

Thompson, E. H.

Judging beef cattle.

(1919)

HARVARD UNIVERSITY.



LIBRARY

OF THE

MUSEUM OF COMPARATIVE ZOOLOGY

53,072

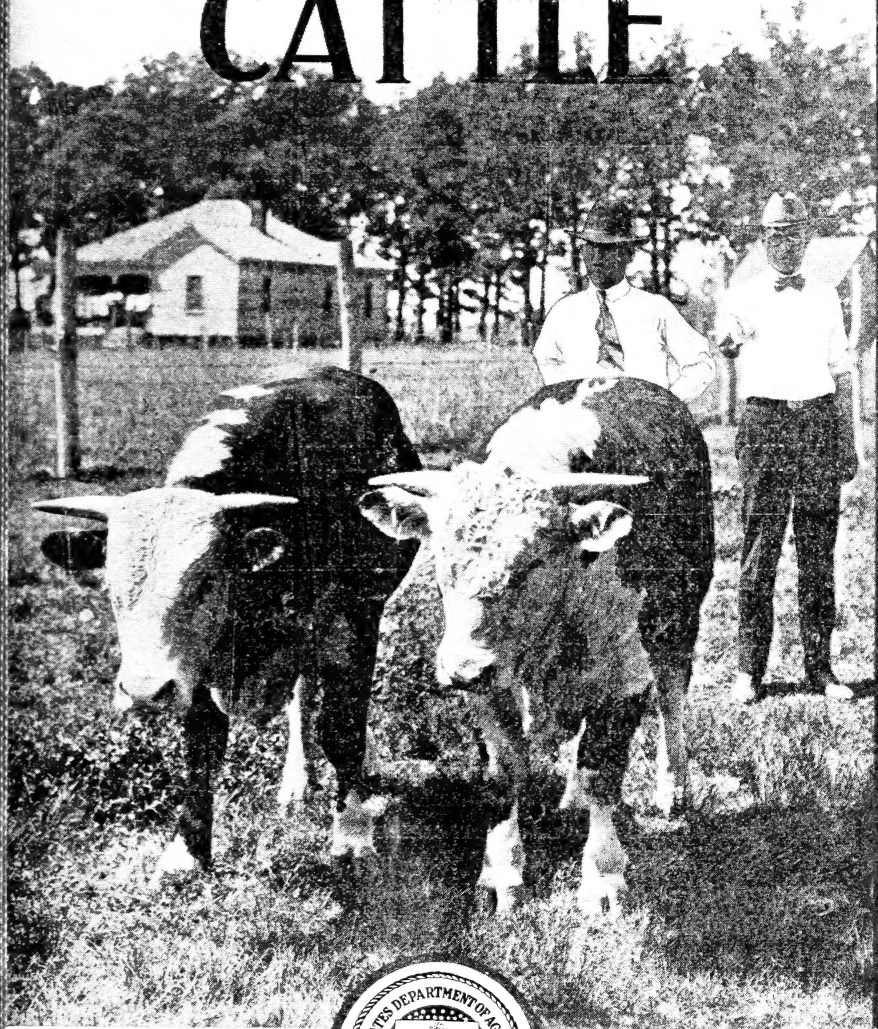
*Exchange.*

*December 27, 1919.*

53,072

FARMERS' BULLETIN 1068  
UNITED STATES DEPARTMENT OF AGRICULTURE

# JUDGING BEEF CATTLE



J

THE ART OF JUDGING is the foundation of all beef-cattle shows and is largely the means of determining the value of cattle offered in public sales.

Each breeder, in order to attain the greatest degree of success, must be a good judge so that he can mate individuals and get the best possible offspring.

A thorough knowledge of judging feeders is important in view of the fact that profit in cattle feeding usually depends upon buying the right cattle.

Without ideals stock judging can not be successful. The ideal beef type, for example, in the fat animal consists in a low-set body which is broad, deep and smooth, with level lines and covered with a thick, even covering of firm flesh. In addition to this general beef form, a good quality of hair, hide, and bone, together with general character and style, is important because it serves as an index to the quality of the meat.

Contribution from the Bureau of Animal Industry  
JOHN R. MOHLER, Chief

Washington, D. C.

November, 1919

# JUDGING BEEF CATTLE.

E. H. THOMPSON,  
*Animal Husbandry Division.*

## CONTENTS.

	Page.		Page.
Good judgment valuable to buyer and feeder.	3	Classification used in judging beef cattle—Con.	
Qualifications of a judge.....	4	Judging breeding cattle.....	10
Beef type—definition and description.....	4	Score card for fat and feeder cattle.....	12
Points of the beef animal.....	5	Discussion of the score card.....	13
Parts of the beef carcass.....	5	Score card for breeding cattle.....	17
Classification used in judging beef cattle.....	5	Discussion of score card for breeding cattle	17
Judging fat cattle.....	8	Procedure in judging.....	19
Judging feeders.....	9	Comparative judging.....	20

## GOOD JUDGMENT VALUABLE TO BUYER AND FEEDER.

**T**HE art of judging beef cattle is the foundation of all stock shows and is largely the means of determining the value of cattle offered in public sales. The line of breeding and the pedigree enter into the value of a breeding animal, but the individual should be a good specimen from the utility standpoint as well. Each breeder, in order to attain the greatest degree of success, must be a good judge so that he can mate individuals and get the best possible offspring. This knowledge may be obtained through years of experience in handling and showing cattle, but by means of a systematic course in judging the same ends may be accomplished at less expense and in a much shorter time.

A thorough knowledge of beef-cattle judging is a prime requisite in the successful buying of feeders. By no means all the men who buy feeders at the markets or from breeders are capable buyers. Most of the feeders bought at markets are bought through commission men, but if a farmer were a competent judge of this class of cattle he could go to the market, as he usually does anyhow, and save the buying charges or commission. There is both profit and satisfaction in being able to buy cattle which when put into the feed lot make rapid, consistent, and profitable gains. To the man who feeds cattle for commercial purposes it is more important to study how to judge feeders than fat cattle, because it requires more skill to judge feeder cattle than fat cattle. Knowledge of judging feeders is also important in view of the fact that profit in cattle feeding often depends upon knowledge and skill in buying the cattle.

## QUALIFICATIONS OF A JUDGE.

To become an expert judge of cattle is not easy. It is often said that good judges are born, not made. Judging can not be learned from books but through actual experience in judging or handling cattle after first having a love for them. The experience gained from working among cattle and from visiting shows where expert judges place cattle will assist materially in getting started right. Experience and a liking for the work, however, are the main requisites.

