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1930

## 4-H Baby Beef Manual : Extension Circular 2-52-2

Paul McDill

E W. Janike

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Extension Circular 2-52-2, Revised  
December, 1930



## 4-H BABY BEEF MANUAL



Roaney, Champion Shorthorn and Grand Champion Baby Beef in the 4-H Club Class at the 1930 Nebraska State Fair. A Hereford-Shorthorn cross fed and exhibited by Rex Nisley of Dawson county.



The University of Nebraska Agricultural College  
Extension Service and the United States Department of Agriculture Cooperating  
W. H. Brokaw, Director, Lincoln





## Nebraska 4-H Clubs

Those working with 4-H clubs have had three main objectives in mind—"The development of boys and girls," "giving to each club member information which will be of value," and "the completion of a definite piece of agricultural or home economics work."

Through club organization, boys and girls are brought into contact with each other, with an adult leader, with the community, and with other club members of the county, state, and nation. These directed associations tend to curb undesirable and develop desirable tendencies. 4-H clubs are national in their scope, and are sponsored by the United States Department of Agriculture and every agricultural college in the United States.

Every 4-H club organized in Nebraska has a common problem on which each club member works—it may be the growing of a crop, development of animals, applying the best known principles of clothing or foods. These are but a few of the numerous clubs sponsored by the Nebraska Agricultural Extension Service. The best up-to-minute information on each club is given by the Extension Service, through its connection with the Nebraska Experiment Station and the United States Department of Agriculture. The latest dependable results are always placed in the 4-H club literature.

This 4-H Baby Beef Manual, together with other material, is placed with each club member and leader so that the clubs may have authoritative information on the selection, feeding, and management of a beef calf. At the end of the period the individuals should have a complete financial and labor record on which to base further activities.

So far, the standard club has been the best method to carry on all 4-H clubs. The clubs completing work as outlined by points one to ten, given below, are known as Achievement Clubs, and are issued a gold seal for each year's activity. These seals are placed on charters issued by the United States Department of Agriculture when the club is organized with points one to four completed.

1. Five or more members working on one club project. Active members are 10 to 20 years old inclusive. Those above or below are called associate members.
2. A local leader in charge who is general adviser.
3. A club organization with their own officers having charge of business meetings.
4. A program of work for the year. Success of club depends largely on well planned program.
5. At least six meetings during the year. These are to include organization, and goals, 6, 7, 8, and 9.
6. A judging contest during the year.
7. A demonstration team giving at least one public demonstration locally.
8. An exhibit of club work.
9. An Achievement Day (The Finish Up).
10. At least 60 per cent of the members filing final reports.

Ask your County Agent for further information and supplies for organizing any 4-H club. If your county does not have an Extension Agent, write to the Agricultural College Extension Service, Lincoln, Nebraska.

## 4-H Baby Beef Manual

Revised by

PAUL McDILL AND E. W. JANIKE

This circular was first edited in 1928 by C. S. Maddox and has served as a guide for Baby Beef work for the past three years. The rapid expansion of Baby Beef work during the last few years has called for several changes and additions. In 1924 there were 109 club members feeding 117 calves. During 1930 there were 1,176 boys and girls feeding more than 1,800 calves. There has been an increasing market demand for carcasses of the baby beef type. Nebraska's adaptability for the production of the type of cattle has resulted in the increased enrollment in Baby Beef clubs. With the increased enrollment, personal supervision has been limited. This circular discusses the more important phases of Baby Beef Club work, emphasizing proper selection, buying, feeding, management, and showing of a beef calf.

### Organization

Organization is one of the most important factors upon which the success of a baby beef club depends. In the first place there must be a desire for the work. The first thing to do is to hold a preliminary meeting and form a temporary organization. Talk things over and make arrangements for getting material from the County Extension Agent or State Office for the organization meeting. The time between the preliminary meeting and the organization meeting should be used to build up enthusiasm. See every boy or girl who may be interested in baby beef work and tell them all about it. Get the community back of the club. Their loyal support is necessary for the success of the club.

With the material sent out for the organization of the club, there will be a circular for the local leader. Those who organize the club should read this circular very carefully. It contains information concerning the organization which is necessary for a successful and profitable club.

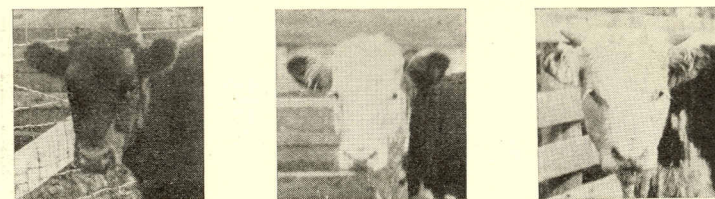


FIG. 1.—The calf selected should have a good feeder head such as the head at the extreme right—a short, wide head and broad muzzle. The head at the left is long and narrow with decided lack of quality. Animals having such heads are usually very poor feeders. The head of the calf in the middle is that of a medium type feeder. Calves of this type are usually rather coarse and upstanding and undesirable for baby beef production.





FIG. 2.—The calf at the upper left is a very plain kind not at all desirable for baby beef production. He is too leggy, rangy, light in the hind quarters, and has a very plain head. The calf at the upper right, altho short legged and having a well developed hind quarter, is too long bodied, coarse and heavy in the fore quarters and so decidedly lacking in the spring of fore ribs that he would never make a good baby beef. The two calves at the bottom of the picture are both very good type for baby beef club work. The white calf is deep bodied, has a straight top line, and is well balanced, altho a trifle leggy. The Hereford is deep bodied, compactly built, straight lined, and has a very good feeder head. However, he is not so well developed in the hind quarters as he should be.

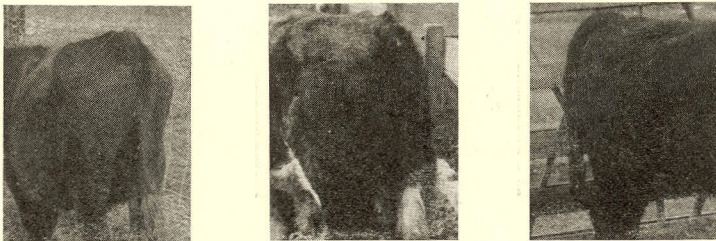


FIG. 3.—The rump at the left is the type that must be avoided in selecting baby beeves; the one in the middle is very good except that it slopes badly from the hooks to the tail head and as the fattening period advances this characteristic would become more pronounced; the one at the right shows a good rump except that this calf has an extremely high tail head. Such should be avoided as it becomes more pronounced as the calf gets fat.

