

THE FARMERS' BEEF CLUB

P. F. TROWBRIDGE



Fig. 1.—Sawing thru the pelvic bones.

A supply of fresh beef for the family on the farm is difficult to maintain. If the cost need not be considered the meat can be obtained at the nearest local market and the regularity of the supply may be governed by the frequency of the trips to town. This condition, where cost need not be considered, however, does not exist in most communities. Because of the difficulty of securing fresh beef in summer at reasonable prices most farm families depend largely on cured meats, eggs, and poultry. By August everybody has become tired of eggs and fried chicken, and the hams have disappeared. Rather than pay retail prices for beef, a number of neighbors kill a young beef and divide it among themselves. This is the beginning of the farmers' beef club, and in many communities there is a well

established organization which enables the members to obtain a regular supply of fresh beef at actual cost.

The operation of the farmers' beef club is explained in the following pages, not to encourage increased consumption of beef in the farm home, but to show how the necessary supply of beef can be obtained for the family with regularity and at a minimum cost.

A group of sixteen families makes the best unit for a farmers' beef club. If it is desired to reduce the amount of beef used by the different families, the group can easily be increased by two smaller families uniting in taking one membership in the group.

ORGANIZATION OF THE CLUB

Only two meetings of the club are necessary during the season—at the beginning and at the end. One member of the club is selected to do the slaughtering and he should receive compensation for his services either in cash or in permission to dispose of the offal for his own remuneration. In nearly every community there is some one who has had some experience in butchering and who will undertake the work. He also keeps a record of the cuts allotted to the different members.

While the warm carcass of beef can be cut up immediately after slaughtering and divided among the different members, each of whom shall care for his own portion, there is a decided advantage in providing in each community a place where the carcass can be well chilled before being cut. At Marble Rock, Iowa, there is a twenty member club that has erected a slaughterhouse and cooler. The following description of the plant is taken from Wallace's Farmer of January 26, 1917:

"As soon as the ring was organized, they proceeded to build an ice house and an abattoir. The building stands on the farm of one of the members who keeps a lot of hogs, and who is glad to have the offal for hog feed in exchange for the rent of the land on which the building is located. The cost of the building and equipment, including putting up the ice last winter, amounted to \$15.51 per member. This is besides work donated by the members in erecting the building. The abattoir has a cement floor, and is a lean-to, 10 by 16 feet, on the north end of the ice house. It is fitted with a 'well', block and tackle, and necessary conveniences for keeping the room sanitary.

"The ice house is 16 by 24 feet. The ice is not disturbed, but is packed in six feet wide on three sides, and three feet deep on top of the cooling room, which is 8 by 10 feet and 8 feet high, and built in the side of the ice house. The space—one foot wide between the ice and the outside wall of the ice house and eighteen inches on top of the ice—is packed with sawdust. The wall of the cooling room is of galvanized sheet iron, and the ice is packed

close to it. The refrigeration in this room proved entirely adequate thruout the season, in spite of the protracted spell of hot weather. Most of the ice was still there when the season closed."

At the first meeting of the club, the frequency of slaughtering—usually once a week or once in two weeks—is agreed upon. The order in which the members are to furnish the beef is usually established by lot. Agreement is made as to the general quality of beef to be furnished and each member agrees to deliver a beef of that quality when his turn comes. The butcher is usually made sole judge of the quality and is empowered to reject any beef not up to quality or that should prove to be diseased. In the following pages are given fairly detailed directions for beef slaughtering and cutting which will be of assistance to those of limited experience. See page 10 for directions for dividing the carcass among the members of the club.

BEEF SLAUGHTERING UNDER FARM CONDITIONS

Selecting the Animal.—Only healthy, thrifty animals should be taken for slaughter. They should be in good flesh, but not necessarily very fat to make good, economical beef. The very fat animals make juicy beef, but yield a great deal of waste fat. The young animal (baby beef) makes tender meat which is lacking in flavor. The more mature animal will give a carcass of better flavored flesh. The old cow, well fattened, makes beef of excellent flavor, and the desired tenderness may be secured by ripening in storage and by the skill of the housewife in the cooking.

For convenience in the work of slaughtering the animal should be off feed for twenty-four hours. Water should not be withheld as the animal will become restless. The animal should never be slaughtered immediately after being driven some distance or when over-heated.

Shooting or knocking.—If the slaughtering is to be done in the open lot, shooting is the more common practice. When the animal can be conveniently roped and is to be brought to a definite slaughtering spot it is good practice to stun with a killing hammer or axe. The place to strike or shoot the animal is just above the place where lines from the base of each horn to the opposite eye would cross. In striking with the hammer, do not make a full arm swing as it gives the animal time to dodge. Strike with a short, quick, snappy blow. The blow should have force enough to crush the skull.

Hoisting.—If block and tackle conveniences are at hand, shackle a chain around both hind feet and hoist the animal so the head is

free from the floor before sticking. This should be done promptly after the animal is stunned. Where considerable slaughtering is done, a good hoist is desirable. A practical form for both bees and hogs is illustrated in Figure 2. The windlass is bolted to the side of the building at a convenient height for operation. The rope pulley is fastened to a beam high enough to permit hoisting a big beef clear from the floor. A good inch rope should be used.

Bleeding.—As soon as the animal is hoisted, grasp the dew lap with the left hand and make a vertical incision, six or eight inches long, in the neck just in front of the brisket. Cut deep enough to

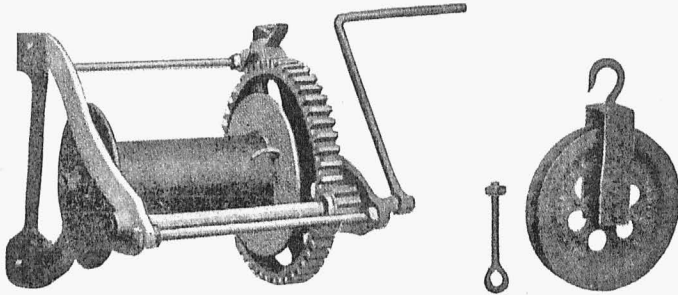


Fig. 2.—A good windlass makes hoisting easier.

expose the windpipe. With the point of the knife just in front of the breast bone cut slightly up and toward the back bone but not far enough back to cut the windpipe. This should sever both artery and vein where they branch to the shoulders and to both sides of the neck. The knife should not be pushed upward far enough to cut thru the opening between the first two ribs, as this causes the animal to bleed internally and the inside of the thorax cavity becomes stained with blood. As the operator faces the animal, hanging for bleeding, the vein and artery to be severed are in front of the windpipe. The gullet (swallow) lies behind the windpipe. Pumping the fore legs during the bleeding will get more of the blood out of the fore quarters. Catch the blood in a tub or pail.

If the animal has not been hoisted after stunning, see that the head is down hill where possible and stick as directed. The reclining carcass will not bleed as completely as the suspended carcass.

Skinning out the feet.—As soon as the animal is well bled begin the skinning. Sever the tendons to the fore feet by cutting deep across the foot just above the hoof. With the point of the knife held at a slant, split the skin between the dew claws and continue the cut to about six inches above the upper end of the cannon bone. Hold the hoof between the knees, skin down each side of the cannon bone and unjoint the foot at the upper end of this bone. Skin out the

front side of the foot after the unjointing, and be careful to remove the hide close to the hoof. If the dew claws are to be removed, cut them off with the knife before beginning the skinning. Do not split the hide up the fore leg any more than necessary in removing the foot. The hide will keep the carcass clean.

Removing the head.—Cut thru the hide just back of the horns and carry the cut down one side of the face to the mouth. This permits the removal of the hide from the face in a single piece. Carry the opening in the throat to the center of the lower lip, skin out each side of the neck and cheek and leave the ears on the hide. Hold the skin near the neck while severing the jugular vein on each side. Open the throat to expose the windpipe the entire length. Cut back on each side of the windpipe to free the gullet (swallow, weasand) and be careful not to cut it. Tie this firmly and push a nail or a skewer thru below the tie so the string will not slip off. Sever the windpipe and the gullet below the tie, leaving three rings of the windpipe on the larynx. Open the windpipe between the first ring and the larynx for a finger hold. Hold the head with the left hand in the rings of the windpipe and cut the muscles of the neck just back of the jaw bones to expose the atlas joint. Sever the spinal cord and remove the head at the atlas joint. Cut close to the jaw bones and skull to leave the most possible meat on the neck.

If the animal has not been hoisted for bleeding, split the throat to lower lip, skin out the upper side of the neck and cheek. Roll the carcass on the other side, skin out that side of the neck and cheek, cut the hide back of the horns, split down the side of the face to the mouth and skin out the face. Roll carcass on its back, open the throat to expose the windpipe, tie gullet, cut gullet and windpipe, and unjoint head as described above.

Tongue, brains, and cheek meat.—As soon as the head is removed take out the full-length tongue, by cutting close to the jaw on each side. In severing the tissue in the point of the lower jaw, be careful not to cut the tongue. Cut the tongue bones with a cleaver or sharp hatchet. Remove the cheek meat. It is well worth saving. Split the head with saw or cleaver and remove the brains. Be careful that there are no splinters of bone with the brains. Wash with cold water. Hang the tongue on a nail; lay the other pieces on a clean board or in a bucket.

Clean up any blood that is on the floor and lower the carcass. The head end should be toward a drain or at a lower level. Skin out the hind feet and expose the leg just enough to make an opening into the hock for the "beef tree". (See Fig. 3) Unjoint the feet at the upper end of the cannon bone.

Opening the carcass.—Prop the carcass flat on its back—the support used is called a pritch. With a firm grip on the knife, start at the back end of the breast bone and cut thru the hide to the bone, along the brisket, to the cut made in bleeding. With the point of the knife, split the hide along the middle of the belly to the cod. Continue the split thru the cod to the rectum. Skin down each side of the belly “to the red”, where the thin outer muscle adheres persistently to the hide. Try to leave the hide free from meat and fat. In skinning along the brisket avoid cutting the muscle holding the leg to the body. Cut the hide at right angles to the brisket so that the cut comes up over the point of the elbow, leaving the fore leg still pro-

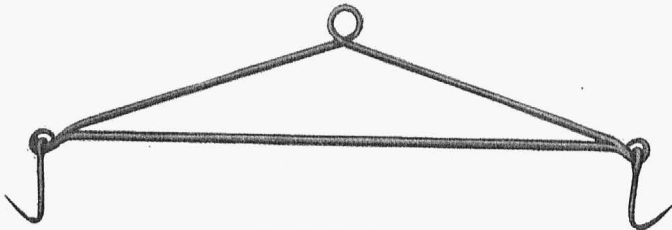


Fig. 3.—Beef tree.

tected by the hide. Skin out the cod, carry the slit in the hide from the hock along the inside of the leg to the median line about midway between the cod and the rectum. Remove the hide from the flank and round just enough so that further skinning will not be interfered with when the beef tree is in place and the carcass is partially hoisted. Skin out the back of the round to the rectum (bung).