To be successful a cattle judge must have a well-trained eye and know the breed characteristics and the ideals of the animals in the class under consideration. At public shows he must know the classifications for the various classes of animals. He should place the cattle in such manner that the greatest possible number of exhibitors and spectators will feel that his decision is correct. In case of any disagreement in regard to his placing, he should be willing at all times to give his reasons. This is only justice to the exhibitors and one way by which the judge may clear himself of unjust criticism.

A good judge constantly keeps himself in practice, because without it his powers of observation weaken. Great patience and confidence are necessary to become a good judge. Personal favor or prejudice must be laid aside, and suggestions, hints, or special favors asked by any of the exhibitors must be disregarded. A judge must be true to his own judgment and temporarily put himself in the place of each exhibitor, keeping clearly in mind that the general public will act as a superior judge to commend or criticize his work, as the case may be.

## BEEF TYPE—DEFINITION AND DESCRIPTION.

Without ideals stock judging can not be made a success. The smallest cattle owner, as well as the man who owns a large herd, needs to be familiar with the ideal beef type. Since the final purpose of a beef animal is to supply beef for the butcher's block it may be said that the ideal of the feeder and breeder as to the correct beef type is the animal that will produce the largest amount of the highest-priced cuts of beef when it is fattened and butchered. The ideal beef animal when fat, therefore, must have a low-set body which is broad, deep, and smooth, with level lines and covered with a thick, even covering of firm flesh. The animal should be of one of the recognized beef breeds, which produce the maximum amount of high-quality cuts. In addition to this general beef form, hair, hide, and bone of good quality, together with general character and style, are important, as they serve as an indication of the inner parts which can not be seen. They are an index to the quality of the meat.

**POINTS OF THE BEEF ANIMAL.**

In learning to judge beef cattle it is necessary to become familiar with the locations and names of the different parts of the animal. The names are similar in all classes of live stock and can be learned easily by referring to the illustrations of live animals. In systematic judging the student becomes familiar with the various parts in a short time because he has an opportunity to make frequent mention of the parts in discussing the placing of the individuals. Knowing the locations of the parts thoroughly is important in that the ideal for each part must be kept constantly in mind. The conformation of the part must be associated with the function it has to perform. Figures 1, 2, and 3 illustrate the names and locations of the various parts.

**PARTS OF THE BEEF CARCASS.**

The names of the wholesale cuts of the beef carcass correspond quite closely to those on the live animal, the only difference being that the wholesale carcass contains fewer parts. The head is eliminated in the dressed carcass. The neck, shoulder vein, and shoulders back to the crops constitute the chuck. The front leg from the knee up constitutes the fore shank, commonly called "shank," and the brisket and chest back toward the middle of the body embrace the plate. The rib is the region of the back above the plate and extends from the shoulder back to and including the last rib. The loin extends from the ribs back to and including the hips. The flank on the carcass corresponds very closely to the flank on the live animal. It is that portion below the loin and extending from the plate backward. The round contains the greater part of the animal back of the hip. In the carcass cut, it contains parts 1, 2, and 3, sometimes called hind shank, round, and rump, collectively known as the round. The term "shank" usually refers to the fore shank of the front leg only. (See fig. 4.)

**CLASSIFICATION USED IN JUDGING BEEF CATTLE.**

From the butcher's standpoint cattle may be divided into three classes: Fat cattle, feeders, and breeding cattle. The first comprises animals ready for the butcher's block; the second is the unfinished product, and the third constitutes the class from which the others are produced. The ultimate aim of the three classes is the same, but they must be judged somewhat differently. In fat cattle one must judge according to what the cattle are at the time. In feeders the animal which gives promise of putting on the biggest and cheapest gains and developing into the best beef form when fattened is the kind one desires. In breeding cattle the true beef form is of prime

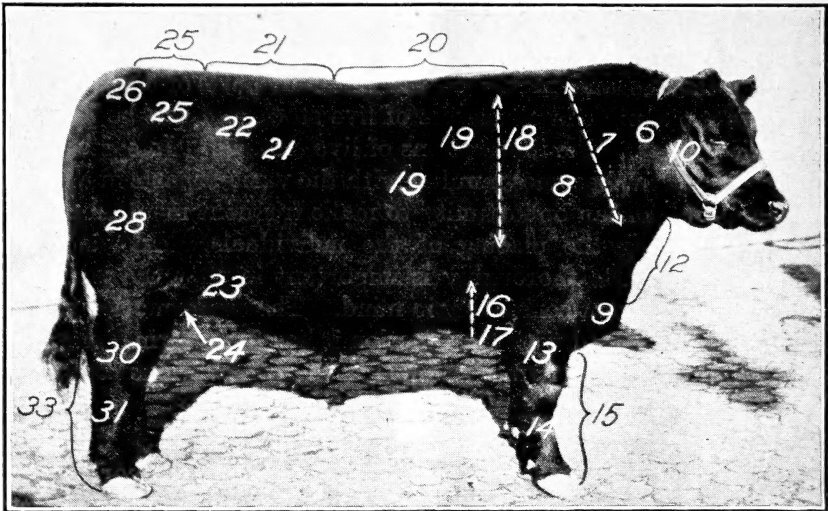


FIG. 1.—Points of the beef animal.



FIG. 2.—Points of the beef animal.

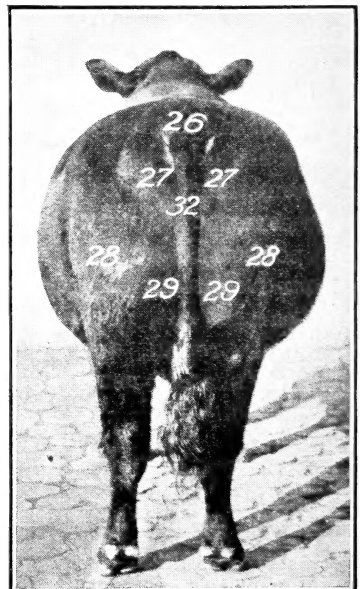
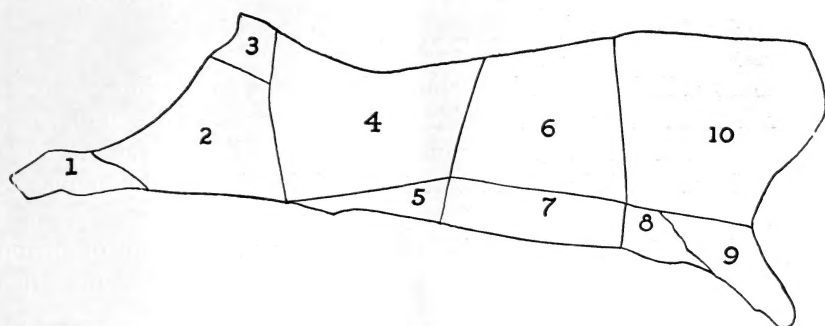


FIG. 3.—Points of the beef animal.