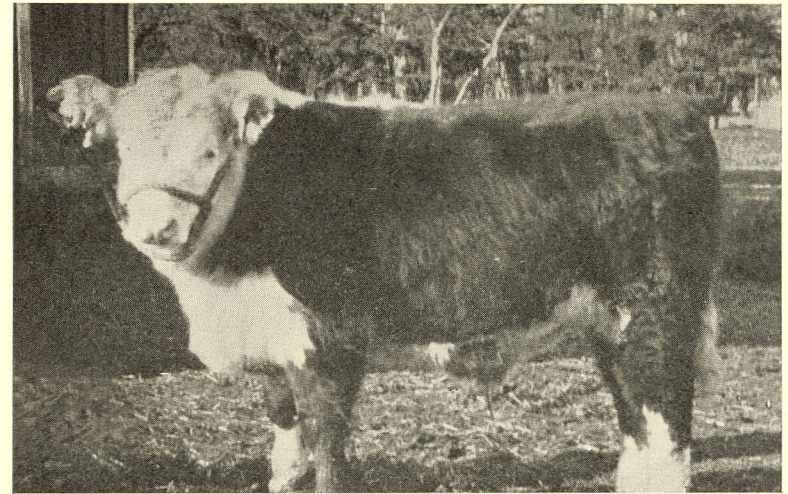


FIG. 4.—A good baby beef feeder type. Note the lines, depth of body, and compact conformation. This calf has a good feeder type head

#### Select a Calf of Good Beef Type

The first and most important step in Baby Beef Club work is that of selecting a good calf. The calf selected should be of good, blocky, beef conformation. Get one that is deep, wide, and short-legged with straight top and bottom lines. By all means, obtain a smooth, tidy kind of a calf with a short neck; short, wide head; wide, deep chest, and a good spring of fore ribs. Straight legs, full flanks, deep rounds, and a level rump are also very desirable. A packer buyer recently said that his greatest criticism of the baby beeves in Nebraska was that too many were large, rough, upstanding, and coarse. It would seem that the packer buyer really prefers the smaller, smoother-turned kind of calves.

Club members will likely find it impossible to secure a calf that entirely fulfills the above description. However, get a calf that comes as nearly to it as possible. Keep in mind that it is better to select a straight lined calf that has good quality with no outstanding defects than to pick one which is very good except for one or two outstanding faults.

Some of the most common defects to guard against are heavy, coarse fore-quarters, light hind-quarters, prominent hips, weak back, sloping rump, or a long, shallow body. No matter how good a cattle feeder a club member may be, he cannot entirely overcome these defects by feeding. Of course, with feeding, a calf will widen out and get a little deeper bodied, but many such undesirable features as mentioned above may tend to become more pronounced as the fattening period advances.



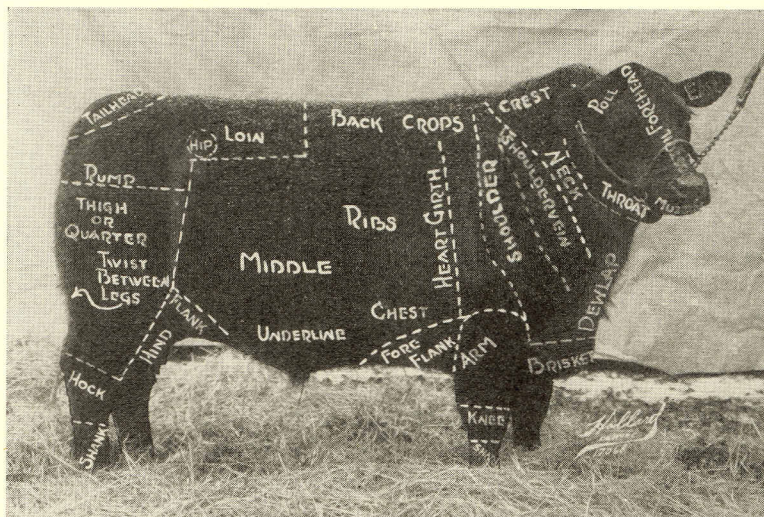


FIG. 5.—Illustration showing various parts of baby beef

#### Quality Calves Are Best

In addition to purchasing good beef type calves, club members should secure quality calves as well. Some authorities say that quality is more important than beef conformation. Certainly it would seem that both are quite essential. Quality refers to the character of bone, hide, hair, and flesh. The most desirable calf, from the standpoint of quality, is one that has soft, fine hair; a pliable, elastic hide of medium thickness; a clean, dense bone; and flesh that will be smooth and firm when the animal is finished. Coarse-boned, heavy-hided calves should be avoided. A high quality animal not only looks better when finished but will usually make better use of its feed and therefore make more economical and rapid gains than will a calf of poor quality.

#### Select a Quiet and Thrifty Calf

A calf, to do well, must be thrifty and not too wild. Most calves with proper handling will quiet down within a few months. Select a calf that has a quiet disposition. Such calves make more economical and rapid gains than wild ones. Calves that have become accustomed to eating grain previous to weaning are the most desirable, since they suffer no severe setback at weaning time, and being accustomed to grain they never lose their "milk bloom."

However, it is well to avoid a calf that is too fat because it may become over done before show time, and too, the cheapest gains are made on the thin calf. On the other hand a calf that is thin and has been about half starved, may be in such an unthrifty condition that it will be quite a while before he starts to make rapid and economical

gains. The best buy is the thrifty, vigorous calf in just good condition, preferably showing a little "milk bloom" and accustomed to eating grain.

#### The Right Age for a Baby Beef

Experiences of the past few years have proved the value of using calves born after May first. The older calves have a tendency to make too much growth and really do not finish out as satisfactorily as the younger ones. A definition given by the Bureau of Animal Industry states that a baby beef must be of beef breeding, from seven to eighteen months of age when finished, weighing six to twelve hundred pounds on foot, and grade according to the Government standard, good, choice, or prime, both on foot and as a carcass. The May, June, and July calves look the best and usually show to the best advantage. The tendency is to shorten, rather than lengthen the age of baby beefs.

Steers fatten out a little more evenly and sell better than heifers. If it is not possible to get a steer, a spayed or free martin heifer will do for the long-fed class of baby beefs.