Caul fat.—Open the abdominal cavity from the sternum (breast bone) to the hind legs, but be careful not to cut the stomach. Strip out the omentum (caul) fat and put it at once into cold water to remove the animal heat.

Breast sawing.—Saw the breast bone and be careful to cut exactly in the middle. Open the throat the entire length and see that the windpipe and gullet are free. With a large animal, after the removal of the caul fat, it is advisable to make a double tie (a few inches apart) between the true stomach and the small intestine. Before cutting the intestine protect each tie with a skewer. By separating the intestines from the stomach at this time, the intestines and liver can be removed separate from the stomachs and caught in a separate tub. Frequently one tub is not large enough to catch all internal organs and the fat comes in contact with the floor or ground and is no longer fit for edible fat.

Splitting the hams.—Hold the knife with a firm grip and cut between the hams to the pelvic bone (coupling bone). Expose the

white connective tissue on both hams. If the cut is exactly in the center it will frequently be possible to split the pelvic bone with the knife. If this is difficult use a saw and be careful not to cut the intestines.

Some form of hoist is essential, if it be only a pulley fastened to a limb of a tree. The windless shown in Figure 2 is practical, especially with a permanent slaughtering place.

Hoist.—The carcass is now ready for the first hoist after the beef tree is in place. A doubletree with coupling fastened to the rope, which runs thru a pulley attached to a limb or to a beam, will serve the purpose of a regular out door beef hoist. A hoist is illustrated on the cover page (Fig. 1). Stop the hoisting when the carcass is conveniently elevated, two or three feet. Skin around the rectum and cut the muscles so that the rectum is loosened. Tie firmly and cut off the end so that none of the clean fat will be smeared. Split the hide the length of the inside of the tail. Skin each side of the tail near the base. Skin out the small end of the tail so that the bone may be grasped with a cloth or a pair of pincers. The hide can be pulled away from the tail with but very little use of the knife. Unjoint the tail near the base.

Beating the fell.—On the outside of the hind leg, the white tissue between the hide and the flesh is difficult to remove from the hide and it is best separated by beating with the back of the cleaver while a helper pulls the hide away from the carcass. Hoist as the skinning proceeds to make the work easier. Keep the fat on the carcass, not on the hide.

Disemboweling.—Have tubs ready to receive the stomachs, intestines, and contents of the thorax cavity. Remove the bladder, loosen the bung, and be careful not to cut into the kidney fat. Watch carefully for the small intestine which makes the bend very close to the bung. Be sure to cut just behind it. Remove the intestines and catch them in a clean tub. On the left side the first stomach (rumen) adheres to the back. Tear this loose by bearing down with considerable force. On the right side the liver adheres, somewhat, next to the kidney fat. This must be pulled loose, which exposes the diaphragm. Cut thru the white tissue of this muscle on each side of the hanging tender (inner diaphragm muscle) and join the two cuts just back of the gullet. On each side cut thru the diaphragm to the sternum (breast bone). Cut the large artery in the back behind the hanging tender, insert the finger and strip out to the back bone, remove the lungs, heart, windpipe, and gullet with the stomachs.

Dropping the hide.—Continue skinning down the back and sides of the carcass. Finish splitting the hide over the fore legs and remove the hide from the shoulders and neck. Spread out the hide,

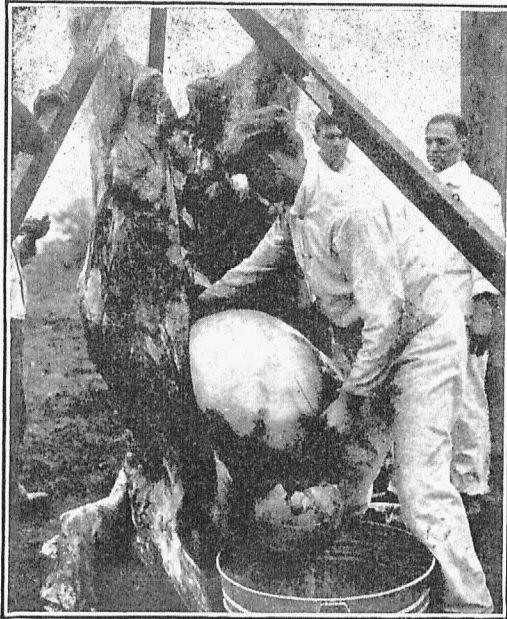


Fig. 4.—Removing paunch.

hair side down, fold in from the edges, roll and tie ready to weigh and sell. If the hide is not to be sold immediately it should be spread out, skin side up, and well salted—10 pounds of good clean barrel salt to a hide. A salted hide will shrink 15 per cent in two or three days and this should be borne in mind in selling hides.

Splitting the carcass.—Begin splitting the carcass from the rear. In cutting the tail bone, be careful in pulling the saw back that it does not bounce out and cut the hand. After the sacrum is split with the saw, the remainder of the splitting may be done with either the saw or cleaver as desired. Before splitting the bones in the neck, cut in from the back, and split the muscles and tendons to the back bone.

With a scribe saw cut into the vertical processes over the shoulder and break them back to give a thicker shoulder (chuck) muscle as the carcass chills. Cut into the flank to drop the under side of the fore quarter slightly. Trim out the spinal cord and the tissue of the diaphragm. Wash down the carcass with plenty of

water. Use a damp cloth to remove all blood stains. The appearance of the carcass can be improved by stuffing rags into the blood vessels in the shoulder and behind the kidney fat. Raise the diaphragm muscle from the ribs with a skewer.

Offal fat and internal organs.—The internal organs should be worked over as soon as possible after removal. Dump them from the tub on to a good sized table or bench. Save the sweet breads. Remove the heart, and see that the blood is rinsed from the valves. Strip out the lungs, wind-pipe, and pericardium. Separate the fatty tissue for the tallow stock. Leave the gullet attached to the stomach. Cut out the gall bladder and remove the liver. Examine it to see that it is wholesome. Cut off the fat from the stomachs. Carefully cut thru the lean muscle of the gullet near the stomach and strip off this muscle from the lining. This muscle is edible. Cut the gullet lining from the stomach and save it to be cleaned for stuffing sausage, head cheese or bologna.

After removal of the contents, the stomachs can be cooked up for hog or poultry feed. Save all grease for soap stock. When carefully cleaned the first, second, and fourth stomachs are edible. They should be scalded and scraped. Heat the water to 145 degrees Fahrenheit, and leave the stomachs in the water until the inner lining is easily removed. Wash the cleaned stomachs in an abundance of cold water and cook until tender. Use with other meats for making sausage, head cheese, or bologna. The first and second stomachs are cooked and pickled in a mild vinegar as tripe. The second stomach makes the choice honey-comb tripe.

Cleaning the intestines.—Begin at the stomach end of the small intestine and remove the fat by using a sharp knife. Let the looped intestines hang over the side of the table so that the fat will not be smeared in case of accident. Remove all the fat from the intestines, especially if they are to be used for casings. Chill the fat in cold water. If it is not smeared it may be rendered for edible tallow. If it is smeared it should be washed thoroly and rendered for soap stock (rough tallow).

If the intestines are to be used for casings they should be thoroly cleaned as soon as possible with an abundance of water. The small intestines are best cleaned by turning inside out and using water. Then with a brush or a case knife clean off the inner mucus lining. Run water thru the large intestines to wash out all fecal matter, cut into lengths wanted for stuffing, turn inside out and clean off the mucus lining. If they are not to be used for sausage stuffing, strip out the contents and cook up with the stomachs for hog and poultry feed.

Chilling the carcass.—The carcass should hang in a cool place (not freezing) long enough (24 to 48 hours) to become thoroly chilled. The tenderness of the meat improves with ripening and when possible beef should be slaughtered a week or ten days before it is to be consumed. In the country this will not be possible, except in winter, and the methods of cooking must be adapted to utilization of the tougher meat.

DIVIDING A CARCASS FOR THE BEEF CLUB

The number of cuts to be made of a beef carcass for the farmers' beef club must depend upon the number of families or members in the club. The plan of cutting should be simple, and should not require an expert to do the work. The club should be organized into sixteen members or shares. In some instances a large family or a farmer having a great deal of hired help may take two or three shares. Two small families may jointly take a share or membership. At the beginning of the club season the numbers, one to sixteen, should be drawn by lot by the members. The carcass (well chilled if possible) is then cut by the butcher, as indicated in Figure 5, into the sixteen cuts, eight to each side. Members 1 and 9 take the two cuts numbered 1; Members 2 and 10 take cuts numbered 2; Members 3 and 11 take cuts numbered 3, and so on until all the cuts have been assigned. As each cut is made it is weighed and its weight marked in its place in the chart illustrated in Table 1 on page 13. If Member 1 has furnished the first beef he is credited with the weight of the carcass at the price agreed upon by the club. The price per pound is agreed upon for the season and each member is charged with his portion at each assignment at the same price per pound. The tongue and heart are usually assigned to the two cuts numbered 1 and the liver divided between the two cuts numbered 7. The hide and the rough tallow are the property of the member furnishing the beef and he attends to the disposal of them. The other offal is usually disposed of by the butcher and may be a part of his compensation for use of building for slaughterhouse or for services, as has been mutually agreed.