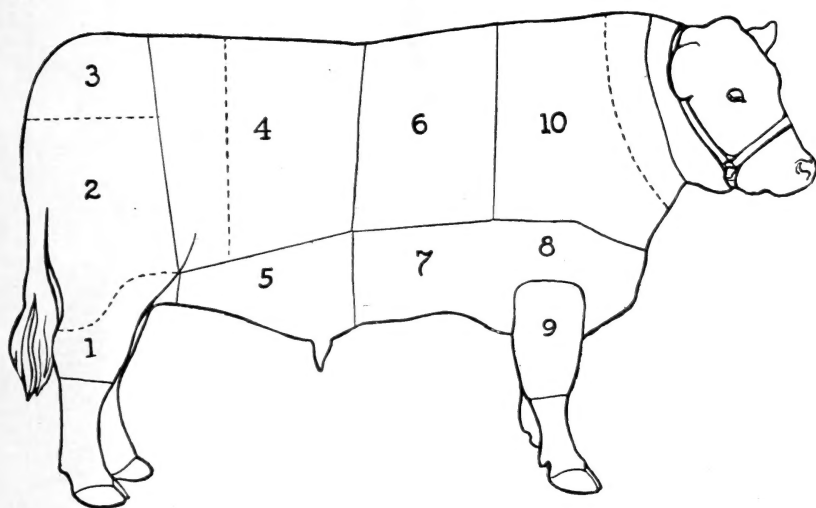
FIGS. 1, 2, 3.—Points of the beef-animal nomenclature.

- |                   |               |                 |                   |               |
|-------------------|---------------|-----------------|-------------------|---------------|
| 1. Muzzle.        | 8. Shoulders. | 15. Foreleg.    | 22. Hips.         | 28. Thigh.    |
| 2. Eyes.          | 9. Brisket.   | 16. Chest.      | 23. Hind flank.   | 29. Twist.    |
| 3. Face.          | 10. Jaw.      | 17. Fore flank. | 24. Cod or purse. | 30. Hocks.    |
| 4. Forehead.      | 11. Breast.   | 18. Crops.      | 25. Rump.         | 31. Shank.    |
| 5. Ears.          | 12. Dewlap.   | 19. Ribs.       | 26. Tail head.    | 32. Tail.     |
| 6. Neck.          | 13. Arm.      | 20. Back.       | 27. Pin bones.    | 33. Hind leg. |
| 7. Shoulder vein. | 14. Shin.     | 21. Loin.       |                   |               |





Wholesale cuts on carcass.



Corresponding cuts on live animal.

FIG. 4.—Wholesale cuts of carcass.

Name.	Per cent of carcass by weight.	Per cent of value of carcass.	Name.	Per cent of carcass by weight.	Per cent of value of carcass.
1, 2, and 3, round.....	23	23.18	9, shank.....	4	2.33
4, loin.....	17	26.15	10, chuck.....	26	21.24
5, flank.....	4	2.97	Suet.....	4	2.55
6, rib.....	9	11.93			
7 and 8, plate.....	13	9.65		100	100.00

importance, but there must also be a reasonable assurance that the beef characteristics will be transmitted to the offspring. In general, the same beef form will be found in each class, only in different degree.

#### JUDGING FAT CATTLE.

The class called fat cattle includes fat steers and heifers, calves, cows, and bulls. Fat steers and heifers constitute by far the largest percentage of fat cattle. Each must be considered from the butcher's point of view and his ideal must be the deciding factor in placing the awards.

In judging fat cattle the finish and quality of flesh are of prime importance. A well-finished animal when of the right breeding has

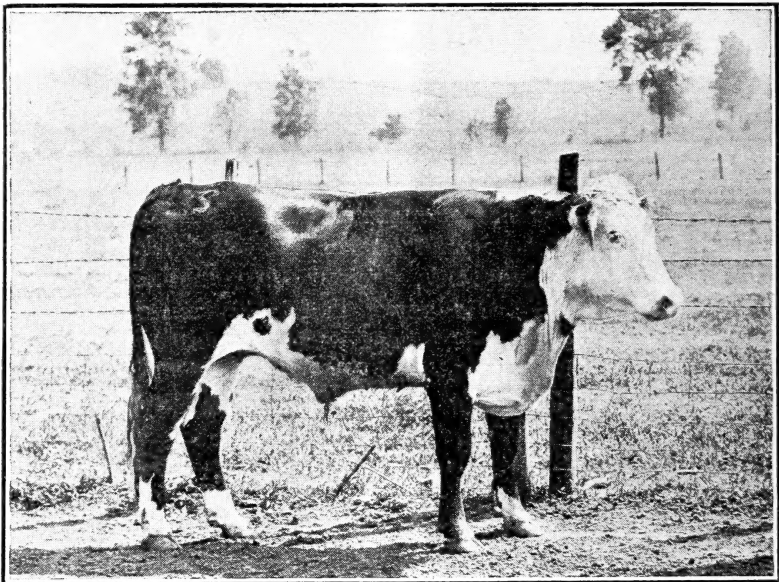


FIG. 5.—A choice feeder steer. Illustrating the desirable type as shown in a short face, wide forehead, large muzzle, a short, thick neck, large heart girth, straight, wide back, low flank, and thick hind quarters.

layers of fat interspersed among the tissues of lean meat. In this connection it may be said that cattle bred especially for beef purposes have a tendency to produce marbled meat or to deposit layers of fat throughout the lean meat. In cattle bred exclusively for dairy products the tendency is to deposit the surplus fat principally around the internal organs, where it becomes a part of the relatively cheap suet and does not tend to improve the quality of the lean meat. There is also a difference in the quality of the fat. In the dairy breeds it is more or less yellow, while in the beef breeds it is much lighter in color and meets with more favor in the butcher trade.

In fat cattle indications of a high dressing percentage are of importance. A pliable and medium-to-thin hide, fine bone, and soft, silky,

glossy hair are indications that the animal will dress out a large percentage of meat of good quality.

