

But we planned to build a dairy at the well, where we would have a large supply of fresh water receivable at the stables under control of float valve. We wanted power that might be under control, and with shafting and pulleys could be used for pumping, churning, cream separating, running the emery wheel or any such light work. We decided that a small gasoline engine should do the work. These machines for this purpose are now quite common throughout Waterloo county, and are giving good satisfaction.

Points to Consider in a Dairy Sire*

In selecting the sire, first decide on the breed which you think will be best suited for your conditions. Then stick to this breed. The value of the sire must be based solely on his ability to get high producing heifer calves. There are two courses open to a man who wishes to select the proper sire to grade up his herd. Select a young, untried sire and judge from his form and the records of his dam and grand dam as to his ability to transmit dairy qualities, or select an old sire that has been tried and found to have the ability to transmit milking qualities to his daughters. The desirable sire should have high producers in his ancestry. His dam, and grand dam especially, should be superior individuals, also the dam of his sire.

In studying herd records it is well to pay more attention to year records than to records for short periods of time, such as 7-day and 30-day. Although many dairymen prefer a young bull—of course there is some uncertainty as to his power to transmit dairy qualities—the most skilled breeders are often on the lookout for aged bulls, which have sired daughters of merit. They, of course, are hard to get and are often expensive because their great value is known to their owner, if he is a wise breeder. Many dairymen sell the bull for beef after he has been used two or three years without seeing any of his daughters in milk. Many good bulls no doubt are lost in this way.

There are certain characteristics of form which should be present in the sire. He should have a strong, masculine appearance, strong constitution and vitality and be a good type of the breed he represents. He should have a lean, clean-cut face, with wide muzzle, strong jaw and large bright eyes. His ribs should be long, well sprung and wide apart, giving him an open relaxed conformation. His abdomen should be large and deep with strong navel development, indicating feeding capacity and vitality. His hide should be loose, pliable, of medium thickness, not thick and meaty, nor thin, dry and papery. The rudimentary teats, which are found just in front of the scrotum, should be large, squarely placed and wide apart. This is considered very important by many judges, as a large well balanced and well shaped udder on the cow is largely due to the way the rudimentary teats of the sire are placed. If they are crowded close together, the result will be a narrow pointed udder on the daughter. When we speak of prepotency, we refer to the ability which the sire has to transmit his characteristics, or those of his ancestors, to his progeny. It is indicated by the vigorous appearance and a strong, resolute bearing and an abundance of nervous energy.

It is clearly indicated that the farmer's flock, if given a fair chance, plays no small part in producing a profitable income on the farm. That many farm flocks produce little or no income is not the fault of the business, but rather of its management. With the poultry business like any other business, good management brings success. Give the hen a fair chance and she will do the rest.

—L. B. Martin, Lincoln Co., Ont.

*This article is part of an information circular sent out by the Blue Valley Creamery Co. to its patrons.

Modern Means of Unloading Hay

E. Terrill, Northumberland Co., Ont.

Unloading devices are now generally used. In our barn we have put up a wooden track 112 feet long; the one in the "L" is 40 feet long. We prefer the wooden tracks on account of them being the least noisy. Each track is fully equipped so that there is no changing of cars, pulleys, ropes, etc., which is a decided advantage when one is in a hurry. We use rope slings, without slats, going the full length of the load. Three dratts take off a load and often do it in about three minutes. We use two ropes in the sling for hay and three ropes for sheaves of grain.

I often think how many days I have perspired under the rays of a midday July sun putting in hay the best I could in some low shed or lean-to, and then think, with a feeling of much pleasure,



A Labor Saver of the First Order

Unloading tools cost so little in comparison with the work they can perform, that no one with hay or grain in quantity to unload should think of doing without a full equipment in this line.

on the vast improvements of modern days that have made the up-to-date young farmer of today the envy of his city cousins, who acknowledge that he follows the most free and easy occupation on earth.