At the next slaughtering day, one or two weeks later, member 2 furnishes the beef and is credited with the weight of the carcass at the price agreed upon, and cuts are weighed and assigned to the members according to the plan. Members 1 and 9 now take Cuts 2; Members 2 and 10 take Cuts 3, and so on so that Members 8 and 16 get Cuts 1. At the division of the third animal furnished by Mem-

ber 3, Members 1 and 9 take Cuts 3; Members 2 and 10 take Cuts 4; so that Members 7 and 15 take Cuts 1 and Members 8 and 16 take Cuts 2. By this means every eight weeks (or killings) of the club,

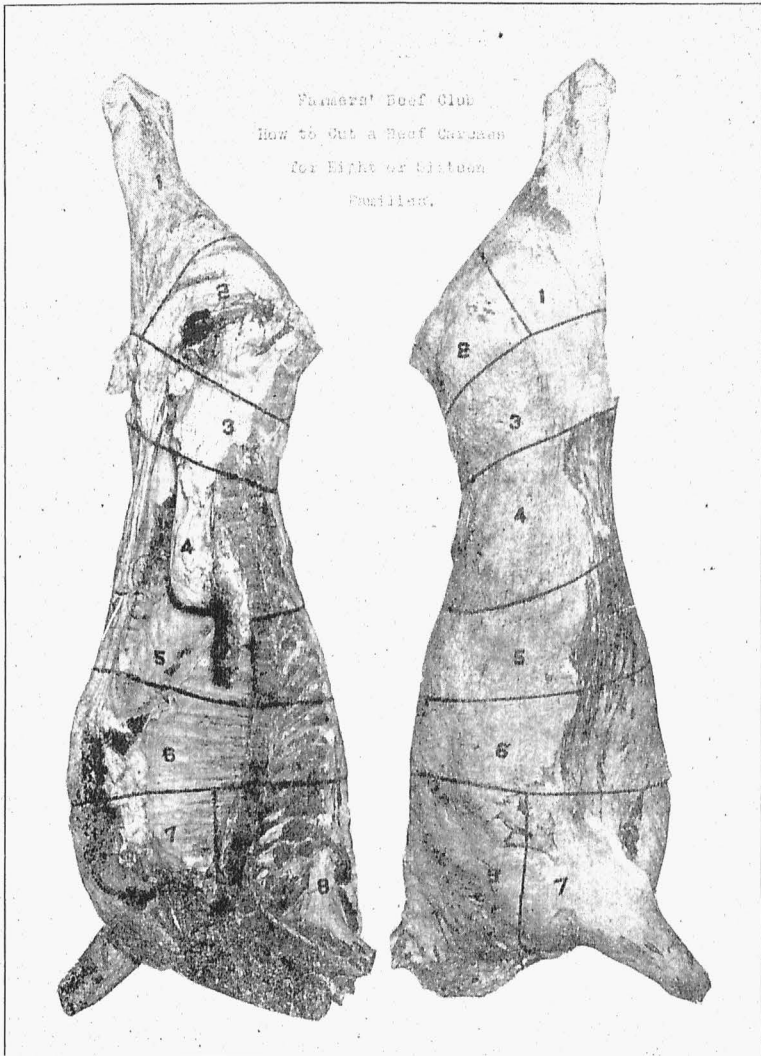


Fig. 5.—Farmers' Beef Club Cuts.

each member has had the assignment of the eight different cuts of a side of beef.

A club settlement is made after sixteen animals have been slaughtered. Each member is credited with the weight of the car-

cass from the animal he furnished and is charged with the weight of pieces he has received in the sixteen assignments. Those members who have received a greater weight than they have furnished pay the secretary-treasurer (usually the butcher), at the price agreed upon, for the weight extra they have received. Those who have received less than they furnished are compensated from this fund. If fairly uniform animals have been furnished very little money will change hands.

Table 1 on page 13 illustrates the record that should be kept. This is all the bookkeeping that is necessary.

HOW THE CLUB CUTS ARE MADE

It is not possible to cut up the half beef carcass into eight pieces of equal weight, but no injustice is done because each member is charged only with the actual weight of the cut assigned to him. The line between Cuts 4 and 5, Figure 5, is the standard ribbing down cut between the twelfth and thirteenth ribs. See page 15 for detailed directions for making this cut. The cut separating Cuts 1 and 2 from Cut 3 is the standard cut to remove the loin from the round without first trimming the flank. See page 23 for directions. Cuts 3 and 4 are divided at the pin-bone—the front point of the hip bone. Cut 3 is the sirloin and Cut 4 is the porterhouse, each with its portion of the flank and kidney fat. In separating Cuts 1 and 2 the butcher should cut square across the round, and try to make the pieces of equal weight. Cut 2 consists of the rump and the upper round (see page 24). Cut 1 consists of the lower round and the shank (see page 25).

Cut 5 consists of five ribs, and is separated from Cut 6 between the seventh and eighth ribs. This cut consists of five ribs of the standing rib cut (page 18) and the five corresponding rib ends of the navel plate (page 17). Cut 6 consists of the next four ribs and is cut between the third and fourth ribs. This cut has the two forward ribs of the standing rib cut and the two rear ribs of the chuck, and includes the corresponding rib ends of the navel and brisket plate (page 20). The butcher must use his judgment in separating Cuts 7 and 8 to make the pieces about equal in weight. This cut will come close to, or thru, the shoulder joint. Cut 7 consists of the shin, the front end of the brisket and the lower or arm part of the chuck. Cut 8 consists of the upper part of the chuck.

Further instructions for making the cuts of beef appear in pages 14 to 28. While these are directions for making wholesale and

TABLE 1.—RECORD PORTAGE FARMERS' BEEF CLUB, AUGUST 2-NOVEMBER 15, 1918

William Smith—Sec.-Treas.

Members by No.		Cut	Aug. 2 1	Aug. 9 2	A'g.16 3	Aug. 23 4	Aug. 30 5	Sept. 6 6	Sept. 13 7	Sept. 20 8	Sept. 27 9	Oct. 4 10	Oct. 11 11	Oct. 18 12	Oct. 25 13	Nov. 1 14	Nov. 8 15	Nov. 15 16
Furnished by	Date		wt.	wt.	wt.	wt.	wt.	wt.	wt.	wt.	wt.	wt.	wt.	wt.	wt.	wt.	wt.	wt.
1 W. Porter	Aug. 2	1	24.50	26.00	26.0	27.0	27.5	21.5	31.0	32.0	23.0	23.0	28.0	27.5	27.0	27.0	30.0	32.0
2 J. L. Petrie	Aug. 9	2	22.75	39.25	27.5	21.0	27.0	27.0	34.0	23.0	33.5	26.5	31.0	22.5	27.0	31.0	33.0	23.0
3 Wm. Smiht	Aug. 16	3	27.75	39.00	22.0	27.5	29.0	31.0	24.5	22.0	43.0	27.5	27.0	27.0	29.0	34.0	23.0	22.0
4 J. Forsythe	Aug. 23	4	28.00	39.00	27.5	31.5	32.5	35.0	23.5	28.0	31.0	21.5	27.5	31.0	32.0	24.5	22.5	26.5
5 L. A. Young	Aug. 30	5	20.50	42.00	30.5	34.0	23.0	24.5	26.0	31.0	41.5	27.5	29.0	34.5	24.5	23.5	24.5	29.5
6 A. C. Austin	Sept. 6	6	28.00	49.25	34.0	25.0	22.0	23.0	27.5	27.5	27.0	31.0	32.5	24.0	22.0	26.5	26.5	26.0
7 N. C. Bacon	Sept. 13	7	32.50	41.25	31.5	23.0	28.5	26.0	21.5	26.5	39.5	34.0	24.5	22.0	28.0	27.5	20.5	25.5
8 Martin Fisher	Sept. 20	8	35.50	23.00	26.0	26.5	31.0	27.5	27.0	29.0	37.5	25.5	23.0	26.0	30.5	21.0	28.0	28.0
9 Freeman Mason	Sept. 27	1	23.50	22.00	39.25	26.0	27.0	22.5	30.5	32.5	24.0	23.0	28.0	27.0	27.0	27.0	30.0	31.5
10 F. L. Blair	Oct. 4	2	22.00	28.00	39.00	22.0	26.0	27.0	35.0	23.0	23.0	26.0	31.0	22.0	25.0	31.0	35.0	24.5
11 B. F. Frost	Oct. 11	3	27.75	31.00	39.00	28.0	29.0	32.0	25.0	22.5	26.5	27.0	27.0	28.0	29.0	34.0	24.0	22.5
12 A. L. Snodgrass	Oct. 18	4	31.25	27.00	42.00	32.0	32.0	34.0	23.0	28.0	27.5	22.5	26.5	31.0	31.5	23.5	23.0	26.0
13 M. Sebastian	Oct. 25	5	26.50	27.00	49.25	35.0	22.5	33.0	26.5	30.0	22.0	26.5	29.5	34.0	23.0	22.5	27.0	26.5
14 J. F. Cooper	Nov. 1	6	27.00	29.00	41.25	25.0	21.0	28.0	28.0	27.0	27.0	30.5	32.5	24.5	22.5	25.5	26.5	22.0
15 Leonard Austin	Nov. 8	7	28.50	32.00	24.00	24.5	28.5	31.0	22.0	27.0	30.5	35.0	29.0	23.0	28.5	26.5	22.0	27.0
16 J. W. Smith	Nov. 15	8	31.50	31.50	23.25	26.0	31.0	28.0	28.0	29.5	33.5	24.0	32.0	26.5	32.0	20.5	28.0	30.5
Total Weight Beef Furnished by		---	437.50	526.25	522.00	434.00	437.50	451.00	433.00	438.50	490.00	431.00	458.00	430.50	438.50	425.50	423.50	423.00
Total Weight Beef Delivered to members		---	433.00	449.00	455.25	461.50	466.00	451.75	452.25	445.00	440.75	439.50	452.25	460.75	460.75	437.25	439.00	455.75
Due members, lb.		---	4.50	77.25	66.75	—27.50	—28.50	—0.75	—19.25	— 6.50	49.25	— 8.50	5.75	—30.25	—22.25	—11.75	15.50	—32.75
Cash at 20c lb.		---	\$ 0.90	\$15.45	\$13.35	—\$5.50	—\$5.70	\$ 0.15	—\$3.85	—\$1.30	\$ 9.85	—\$1.70	\$ 1.15	—\$6.05	—\$4.45	—\$2.35	—\$3.10	—\$6.55

retail cuts of beef as practiced by the market butcher, they also give sufficient detail directions for cutting up the separate Club Cuts into the pieces to be utilized by the housewife.