#### Buying the Calf

In purchasing a calf, it should be remembered that a baby beef project is a practical one, and such being the case, one cannot afford

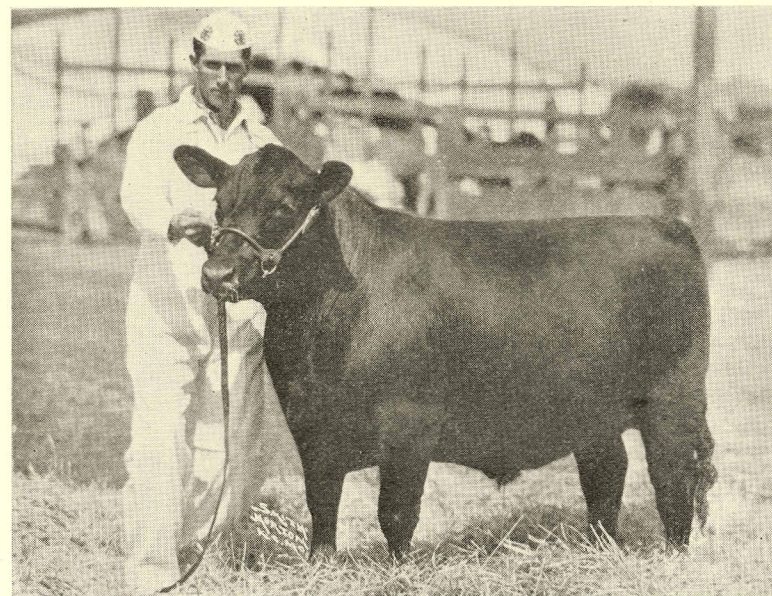


FIG. 6.—Champion Angus of the 4-H Club Show at the 1930 Nebraska State Fair. Fed and shown by Watson Norris of Cass county



to pay too much above the current market price for a calf and still make money. Remember that ninety-nine out of every one hundred 4-H club calves will sell at market price. Only about one out of a hundred wins big prize money and sells for a premium. Buy as good a calf as you can find, but do not forget "Well bought is half sold," and to be successful you must make a reasonable profit.



FIG. 7.—Champion county group of baby beeves, 1930 Nebraska State Fair. Shown by Dawson county

#### Feeding

Club members should realize in the very beginning that the success they have in the Baby Beef Club will be materially influenced by the care their calf receives. No matter how good a calf they may start with, if he is not fed properly, profitable and economical gains cannot be made. A calf to sell well must be fat and have a good percentage of high priced cuts of meat. Calves not only fatten but grow as well. However, one should not get the mistaken idea that a calf must be grown out before fattening. If club members will attempt only to fatten their calves, it will be found that plenty of growth will be obtained during the fattening period.

Calves should be started on feed gradually. Animals that have become accustomed to eating grain previous to weaning go on feed a little better and do not suffer so much from the shock. For calves that have not received any grain it is not advisable to try to crowd them too fast, because there is danger of getting them off feed or even foundering them. Over feeding is costly to the club member. When a calf goes off feed he stops gaining and often he loses in weight. This causes a loss in two ways, not only is the cost per pound of gain increased, but the calf's appetite is dulled for several days. Calves are like humans in this respect. When a person be-

comes sick from over indulging in some food that he likes, he becomes less fond of that food. Start a calf with only about a pound or so a day, dividing it into two feeds.

Keep before him just what hay he will clean up each day, preferably a good grade of alfalfa or clover. One of the best starting rations to use is shelled corn and whole oats mixed in equal parts. Increase the grain feed about one-half pound per day until he is getting all that he will clean up. Patience, regularity, and good judgment are essential for the successful feeding of a baby beef.

Be sure that the calf's trough is clean before feeding and that he cleans up each feed of grain that is given. In case a calf goes off feed, it is advisable to cut down his feed materially at the next feeding time. Give him only one-fourth or one-half as much as usual. Continue feeding this way until the calf's appetite comes back. Increase gradually until taking a normal feed again.

In the event it is planned to grind the feed, one plan that works very well is to start on ground, snapped corn, changing a little later to ground, ear corn, and then very gradually to ground, shelled corn. (Grind coarse, not fine, they will eat it a lot better.)

Most feeders, however, prefer to feed the whole grain starting half and half corn and oats, and gradually cutting down the oats until after the calf has been on feed 30 to 60 days he is getting only shelled corn. Considering the trouble and extra labor involved in grinding corn, it usually does not pay. Experiment station results show that no cheaper gains are made by feeding ground corn than by feeding the whole grain. Calves masticate their feed more thoroughly than older cattle. Grinding corn during the latter part of the fattening period may be advisable in that calves may be getting a little stale on their feed and will eat a little more feed when it is prepared in this way.

Linseed oil meal or cottonseed meal should be fed with corn. Be sure to use the pea size rather than the ground. Calves will eat it a lot better. The amount of these feeds to use will depend upon the kind of roughage available; that is, where alfalfa or clover hay is fed, less cottonseed meal or linseed oilmeal is required than when feeding prairie hay.

The state of Nebraska normally produces an abundance of the best feeds for use in the fattening of cattle. All of these feeds can be raised on the farm, except a small amount of protein supplement that is needed. Shelled corn or ground barley, or a mixture of the two and alfalfa have proved to be the best fattening rations. To this, a small amount of protein supplement such as cottonseed meal or linseed meal should be added. These are perhaps the most popular fattening rations, and are used almost entirely by the feeders in this state. Clover is about equal to alfalfa as a roughage but is not so extensively grown in Nebraska. Oats, as has been stated, are very good for starting calves on feed but should not be used for fattening. Oats are too bulky for a fattening feed.



