

the plant will be destroyed and there will be no second crop. Red clover produces a good after-growth which furnishes fresh pasture for the stock at a time when the regular pasture is generally short and dry. If the field is free from weeds the second crop might profitably be left to produce seed. However, if the intention is to save seed it is advisable to cut the first crop the latter part of June whether it is in blossom or not. This gives the crop for seed a better chance. If there are frequent showers a timothy stubble furnishes a fair amount of picking, but if the weather is dry or the field is dirty many find it pays to plow the sod and cultivate it during the fall rather than count on it producing much feed.

Making Hay.

An important factor in making good hay is favorable weather. Rain and dew are not the only elements that injure the quality and feeding value. Hay that is exposed too long in the sun becomes bleached and not only loses leaves but becomes less palatable. It is generally claimed that the best hay is made in coil rather than by leaving it spread over the ground in swath or windrow. Coiling hay entails a considerable amount of extra labor but tends to ensure quality. However, where there is a large amount of hay to handle with little help a man is compelled to do the work the quickest and most economical way. The wide mower and two-horse rake are replacing the narrow machines and implements. Where heavy crops of clover or alfalfa have to be handled a tedder is essential to the easiest and most rapid curing of the hay whether it is to be coiled or loaded from the windrow. The side-delivery rake and hay loader go together, and while some farmers have discarded them on the ground that better hay can be made without them, many would not be able to handle their crops without the assistance of these two implements, and claim that what is lost in quality is made up in having the hay cured quickly with less risk of being exposed to rain.

Many find that they lose time by cutting clovers when a heavy dew is on, as the wet clover falling in a pile takes a long time to dry out. It dries more quickly when standing and then wilts soon after cutting. If the crop is heavy the tedder should follow the mower to loosen the hay and permit free circulation of air through it. When the leaves begin to get brittle the hay can be raked into windrows and then coiled. As a rule it should be left in the coil two or three days or until the first sweating is over. On the day of hauling the coils should be turned over. No more should be cut than can be handled that day. In catchy weather one cannot always wait for the sun to shine before

starting to cut. A certain amount of risk must be run or else haying would not be finished in time for harvest. Coiling the same day the clover is cut avoids any discoloring of the hay by dew. As freshly cut clover is not affected by the dew or a shower, the mower may be started in the afternoon and tedding, raking and coiling done the following day. Cutting in the morning after the dew is off is considered to be the preferable method. One man can soon cut and put a lot of hay in coil and then endeavor to secure assistance for a few days to haul it to the barn. Well coiled hay turns a good deal of rain and very little injury is done by bleaching. On some farms hay caps are used for covering coils. They afford a certain amount of protection but are rather expensive when labor is considered, although, if they are the means of saving a crop from spoiling, they may pay for themselves in one season. The method followed by one farmer at least is to use a rake that is wide enough to take two swaths then make only small windrows. After the hay has aired in the windrow he turns three swaths into one by use of a fork. This makes small coils and is more quickly done than making large ones. The idea is that, if there should be a heavy rain which goes right through the coil it can easily be turned and will dry out quickly. There is less loss of leaves than by pulling a large coil to pieces or by curing the hay in the swath. When it comes to loading there is just a good-sized forkful in each coil and pitching is easier than from the bigger coils.

Good hay has been made by curing it in the swath and windrow. Mixed clover and timothy that yielded over two tons per acre have been cut one morning, tedded about noon and left in the swath until the next morning, then gathered in windrows with the side-delivery rake before the leaves become brittle and hauled that afternoon. The dew caused a slight discoloration but there was very little loss of leaves and the hay came out of the mow during the winter in splendid condition.



Tedding a Heavy Crop of Clover.

The side-delivery rake leaves the windrow loose so that the hay is dried by the air as much as by the sun. Hay can be put in the mow fairly green if there is no moisture from dew or rain on it. It is injured by the moisture on it more than by the moisture in it. After a rain the tedder will shake the moisture off the hay and leave it in good condition for drying.

Grasses cure much more quickly than do clovers. The length of time required for curing depends upon the degree of maturity and weather conditions, but in good weather there is no trouble having the grass hay ready to store the day after it is cut. Frequently it can be cut in the morning and stored towards evening.

Storing the Crop.

When the hay is in coils, or a loader is used, it does not take long to clear a field of the crop provided there is sufficient help. Two men can manage but three are better—two to pitch from the coil and one to load. In the barn, one mows, another runs the fork or slings while the third drives the horses. With the loader two men are required on the load and one to drive the horses, although, if the horses are steady, the man on the front of the load can guide them. In June 8 issue was given the detail construction of a sliding hay-rack. By its use one man can do the loading practically as easily as two on the ordinary rack. Whether the hay is to be unloaded by hayfork or slings it is well to build the load in sections.

On most farms the barns are commodious enough to house the hay crop, and unloading by hand has given place to power contrivances. For long hay the hayfork is satisfactory but for clover the slings make a neater job of removing the load. In some barns there are three tracks, so that a mow can be filled with the minimum of forking by the man in the mow. Horse power is generally used for drawing up the bundles or sling loads, but some men of a mechanical turn fasten a drum, to their gasoline engine, on which the rope is run for drawing up the hay as well as returning the car to the stop-block on the track. The drum is controlled from the load by means of two ropes. It is advisable to keep the hay evenly spread in the mow. It frequently happens that hay that is left where it drops has a tendency to heat and mold if it should be a little too sappy or moist. Some sprinkle salt over the hay which tends to bring back the freshness if it should be dried out too much. Clover hay has been stored when only partially cured and while it heated considerably in the mow it came out in good condition. Several loads are frequently dropped in the centre of the mow and never moved. Bundles are allowed to roll down to the farthest end of the mow, which saves hard work, but, as a rule it is safer to keep the hay spread over the mow as it is hauled in. Hay is an important crop which enters largely into the ration of horses, cattle and sheep, during the winter. In order that the greatest returns be secured from feeding hay, it should be cut at the right time and then cured and stored in a way that there will be least loss of valuable feed constituents.

