IX

ECONOMIC HISTORY OF THE PRODUCTION OF BEEF CATTLE IN IOWA

[This is the final installment of an article on the economic history of beef cattle production in Iowa, by John A. Hopkins, Jr. Previous installments of the article appeared in the January and July numbers of this magazine.— THE EDITOR]

Whatever the physical productivity of a region may be, its economic productivity can not be greater than the value of its product in consuming areas, less the costs of transportation to them.[192] Therefore the efficiency of the transportation system provides a limit to the productivity of areas distant from markets, and it has a part in shaping the productive methods. It matters a great deal to the producer of cattle whether he must have his cattle driven several hundred miles to market, or whether he can ship them quickly and cheaply from a station near his farm.

Before the building of railroads, as much of the farm produce as possible was fed to cattle or hogs, and these were driven to market. It was necessary to ship other articles over water-ways or to haul them in wagons. The expense of haulage overland was so high and the time re-

[192] This is true if differences in handling costs are ignored. The more accurate statement would be that the price received by the producer, over a period of some length, would equal the price in each consuming area less the costs of transportation and handling. It should be remembered that deficiencies may arise in what are normally surplus areas, due to short crops, etc., and that there are also sections in the midst of producing areas, in which there may be a heavier consumption than production; and where, because of their small size and incomplete market mechanism products may at times sell higher than in consuming centers at a much greater distance. Cattle feeding sections are an example of this in that a scarcity of corn often occurs because of its use in large quantities for feeding.

quired so long that very few commodities could be shipped by this method.[193]

The principal method of getting crops to market from the Ohio Valley was by feeding them to live stock, and driving the stock to the eastern cities. Something of this business has already been told in Chapter I. Before the building of the trunk line railroads, there was a period when cattle were driven from the Middle West or even from points in Texas to the New York market.[194] A herd mentioned in an Indiana, Pennsylvania, paper in 1855 had been driven on their way to market from a point in Texas, and had been four months on the road.

The first roads in Iowa sometimes followed Indian trails. These trails were unsuited to the travel of the settlers and their wagons but were often used at first as guides, since they generally followed the easiest routes. Public roads either came into existence behind the incoming settlers, or were laid out consciously by the authority of the legislature. The legislature was, in fact, so liberal in the author-

[193] "I counted thirty regular stage-waggons engaged in the transportation of goods to and from Pittsburgh. They are drawn by four strong, well-fed horses, are made upon the model of English waggons, but about one-third less in size. They are from 20 to 35 days in effecting their journey. The articles sent from Philadelphia are hardware, and what are denominated 'dry goods'. This term includes all articles of woolen, linen, cotton and silk. Those returned from Pittsburgh are farming produce, chiefly flour. It is necessary to understand that the road I am travelling is the only trading waggon route to the whole western country".—Fearon's *Sketches of America* (1818), p. 186.

[194] "I trailed cattle from Central Illinois to the New York market before they could ship them by rail. It took about ninety days to make the trip. I also trailed the first bunch of Texas cattle to the Missouri river, and from there came north to the country where I now live. I got here on the 26th day of July 1853. I grazed the cattle the balance of the summer and fed part of them, then started the next spring after grass was good to drive them as far as we could toward New York. We got as far as Muncie, Indiana, some time the latter part of June, and there we secured cars and shipped them to New York. The first Texas cattle sold in New York was on July 3, 1854".—Letter from Tom C. Pointing, Shelby County, Illinois, in *Wallaces' Farmer*, October 21, 1910.

izing of roads, which were to be built and maintained at the expense of the counties, that this practice came to be recognized as a serious abuse.

The more important roads, such as the Mormon Trail previously referred to, the trail along the Des Moines River, and others were developed naturally by streams of traffic following the shortest and most practicable routes toward their destinations. Cattle and hogs were driven to the nearest market or to shipping points along these roads, or in the more thinly settled sections directly across the prairies.

Prior to the building of railroads the rivers offered the principal means of transportation as far as they went.[195] From Pittsburgh to St. Louis there were steamboats which were frequently used by immigrants in order to get as far west as the Mississippi River. From there they embarked on a smaller boat up stream or struck out overland. Attempts were also made to navigate many of the principal streams of Iowa, and there was a general clamor among the people of the State for making the rivers navigable to connect with the outside world. There are records of steamboats ascending the Cedar River as far as Cedar Rapids, and the Iowa River as far as Iowa City, as well as attempts at navigating the Des Moines River and other streams.[196] However, this navigation was not strikingly successful, and the railroads soon diverted attention away from it.

In the fifties railroads were built across Ohio, and to the Mississippi River. With them there came a new or-

[195] "A continuous line of steamboats now runs from Dubuque, via New Orleans and New York, to Liverpool and Bristol, in England; besides another from DuBuque to Pittsburgh, Pennsylvania, where it connects with the great chain of Rail Roads and Canals across that State to the seaboard".— Plumbe's *Sketches of Iowa and Wisconsin* (1839), p. 77.

