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THE FARM SHOP

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Value of a Farm Shop

The construction, maintenance and repair of farm equipment is an important phase of farming, and should receive more attention than it does on many farms. It is probably a conservative estimate that an efficiently used farm shop will save at least one hundred dollars per year on the average farm. This estimate includes savings due to having machinery in good repair so that there will be fewer breakdowns and, therefore, less loss of time and crops. A certain amount of repair work can be done without a shop, but there are many advantages in having the tools and equipment arranged in an orderly manner under one roof. The farm shop provides a comfortable place in which to work on rainy days. Without a shop the farm tools are frequently scattered over the farm. Aside from being inconvenient, this practice is a costly one as many tools are thus lost while others are so badly rusted that they become useless.

Types of Farm Shop Work

A well-equipped farm shop will enable the farmer to lengthen the life of his machinery by systematic overhauling, repairing and painting. Time and money spent in keeping farm buildings painted and repaired will prolong their period of service. Farm shops are being used for all types of repair and construction jobs in wood, metal, leather, rope and concrete. Auto and tractor repairs, glazing, soldering, simple plumbing and electrical work are among the jobs that can be

more readily performed with the aid of a farm shop. The variety of jobs that can be done will depend upon the extent of the equipment and the ability of the worker. The introduction of new power machines and tools has helped to increase the scope of farm shop work. New materials such as plywood, quick-drying enamels, water-resistant glues and insulating boards have helped to simplify many of the farm shop tasks. For the farmer or his sons who wish to improve their mechanical ability, and secure additional information on farm shop work, there are available numerous books, bulletins and manufacturers' handbooks. A list of available publications can be secured by sending your request to the Agricultural Engineering Division, University Farm, St. Paul, Minnesota.

Shop Specifications

The farm shop should be large enough to accommodate most farm machines so that overhauling and repair work can be carried on irrespective of weather conditions. It is quite common to put up a building that will serve both as a garage and a farm shop. With this type of building the minimum size should be sixteen by eighteen feet and an eight foot doorway should be provided. A larger building will be necessary and desirable in some cases in order to provide additional working space. The shop can also be combined with the machine shed.

The building may be of wood frame construction, or it may be of fireproof materials such as brick, concrete or tile.

There is always some danger of fire from the presence of oil, grease and wood shavings in a building where a stove, forge or blowtorch is being used. The floor, preferably, should be of concrete from four to six inches in thickness. A concrete approach to the floor will facilitate the bringing in of farm machinery.

The shop should be well lighted and ventilated. Some form of artificial light should be provided for use during the late winter afternoons,

as well as for emergency repairs at night. Where electric lights are installed an extension cord should be on hand. A stove will make it possible to work in the shop during the winter months when the farmer has more time to devote to the overhauling and repairing of his machinery, as well as to do many other repair and construction jobs.

Equipment and Arrangement

The shop should have a substantial work bench equipped with both wood-working and metal working vises. There should be storage space for lumber, garden and lawn tools, shovels, scythes, sickles and other miscellaneous equipment. Cabinets with drawers should be installed for such supplies as nails, screws, bolts, nuts, washers, rivets, glue, paint and other small items that will be found useful in the shop. The smaller hand tools can most conveniently be taken care of by a wall cabinet which may be locked when not in use. The shop should be equipped with a tool grinder or grindstone, an anvil and a bench or post drill. A forge may be added if blacksmithing is to be done.

The arrangement of the shop equipment is important and should be planned so as to take best advantage of the space available, and at the same time be convenient to the worker. The work bench should be placed along one wall so that the vise will be in a position to receive sufficient light from the windows. It is best to keep the drill and the tool grinder away from the corners so as to leave room for swinging long rods, sickles and similar pieces of equipment.

In selecting equipment and tools for the farm shop one should keep in mind that a few good tools will be more valuable than a lot of cheap ones of inferior quality. Where all the tools and equipment can not be purchased at one time, the most essential ones should be purchased first and the others added as funds permit or as the needs arise. In Special Bulletin 115 of the University of Minnesota will be found plans for work shops in combination with machine sheds and garages. This bulletin also contains a plan for a tool cabinet and a suggested list of tools and equipment for a farm shop, the total cost of which is approximately \$80.00.

When the farm shop is once equipped its usefulness can be greatly increased if the shop and equipment are kept in good order. Keeping things in their places, cleaning the bench and the floor, filing the saws and grinding and honing edge tools are a part of keeping up the farm shop.



Combination Shop and Garage