The essential consideration with the development of hoed crops planted late this year will be frequent cultivation. Keep the horses going in the corn and mangels. Every five days will not be too often to cultivate the corn to hasten maturity. Start early and keep it up as long as possible.

Canada's Young Farmers and Future Leaders.

Young Farmers, Win These Good Prizes!

Following the announcement and inauguration in last week's issue of a new department in "The Farmer's Advocate," devoted especially to the boys and young men of the farms, readers will be interested to know that we are offering three special money prizes for essays written by these boys and young farmers. For a subject we limit the writers only to something they have done. Suppose we say: What was your most profitable farming experience last year, either in money or in lessons learned? This gives ample opportunity for all. Some may have had experience in pig feeding. Others may have fed calves or cattle, or managed dairy cows, or conducted experiments with grain, roots, potatoes, or vegetables.

The field is not limited. Choose your own subject but remember that it is facts and figures in connection with your work that we want. Pleasing generalities, will not win the money. The contest is open to all farmer's boys and young farmers. First prize will be \$10; second \$8; third, \$5. Essays must not be over 800 words in length. The contest closes one month from the date of this issue, so that letters must be mailed on or before July 22. Furthermore, all essays deemed worthy of publication will be published and paid for at our usual rates. Every boy has a chance of winning the best prizes, and all writers whose essays are published will get a fair amount for their work. We hope to get a large number of

letters and feel sure that nearly all will be worthy of a place in our columns. In case of a tie in totalling up the score on any two or more essays, the essay in our hands first will receive the preference, so that it is important that you write at once. Publication of essays will commence as soon as they come to hand. Prizes will be awarded August 15th. All essays which are published previous to that date but which do not receive the special prize money will be paid for then, and those published later, at the end of the month in which they appear. Every boy and young farmer had some experience last year. Describe it and get these prizes. Get your letters in early. Contest closes July 22. Write now.

Get Ready for the Fair.

Every farm boy who is interested in and an admirer of good stock should plan to show something at his local or county fair this fall. There is no prouder moment in a lad's life than when he leads out of the ring a calf or colt bearing the red or blue ribbon on the halter. One of the most inspiring sights we remember was at a big fair when a lad of twelve marched away with first prize on a Jersey calf in strong competition. The value of the winning cannot be estimated. The money prize is only a small part of it. The effect on the boy is the real value. And it is not necessary to win to get inspiration. The very fact that you have something good and have fitted it yourself will increase your interest in and understanding of live stock. What better start could you get than to feed and fit a calf, a colt, a pen of pigs or a pair of lambs for the fall fair? And it would be a good thing for the fall fair too. Boys,

persuade your fathers to let you have some stock to fit and show, and start the fitting early.

How Young Farmers Can Improve Our Live Stock.

Live stock is essential to a permanent agriculture. Without it the farms under cultivation soon lose their producing power. Selling grain and hay year after year without returning anything to the soil saps it of its very life. There are instances of it everywhere to-day. The grain farmer mines his farm and leaves it poorer than when he got it, but the farm where the products of the soil have been marketed on foot or by way of the dairy is proof of the value of stock in maintaining the natural fertility. An observant person driving along the road can tell by the appearance of crops and conditions whether or not the farm is being gradually disposed of in bags of grain and bales of hay or walked away. From the standpoint of consuming these products on the farm and returning fertility in the form of manure, stock is stock. Poorly-bred animals are probably as valuable as richly-bred ones, but when it comes to the cash returns there is a vast difference. This fact is known to practically everyone, and yet in this age of advanced agriculture the majority of the live stock in this country is of nondescript breeding. In every class of animals there is not sufficient attention paid to the quality and breeding of the sires used in the herds and flocks. The offspring inherit the weak as well as the strong points of their ancestors. A sire lacking in quality and conformation transmits those deficiencies to his progeny. True, the good and bad qualities of the dam are also transmitted, but she affects only one individual animal, while the head of the herd leaves his mark on many. For this reason

particular attention to which the female is a regrettable sire of all classes course, pedigree is at least that some selection and mating. The individuality as well as the line grade herds and meat or milk products. Without exception to the high state pure-bred, high-quality females for breeding allow the first good animal. In money had been years ago many better than they are. It

During the past been attending Sh held in their county type and conformation where well-bred stock that very little n after stock that sh common stock wh could not be made of these young me tion to improve th farm. Others have were not such i could be made, a from purchasing recently with a business for him neighbors kept a his herd, and he out the money fo he should use. L animal the neigh service fee of an make bad friends districts, but it i like turn of min purchase of male ity and use the or accommodate breeding as a me stock. In most stallion can be can agree on kee cost of a bull, heavy on any on stock started in agree to allow or ing and looking turns in keeping were being grad gradually added. With cattle it is females would sized herd in ten not deter anyone well-bred stock something about and there is alw from each gene tunity of impro work more inte

More Esse

Having gone you are now pre into play the m of any good ma pressed steel. S supports running ample depth a strain. The spr elliptic or cantile thorough inspe the cantilever s quality. Stand by bouncing th elasticity and can be ascertain use your sense They should co ing frames is a metal and faul away. You sho firmness. The beams, the lette sectional beam, are three-quar the weight of t the axle, in or work than the before going