[196] Van der Zee,s *Roads and Highways of Territorial Iowa* in THE IOWA JOURNAL OF HISTORY AND POLITICS, Vol. III, p. 197.

ganization of the beef cattle industry. It then became possible to ship corn from the Ohio Valley to the eastern markets, and although the quantities shipped were relatively small, the effect of this new outlet for corn was seen in an increase in its value in Ohio. This reduced the profit to be gained from feeding corn to cattle.

At the same time there grew up a feeding business in Illinois. Previously most of the cattle of Illinois were sold to feeders in Ohio or even farther east. There was smaller opportunity for profit in fattening them in Illinois than in Ohio. They could not be fed until they reached a high finish and then be driven all the way to Philadelphia or New York as the fat would largely be lost along the road to these market centers.

Within a few years after the railroads were built to the Mississippi, they began to be used for hauling cattle, and although the facilities were very poor and the shrinkage on the trip heavy, the cost of transportation was much less than that incurred earlier by driving for long distances. It became possible to finish cattle in Illinois and ship them through to New York without feeding them again in Ohio or Pennsylvania to get the best finish. Prior to this, the only outlet which Illinois had for finished cattle was the trade down the river with the southern plantations. It was insufficient for the consumption even of the number of cattle then coming out of the Middle West.

EARLY CATTLE TRANSPORTATION IN IOWA

The railroads followed close on the heels of the settlers, and within a few years after the heavier influx of settlers reached a section there was usually a railroad within a few days drive. The first market for many of the first Iowa cattle, however, was to the west instead of the east.[197] In

[197] See a further discussion of this in Chapter X.

this direction, there was only one way by which the cattle could be moved — by driving. For this no definite system of transportation seems to have developed. Each new settler obtained his cattle as best he could in the region from which he came or along the way to his new home and then drove them along with him.

A little later, in the seventies, when the ranges were rapidly being stocked up, cattle dealers from the corn belt region sometimes collected droves of cattle to ship or drive westward for sale to the ranchers instead of selling them to the eastern markets. This business was of too brief duration for well defined channels of transportation to develop. Each dealer seems to have planned his own route and methods in view of the information he was able to glean from those who had preceded him.

The necessity of driving cattle for long distances from Iowa eastward lasted from five to fifteen years in different sections. Along such main travelled roads as the Mormon Trail, there were dealers who bought up cattle and hogs and drove them to market or to shipping points in the eastern part of the State until the railroads supplanted them. There was also a system developed for the accommodation of these drovers and their herds. This was composed largely of settlers along the trail who maintained yards for the stock and rude accommodations of one sort or another for the drovers' stay overnight.

The dealers usually started near the Missouri River, buying up a few head of cattle or of hogs here and there as they moved eastward. By the time they reached a shipping point they might have from three to six or seven hundred head of cattle, and from six to fifteen drovers to help them. At night the men would stop at the home of a settler where it was known they could be accommodated. The cattle or hogs were driven into the yard, and the dealer usually bought some corn for them. The drovers were fed by the settler's wife and slept in the barn or outside during the summer, and in the house, wherever they could find room in the winter. Cattle were usually driven twelve or fourteen miles a day. If the drove was made up of hogs, a slower pace of about half that rate was necessary. It was said in the eastern part of the country, where the same business of driving stock was carried on a couple of decades earlier, that hog drovers sometimes slept in the same tavern for three successive nights, stopping their drove before they got to it the first night, stopping the herd at the tavern the second, and walking or riding back, if the lodging was very good, the third night.

The prices paid by these dealers must have been considerably below the market rates. A man whose father settled near Creston before this business declined relates that his father shipped a load of cattle to Chicago as soon as there was a railroad available. He was greatly surprised at getting so much for his cattle, having always sold to dealers before. Thereafter he kept in closer contact with the market and was never again induced to sell by the drover's bids.[198]

Railroad building in Iowa began in the middle fifties. By the end of 1859 roads had been opened to Cedar Rapids, Iowa City, Washington, and Ottumwa, besides nearly a hundred miles of track along the river. The Civil War interrupted railroad construction between 1861 and 1865. By the latter date the roads had been extended to Nevada, and Grinnell, and new roads had been built from Farley to Paralta, and from Dubuque to Cedar Falls. Up to 1860, however, but little use had been made of the railroads for hauling cattle.

In 1867 the Chicago and Northwestern reached the Mis-

[198] Interviews with George A. Ide and Joseph M. Wray of Creston.

souri River at Council Bluffs, followed two years later by the Chicago, Rock Island and Pacific and by the Chicago, Burlington and Quincy. During this period of five years, from 1865 to the end of 1869, there were over a thousand miles of railroad built in Iowa. During the next half decade, to the end of 1874, nearly two thousand miles were built. In 1870, the Dubuque and Sioux City Railroad, now part of the Illinois Central system, was opened to Sioux City. In the eastern part of Iowa, branch lines were built in all directions so that by 1875 that part of the State was already covered by a network of the new transportation system. The greater part of this mileage was built between 1870 and 1872. It was a part of the great boom in railroad construction which, because of its rapid over-expansion, resulted in the crisis of 1873.

