

### Caring for Farm Machines.

The best way is to keep the binder and mower always in first-class condition. This can be done easily if the farmer will do it at the right time. The right time is just after harvest, or when the machine is last used. That is when the farmer best knows how the machine has been running, how badly it is worn, and what parts are weak. A binder or mower repaired then saves both time and labor, because the parts are bright, and the old grease can be easily removed.

From observation, it seems that more farm machines rust out than wear out. This is just as true of the binder and mower as it is of the plow. These machines should be completely overhauled as soon as the harvest is over, and the needed repair parts ordered before the machine is put in the shed for the winter. All bearings should be cleaned with kerosene or gasoline to cut out all hard grease, decreasing the chance for ball bearings and other wearing parts to cut out when the machine is first put in operation the following year. All bright wearing parts, such as the bill hook and other knotters parts, the efficiency of which rust affects, should be greased with tallow as soon as the cutting is done. Such care as this keeps the machine in perfect condition, by preventing severe strains that might break some of the sound parts. The sticking of a binder elevator roller could break a chain, or even the bevel gear on the second shaft, if conditions were right.

If the binder is put in the shed with the canvases on, without cleaning the bearings or greasing the knotters parts, the first thing that will have to be done, when the binder is taken out of the shed, is to put it in motion to "loosen it up," before starting into the field. It takes from one-half to two days to get the knotters in shape, so that it works successfully. Very frequently, farmers use files, sand paper, or some other tool on the bill hook. Anything that scratches the metal should never be used, because it affects the working of the knotters, and almost always calls for the services of an expert before the damage thus done can be remedied. If the machine is cared for in the fall, when all the parts are bright, this difficulty can be avoided.

It is all-important to have the reel bearings working without unnecessary play. The same is true of the packers. If they are loose, the bearings should be babitted, which can be done by any blacksmith.

Care of the canvasses is also very important. Leaving them on the binder all winter results in stretching and affords a good place for mice nests. For this reason, it is best to take off the canvas, roll it up, tie it in a bundle, and either suspend it from a rafter or put it in a place where there is absolute assurance that no mice can reach it.

It is important, before putting the binder in operation, to see that every part is working free and easy. Remember, also, that rusty knives and guards will not cut grain if it is a little green. It is necessary, first, to get rid of this rust. The "loosening up" of the binder is the ordinary method. This is hard on the machine, and will not be necessary if proper care was taken the previous fall.

One of the best methods to keep any farm machine in good order, if it is not to be used for a few months, is to clean thoroughly all the oil holes with gasoline, then oil the bearings with a mixture of lard and kerosene, having the proportions so that the fluid will permeate all the parts, and then harden. This forms a coating over the metal which prevents rusting, leaving the machine in first-class condition. Going over a machine carefully to see that all the bolts are tight also helps to keep the machine in working order, and many repairs that would be occasioned by bolts falling out can thus be eliminated.

The cutter bar is the business end of the mower. The guards should always have a sharp point, and be kept in alignment, so that the ledger plates are always even, the ledger plates in good condition, and the knife sharp and free from nicks. The farmer will save trouble and worry by keeping his knife-grinder in the field, so that he can sharpen the knife when it becomes dull; also, by being well supplied with knife-heads, rivets, sections, ledger plates, wearing plates, and guards.

Tinder knives, mower knives, plow shares and any polished-surface tool should never be painted, when stored for the winter. Paint is hard to

remove. If one attempts to cut grass with a painted mower knife, the experience will satisfy him as to the foolishness of painting mower knives. Paint is harder to remove, and it does not protect the share nearly as well as good axle grease or tallow, which can be easily rubbed off.

One of the best methods to take care of the steel plow is to grease the mold-board, share and land side just as soon as the plowing is done. Leaving a highly-polished surface exposed to the weather for one night starts a rust. Paint must be scraped off with some sharp instrument, while grease can be wiped off with a cloth, or, not infrequently, the farmer can hitch to plow without touching the share, the dirt pushing off the grease. Paint is a good preservative of wood, but should not be applied to metal which has wearing or bearing surfaces.

Good judgment must be used in the care of the machines, as in every other phase of farm life. It frequently happens that a part becomes so badly worn that it may not wear throughout the next season. The question is whether to buy a new part, or take a chance on the old one lasting. The answer to this question involves more than the worn part. If the rest of the machine is in condition to last through the season, there is no question as to the wisdom of buying a new part, and putting it on before the rest of the machine is affected. But if a machine is so badly worn that a great deal of doubt is entertained as to whether the machine will last, it is better to purchase a new one.

The most essential thing is to house all machines and implements. To make any suggestions as to the size and kind of sheds would be inviting trouble, because no two farmers have the same kind of farm equipment. The floor should be dry and the sides and roof free from holes through which rain can fall. Using a shed for a chicken roost is very bad practice. Convenience in storing and removing the implements is another important factor to be taken into consideration when building a shed. But the greatest thing of all is to keep the metal parts from rusting and the wood parts from cracking and warping.—[C. A. Bacon, in I. H. C. Service Bureau.]

### THE DAIRY.

#### What Shall I Do With my Milk?

Men have not paid too much attention to the production of farm products, but they have not given so much attention to the marketing end as its importance warrants. To the dairy farmer, "Where shall I market, or sell, my milk?" is a very important question, because milk is such a perishable commodity that, unless the producer has a steady market, he may lose a considerable sum of money in a short time. While various plans are being perfected for preserving milk in a marketable and palatable condition, none of these may be said entirely to replace the old-fashioned method of producing, selling and consuming milk within 24 to 48 hours. Whether or not we shall be able to produce palatable and digestible milk, which will keep in good condition for longer than two or three days, only the future can decide. Men are working at the problem.

#### CONDITIONS WHICH DECIDE METHOD OF MILK MARKETING.

1. The Kind of Farming Carried on, and Condition of Soil.—For the man who is interested in raising live stock, milk in some form is almost a necessity, especially to the man rearing pure-bred stock. There is no known substitute for milk in raising young calves, pigs or poultry—more particularly the first two. To such a farmer, the selling of whole milk for town and city trade, to the cheesery or condensary, is looked upon as robbing the growing life on the farm. Under such conditions it is customary to keep part of the milk at home, either as whole milk or skim milk, and sell part whole milk and part cream, or churn the latter. Personally, we consider selling cream and feeding the skim milk on the farm an ideal method of dairy farming. There may not be so much direct cash from this plan as where milk is sold for direct consumption, but it means more and better live stock, more fertility retained on the farm, and, to the man on a "worn-out" or "wearing-out" farm, this is no small matter.



Hand - Selecting Seed Wheat.