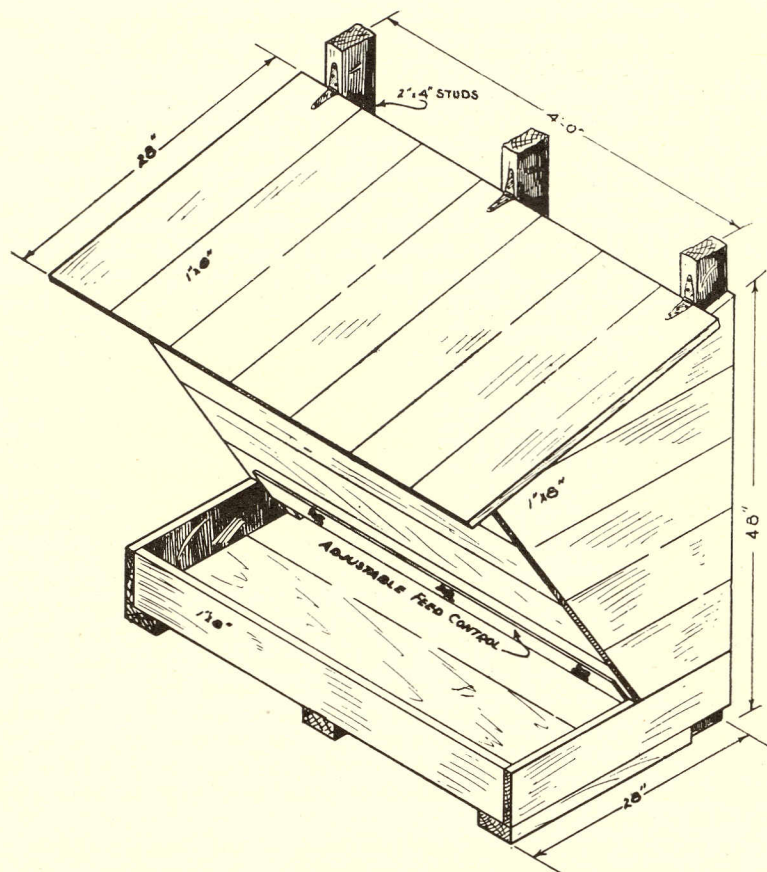


FIG. 8.—A good type self-feeder to use inside a barn or shed

The important things to remember in regard to the feeding of calves are: to feed at regular hours, and then only what will be cleaned up (unless using a self-feeder); increase feed gradually; change the feeds gradually; feed concentrates such as corn, ground barley and linseed oil meal or cottonseed meal; keep feed troughs clean; allow calves to have all the water and salt they desire (preferably access to salt and water at all times); and do not put them on pasture while fattening.

A great number of club members and practical feeders have been very successful at self-feeding calves. Most of them having tried this method would not feed any other way. If calves are put on a full feed gradually and then given access to grain in a self-feeder, they do very well. With such an arrangement for feeding, calves seldom go off feed. Feed is available at all times and they are necessarily on

full feed. Such a practice eliminates the necessity of feeding at regular hours and watching to see that calves clean up their feed.

### Water

The importance of fresh, clean water for the health and thrift of the calves is too often not realized. When possible, water should be kept before the calves at all times, especially in warm weather. If it is impossible to keep water before the calves at all times, they should be watered twice a day in cold weather and at least three times a day in warm weather. Irregular watering often causes calves to go off feed. If a calf is very thirsty he is likely to drink too much water which will cause him to scour. An old saying is: "Animals can live three minutes without air; three days without water; and three weeks without feed." This is not an accurate statement, but it emphasizes the importance of water.

### Feeds

Feeds are divided into two main classes—concentrates and roughages. Both supply about the same things for the fattening and growing of animals, but the concentrates (such as corn, barley, oats, linseed oil meal, cottonseed meal, and molasses), as the name implies, are of a more condensed nature, the greater part of which is readily digestible. There are two kinds of concentrates—one that produces growth and the other that makes fat. For baby beeves, the one that produces fat is the one that should be used in largest amounts. Roughages such as alfalfa, clover, and prairie hay are more bulky and it requires a greater quantity of them to supply the same amount of digestible food for the animal than is necessary in concentrates. Calves belong to the ruminant class of animals, or those chewing cuds, and for this reason roughages are very important since they help to keep their digestive systems in order.

The relative usefulness of different feeds to the animal depends on the things they contain, their digestibility, and palatability. Feeds contain proteins, carbohydrates, fats, ash, and fibre.

**Proteins** are essential for the growth of animals, the building of muscles, and the making of blood tissues, vital organs, hair, hoofs, and horns.

**Carbohydrates** furnish principally energy for the animal body. They are composed of sugar and starches and when more are eaten than is necessary for supplying energy in the animal body, they are stored as fats.

**Fats** furnish heat and energy and are also stored as fats in the body.

**Ash or mineral matter** furnishes minerals for the building of bone.

**Fiber** is the coarse, woody, less digestible part of the feeds and usually is of no value except to give bulk to the ration.

**Corn and cob meal** is a desirable feed for a starting ration. The cob meal, while of little nutritive value to the calf, serves as a filler and tends to prevent over feeding. It should not be fed to baby



beef calves longer than is necessary to safely get them on full feed. It should be discontinued gradually by supplementing with shelled corn.

**Corn** is rich in carbohydrates and fats, is very palatable, and the best fattening feed available. Since corn does not supply all the necessary proteins in the ration, better results are obtained when fed with alfalfa or clover hay and a little linseed oil meal or cottonseed meal. Corn may be fed either shelled or ground. Ground corn at the last of the fattening period is often more palatable. Calves will consume more of it and make slightly more rapid gains.

**Barley** when fed should be ground. It is used quite extensively in Nebraska and is nearly equal to corn as a fattening feed. Owing to the fact that animals fed barley tend to cover a little more evenly than when fed corn, it is especially desirable to feed some barley to calves that are getting a little "rough." Barley is a good finishing and fattening feed when used half and half with corn.

**Oats** are higher in protein and mineral matter than corn. A good feed to use in starting calves but too bulky to use as a fattening feed.

**Wheat bran** is high in minerals and proteins, a good growing feed, has a slightly laxative effect, and is a good conditioner, but too bulky to be used to any large extent as a finishing feed.

**Linseed oil meal** is a laxative and a good growth and conditioner feed. It is especially important in the feeding of baby bees because it is so rich in protein. Its judicious use is soon made apparent in the pliable skin, sleek, oily coat, and the good handling qualities of the flesh of animals receiving it. The feeding of linseed oil meal should be started gradually, feeding only a very small amount at first. Gradually increase it until the calves are receiving about one pound of linseed oil meal for each ten pounds of grain consumed when feeding alfalfa hay, and one pound for each seven pounds of grain when feeding prairie hay. Usually it is not advisable to feed more than two pounds per head per day. The pea size is more palatable than the ground.

**Cottonseed meal** is very similar to linseed oil meal as a protein feed, except that it is slightly constipating and is not as good a conditioner. However, it balances the ration efficiently and if used should be fed about the same as linseed oil meal. Some feeders use a mixture of linseed and cottonseed. The price will usually determine which to use.

**Molasses**, cane molasses, or black strap as it is commonly known, is well liked by cattle and is quite often used as an appetizer. In feeding value it is about equal to corn. It should be used only as an appetizer and then only in small amounts because of its laxative effect. About one-fourth pint mixed with enough water to moisten the feed is sufficient.

Molasses and alfalfa feeds may be fed as appetizers in small quantities if the cost is not too high to be in keeping with the feeding value. Molasses and molasses feeds are **low in protein and should not be fed as a substitute for protein feeds.**

**Alfalfa hay** is an exceptionally good roughage to use with fattening concentrates. It is high in protein, and for that reason is very valuable in that less protein supplements are necessary when feeding it. Alfalfa is much to be preferred to prairie hay when feeding baby bees.

**Clover hay** is about the same as alfalfa. It is a good roughage to use.

**Corn silage** is a good feed to use in moderate amounts as an appetizer and to provide succulence, but because of its high water content and bulkiness, it should never be used in large amounts. During the latter part of the feeding period, five to seven pounds is enough.

**Prairie hay, sudan grass, and other grass hays** are all right if of good quality. It must be remembered when feeding these that more protein supplement should be fed than when using alfalfa.