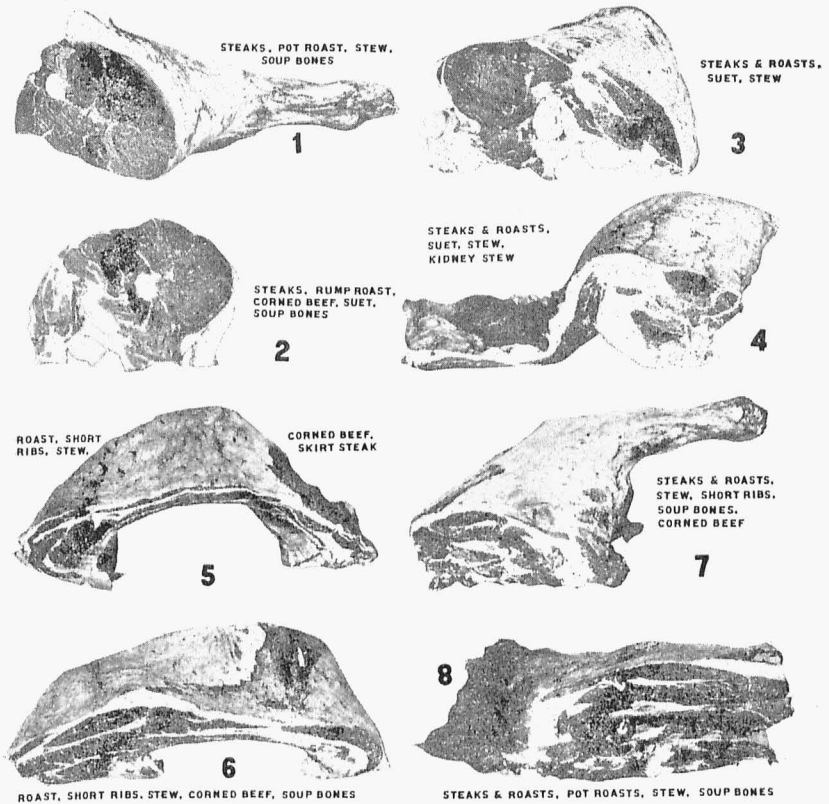


Fig. 6.—How the separate Club Cuts may be used.

CUTTING THE BEEF CARCASS

Beef cuts will retain their shape much better if the carcass is allowed to become thoroly chilled before it is cut. This, for a good sized carcass, will require about 48 hours. The best temperature for the first two or three hours is 35 to 40 degrees F. To prevent souring at the joints, the chilling should be rapid enough to lower the temperature of the carcass to 38 degrees F. during the first twelve hours. Beef should be held at 33 to 34 degrees F. Freezing causes breaking of the cell walls and when the beef is thawed there is a loss of meat juices and the meat is soft and flabby. If the meat is frozen it should be held in this condition until it is wanted for use.

The ordinary family ice box does not hold a temperature below 40 degrees F., and at this temperature it is not wise to attempt to hold fresh meat more than a week.

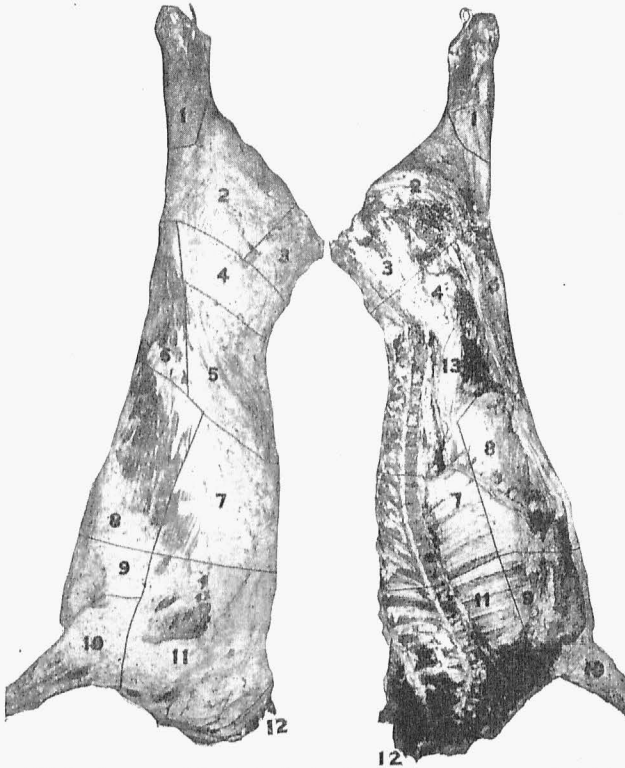


Fig. 7.—Wholesale cuts of beef—1 shank, 2 round, 3 rump, 4 and 5 loin (4 sirloin, 5 porterhouse), 6 flank, 7 rib, 8 and 9 plate (8 navel plate, 9 brisket plate), 10 shin, 11 chuck, 12 neck, 13 kidney fat.

Figure 7 gives an inside and outside view of a beef carcass marked to indicate the standard cuts as made for the markets of the middle west.

The separation of the fore quarter from the hind quarter is known as ribbing. The separation is made between the twelfth and thirteenth ribs. Stick the knife between the ribs about the middle of the side. Cut upward, following the curvature of the ribs until the cartilage of the last rib is reached. After this is severed the cut should be curved slightly downward to end at the navel. Leave about four inches of the belly strip to hold up the fore quarter. Carry the cut toward the back bone, and keep the knife about midway between the ribs. As the thick muscle of the back, "eye of beef" (Fig. 8) is approached, let the cut be nearly at right angles to the muscle

and so that about one-half inch will be cut from the rear of the next to the last dorsal vertebra. That is, cut about one-half inch from the top of the eighth vertebra from the sacrum. Cut to the vertebra

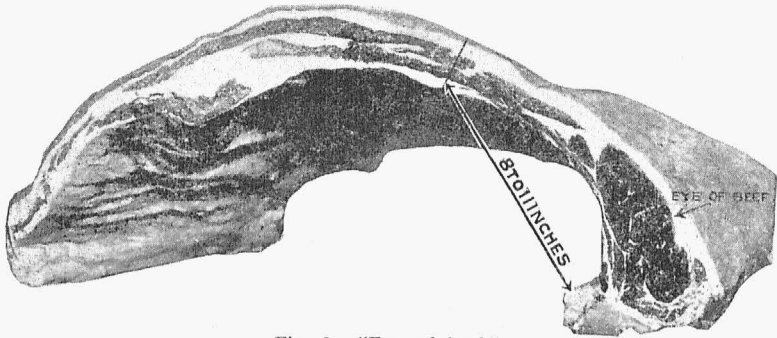


Fig. 8.—“Eye of beef.”

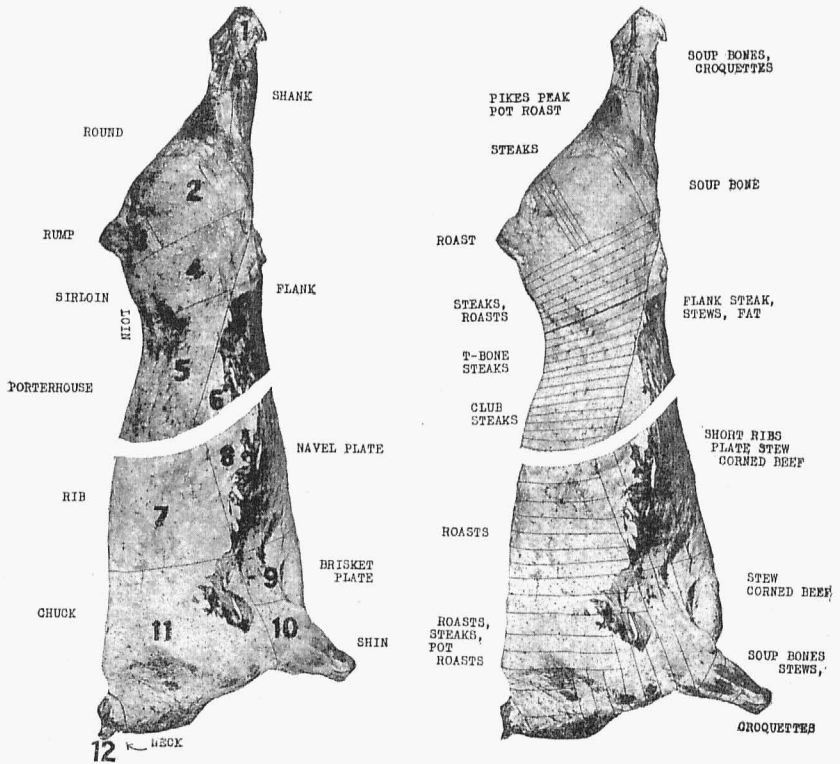


Fig. 9.—Two outsides taped—left wholesale cuts; right, retail cuts.

with the knife and finish with the saw. Let the fore quarter hang by the plate end. When the right or “closed” side is ribbed, the knife should be held on a slant to avoid cutting into the kidney fat.

Figure 9 shows the outside of a choice carcass, taped to indicate the wholesale cuts numbered to correspond to the numbering of the cuts used in the discussion, and also taped to indicate the direction of the cuts for retail, with a designation of the uses to which the cuts are usually put.

THE FORE QUARTER

Neck trimming.—The neck (Cut 12) is only a trimming to shape up the front of the chuck. It is usually taken off at the first



Fig. 10.—Shin.

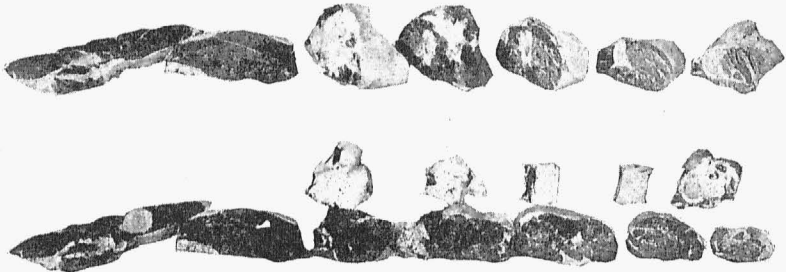


Fig. 11.—Cuts from the shin.

joint. This removes the atlas bone. It is not sold in the markets as a cut but is boned out, and the meat is worked into hamburger or sausage.

