Cooperative Ownership of Equipment

For Threshing and Silo Filling

Samuel Armstrong, Peterboro Co., Ont.

A FEW years ago there were several silo filling outfits in our district owned by private individuals and travelling from farm to farm filling silos. To-day there are none. The privately owned outfits did not prove satisfactory. Not only did we have to fill our silos when it suited the convenience of the owner of the outfit but, in few cases, was the power used sufficient to run the blower satisfactorily. The syndicate with which I am connected was, I believe, the first one organized in our neighborhood on a cooperative basis. That was about seven years ago when six of us went in together to buy a corn binder. We purchased this corn binder before we even had silos. Later two more neighbors joined the syndicate and we bought a blower, one of the largest capacity manufactured. In the meantime, of course, we had built silos. At first we hired a power. This fall the charge asked for the power became so high that we bought the big steam engine and the threshing machine along with it, so that now we are completely equipped for both silo filling and threshing.

The investment divided among the eight of us is nominal. Our corn binder cost us $130, the blower $180, and the engine and threshing machine $1,800. At first, when we owned only the corn binder and blower, each one of us contributed an equal share of the purchase price and also divided the expenses equally between the eight shareholders. Since we have gotten the threshing outfit we have had to adopt a different basis for it, as some men have twice as much threshing as others. We are now working on a scheme which is original with us and which promises to be perfectly satisfactory. The man from whom we purchased the outfit did not require cash. Our arrangement is that every man will pay $20 a day for the use of the outfit until it is paid for. The interest charge on the money is six per cent. Expenses for repairs and so forth are allotted according to the number of days that the machine is in use, the bills being rendered at the end of each season.

"Shorty," Grand Champion Steer at Toron to Fat Stock Show.

"Shorty" is a pure bred Shorthorn, bred and fed on the farm of T. A. Russell at Downsview, Ont. At the conclusion of the Toronto Show he was sold at auction for 60 cts. a pound. The Wm. Davies Company were the buyers.

We have purchased this equipment for our own convenience. We thresh when we want to and we fill our silos when we want to. It is one of the rules adopted by the syndicate that the equipment will never be used outside of our own members. The only possible exception would be one of charity.

Internal Combustion Engine

Its Many Uses Around the Farm

Prof. J. Evans, O. A. C., Guelph, Ont.

SAVING labor in stable and home by the use of machinery is one of the great economic problems engaging the attention of farmers to-day. Through the use of machinery they can produce even more at less cost than in years past when labor was plentiful and tolerably cheap. Probably never before in the history of the farming world have so many farm problems been solved by a single piece of machinery as has now been accomplished by the internal combustion engine. A single man on the farm by the use of machinery and by means of ample mechanical power can accomplish as much as a dozen men could with their unaided hands.

Just now efficient helpers for farm work are scarce, but the amount of labor to be done is even greater than in normal times. This demands strenuous and increasing effort and taxes the resources and ingenuity to the breaking point.

The possibilities of the gasolene engine on the farm are only just beginning to be realized. It can be operated successfully and profitably by a person with very little experience in caring for machinery. Its more general adoption and use will lighten the labors of the farmer and his wife and relieve them of much drudgery. The number of practical uses to which a farmer can put his farm engine is limited only to his own ingenuity; and probably there is no easier and more economical way to reduce the chore work than to enlist the services of a gasolene engine.

A Few of Many Uses.

In the stable it can be employed to advantage in grinding feed for the stock. It can cut feed and ensilage—this use of the engine is so well known that I merely mention it in passing. It can pump water for the house and stable. To have a liberal supply of water on tap in house and stable whenever one pleases; a hydrant on the lawn and in the stock yards to which a hose may be attached for washing the buggy, sprinkling the lawn, flushing pens and stable and for other purposes is a source of much satisfaction, pleasure and comfort.

By means of a line shaft a gas engine may operate many labor saving machines at the same time. It can run the grindstone, root pulper, fanning mill, cream separator, churn, sheep shearer, horse clippers, rotary curry comb and the milking machine, with which it is possible to milk two cows in about six minutes, including the time required for changing and setting. Further assistance may be had by attaching the power for refrigeration and for circulating milk over a cooling surface—a practical necessity.

Electrical Assistance.

The development of the gasolene engine has made possible the use of electricity on the farm by furnishing the source of power for driving an electric generator. The current thus generated can be distributed at will about the various buildings for light and power.

Every electrical device that has been invented for use on the farm has had in view the saving of time and labor and a reduction in the amount of hired help needed. The electric current may be made to operate in the house the sewing machine, the washing machine, wringer, etc. When you decide to instal an electric power or light plant do not make the mistake of buying a plant that is not large enough should you desire to use your lights and at the same time several of the labor saving devices. The gasolene engine solves for the farmer the problems of comfort in the home, safety in the stables, and a great deal of drudgery generally.