Raising an Orphan Foal by Hand

A. S. Alexander, V. S., Madison, Wis.

In case the mare dies or has no milk the foal may be raised on cows' milk, if the attendant conducts the work patiently and intelligently. Choose the milk of a cow that has recently calved, preferably one which gives milk low in butter fat, for mares' milk while rich in sugar, is poor in fat. Sweeten the milk with molasses or sugar and dilute with warm water. Give a little of this prepared milk at short intervals from a scalded nursing bottle and large rubber nipple. Be careful to keep the bottle and nipple scrupulously clean. Add an ounce of lime water to each pint of the prepared milk and allow half a cupful once an hour at first.

As the foal grows, gradually increase the amount of milk fed and lengthen the intervals between meals. In a few days food may be given six times a day and, later, four times daily. The foal will soon learn to drink from a pail, if allowed to suck the attendant's fingers at first.

Until the bowels move freely, give rectal injections night and morning. If the foal scours at any time give two to four tablespoonfuls of a mixture of sweet oil and pure castor oil shaken up in milk and stop feeding milk for two or three meals, allowing sweetened warm water and lime water instead. Let the foal lick oatmeal as soon as it will eat and gradually increase the amount

and add wheat bran. In five or six weeks some sweet, skim milk may be given and the amount gradually increased daily until, in three months or so, it may be given freely three times a day in place of new milk. The foal at this age also will be eating freely of grass and bran.

At all times supply pure cold drinking water. Let the foal run out in a lot or grass paddock for exercise. Accustom it to being handled daily. Feed small quantities of nutritious food often, keeping all feed vessels clean, and the foal should thrive and develop well.

Second Hand Machinery—Is it Worth While?

T. R. James, Middlesex Co., Ont.

Shall we, or shall we not, buy second hand machinery? Many of my brother farmers do not stop to consider this question. They buy the cheap second hand machinery wherever and whenever it is offered, provided they have any possible future need for it. Some of the second hand machinery such as can be picked up at auction sales is little the worse for wear and will often give good satisfaction and prove to have been good value for the money. To buy any of the great bulk of the farm machinery that is sold at auction sales, however, is a losing business; and this statement applies with double force to such intricate and delicate machinery as binders, mowers, tedders, side delivery rakes and cream separators.

A PREMIUM ON NEW MACHINERY.

The western farmers put a premium on new machinery that is often overlooked by us eastern farmers who are nearer the place of manufacture and hence can more rapidly secure repairs. One westerner of my acquaintance who keeps three seven-foot binders, sells one of them every third year no matter how good it may be and buys a new one to replace it. He says that there is always someone looking for a cheap binder and by keeping his binders housed while not in use, the paint is still fresh on them and they sell for a very good price. He told me that he would not risk going into his crop with an old machine because the delay of one or two days might mean a loss to him sufficient to cover the cost of several new binders.

Another western farmer of my acquaintance who was talking about his mowers said, "There are many mowing machines used long after it would pay to replace them with new ones. Time is money. A man cannot afford to work with any cutting machine that will not go right along without stopping to clear the machine or to put on repairs."

What is true of a western farmer applies, possibly to a lesser degree, to us farmers here in the east. We cannot afford to run an old mower that has to be backed up and given a running start when it comes to heavy grass. We cannot afford to run a binder that misses occasional sheaves or that does not tie perfectly. With a hay tedder that calls for repairs each half day it is run—and there are many such—the time lost and expenses for repairs would pay big interest on new and up-to-date machinery, which is capable of doing the best possible work and for which the manufacturer must be responsible until the machine has proven its efficiency and worth.

There will always be a small probability, men who will jump at the chance of buying second-hand machinery. There will always remain countless farmers who will use old machines much after they should be consigned to the scrapheap. These men will pay for their folly in good hard cash. The more progressive of us, however, will continue as we have done in the past to recognize the superior value of brand new and up-to-date machinery—the kind that can be relied upon to do its work well and whenever called upon to do that work.

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