Plate and shin.—The cut separating the under side of the fore quarter from the upper portion is a straight line, cut across the hollow of the arm between Cuts 10 and 11, as indicated in Figure 9. The starting point for the cut on the twelfth rib is governed by the size of the beef and the thickness of the fleshing over the ribs. The point (See Fig. 8) is fixed by measuring from the inside of the back bone to the rib—the distance varies from eight inches in thin, light cattle to eleven inches in heavy well fleshed cattle. This point must be fixed by the judgment of the cutter.

The shin or arm (Cut 10) is separated from the brisket plate (Cut 9) along the connective tissue. From this arm may be cut about three fairly good steaks or a small pot roast. The remainder is used for soups, stews, and croquettes, or is ground for bologna meat. Figures 10 and 11 show suggestive cuts and the relative amount of meat and bone.

The plate (Cuts 8 and 9) is divided between the fifth and sixth ribs into the navel plate (Cut 8) and the brisket plate (Cut 9). From the plate, strips across the ribs about two inches wide may be cut and used as roasts, "short ribs of beef". The plate serves well for stew pieces, meat pie, croquettes, and hamburger if not too fat. It

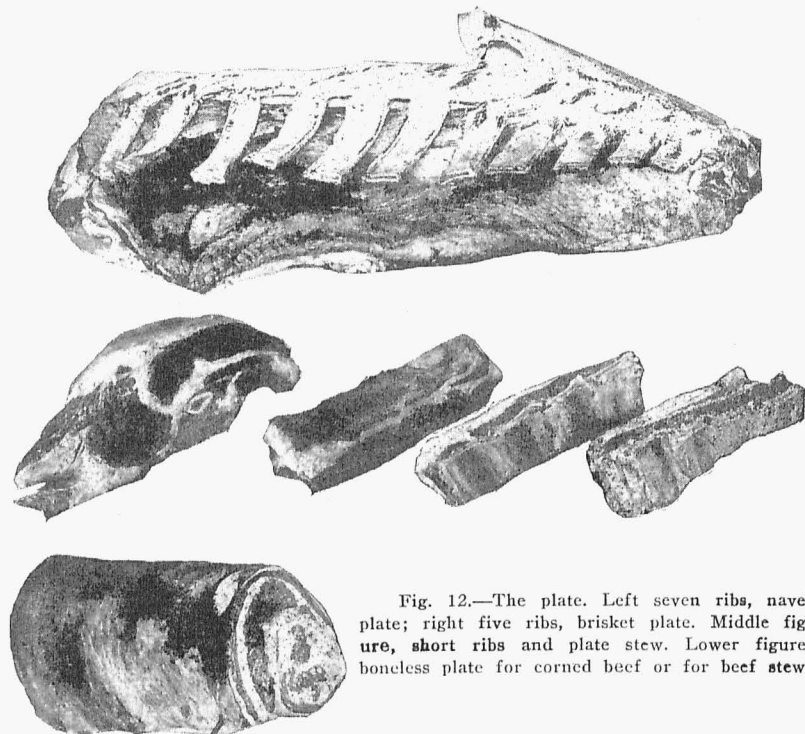


Fig. 12.—The plate. Left seven ribs, navel plate; right five ribs, brisket plate. Middle figure, short ribs and plate stew. Lower figure, bonedless plate for corned beef or for beef stew.

is also a very desirable piece for making corned beef. The brisket end of the plate usually is considered a little better than the navel end. In very fat beeves the excess fat on the plate may be separated and rendered for an edible fat. It may be softened by mixing with it cotton seed oil or lard.

Standing rib.—The separation of the standing rib (Cut 7) from the chuck is between the fifth and sixth ribs. This cut takes off the end of the shoulder blade (scapula). The seven ribs of the standing rib cut are regarded as the choice part of the fore quarter. The choicest portion is the ninth and tenth ribs. The eleventh and twelfth ribs have a little less fleshing over the ends of the ribs. The muscles of the sixth, seventh, and eighth ribs are smaller and there

is more of the connective tissue. The piece of scapula over the sixth rib should be taken out, as it interferes with carving the roast. Insert a piece of fat in place of the bone and fasten with a skewer. This will prevent the meat from drying out in roasting.

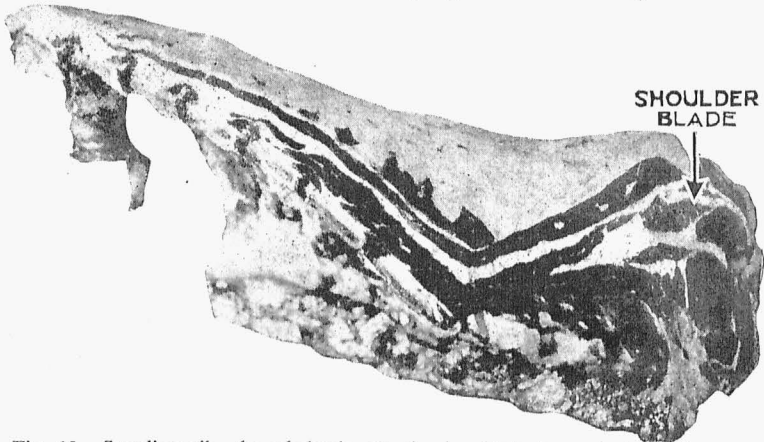


Fig. 13.—Standing rib—the wholesale cut showing blade bone at sixth rib.

A one rib roast is too narrow for a good oven roast. It is really a thick steak. If the animal is not thick fleshed, saw across the ribs at the "eye of beef", remove the ends of the ribs and skewer the rib portion tight to the body of the roast. Or, cut off the rib ends at the "eye of beef". Use the thick portion, short cut ribs, for

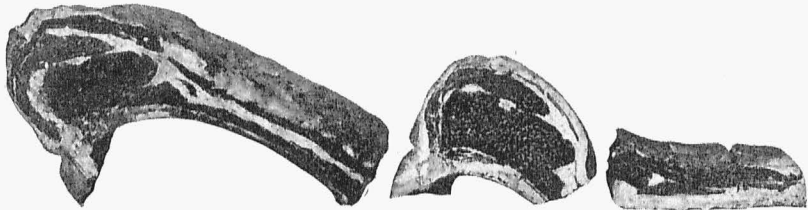


Fig. 14.—Standing rib roast.

Short cut rib.

Short ribs.

the oven roast and serve the ends (cut across the ribs) as short ribs of beef. A standing rib cut should never be boned out entirely to make a boneless rolled roast. It will dry out too much in cooking. The use of the rib for rolled roasts should be decided upon before the navel plate is removed. In case it is used for this purpose, four to six inches of the plate should be left on the standing rib piece; then when the bone is entirely removed the plate strip will be long enough to wrap around the "eye of beef" so that it will cover this lean muscle and prevent it from drying out too much in roasting. In boning out a rib roast, cut down each side of the rib bones, cut

the flesh from the ends of the ribs, and with the back of the cleaver, strip (pound) the ribs free. The rib is usually used as an oven roast and should have sufficient fat covering to protect the lean from

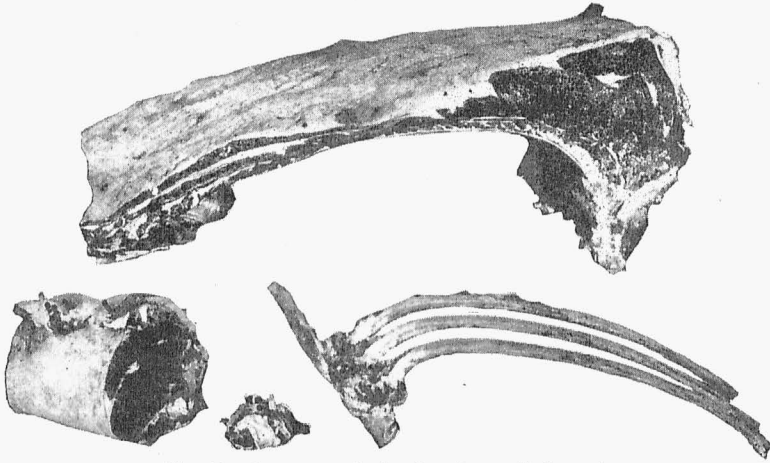


Fig. 15.—Long cut rib for boneless rolled roast.

the intense heat of the oven. With the fat surface up in the oven the sides will be bathed by the dripping fat. If the beef is not fat enough, pieces of suet or pork may be used to protect the lean.

Chuck.—The chuck (Cut 11) is about the most economical part of the fore quarter. On the wholesale market it is about four or five

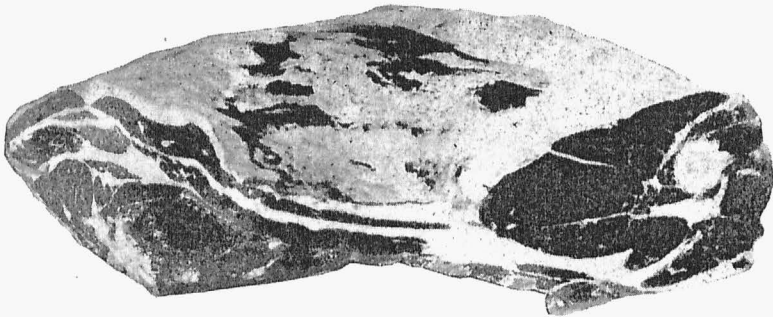


Fig. 16.—Chuck, square cut.

cents a pound under standing ribs of the same grade of carcass and about two cents a pound over plates. This cut may be utilized for roasts, steaks and boiling pieces. Roasts cut parallel to the ribs are frequently sold as rib roasts. If the piece of scapula is removed and a piece of suet inserted and fastened with skewers, a roasting piece is obtained that permits convenient carving at the table. From a good piece of beef this is nearly as acceptable as a genuine

standing rib cut. When the cut is made from the under side of the chuck it is usually designated as arm roast or steak. The untrimmed arm cuts will have the ends of the ribs remaining on the chuck piece. The large shoulder joint is over the first rib. It may be cut out for