Homes Retain the Best Labor

Argument for the Tenant Cottage—*By A. D.*

HOMES are the great stabilizers of civilization. The more advanced industrial methods recognize the value of decent homes in keeping labor fixed and thus preventing the heavy losses that result from constant shifting from place to place. As a result of this recognition, many large industrial concerns provide neat and attractive houses, which they rent to their employees at reasonable rentals. Such cases are usually merely commercial propositions. Homes are provided because it is cheaper to do that than to suffer the losses due to the constant shifting of a more or less dissatisfied labor supply. Similarly, during the war, the Government of Great Britain and the United States established model towns for the employees of munitions factories and the results in greater labor efficiency have surpassed all expectations.

Herein lies one of the remedies for the shortage of labor on farms. The farm hand whether married or single, whether employed permanently or temporarily, is, in most instances, dependent on the home surroundings of his farmer employer for the comforts and decencies of life. In cases where the farmer knows the difference between living and existing this system may not be intolerable, but every efficient laborer desires a home where he can enjoy a reasonable measure of privacy and independence.

Farmers would do well to learn from the experience of industrial leaders and provide simple but attractive and comfortable homes, which could be leased to hired help at a small rental, or simply be used as a special inducement to encourage married men to work on farms. Unless such advantages are provided, it is useless to complain of the scarcity and inefficiency of farm labor, for the best laborers are sure to seek for employment where they can have homes of their own and only the less competent and the inefficient will find their way to the farms.

Why Store Ice?

With Suggestions on Ice House Construction

ONE Monday morning last summer while driving along a country road, I happened to meet a friend returning from a cheese factory after delivering his milk. It was an exceedingly hot morning following a still hotter Sunday. I noticed that he was not in very good humor and after talking with him for a while I asked him what made him look so cranky. This was his story as told to me:

"I am not going to be humbugged this way another summer. I am going to put up ice and keep my milk in shape after milking. This morning I took down to the factory part of Saturday's milk, also Sunday's and this morning's milking, about 500 lbs. in all. When I got it to the factory it was so sour that the maker wouldn't take it. He said that it would spoil his whole make. There is easily $10 worth of milk in these cans that I will have to feed to the pigs. This is not the first time I have brought home a can or two of sour milk. I don't blame the maker. It's my fault and I am losing money by it."

How many farmers keep ice? I doubt if there is one in ten. What is true of the farmers is, to some extent, true of the factories. Many of them do not put up ice for summer. During the hot weather it is about as difficult for makers to produce good cheese or butter without ice, as it is for the former to deliver good milk or cream at the factory.

As a rule, ice can be had for the cutting, also sawdust can be had for drawing it away from the millyards. On the whole, ice for the dairy farm is not an expensive necessity. Factorymen would find it to their advantage to persuade more of their patrons to put up ice for their dairy. The milk or cream can be cooled off after milking or separating, and held at a low temperature until taken to the factory. If started on its journey in a good cool condition, there is not much danger of it souring before reaching the factory. With all the milk or cream coming in in good condition, the maker is able to turn out a product that will find a ready market at the highest prices; particularly is this true of butter.

One advantage in connection with storing ice on the farm is that it does not require expensive ice houses. I observed the type of house at one of the government's experimental farms that appealed to me as being one that nearly every dairyman could afford. This house was located at the well, which happened to be not more than seven or eight rods from the stable. It was placed there for convenience to water.

Constructing an Ice House.

The construction was simple. It was a building 12 feet square and 12 feet high and having a pitch roof. The framework, consisted of five cedar posts to a side. These posts were sunk in the ground four feet. The plate at the top consisted of two 2 x 6 inch planks spiked on the top of the posts. The rafters were 2 x 4's put on in the ordinary manner. The siding used was rough inch lumber nailed on the outside on the posts. Special care was taken to nail this lumber on securely enough so that the pressure of the sawdust from the inside would not cause a bulging of the siding. The sheeting of the roof was also rough inch lumber, laid tight. A good grade of felt roofing was used. It was considered that a floor was not necessary, but several cedar poles were laid on the ground at intervals of about six inches to afford drainage. The frost is not yet so deep in the ground but that such a house could still be constructed this fall.

A house of this size will hold six rows of cakes, cut 18 inches, each way. This left a space 18 inches all round for sawdust. A foot or a foot and a half of sawdust was placed in the bottom before any ice was packed. The height of the house is sufficient to hold six or seven tiers of ice. In other words 200 to 250 blocks could be stored. This amount would be sufficient to meet the needs of any dairy farmer.

This ice house was erected as the permanent house for the Station. It does not cost much more to build permanently than to build temporarily. About the only difference that I can see is the difference in the amount of labor expended. The temporary house will take practically the same amount of lumber. Although the material used in erecting the ice house at the station was all rough lumber, it was considered advisable to paint it. It is surprising the difference in the appearance of a rough building that a little paint will make. A mixture of cement and milk was used for painting this particular house. It produced a slate gray color pleasing in appearance. Such a paint is cheap and could be used about the farm with wonderful results.—C. E. M. D.