#### JUDGING FEEDERS.

In judging feeders it must be borne in mind that they are unfinished cattle and therefore do not have the width and covering of flesh of fat cattle. In general the same qualifications apply to feeders as to fat cattle except that certain points of the score card must be empha-

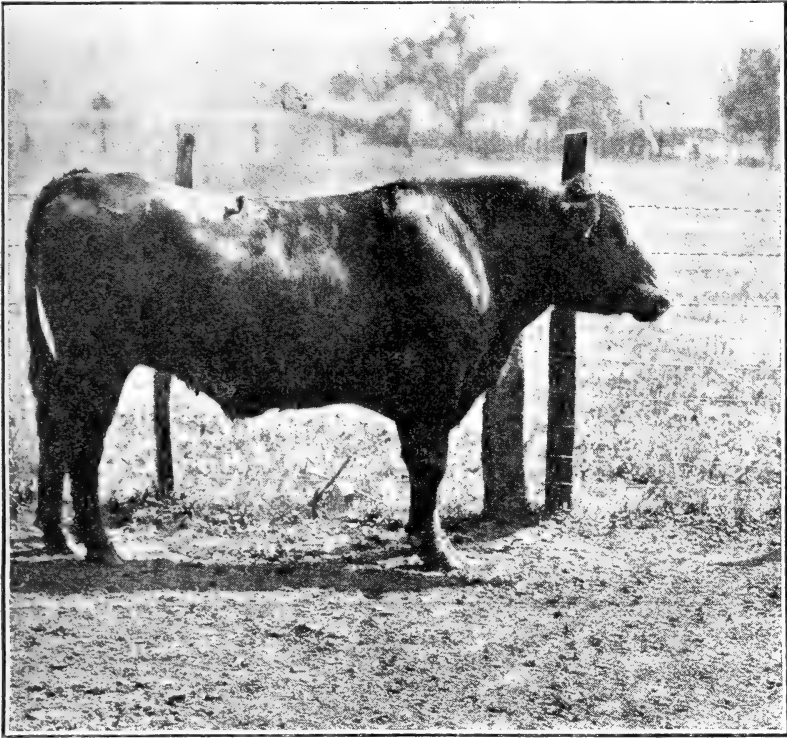


FIG. 6.—This feeder steer shows the undesirable qualities of a long, sharp face, a dull eye, a small heart girth, weak, low neck, poor loin, light hind quarters, and the characteristic expression of a poor feeder that will never develop into the desirable market type.

sized and others minimized. The desirable feeder is one that will dress out a high percentage of high-priced meats when finished and slaughtered. The feeder should have a rugged constitution and "middle" enough to indicate that large quantities of feed can be consumed and converted into beef. A good indication of constitution in a feeder is a large heart girth, short, thick neck, and thickness in general. The general features, especially those of the head, should receive close inspection. A good head, short and wide between the eyes, with a large muzzle and mouth, together with a prominent eye,

indicates a steer of quick-fattening qualities. The body of the animal should be essentially of the same general conformation as that of the finished animal. The body should be short, wide, of good depth, and generally smooth throughout. There should be no undue prominence in the shoulders and the hind quarters should be wide and "let down" without too much prominence in the hips. (See figs. 5 and 6.)

The handling qualities of a feeder are not so pronounced as in a finished animal but are good indications of thrift and feeding qualities. The hide should be pliable and thin, because a coarse hide indi-



FIG. 7.—In the bull, masculinity, sexual characters, and a vigorous constitution are essential to the desired beef conformation.

cates coarse meat of inferior quality. The hair should be soft, silky, and mossy, and not present a rough, harsh appearance.

A separate score card for feeder cattle may be desirable, but the same qualifications apply to both feeders and fat cattle. The main difference is in the degree of perfection of the various parts. Proportionately the conformation and the external parts of the feeder bear the same relation to each other as they do in the fat animal. For that reason it is suggested that the same score card be used for the two classes of animals, because the feeder has to be judged in terms of the fat animal.

#### JUDGING BREEDING CATTLE.

Breeding cattle first of all must have the true beef form. In that respect they are intermediate between feeders and fat cattle so far as flesh is concerned. Early maturity and easy-fattening qualities

should be present to a marked degree. Good handling qualities are essential, as an excessive covering of fat, showing that the animals have been pampered, is undesirable. Heavy flesh is necessarily a factor of great importance, but breeding cattle should be judged more by their value as breeding stock than by the flesh they carry. Breeding cattle when in show condition have about the same handling qualities and covering of flesh as choice fat cattle. In show cattle proper fitting should be valued highly. Other things being equal, the best-fitted animals should be preferred, but it is often the case that a superabundance of flesh hides defects and the poorer animal wins as a result of the greater fitting.

In judging breeding cattle great emphasis should be placed upon any indications which tend to show that their characteristics and

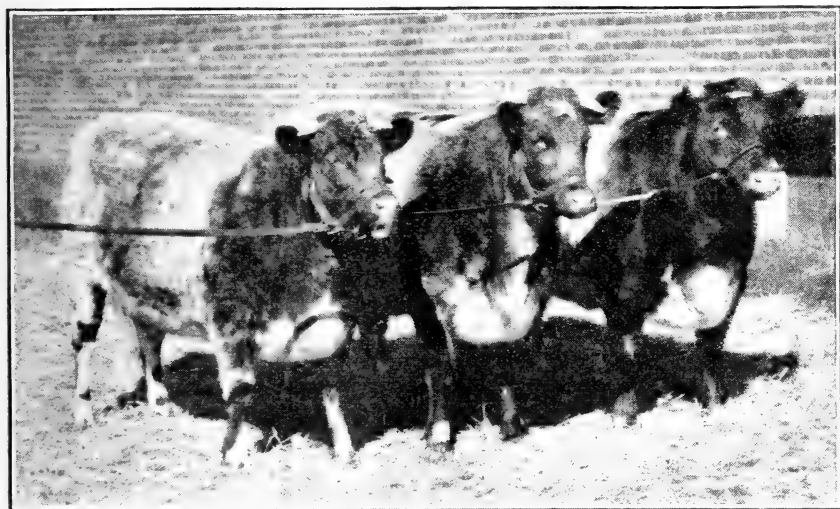


FIG. 8.—Refinement and femininity should be shown to a marked extent in females.

qualifications for a specific purpose will be transmitted to their offspring. In other words they must be prepotent or have the ability to transmit their usefulness and likeness to their offspring. The prepotency should be so strong and the line of breeding so well defined for a specific purpose that an animal will have a tendency to produce better individuals than itself. This should be particularly true of bulls, because of their greater influence in the herd.

Prepotency is obtained by consistent breeding toward a definite breed type. Strong prepotency, therefore, is to be expected most frequently among animals true to their breed type, an example of which is seen in figure 7. In addition to the desired beef conformation, this type in beef cattle always includes certain sexual characters and a vigorous constitution. Sexual characters in male and female differ. In the bull masculinity should be pronounced. The head

should be only medium in size, but broad between the eyes, short in length, full in the forehead, and if it belongs to a horned breed the horns should be strong and characteristic of the breed represented. In a bull the neck is heavy, with a well-developed crest, and neatly attached to the shoulders. The male should be decidedly heavy in the shoulders as compared to the female. The color markings, while of no value from the butcher's standpoint, should be typical of the breed, because correct color markings indicate trueness to breed type and serve as a reasonable assurance that the offspring will be like the parents.