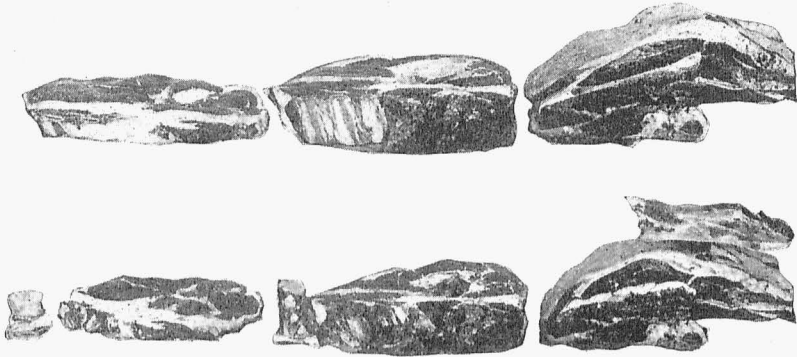


Fig. 17.—(Above) Arm steak, arm roast, chuck roast with bone in.
(Below) Arm steak, arm roast, chuck roast with bone out.

a stew or soup piece or it may be worked in with a good sized chuck roast. The pieces cut from the forward end of the chuck (neck) are not so desirable as the first cuts. The neck chuck cuts are more suitable for pot roasts or stews and should not be utilized for oven roasts. The neck ends from thinner cattle are worked up into ham-

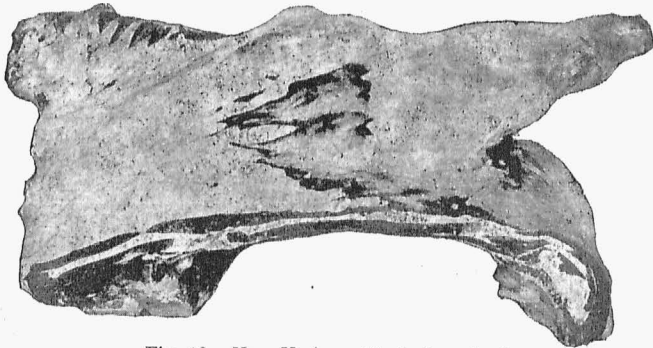


Fig. 18.—New York or Manhattan chuck.

burger or bologna. Chuck steaks are cut from the rib side of the chuck. From the lower side of the chuck are cut the arm steaks which are sometimes sold in markets as round steaks. The shape of the bone is similar but the appearance of the muscle is so different that the housewife should be able to tell the difference.

The forward end of the fore quarter cut between the fifth and sixth ribs is known as a New York or Manhattan chuck. It con-

sists of the chuck, shin, and brisket end of the plate. Sometimes a short shin and small brisket are cut and thereby a considerably larger chuck is left.

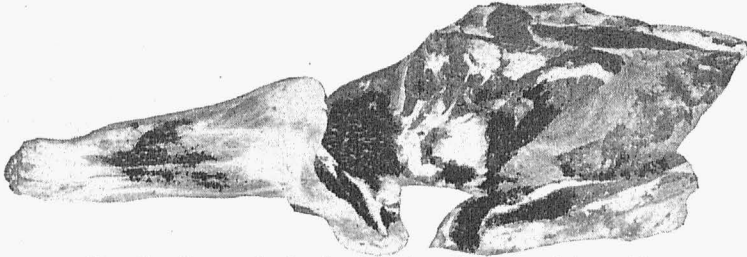


Fig. 19.—Boston chuck, showing short brisket and long shin.

In the Boston style chuck the humerus or arm bone is removed with the shin. Cut to the bone just above the elbow and follow with the knife along the bone to the shoulder joint. Unjoint from the scapula and remove the arm bone almost entirely free of meat. The brisket plate is cut off narrow, and the Boston style chuck is left.

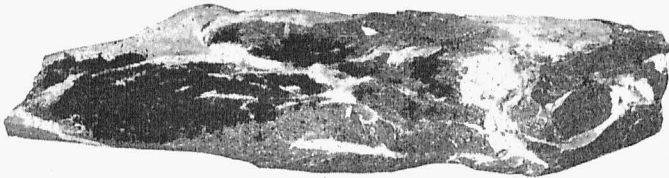


Fig. 20.—Shoulder clod.

This style of chuck is usually made in cutting up poor grades of beef. The outer shoulder muscle over the shoulder blade is removed as one large muscle known as the clod. It is usually used for medium steaks. In low grade cattle the remainder of the chuck is freed from bone and tendons and is used for hamburger, bologna, or canned beef.

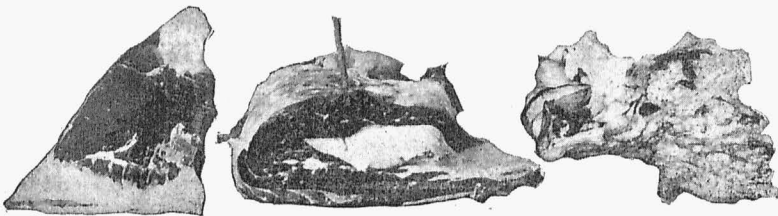


Fig. 21.—Flank steak, flank stew, flank fat.

THE HIND QUARTER

Flank.—Cut 6 is the trimming of the under side of the hind quarter. It is cut fairly close to the knuckle muscle of the round

and follows forward approximately on a line of the kidney fat. It has only a very small amount of bone, the end of the thirteenth rib. The inside muscle just forward of the cod or above the udder is the flank steak, and from well fattened carcasses it is a very choice piece of meat. The leaner portion of the flank is suitable for stews or may be ground up for hamburger. The fat may be rendered and mixed with lard or cotton seed oil or may be used for soap stock.

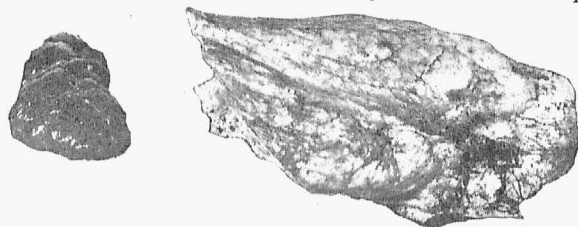


Fig. 22.—Kidney

Kidney fat.

Kidney fat.—The kidney with the lower end of the kidney fat is removed from the loin (Cuts 4 and 5). The rough excess of the kidney and pelvic fat should also be removed. This fat is used as suet without rendering or it may be rendered and softened by mixing with lard or cotton seed oil or it may be used as tallow for soap stock. The kidney is used for stews or may be worked into a cooked sausage or head cheese.

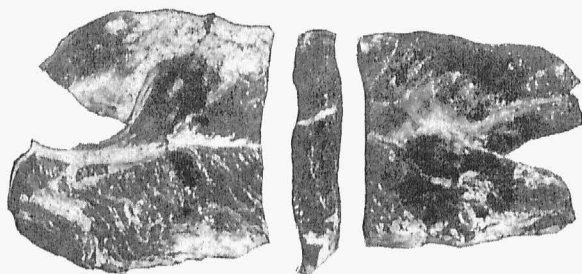


Fig 23.—Hanging tender.

Hanging tender.—The central muscle of the diaphragm is on the left hind quarter and is trimmed out as the hanging tender—sometimes called the hanging tenderloin. It makes a fairly good steak, but is more commonly used for hamburger or bologna.

Round.—The wholesale cut of the round consists of Cuts 1, 2, and 3. This cut is separated from the loin (Cuts 4 and 5) by cutting thru the ball-and-socket joint approximately parallel to the line of the separation between the fore quarter and the hind quarter. With a thin bladed knife or steel skewer, locate the end of the projection of the femur (leg bone). This is about at the junction of the lines

separating Cuts 2, 3, and 4. The cut should just miss this projection and should slant enough to come thru about an inch forward of the point of the pelvic (coupling) bone. If properly made a thin slab of bone will be cut from the ball of the femur.

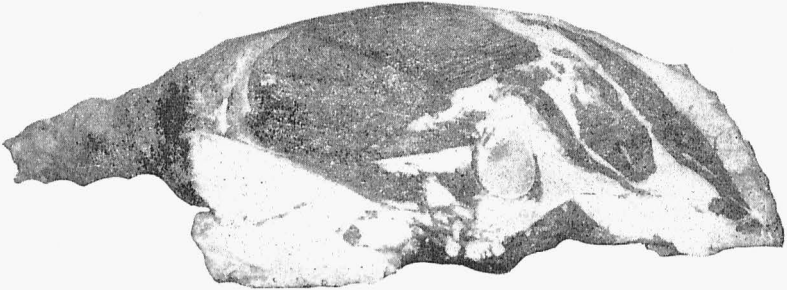


Fig. 24.—Round, rump and shank on.

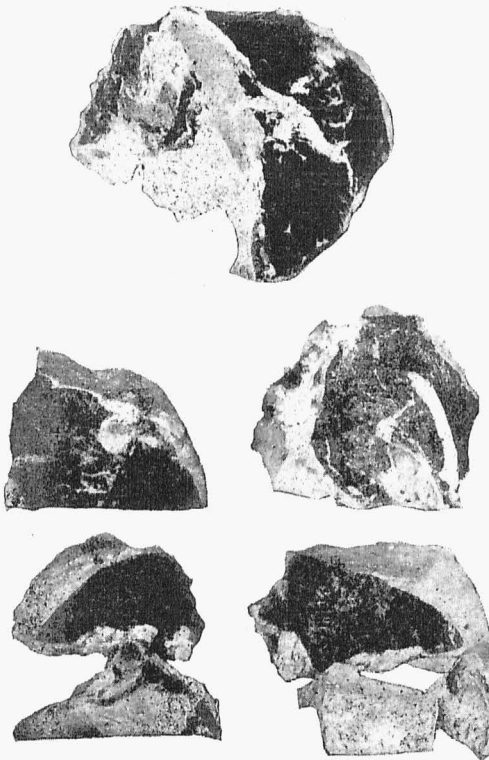


Fig. 25.—Rump, showing the two small roasts. The only cut from which choice but small roasts can be secured. Another standard method of preparing the rump is to remove the pelvic bone entirely, and to leave

The rump (Cut 3) is removed from the wholesale round by cutting very close to the pelvic bone. Cut off a point of the middle of the coupling bone and also a thin slab from the upper side of the ball of the femur. This gives direction and slant to the cut. The wholesale cut of the rump is seldom suitable to sell or use as such but is trimmed by cutting off the piece of the tail bones and the inside of the pelvic bone up to the socket joint. This trimmed rump may be cut for two roasts for small families. It is a choice cut of meat, has a little excess bone, but from a very large beef it is about

the piece of sacrum and tail bone in. The meat is skewered compactly together and is called "boneless" rump.