**Mineral mixtures** are not necessary. If a good ration is fed, calves will receive sufficient minerals. Salt, however, should be available at all times.

#### Rations for Starting on Feed

Corn	5 parts	} Alfalfa	Corn	6 parts	} Alfalfa
Oats	5 parts		Oats	4 parts	
L. O. M.	1 part		Bran	3 parts	

#### Fattening Rations

Corn	10 parts	} Alfalfa	Corn	5 parts	} Alfalfa hay
L. O. M.	1 part		Gr. barley	5 parts	
			L. O. M.	1 part	
Corn	7 parts	} Prairie or	Corn	4 parts	} Prairie or
L. O. M.	1 part		Gr. barley	3 parts	
		cane hay	L. O. M.	1 part	

Cottonseed meal may be substituted for linseed oil meal in any ration where alfalfa is used. Silage may be used with any of these rations.

Remember that calves should be fed at regular hours. Feed at least twice a day at the start. Many have been successful in getting the calves to consume more feed by feeding three times a day along towards the last of the feeding period. In the hot summer time, it is advisable to feed early of a morning and late of evenings since the calves eat better when it is cool.

Let the calves have what hay they will clean up unless they are inclined to eat a lot of it. Two or three pounds should be sufficient the latter part of the fattening period. Limit the hay if they eat much more than this.

#### A Comfortable Place for Calves

In order to keep accurate records on calves, it is necessary to keep and feed them away from other cattle. Two or three calves fed together are more content than one fed alone. Once accustomed to being alone, calves will be much quieter and more contented than when running with other cattle. This is the only satisfactory way to tame and fit a calf for show.



Every precaution possible should be taken to see that the calf is comfortable at all times, for he will make maximum gain only when quiet and contented. About the only protection necessary in the winter is to see that animals are protected from rain, snow, and drafts. Usually they will keep warm enough if getting a full feed of grain. Calves should have a clean, comfortable bed of straw at all times, because fattening cattle spend a great deal of their time lying down and contentedly chewing their cuds.

Until the calf is broken to lead, it may be advisable to keep him tied, but after this he will do better if given more freedom. Usually it is best to allow the calves to have the run of a small lot, or at the least a good sized stall. If calves are kept in a stall, a good policy is to turn them out each day a little while for exercise, or to lead them around to give them their exercise.

In the hot summer time, calves do better if they have a cool, well ventilated stall. It is advisable to keep calves out of the direct sun, since the hot sunshine tends to sunburn the hair and make it harsh and dry. There are a number of preparations on the market which will keep the flies off of the calf, but will make the calf's hair dry and harsh, so it is not advisable to use them at all unless for spraying the stall.

The most satisfactory way of keeping flies from bothering the calf is to remove the windows and tack strips of burlap over them and other openings, thus darkening the stalls, stopping the activities of the flies and at the same time allowing free passage of air to keep the calf cool.

The blanketing of calves helps to keep flies from bothering them and at the same time puts the calf's hair and hide in better condition. An inexpensive blanket can be made from a couple of burlap sacks. Another practice that meets with a great deal of favor is that of tacking narrow strips of burlap to the ceiling of the stall (some however use full size sacks) and let them hang down far enough that a calf can brush the flies off by walking under them. Too, the slightest breeze blows the strips until flies will not bother a calf much that is lying down beneath them.

A stall on the north side of the barn and under a hay mow is the most desirable location. The north side is shaded and cool, while the hay in the mow acts as an insulator and keeps the stall cool. If the calf is kept in a shed, away from the barn, the shed may be kept cooler by placing boards on the rafters and covering these with straw.

#### **Castrate Calves Early**

It is the easiest thing on earth to put off doing some things until another day. That is just what happens when the time comes to castrate calves. Usually, however, it is put off months instead of days. If calves are raised at home, castrate any time, best if done before calves are a month old. Most club members buy their calves at wean-

ing time. In this case calves should be castrated about two weeks after they are weaned. The weather is cool then, and it is possible for calves to run in a small, clean lot or pasture. Under such conditions there is little likelihood of infection. However, what often happens is that castration is put off until the middle of the winter when the weather is cold and disagreeable and calves have to stand in the barn with little or no chance of exercise. If the stall is allowed to become filthy, the chances for infection are rather great. Clean stalls and early castration are best. The number of club members losing calves from infection after castrating, to say nothing of the calves that have infection and get well after a lot of doctoring, is astonishing. The things just mentioned are really only secondary in importance. The fundamental purpose of castrating calves soon after weaning is to prevent them from looking staggy when finished. Too, the younger and smaller they are, the less shrink and trouble caused in castrating.

The use of Burdizzo emasculators for castrating baby beef calves is fast gaining in popularity. Since there is no opening of the skin there is less danger from infection. Calves castrated by this method are less likely to go off feed. There is also a tendency for the cod to fill out more.

#### **Training Calves**

The younger and smaller a calf is, the easier it is to train him, so start early. After a calf has become accustomed to his surroundings it is advisable to put a halter on him and tie him in his stall for two or three days. A rope halter that fits the calf properly should be used. If at all possible, the calf should not be allowed to get away when he is broken to lead. Start out in the barn or in a small lot. Don't be too hasty. Work with him a little every day. Leading him to water is good practice. After the calf gets so that he leads fairly well it is not necessary to keep him tied all the time.

Certainly a calf should never be allowed to get loose when breaking him to lead. Once he finds out he can get away, it is hard to break him of the habit. It is also advisable to lead the calf about the farm occasionally where he can see things he is not accustomed to seeing. In this way he will get used to conditions other than those in his stall and around the barn. He will then be much easier to handle at the fair.

After breaking a calf to lead well, start training him to stand properly for showing. The most successful way is to teach him only one thing at a time. For 3 or 4 days the calf should be led out and made to do nothing but stand still. Then after he has learned this, it is easier to teach him to stand squarely on his feet and to keep his back level and head alert.

