders are either dried out or filled with gas. If they are overloaded, then you can arrive immediately at the conclusion that the spark plugs are shorted with the over-plus of gas. If this is the case, open the pet cocks on the cylinder heads. After removing the spark plugs, turn the engine a score of times by hand. While you are doing this, it is always well to open the throttle and have some one hold the intake of the carburetor open in order that only air may be sucked into the combustion chambers. Having accomplished all this, adjust the spark and gas levers properly and close the pet cocks. If the engine does not start, open up the cylinders and pour about a spoonful of gas into each one. Your engine may start now, or it may give a few explosions and stop, or it may absolutely refuse to turn a hair. If the weather is at all chilly, and we may expect altered atmospheric conditions, it would be advisable for you to try the priming process several times. The few explosions you secured at the first instance may develop into a regular series and start your engine

going. We give you these simple remedies in order that you may be saved the sacrifice which one's pride undergoes upon having a car towed in when the mechanic subsequently states that there was no serious trouble.

All the air that the cylinders require must be drawn through the carburetor. If you discover that your motor will not idle down, that it refuses to go without jumping and jerking at a less speed than ten miles an hour, then you can make sure that air is leaking some place. Under these conditions, you should examine all the manifold gaskets, the cylinder head gaskets, and the intake valves. These tests always provide definite information. In so far as the spark is concerned, you know that the hotter it is the greater will be its assistance in starting the engine under extraordinary circumstances. Hence, if you are having trouble, it may arise from the magnets of the magneto being weak, or the coil having developed a short circuit. We would recommend, however, that you do not tamper with any vital parts, but rather leave such a situation to be handled by a service man who possesses a real knowledge of ignition.

If, after having primed your motor a number of times, you find that it does not operate successfully, but continues to give just a few heavy explosions and then stop, it is possible that the gas supply pipe may be choked. You had better disconnect the union between the gas pipe and the carburetor and blow it out until it is perfectly clear, and until you are absolutely certain that the flow of fuel will not be stopped. Perhaps, too, there may be a dent or a kink in the pipe. If you discover either of these, the work to be done will be obvious. Should you find water or dirt in the pipe, it will be a simple matter to conclude that other foreign substances exist elsewhere. Then it is your duty to clean out the tank with a swab. In most cars, misfiring can be judged by putting on the muffler cut-out, but in those automobiles which do not have such a contrivance, missing cylinders can be detected, if the ear is at all practiced, from the sound of the muffler. There are different ways of locating the cylinders which are misfiring, but probably the easiest one is to loosen all the spark plug wires so that they can be easily disconnected or connected while the engine is in operation. Slow the engine down and open a pet cock slightly so that a distinct hissing sound is available. If this

noise is not altered by disconnecting the wires, then that particular chamber in question must be misfiring. If your motor misfires at a slow speed, but regulates itself at a higher one, we would not advise your stopping on the road to go through any elaborate tests, but would suggest that you get to the nearest garage without delay in order that an expert may bring his experiences to bear. Should you upon any occasion, however, find spark plugs covered with oil and soot, do not hesitate to thoroughly clean or replace them. AUTO.

Chief Cause of Auto Accidents.

It is estimated that at least 500,000 persons are driving automobiles on New York State roads alone. On August 1st the Secretary of State had licensed 205,954 cars and 87,591 paid operators. Even on rural stretches of highway more than thirty miles per hour is regarded as unsafe driving. Licenses in that State may be revoked for three causes upon conviction and recommendation of a trial court—intoxication, hurrying away from an accident causing injury without leaving name and address, and a third and subsequent conviction by a paid operator for speeding. A good many speed maniacs have already this year lost their licenses, and the records of the Secretary of State show that sixty-one per cent. were convictions for operating cars while intoxicated. In Canada, newspaper reports and common observation indicate that most accidents are the result of reckless driving, in many cases due to alcoholics.

Worth More.

EDITOR "THE FARMER'S ADVOCATE":

Your advice in "THE FARMER'S ADVOCATE" for treatment of young stock and horses has been a benefit to me many times, and the useful hints on these lines are worth much more than the price of subscription.

N. B.

C. H. SPIKE.