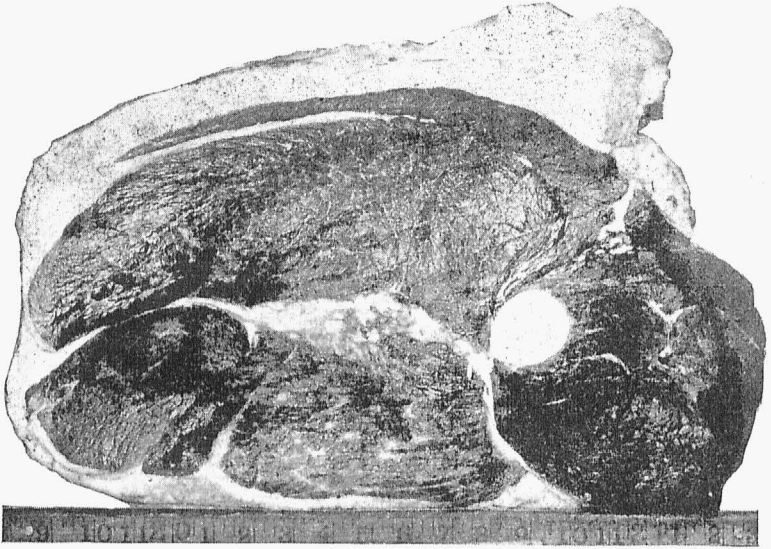


Fig. 26.—Choice round. Outside muscles, lower center and left are tough.

The round (Cut 2) is used almost entirely for steaks. When liberally larded it makes a very satisfactory roast. It should always be cut from the rump face. The outside muscles of the round are

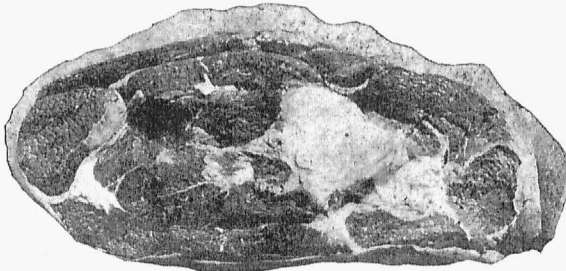


Fig. 27.—Lower round, a poor steak.

tough and do not make good steaks unless special care is taken in cooking them. It is better to use these tough muscles for Swiss steaks, hamburger, or croquettes. The

lower part of the round contains too much connective tissue to make satisfactory steaks. It is usually used as a pot roast (Pike's peak). The knee joint (knuckle) makes a choice soup bone.

The shank (Cut 1) separates from the round at the knee joint. It is usually kept with the round, as it facilitates handling the round.

It contains a relatively small portion of meat and is chiefly used for soups. The meat works well into bologna.

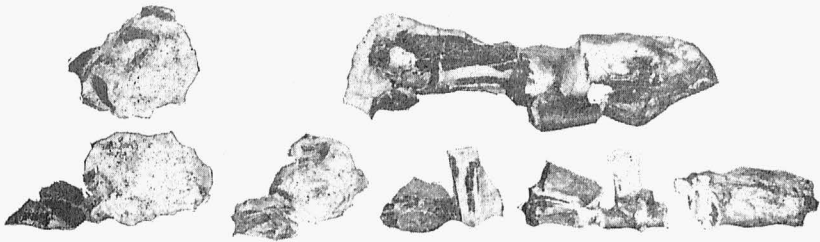


Fig. 28.—Knuckle soup bone at left—shank soup bone at right.

Loin.—This is the most expensive cut in the beef and is separated into sirloin (Cut 4) and porterhouse (Cut 5) by cutting just at the forward point of the hip bone or pin bone. Cut 5, the porter-

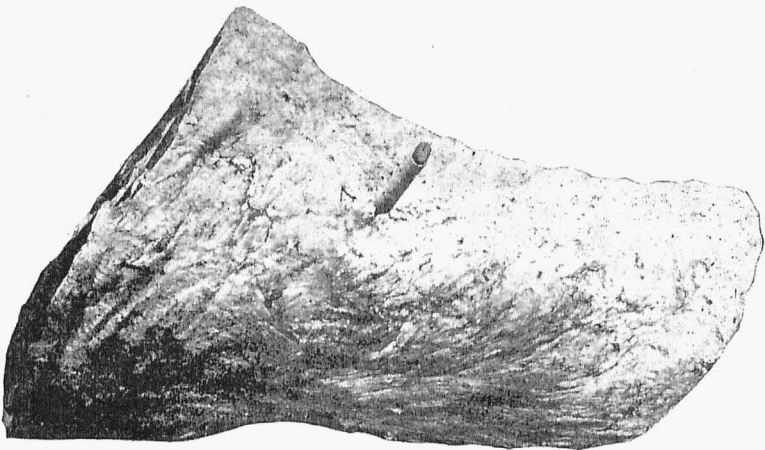


Fig. 29.—Loin. Knife at point of pin bone.

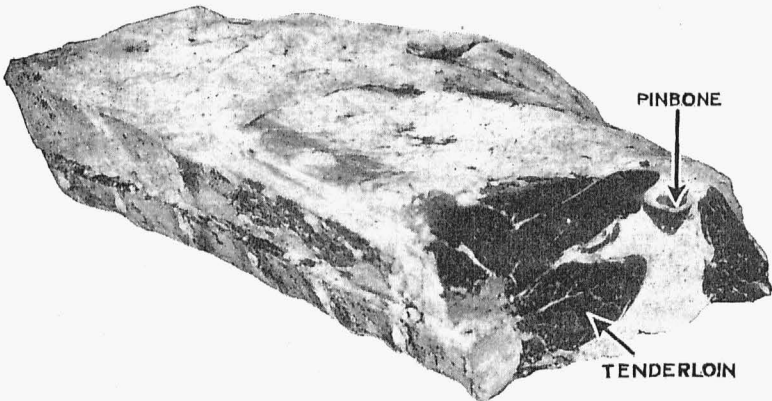


Fig. 30.—Porterhouse (pinbone loin)

house, is called also the pin bone or short loin. Sometimes a longer "short loin" is cut to include about one-third of the sirloin, and is designated as a flat bone loin.

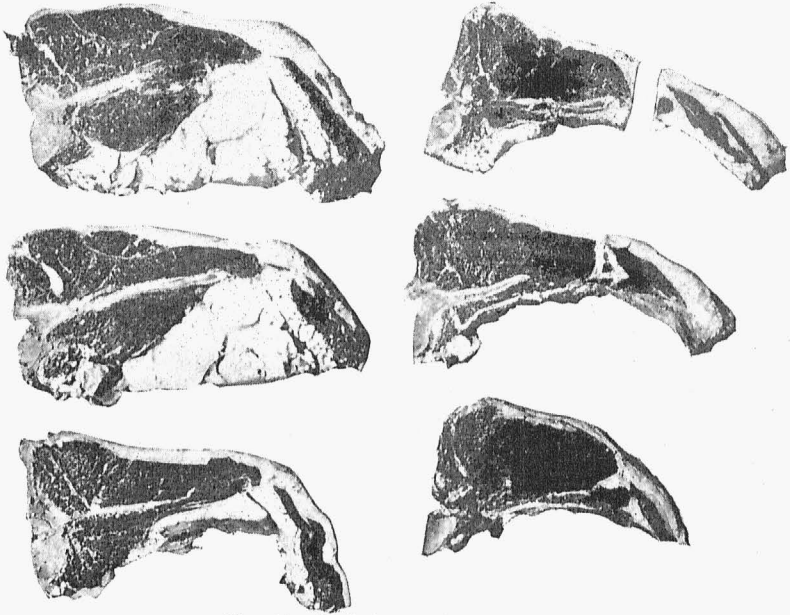


Fig. 31.—Typical porterhouse steaks.

The porterhouse is used almost entirely for steaks altho it makes a very choice roast. The rear end of the cut contains the largest tenderloin muscle and is better for that reason, altho it also contains a greater excess of fat. The forward steaks do not contain any appreciable portion of the tenderloin and are designated club house or one-man steaks. The six lumbar vertebrae (five in the porterhouse, one in the sirloin) in the loin all have horizontal projections and when the cut for the steak passes thru one of these projections a "T" is formed with the section of the vertebrae, and such steaks are called T-bone steaks.

The sirloin (Cut 4) is nearly as desirable as the porterhouse. It is used for steaks or roasts. The tenderloin muscle is large at the forward end. The forward steak is called a pin bone sirloin steak. It also contains a typical T-bone. The pelvic bone by its suture union with the sacrum gives the two bone steaks in about the middle cuts, and toward the back end can be cut the round bone, or

wedge bone, sirloin steaks which have relatively a very small amount of bone.

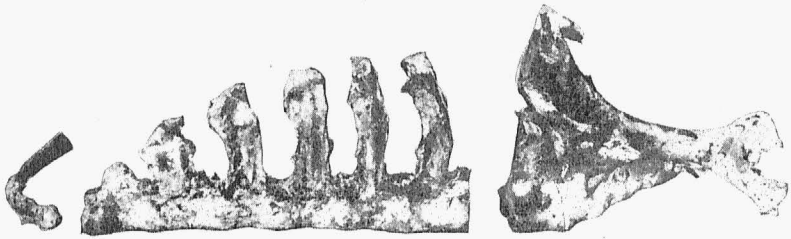


Fig. 32.—Bones of loin. Porterhouse at left. Sirloin at right.