#### **Care of the Horns**

The care of the horns may seem to be of little or no importance. If calves have no horns, then it is just that much less worry. If a



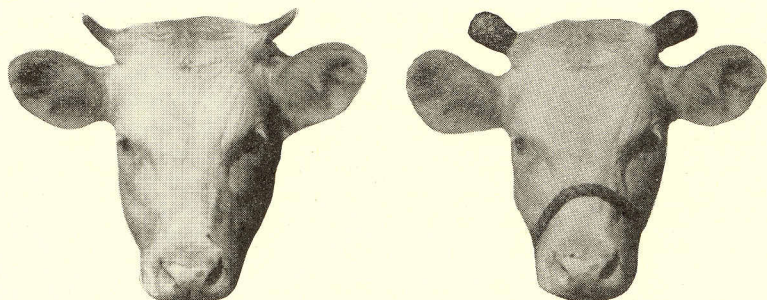


FIG. 9.—Spiked horns and proper use of horn weights

calf has horns they should be trained so that he will look well at show time. Very few horns in their natural condition have the right set to them. "Spiked" or upturned horns (as in Figure 9) detract materially from the appearance of an animal. They tend to make the head look long and plain, while horns with the correct set to them make the same calf look like he has a short, neat head. To draw the horns down in the most attractive position, use small weights of one-half to three-fourths of a pound. The horns will come down a lot better when calves are young than after they get older. Heavy weights should be avoided since there is danger of breaking the horns by drawing them down too fast. Several club members have used railroad burrs very successfully as horn weights. Of course such weights must be tied together with a strap or cord. If horns are inclined to go straight out or backward instead of curving in slightly, a strap may be used to draw them in. Make sure in attaching horn weights that the set screw is to the rear and underneath side. This avoids their leaving unsightly depressions on the most conspicuous part of the horn.

#### Care of the Hoofs

Sometimes the calves' hoofs tend to become misshapen or too long and the calves will as a result stand poorly and become sore footed. This can be prevented by trimming the hoofs with an ordinary pair

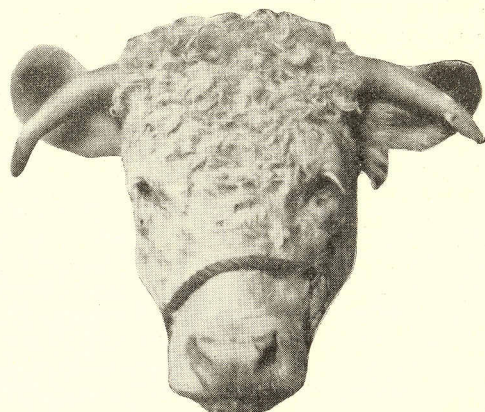


FIG. 10.—Broken horn and holes in horns, the result of using heavy weights and tightening the set screws in front instead of on the back and under side of the horns. Notice the good feeder head.

of hoof snips. To do a good job of trimming it is generally necessary to throw the calf. Care should be taken so that the hoofs are not trimmed too close.

#### Condition of Hair and Hide

A loose, pliable skin and soft hair cannot be made in one day. Calves that are brushed often and kept in a clean and well bedded stall; washed frequently and fed linseed oil meal will have a good coat of hair at show time. Letting calves run outside during the hot summer days tends to deaden the hair.

#### Disease and Parasites

**Black leg.** There is no known cure. Vaccination to prevent is money well spent.

**Lice.** There are two kinds. The blue ones bite the skin and the red ones suck the blood. Calves should be brushed often. In warm weather washing, dipping or spraying with any good coal tar or tobacco dip properly mixed is very effective. Usually a second dipping in two weeks will be necessary.

**Mange,** caused by small mites which live in the skin. A thickening of the skin, loss of hair (especially about the neck), and constant rubbing are indications of mange. If coal tar, lime and sulphur or tobacco dips do not effect a cure, a paste of powdered sulphur, linseed oil and a little kerosene applied to the affected parts should be used. Wash off in two weeks.

**Ring worms** appear usually about the eyes or nose. Soften with a mixture of glycerine and iodine equal parts. It may be necessary to do this several times to effect a cure.

**Warts** mar the appearance of a calf. They can usually be softened away by applying castor oil or some other fine oil every day or so. Another good method for removing large warts is to tie a string around them and tighten every few days.

**Warbles or grubs.** It is best not to tamper with them until warmer weather. Then squeeze them out when they appear. Take care that they do not break beneath the surface. Apply an antiseptic. Some squeeze them out by pressing the top of a bottle down over them.

**Scours** usually result from over-feeding, feeding of spoiled feeds, or unclean feed, exposure, or over-heating of calves. The laxative feeds should be reduced and prairie or other grass hays substituted for all or part of the alfalfa for a few days. In severe cases, dose with a pint of castor oil or bran mash (1 gallon of bran through which hot water has been poured). Calves seldom go off feed when fed clean feeds and cared for at regular hours.

**Bloat** is often caused by the calves eating too much fresh, green, leafy alfalfa. A three- or four-inch rope or piece of wood about that size fastened in the mouth as you would a bit, will usually bring relief. In more severe cases, and one must act quickly, a drench of 1/10 of a pint of 6 parts raw linseed oil and 1 part of kerosene mixed is usually effective. In cases of severe bloating it may be necessary



to use a trocar and cannula to tap the animal on the left side somewhat in front and slightly below the hip.

#### Fitting Calves for Show

The care of hair and manner of grooming are very important in making the calf look his best. The hair is an indication of the calf's quality, so every effort should be made to have it appear glossy and full of life instead of harsh and dead. As has been stated, keeping calves out of the hot sun during the summer months and blanketing a few weeks before showing will put the hair and hide in good condition. Occasional washing and brushing several weeks previous to showing will improve the condition of the hair and hide. The method of grooming will depend upon the breed and individuality. All breeds may be shown with the hair curled, however, Aberdeen Angus are often shown smooth. Calves should be so fitted as to show their good qualities to the best advantage.

**Curling.** There are three ways of curling the calf's hair. Before curling, the hair should be wet thoroughly with water containing a small amount of dip solution. This tends to stiffen the hair and cause it to stand up. Hair should be parted down the back from head to the

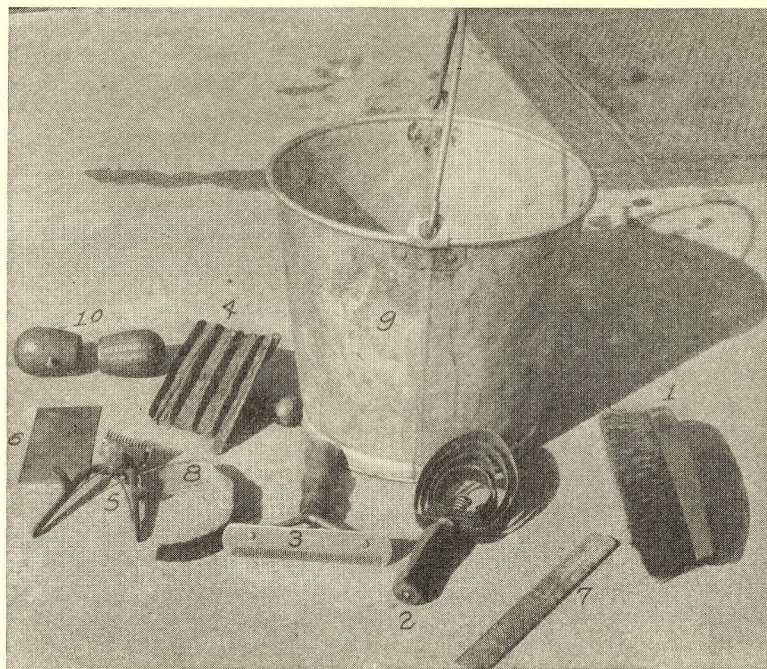


FIG. 11.—Grooming equipment: 1. brush, 2. round curry comb, 3. Scotch comb, 4. straight bar curry comb (may be used for lining), 5. clippers, 6. dip solution, 7. rasp, 8. emery cloth, 9. bucket, 10. horn weights.