Females should show refinement throughout the body (fig. 8). The head is somewhat longer and more angular, but should have width and fullness in the forehead. The horns are finer and usually more curved, the neck thinner and longer than a bull's, and free from a crest. A cow's conformation shows more length and width in the pelvic region and the pin bones should be wider apart but not prominent. A cow usually has more barrel than a bull and also a longer body. Though milking qualities should not be emphasized unduly, it is desirable to have cows with good udder and teat development. A good flow of milk assures that the calf will have a good start, which is so essential in raising beef calves profitably.

### **SCORE CARD FOR FAT AND FEEDER CATTLE.**

A score card is often used as a guide for making a detailed study of the animal, and the values given to the various points indicate their relative importance. In scoring, each part is considered, and if judged as inferior to the perfect animal, "cuts" are made accordingly from the value given that part in the standard score. The sum of these estimated values gives the score of the animal judged. A "cut" of less than one-fourth of 1 per cent is never made, and a part of an animal seldom deserves a "cut" of more than 50 per cent of the value of that part. The animal is scored from the standpoint of the use to which it is to be put. The parts named in the score card are those which go to make up perfect animals from a utility or market standpoint. In judging from the breed standpoint decisions must be based upon trueness to breed type as described in the breed standards which nearly all the breed-record associations have adopted for the registration of pure bred live stock, and are given in their books of record.

Since the fat steer is the principal source of beef supply of the country, the following score card is made out for that type in particular:

Score Card for Fat and Feeder Beef Cattle.

Class \_\_\_\_\_

Scale of points.	Standard.	Student's score.	Corrected score.
<b>A. GENERAL APPEARANCE—38 per cent:</b>			
1. Weight according to age; estimated, ..... pounds; actual, ..... pounds .....	10	.....	.....
2. Form—broad, deep, low-set, smooth, compact, cylindrical; straight top and underline; stylish .....	10	.....	.....
3. Quality—loose, pliable skin of medium thickness; dense, clean, Medium-sized bone; fine, soft hair .....	8	.....	.....
4. Condition—deep, even covering of firm, mellow, flesh, free from patches, ties, lumps, and rolls; full cod and flank, indicating finish .....	10	.....	.....
<b>B. HEAD AND NECK—6 per cent:</b>			
5. Muzzle broad; mouth large; nostrils large and open .....	1	.....	.....
6. Eyes large, clear, placid .....	1	.....	.....
7. Face short, jaws strong .....	1	.....	.....
8. Forehead broad, full; ears medium-sized, fine texture .....	1	.....	.....
9. Neck short, thick, blending smoothly with shoulders; throat clean with light dewlap .....	2	.....	.....
<b>C. FORE QUARTERS—8 per cent:</b>			
10. Shoulder vein, full .....	2	.....	.....
11. Shoulders smoothly covered, compact, snug, neat .....	3	.....	.....
12. Brisket trim, neat; breast wide and full .....	2	.....	.....
13. Legs wide apart, straight, short; arm full, shank fine .....	1	.....	.....
<b>D. BODY—30 per cent:</b>			
14. Chest full, deep, wide; girth large; crops full .....	4	.....	.....
15. Ribs long, arched, thickly and smoothly fleshed .....	8	.....	.....
16. Back broad, straight, thickly and smoothly fleshed .....	8	.....	.....
17. Loin thick, broad, evenly covered .....	8	.....	.....
18. Flank full, even with underline .....	2	.....	.....
<b>E. HIND QUARTERS—18 per cent:</b>			
19. Hips smooth, evenly covered .....	2	.....	.....
20. Rump long, wide, level; tail head, smooth; pin bones wide apart, not prominent .....	5	.....	.....
21. Thighs deep, full .....	5	.....	.....
22. Twist deep, plump .....	5	.....	.....
23. Legs wide apart, straight, short; shanks, fine, smooth .....	1	.....	.....
	100	.....	.....

DISCUSSION OF THE SCORE CARD.

In judging fat cattle the score card is divided into 5 parts, each carrying a certain per cent of the 100 points of a perfect individual. The 5 parts and the relative importance of each are as follows:

	Per cent.
A. General appearance .....	38
B. Head and neck .....	6
C. Fore quarters .....	8
D. Body .....	30
E. Hind quarters .....	18

Each of the parts is subdivided into smaller divisions and given a relative value. A brief discussion is given for each of the larger subdivisions as well as the smaller ones.

#### A. GENERAL APPEARANCE.

The general appearance includes weight, form, and quality, and condition. In comparing the general appearance of different animals one must consider the relative merits of these points as a single unit. The general appearance is a fair index to the placing of the animal, but the other details must be taken into consideration before a final decision should be made as to the relative merits of different individuals.

1. **Weight.**—The weight of an animal according to its age is considered important as an indication that the greatest possible growth and fattening have been taking place ever since birth. Early maturity is desired in beef cattle because it is highly important to have animals which begin to put on flesh early and at the same time show size, vigor, and quality.

2. **Form.**—In judging fat steers the point of view taken must be largely that of the butcher, and therefore the favored fat animal is of the low-set, deep, broad, compact sort that will yield a large quantity of valuable meat. A steer that is high on the legs, cut up in the flank, and small in heart girth rarely makes a good feeder and it is usually the case that such individuals do not develop into the most desirable fat kind.

3. **Quality.**—In a fat steer quality means fine, clean bone, soft, mellow hide, fine, silky hair, and general refinement of features, together with a covering of flesh which is smooth and firm over all parts of the body. An animal having quality should in general show the absence of coarse joints, prominent hips, rough shoulders, or loose coupling.

4. **Condition.**—This refers to the degree of fatness or finish which is found in the animal. A good indication of the finish of an animal is the fullness of the cod and the thickness of the flank. The cod is considered to be the last place to take on fat and when it becomes full the animal is generally well finished. In a well-finished animal the fullness of the flank will cause the bottom line to be comparatively straight. A well-fattened, medium-weight animal yields the best returns in the feed lot and the most profit on the block.

#### B. HEAD AND NECK.

The head and neck are not of importance on account of the meat they contain, but because they serve as an indication of the development of the rest of the body. In the feeder or unfattened individual the appearance of the head and neck can be taken as an index of the feeding qualities of the animal. The head serves as a condensed



reflection of the rest of the body. To most experienced cattle feeders a view of the head is sufficient to tell whether the animal is a good one.