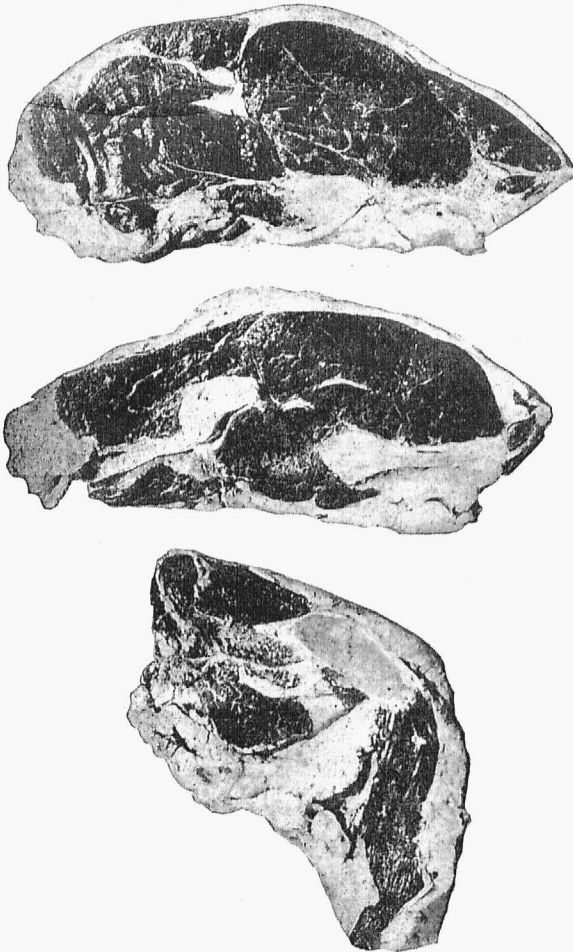


Fig. 33.—Typical sirloin steaks. Upper, round bone sirloin. Middle, flat bone or two bone sirloin. Lower, pin bone sirloin.

BONELESS CUTS OF BEEF

The markets in the larger cities handle the various boneless cuts that come from the packing houses. Many thin cattle are slaughtered that do not yield carcasses that can be sold over the block in the retail markets. These carcasses are known as strippers and canners. These are cut up at the packing houses and boned out. They furnish the material for canned beef, corned beef, hamburger, and sausage. From these carcasses certain portions are sold as boneless cuts.

Round—The rounds are separated from the loins, leaving the rump on the loin. This leaves a piece of the loin on the knuckle

muscle of the round. The fatty tissue trimmings are removed and the flesh is separated from the bone in three pieces, which constitute the dried beef sets. The inside muscle is tenderest and best. The knuckle muscle is nearly as good as the inside, but has some waste due to the presence of the knee cap or knuckle. The outside is the tough portion of the round and usually sells at a lower price.

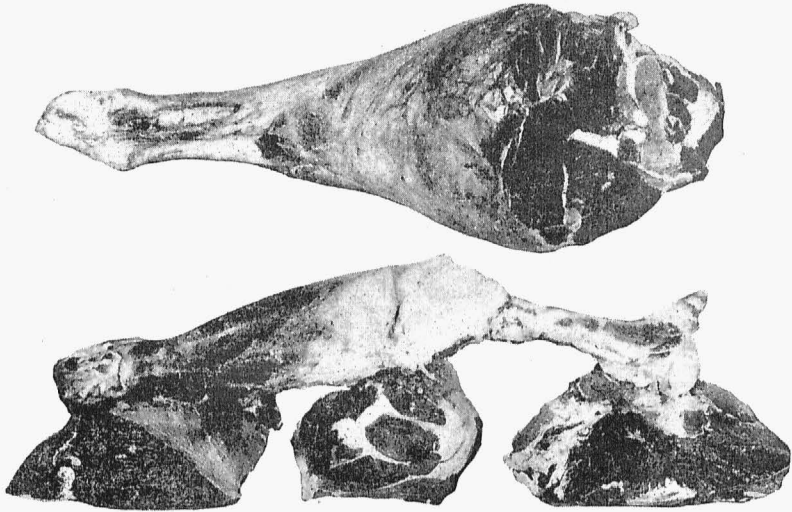


Fig. 34.—(Above) Round for dried beef. (Below) Outer round at left; knuckle in the middle; inner round at right.

Loin.—The tenderloin muscle is removed from the loin and is graded according to weight. The heavier tenderloin or beef fillet comes from the better cattle. The tenderloin is used for steaks or fillet roast. The outer loin muscle forward of the pin bone is known



Fig. 35.—Tenderloin or fillet. Tenderloin butt (at left).

as a strip loin. It is used for short order steaks. The outer muscle of the sirloin is known as a sirloin butt. The sirloin ends of good loins that have been cut off to make short cut or pin bone loins are designated as wide loin ends, bone in. If these loin ends are boned out they become boneless loin ends.

Rib.—The rib is boned out and trimmed by removing the thin strip over the ribs and the piece of shoulder blade with the meat

above it. This trimmed piece is termed a regular roll. In the thinner carcasses the outer tissue over the whole roll is removed, and the single muscle, "eye of beef", which is termed a Spencer roll, is left.

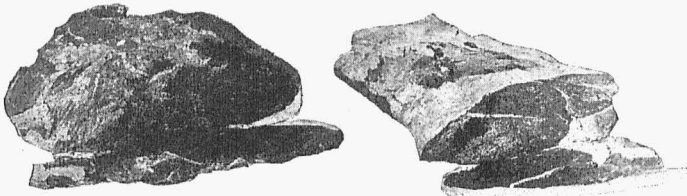


Fig. 36.—Sirloin butt at left, strip loin at right.

Chuck.—The arm bone, humerus, is removed with the shin at the shoulder joint. The heavy outside muscle is then stripped from over the shoulder blade. This muscle is known as the clod. (See Fig. 20) It makes a good piece of dried beef. It is usually made into steaks.

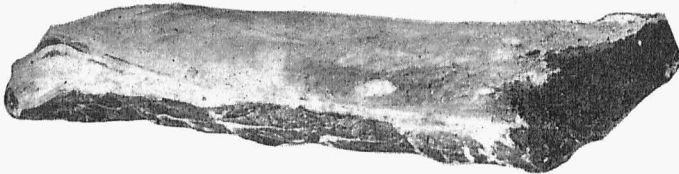


Fig. 37.—Spencer roll.

HOW TO KEEP BEEF IN WARM WEATHER

1. **Corned beef or salted beef.**—Any part of the beef may be corned, but the plate and rump pieces are usually selected. The brisket plate is especially recommended because of the character of the fat, which is somewhat like a tissue.

Cut the meat up into pieces of about the size that will be wanted for cooking. It is best to remove the bone, altho this is not necessary. Be sure to start the pickling while the meat is perfectly fresh but well chilled. Do not wait until the meat is about to spoil and then salt it down just to save it. Sprinkle a thin layer of clean dairy salt¹ in the bottom of a barrel or crock; rub each piece of meat lightly with the salt and pack tight in the container. Sprinkle a thin layer of salt over the first layer of meat before packing in the second layer. Cover the meat with a board and weight down with

¹Do not use table salt as the starch which is added to keep the salt dry will putrify.

a stone. Do not use an iron weight. Let the meat stand over night. Prepare a brine by boiling seven pounds of salt, three pounds of sugar, two ounces of baking soda, and two ounces of saltpeter in four gallons of water. Remove any scum that rises to the surface and filter the hot brine thru muslin. Set the brine aside to become perfectly cold before using. The amount of brine indicated will be sufficient to cover one hundred pounds of meat if it is well packed.

In the morning tip the crock or barrel so that the liquor which has separated from the meat over night will drain off. Cover the meat with brine. The container should be in a cool place. The meat will cure better at a temperature of about 38 degrees F. Meat can not be cured safely at temperatures much above 50 degrees F. There is some risk with continuous temperatures above 40 degrees.

After about five days the meat should be overhauled and repacked, so that the pieces which were on top will be at the bottom. Pour back the same brine, and five days later repeat the overhauling. This will insure more rapid and uniform curing of the meat. When the meat is being overhauled the brine should be examined to see that it is not becoming ropy. If the brine begins to mold or get ropy, remove the meat and rinse each piece with water. Scald the container and repack the meat as at first with a little salt. Scald and skim the brine. Let it become cold and pour it over the meat. Corned beef is good after a week in the cure, but is not thoroly cured until about three weeks. Corned beef kept more than sixty days will be salty enough to need freshening before cooking.

Sorghum or molasses can be used instead of sugar with very satisfactory results and is to be recommended during the sugar shortage. Saltpeter is not a necessary part of the cure but will help to hold the red color of the lean meat. If saltpeter is not used the lean meat will be gray in color, but will be really better, as the saltpeter tends to harden the meat. Chili saltpeter can be substituted in place of saltpeter, if only four-fifths as much is used.

2. **Dried beef.**—The same method and cure described under corned beef may be used with splendid results for making dried beef from the round or shoulder clod. When the pieces are cured, wash off the brine and soak in tepid water for half an hour. Wipe dry and smoke by the method used for pork hams. The smoking is not necessary, but the smoked flavor is preferred by some persons. Wrap the meat to protect it from flies, and hang it in a dry airy place where the mice cannot get to it. Do not hang the meat in a damp musty cellar.

3. **Dry cure for dried beef.**—A really superior dried beef is made if the dry cure process is used instead of the brine cure. Any of the dry cure formulae for pork may be used. The following is a good mixture and will be sufficient for one hundred pounds of meat:

5 pounds fine dairy salt	$\frac{1}{2}$ pound black pepper
1 pound sugar (or two pounds sorghum or molasses)	1 ounce red pepper
	$\frac{1}{4}$ pound powdered saltpeter.

Rub each piece of meat thoroly with the well mixed cure and pack in a tight box or barrel. Not all of the cure will be needed. In four or five days re-rub the meat and repack in the container. Leave the liquor in with the meat. In another five or six days repack, and use the last of the cure. In about three weeks the pieces will be thoroly cured. Wash off the excess of the cure. Soak for half an hour in tepid water and finish according to directions for the brine cured meat.

4. **Canning beef.**—Canned beef will be a pleasant change from salted meats in summer. Free the pieces of fresh meat from bone and sinews. Cut into pieces of suitable size for packing into quart or half-gallon glass jars. Pack the meat tight and let it come to within an inch of the top. Put on the amount of salt wanted for seasoning. Fill the jars with water, put on the rubber and screw down the cover. Loosen the cover about half a turn and place the jars in the sterilizer. If a wash boiler is used be sure the jars are kept from the bottom by a wooden or wire frame or some form of false bottom. Cover the jars completely with water and heat to boiling. Keep the water at the boiling temperature five hours for quart jars and five and one-half hours for half-gallon jars. (If the meat has been partly cooked beforehand, the time of sterilization may be reduced—to three and one-half hours.) Take the jars from the boiling water and screw the covers down tight. If the rubber slips from under the cover so that it is necessary to remove the cover to replace the rubber, replace the cover and return the jar to the sterilizer and continue the sterilization for one hour.

Pork, veal, or mutton may be canned the same as beef. In canning poultry it is not necessary to remove the bones.