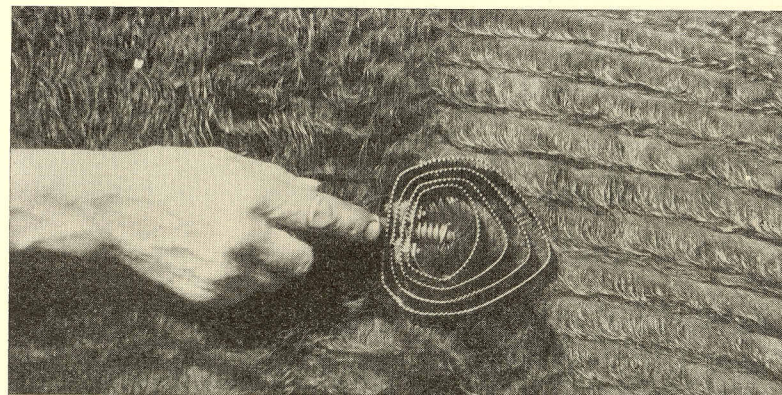
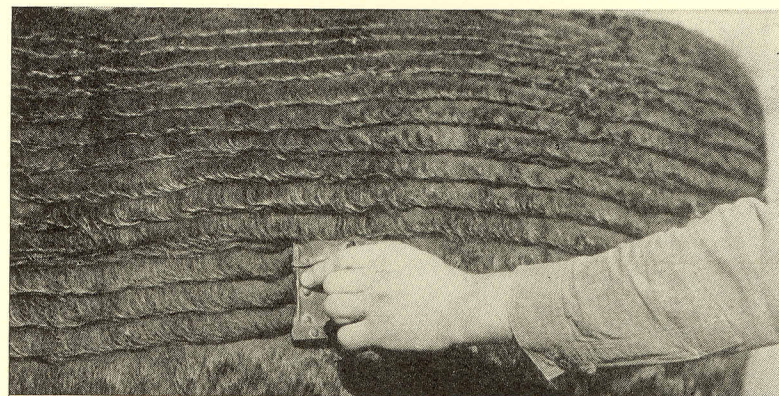


FIG. 12.—Making the curl with parallel lines

swirl or about the middle of the back. Where the hair is parted, it should be brushed out smooth in a manner to best emphasize width. Hair along the remainder of the top line that is not thus parted should be brushed back to the rear. Waves (made with a round comb) may then be made on this part of the back if desired. Brush the hair on twist and round to emphasize width. It should be remembered in the curling of the sides of the body that the best effect can be obtained by curling the entire side from the jaw to the round. To make the curl in parallel lines, brush hair down smooth and mark lines as in Figure 12. A straight bar comb with every other row of teeth knocked down is very good for lining, except when making lines more than  $1\frac{1}{4}$  inches apart on longer haired calves. After marking the hair should be brushed up lightly with a stiff brush.

In making the curl with wavy lines, use a round comb, then brush up as shown in Figure 13. In making these lines it should also be



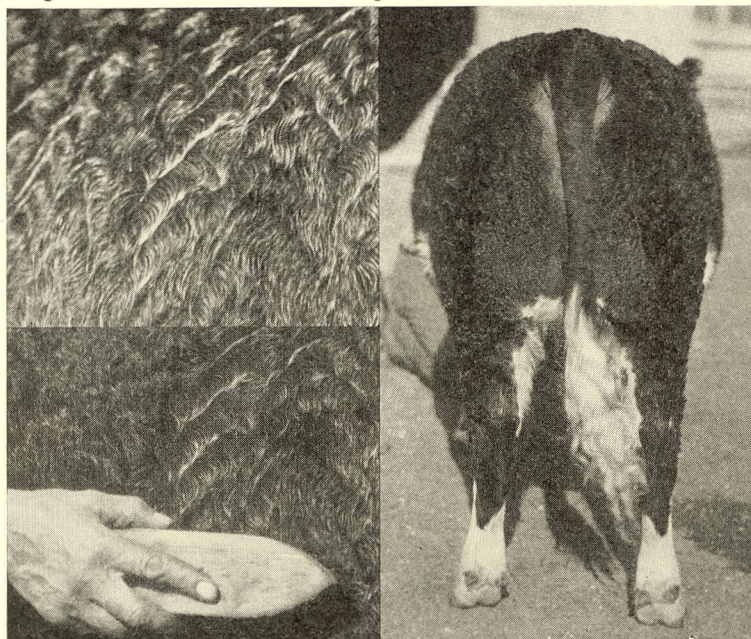


FIG. 13.—Making the wavy curl with a round comb. Notice the tail clip and the broadening effect of the fitting

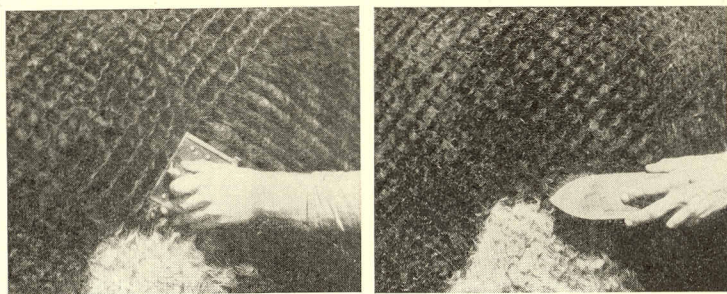


FIG. 14.—Making the diamond curl

remembered that they are best made by moving the comb first to the right and then to the left with very little downward movement. Many ruin this curl by making the lines with too much downward and not enough sidewise motion.