The head should be broad and short, because those qualifications accompany a thick, low-set, blocky body, while a long, narrow face usually accompanies a narrow and upstanding body and other features which are undesirable in a beef animal. The muzzle should be broad and the mouth large, because they indicate a good appetite. The nostrils should be large and open, showing good lung capacity. The eyes should be clear, prominent, and have a docile appearance, indicative of a quiet temperament. The face should be short and the jaws strong and wide apart at the base. As viewed from the side the profile of the head should show a wide angle. The ears should be medium sized, of fine texture, and covered with fine, silky hair. If horns are present they should be small or medium sized and free from undue coarseness.

The neck should be short, thick, and blend smoothly with the shoulders. The top line of the neck and the back should form a straight line. The throat should be clean and the dewlap light. A long, narrow, ewe-shaped neck is undesirable because it is often associated with poor feeding qualities.

#### C. FORE QUARTERS.

The fore quarters include the shoulder vein, shoulders, brisket, and legs. The fore quarters should be well proportioned so as to form a smooth connecting link between the neck and body. Coarseness in the fore quarters should be avoided, but a fullness of the various parts is desirable.

The shoulder vein should be full and the shoulders smooth, compact, and evenly covered with flesh so that the neck fits snugly into the body. This part should be free from coarseness and the shoulder blades should be practically hidden from view. The brisket should be medium sized and prominent enough to make the body appear rectangular as viewed from the side. Freedom from coarseness is desired in the brisket. The legs should be short, straight, set well apart, and show refinement, which acts as an indication of quality and a high dressing percentage in the carcass.

#### D. BODY.

The body of the animal contains the most valuable cuts of beef. Included under this heading are chest, ribs, back, loin, and flank. In general the body should be broad and deep with the underline and the top line parallel or nearly so. The body should be well rounded with well-sprung ribs but free from paunchiness.

The chest of a good individual should be wide, deep, and have a large girth. The crops must be full so that there is no depression

behind the shoulder. Fullness in this region will give the animal a more level top line and cause the body to appear truly cylindrical as viewed from the front or back. Long, well-arched ribs thickly covered with smooth flesh are desirable. The back should be broad and straight and carry a thick covering of flesh. The most valuable part of the carcass is the loin, which extends from the last rib backward to the hip joints. It should be broad and thick and contain considerable fat, evenly distributed throughout the lean meat. This is equally true of other parts of the body but is particularly so in the case of the loin. In a thin animal the flank is primarily a web or fold of skin which connects the lower part of the body to the thigh. In a fat animal the flank becomes thick and causes the bottom line to appear straight. There is also a fore flank behind the elbow of the front leg. Both of these flanks should be well let down and in the well-finished animal should be thick and level with the underline.

#### E. HIND QUARTERS.

The hips, rump, thighs, twist, and legs make up the hind quarters. The hind quarters should be deep and as broad as the shoulders. The hips should be smooth and show no prominence. The rump should be long and wide and gradually round off smoothly from hips to tail head. The rump should be free from patches and rolls caused by uneven deposits of fat. The thighs should be deep and full and the twist deep and plump. The twist constitutes the portion below the tail head on the inside of the leg. The thigh is the outer aspect of the leg. Both of these constitute the so-called quarter. The hind legs, as in the case of the front ones, should be wide apart, short, straight, and show a fine shank and fine-quality bone.

Great emphasis should be placed upon the development of the hind quarters because the cuts in this part of the body contain some of the highest priced and best quality meat. The hind quarters in the carcass contain about 23 per cent of the meat of the entire animal, but it must be remembered that the hind quarters on the carcass are proportionately smaller than the hind quarters on the live animal. If the carcass cut is made comparable to the part on the live animal it will be found that a large part of the loin will be classed with the hind quarters. In making out the score card for fat cattle the purpose has been to assign values to the various parts of the animal corresponding to the relative market values of the corresponding cuts and not to the corresponding relative weights. It is usually considered that the front half of the animal weighs 52 per cent and the hind half 48 per cent. In figuring the relative market values of these parts based on wholesale prices, the hind half of the carcass is worth about 54 per cent while the front half is worth about 46 per cent. This gives the reason why due emphasis should be placed upon the score of the hind quarters and the loin of the animal.

## SCORE CARD FOR BREEDING CATTLE.

A score card for judging breeding cattle needs to be slightly different from that for judging fat cattle and feeders. For making a detailed study of the different parts the fat-cattle score card may be used for breeding cattle, but it does not cover all the points which are desired in breeding beef cattle. For that reason the following score card is submitted.

## Score Card for Breeding Beef Cattle.

Class \_\_\_\_\_.

Scale of points.	Standard.	Student's score.	Corrected score.
1. Weight and size, according to age.....	10	.....	.....
2. Form—deep, broad throughout, low set, straight top and underline..	25	.....	.....
3. Constitution—good depth and width of chest.....	15	.....	.....
4. Quality—smooth throughout; good handler as indicated by soft, loose, pliable skin covered with fine, mossy hair; bone, fine yet of sufficient substance and strength to carry the body.....	15	.....	.....
5. Condition—carrying natural flesh enough to indicate vigor; free from patchiness.....	10	.....	.....
6. Breed, type, and color—clean-cut head and neck with good form; color markings typical of breed.....	10	.....	.....
7. Sex character—strong, masculine head and neck in bull; more refinement throughout cow than in bull.....	10	.....	.....
8. Disposition—docile, with quiet temperament..... (Disqualifications automatically eliminate the animal from the class.)	5	.....	.....
	100	.....	.....

## DISCUSSION OF SCORE CARD FOR BREEDING CATTLE.

In the score card for judging breeding cattle of the beef type are enumerated those points which are most essential in an animal kept for reproduction. Included among these points are also those which are important from the commercial standpoint. The commercial idea must always be kept in mind, because the object of keeping the breeding cattle is to supply animals of the right kind for the butcher's block.

Under the points of the score card the weight and size according to age are important, because the greatest possible growth is desired in the shortest possible time. Quick growth indicates profitable gains and enables the beef-cattle producer to sell his cattle at an early age.

The form of breeding cattle is essentially the same as that of fat cattle. The body should be broad and deep throughout with short, straight legs and a straight top and underline. The form of breeding cattle, unless in unusually fat condition, will be somewhat intermediate between that of feeders and fat cattle.

Quality is desired in beef animals kept for breeding purposes. The animals should have good handling qualities, as indicated by soft, loose, pliable skin, covered with fine, mossy hair. Fine bone is desirable, but it should be of sufficient size and quality to carry the body. As a choice of two evils it is better to have a little too much bone than too little.

The condition of breeding animals should be such that they have at least natural flesh enough to indicate vigor. The covering of flesh should be evenly distributed and be free from lumps or patchiness.

Breed type and color markings are indications of prepotency. The type and form peculiar to each breed should be present to a

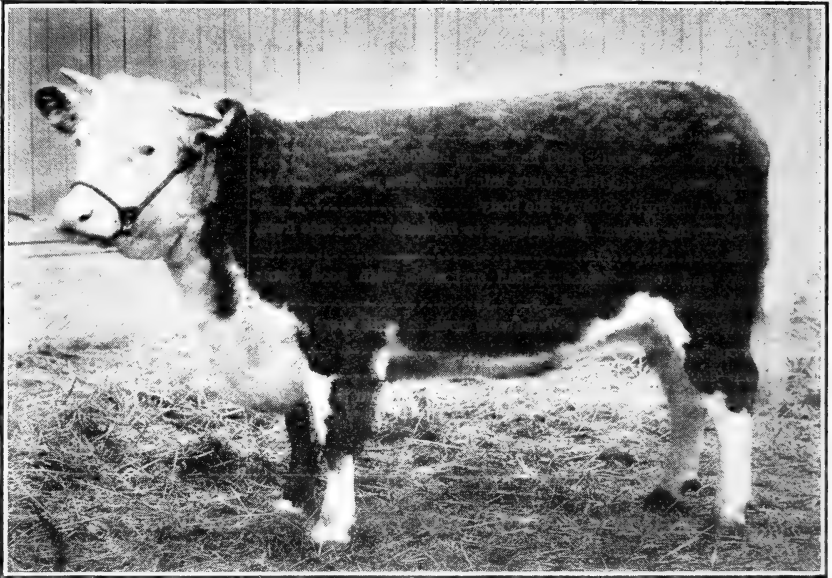


FIG. 9.—An animal with breed type and color markings such as is shown in this illustration will be reasonably certain to produce good-quality calves when bred to a good bull.

marked degree. Under this should be included the features of the head and horns and the color markings typical of the breed. (See fig. 9.)

The sex characters are also indications of prepotency. The bull should show masculinity throughout the body, especially in the head, neck, and shoulders, while the cow is more refined and should show more width and length in the pelvic region.

The disposition or temperament is only a minor point and is given a low score, but because of bad disposition many animals are sold long before their usefulness is over. A breeding animal should show a docile disposition and a quiet temperament. A bad disposition is most common among bulls, and though it is a quality that does not detract from their usefulness it makes them dangerous to handle.

Disqualifications differ in the several beef breeds. Animals known to possess disqualifications should be eliminated from the class. The disqualifications are not given here, because the different beef-cattle record associations designate from time to time what constitute disqualifications.

### PROCEDURE IN JUDGING.

In judging a class of cattle or inspecting a single individual one should first make a general survey of the animals. From a distance examine the general features of the animals and note the general outline and typical beef form. When first approaching the animal note the front view and general features of the head and the width and depth of the chest. On moving toward the side, note the depth of the body and the lowness of the flank. The rear view will give the width of the back, spring of ribs, and thickness and development of the hind quarters, particularly the thighs and twist.

After a general survey of the animal from a short distance a close inspection of the various parts of the body should be made, beginning at the head. Examine the various parts of the head and proceed backward to the neck and shoulders. After examining these parts it is well to move a step or two away from the animal and compare the straightness of the top and underline, at the same time noting the depth of the chest and the constitution in general. Continuing the examination proceed toward the loin and hips, feeling the skin and paying particular attention to the evenness and covering of flesh. In the examination of the hind quarters note the smoothness of the hips, levelness and width of the rump, and the depth and thickness of the thighs and twist. The quality and condition should be obtained from the handling of the various parts during the examination. In classes which are very close the condition and quality may be the deciding factors, especially in fat cattle. In such classes a close examination of the thickness of the flank and the fullness of the cod may be very helpful.

In the case of beginners, judging work usually commences with the use of the score card, after having the various parts of the animal identified and the use of the score card explained. In using the score card one should make a complete examination of the individual before the various "cuts" are noted on the card. If this is done and the score of the various "cuts" put down on the card after the examination it will tend to cultivate confidence in one's memory and ability to remember the relative merits of the various parts. This is only for practice purposes; in close competitive judging contests further inspections should be allowed.

**COMPARATIVE JUDGING.**

The score card is primarily for the use of the beginner or amateur. It is to be used in learning the details of comparative judging which is used exclusively in placing the awards at public beef-cattle shows. To become expert at comparative judging requires considerable practice. Patience and an observing nature will aid in obtaining efficiency in picking out the leading individuals and placing them in their order of excellence. Practice at first may be confined to selecting the best individual in a class of cattle of the same age and class. As more proficiency is obtained animals of different ages may be used, but the sexes should be kept separate. It is not practicable to try to select the best individual in a mixed class of males and females, but efforts should be confined to picking out the best female and also the best male. Except for practice purposes it is also inadvisable to judge individuals of different breeds as a class, because it results in prejudices and disagreements as to the merits and usefulness of the different breeds. In the judging of fat cattle the statement above will not apply, because the breed standards have been replaced by the standard for fat cattle, which therefore are strictly comparable.

In comparative judging one must examine the various parts and make direct comparison, keeping in mind the parts which are relatively the most important. For instance, it would be folly to place a fat animal having short, straight legs first if a second animal were only slightly poorer in that respect but much better in the region of the back or loin. The back or loin is a part having decidedly more value than the legs. The judge must constantly weigh the merits of the corresponding parts and summarize the total of the qualifications of each animal. He must keep a mental impression of the score card or similar scale of points and base his final decision upon his most careful judgment as to the relative merits of the animals for the purpose designated.

Beginners in comparative judging have a tendency to follow the score card in all its details. The score card is used for this specific purpose, but is intended mainly to familiarize the students with the detailed parts and to teach the relative importance of each. Its use is a step toward the more difficult task of comparative judging. In comparative judging one must take a broader view of the different parts than in score-card judging. The detailed parts of the head may be taken as a unit. The same is more or less true of the fore quarters, the body, and the hind quarters. Only in a close competition does the judge need to compare the smallest details, but in many judging contests it becomes necessary. Often in such contests the judge must make his final decision upon such relatively fine points as quality or condition of the animals.

In judging breeding classes of graded herds, "produce" of dam or "get" of sire, the judge is confronted with a very difficult task. It is

very probable that many of the individuals have been up for competition and have been passed on before. If one judge has done all the judging and has kept in mind the animals which were placed at the top of the class on the individual basis, it may aid him materially in placing the group classes. It must be remembered that just because a group contains an animal placed first in the individual class is no indication that that group will be placed first. It often happens that the best individual may be in the group placed last. In classes composed of groups of animals the judge must compare each group as a whole and base his final conclusion upon a careful examination of the animals in each group. In these classes uniformity of breeding and trueness to breed type are especially important qualifications. The conformation, condition, and quality always command first consideration, but the others are of great importance in placing group classes of cattle.