The third curl, the diamond curl, is one that has not been used a great deal, but some like it, especially for the short haired calves. The straight bar comb used for marking parallel lines works best to

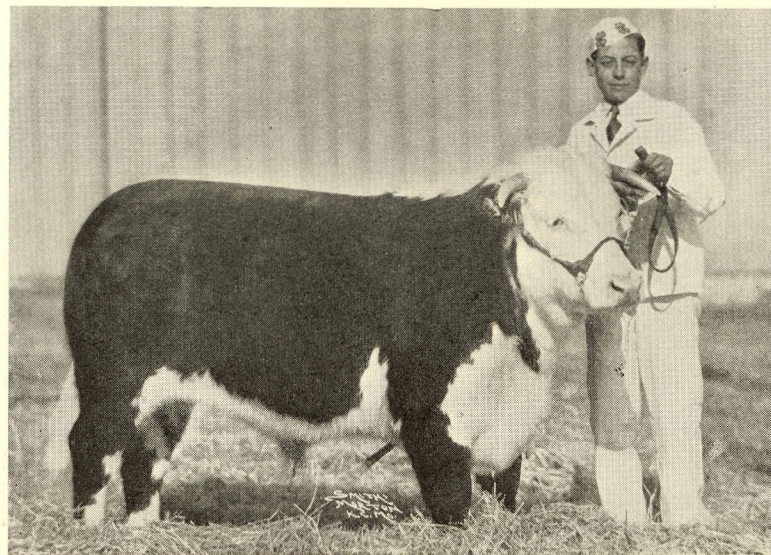


FIG. 15.—Mervin Aegerter of Seward county and his Hereford baby beef with which he won the award of Grand Champion Showman at the 1930 Ak-Sar-Ben.

mark off in the manner shown in Figure 14. Then use a stiff brush and brush up lightly. The hair covering all depressions on the animal's body should be brushed so that it will stand on end.

Brush the hair of short haired calves down smooth and rub with a woolen cloth dampened with equal parts of olive oil and denatured alcohol. This gives a gloss to the hair.

**Clipping.** The head of Aberdeen Angus and Red Polls should be clipped in front of a line drawn around the neck about three inches back of the ears as in Figure 16. The long hairs in the inside of the ear around the muzzle and eye lashes should not be clipped. Brush and curl hair on the heads of horned cattle. Part hair on top of horns and comb down to swirl on face, and then brush in natural direction.

The tails of all breeds should be clipped from just above the switch (beginning just a little above the lower end of the twist, as some say, "where the split begins") to the tail head, tapering off to the tail head so that it will not be necessary to clip any hair from the rump. (Note clipped tails of calves in Figure 7.) Be sure to wash the switch out well. Usually if it is a little coarse, showmen braid the hair into three or four braids while it is still wet and leave it over night. Unbraid and brush it out well just before going to show. To brush the switch out, take hold of the tip of the tail and brush forward.



**Horns.** The appearance of the horns will add much to the appearance of the calf. If they have been weighted as suggested, all that will be necessary is to remove the rough surface with a rasp and smooth them down with a horn scraper of some kind. A piece of glass makes a good horn scraper. Push hair back from base of the horn and scrape outward to the end of the horn, taking care to scrape the horn evenly all the way around. Don't scrape so close that they bleed. If the horn is a little sharp pointed, half an inch can usually be cut off of the end and the horn repointed. After scraping, smooth down a little more by using emery cloth. (Use of rasp and emery cloth shown in Figure 17.) Polish with a woolen cloth dampened with sweet oil.

**Hoofs** may be polished in the same way. If they are black, lamp black may be used.



FIG. 16.—Clip the head of Aberdeen Angus calves back to the white line.



FIG. 17.—Showing the use of the rasp and emery cloth

### Halter Making

To break the calf to lead, a strong serviceable halter is necessary. Show halters should be used in the show ring only. They are too expensive for general use. Following are the directions for making an economical and easily made halter.

1. Secure a piece of rope about 15 feet long ( $\frac{1}{2}$ " to  $\frac{3}{4}$ " rope is strong enough).

2. Measure off 30 inches from one end and throw a triple loop (see Figure A) at this place. These loops are made by grasping the rope in both hands and turning away from the body with the right hand and toward the body with the left, at the same time pushing the hands toward each other, forcing the strands to form the loops.

3. Now draw the long end of the rope through these three strand loops, forming the large loop (B). This loop (B) should be large enough to allow free passage of the rope.

4. Throw a triple loop in the long end of the rope close to first triple loop and draw the short end through (Figure D). This makes the large loop permanent.

5. Now another triple loop is made near the end of the short end of the rope. (This end tied to prevent the rope from unbraiding. In Figure C the end is tied in a double Mathew-Walker knot.) The rope between loops C and D in the short end serves as a nose band which may be shortened or lengthened by moving the loop C.

6. The halter is completed by drawing the long end of the rope through the loop D. Loop C allows the halter to be adjusted to fit the animal.

7. Tie a crown knot in the end of the lead rope and splice the strands back.

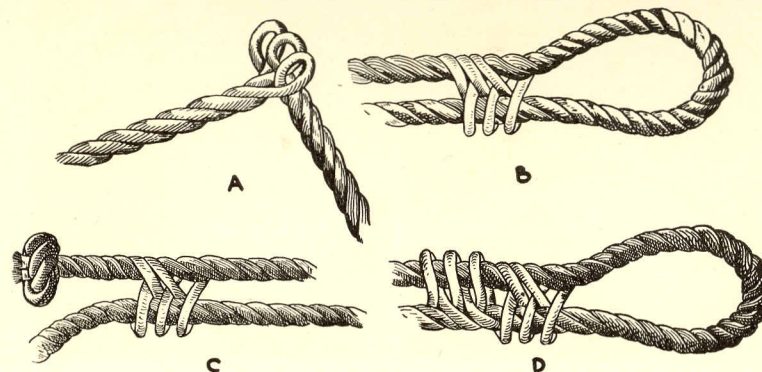


FIG. 18



### Showing

In showing club members should keep their eye on only two things, their calf and the judge. A well trained calf at this time is much easier handled. Club members should always walk on the left side of their calves when leading them. When holding calves in the show ring, members should stand on the left side, face the calf, and hold the halter rope in the left hand and the cane in the right. Calf should stand squarely on all four feet with back held level and head well up. There is a decided advantage in making sure that the calf looks his best before the judge at all times. A stockman's cane, or a light stick four or five feet long makes a good show stick if a nail is put in the smaller end.

When the judging is over, take the decision like a cattleman and a gentleman. Last but not least in importance, club members certainly should not wear the ribbon that their calf has won. The calf won the ribbon, why not display it on him?

### Summary

1. Organize early—if you are reorganizing, do it when your former project ends.
2. Study selection and have your type in mind before you buy.
3. Buy for profit, not prizes.
4. Study the Manual—then follow it.
5. Keep accurate records—start them at the time you buy.
6. Follow your program—it's the spice of club work.
7. Proper fitting and showing requires time and practice.
8. Sell calves not show-worthy—you'll profit by it.
9. Be a true 4-H "clubber"—don't grumble if you lose or boast if you win.
10. End the project right—finish your records.