A student who has advanced to the stage of comparative judging should have clearly in mind the ideals for the various classes of cattle. The detailed score card previously discussed is for use in scoring animals individually. For comparative judging, it is necessary to have a card giving the placing of several animals in order of excellence. Considerable space is also necessary for the giving of reasons, because the greatest benefit in practice judging is derived from the giving of the reasons and the discussions of the placing. In discussing the differences of animals the order of importance should be given. It is well to confine the discussion mainly to the outstanding good qualifications and the most prominent defects and make little or no mention of the minor points. If the animal placed first is an outstanding good individual, say so, and pass on to the next two for comparison.

The following form is designed for comparative judging and may be used for all classes of beef cattle. It is designed for classes of 4 animals but may be modified for any number.

COMPARATIVE JUDGING BY CLASS OR TEAM.

Kind of Cattle.....

Name of student: ..... Date: ....., 19..

Order of placing: First..... Second.....

Third..... Fourth.....

(Write reasons for placing below.)

Reasons for placing No. .... over No. ....

.....

.....

Reasons for placing No. .... over No. ....

.....

.....

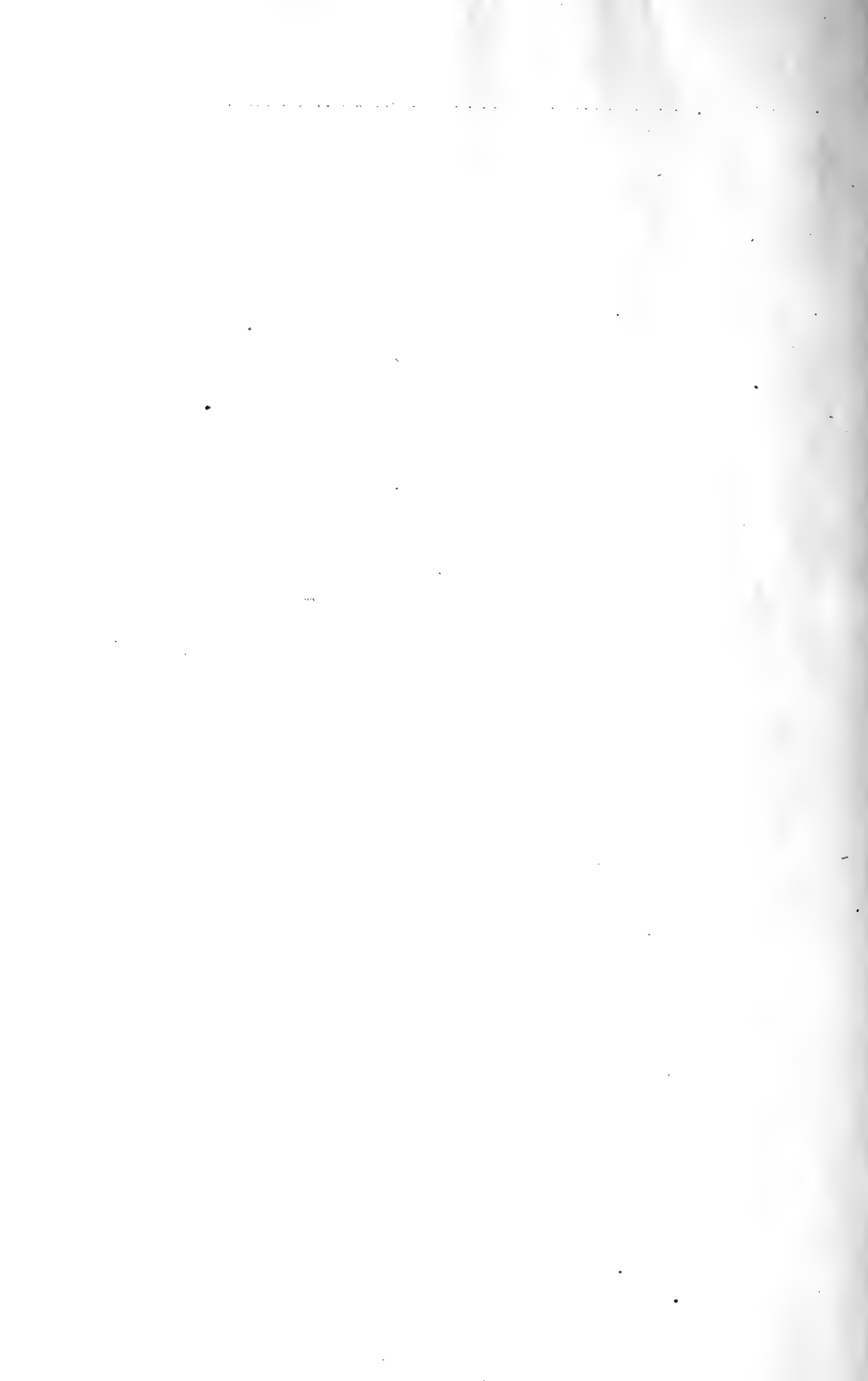
Reasons for placing No. .... over No. ....

.....

.....

.....

.....





**PUBLICATIONS OF UNITED STATES DEPARTMENT OF AGRICULTURE  
RELATING TO THE BEEF CATTLE INDUSTRY.**

**AVAILABLE FOR FREE DISTRIBUTION BY THE DEPARTMENT.**

- Beef Production in the South. (Farmers' Bulletin 580.)  
Breeds of Beef Cattle. (Farmers' Bulletin 612.)  
Cottonseed Meal for Feeding Beef Cattle. (Farmers' Bulletin 655.)  
Production of Baby Beef. (Farmers' Bulletin 811.)  
Live Stock Classification at County Fairs. (Farmers' Bulletin 822.)  
Raising and Fattening Beef Calves in Alabama. (Department Bulletin 73.)  
The Economical Winter Feeding of Beef Cows in the Corn Belt. (Department Bulletin 615.)  
Wintering and Fattening Beef Cattle in North Carolina. (Department Bulletin 628.)  
Five Years' Calf-feeding Work in Alabama and Mississippi. (Department Bulletin 631.)  
Fattening Steers on Summer Pasture in the South. (Department Bulletin 777.)

**FOR SALE BY THE SUPERINTENDENT OF DOCUMENTS, GOVERNMENT PRINTING  
OFFICE, WASHINGTON, D. C.**

- American Breeds of Beef Cattle, with Remarks on Pedigrees. (Animal Industry Bulletin 34.) Price, 20 cents.  
Beef Production in Alabama. (Animal Industry Bulletin 131.) Price, 10 cents.  
Experiments in Beef Production in Alabama. (Animal Industry Bulletin 103.) Price, 10 cents.  
Fattening Calves in Alabama. (Animal Industry Bulletin 147.) Price, 10 cents.