At this time there was a popular clamor among the settlers for the building of railroads.[199] There were visions among financiers of great wealth to be made easily and quickly in the railroad business.

Responding to the popular demand for railroads, Congress and the State legislatures for several years did all in their power to encourage the construction of new lines. They were more than liberal in their grants of land, which in the State of Iowa alone reached a total of almost five million acres.[200]

Legislative bodies are not called to an accounting for acts committed in the past. The personnel changes rapidly, and the public quickly forgets the identity of the persons who composed any particular session. But if the members of Congress or of State legislatures which appropriated large

[199] McCoy's *Sketches of the Cattle Trade of the West and Southwest*, p. 408.

[200] *Report of the Secretary of State of the Transactions of the Land Department* (Iowa), 1889, p. 105.

quantities of land for the encouragement of railroads had later been called on to justify their acts, they would, in all probability, have been able to make out a strong defense. There were what seemed to them and to their constituents, enormous quantities of public lands as yet untaken. Very little value was then attached to them. And there seemed to them to be grounds for supposing that it would be a long time before a shortage of land could cause a hardship to anyone.

Under the stimulus given by Congress and the encouragement of a large part of the public, railroads were built into territory that was still unsettled, and many lines were constructed which later proved to be unjustified on economic grounds. The public was not willing to see these discontinued, yet many of them were doomed to be perpetually on the verge of bankruptcy, and altogether unable to compete with properly located roads.

The public of 1870 witnessed a bitter competition among the railroads for what traffic was available to be divided among them. Rebates were given freely, since there was no machinery to stop this practice. Rates between competing points were sometimes absurdly low, while an effort was made to make up for the loss incurred by this competition by charging heavy rates from non-competing points. The cattle shipper, or other patron of the railroads, found that the service was incomparably superior to doing without railroads, but it was still extremely poor as compared to what would have been possible had there not been so many unnecessary railroads to support and such bitter competition.

EARLY DEVELOPMENT OF LIVE STOCK SHIPPING FACILITIES

The development of facilities for hauling live stock began in the early fifties. In the early experiments ordinary box cars were used for a while. The first slatted car was the kind without a roof then used for hauling wood for the engine. Cattle were also hauled on flat cars around which sides were built by using saplings for uprights and nailing poles or slats to them horizontally. Feed for the cattle was piled on boards placed across the top.

An excellent description of the early facilities is given by James E. Downing in the *Breeder's Gazette*.[201]

> Trains were coupled with long links and pins and the great amount of slack in a freight train caused a tremendous impact at every movement during the journey.
>
> On western roads, also, old, wood burning engines, equipped with link and pin couplings and hand brakes, slowly dragged the trains, usually starting them with a jerk and stopping by reversed gear, causing everything not nailed down to go into a heap at the far end of the car. The average schedule time for trains, including stops, on the five leading railroads in the West in 1873 was 10 miles per hour. . . . The roadbeds were rough and poorly ballasted, with excessive grades, wooden bridges and trestle work, and everything was in a poor state of repair. . . . The high arbitrary carload rates then charged for the transportation of stock induced overloading as a measure of economy. The result was that the weaker were knocked down by the bumping and rolling of the train, and trampled upon by the others until helpless or dead; or, if they were able to rise were frequently so injured that they afterwards died. All this added to the death toll and loss to the shipper. . . .

[201] "One of the first shipments of cattle by rail was from Kentucky to an eastern market in 1852. It was described by the shipper as follows: 'One week was consumed in driving the cattle, 100 in number, from the neighborhood of Lexington, Ky., to Cincinnati. Here they were loaded in merchandise boxcars without any conveniences for feed, water or ventilation, and shipped to Cleveland. From there they were taken by steamboat to Buffalo, and after a stay of several days were driven overland to Canandaigna, N. Y. From this point they were hauled in emigrant cars to Albany, where they were unloaded and housed in the freighthouse; after two days in a feedyard they were taken by boat to New York City. The freight on the cattle from Cincinnati to New York City was $14. per head".—From *Pioneer Transportation for Live Stock*, by James E. Downing, in the *Breeder's Gazette*, August 25, 1921.

Overloading was intensified by the high prices paid for animals killed enroute which sometimes brought almost as much as live ones. In 1869 Berkshire hogs taken dead from cars sold regularly at \$4.50 to \$5.00 per cwt. . . .

The old cars in which fuel for the engine was hauled were used as models, and improvements made from time to time until the high standard of the present day stock car was reached. The old cars had an unoccupied space of two feet at the end of the platform or floor in which stockmen used to ride and frequently sleep. The cars having been built without roofs or hay racks, the fodder or hay was thrown among the animals, and branches of trees were placed over the cross bars to afford shade or shelter from storms. The permanent roof originated not so much as a shelter as to prevent the escape of small animals. There was great difficulty in hauling mixed shipments. At first hogs were loaded on the floor of the car, and sheep on a temporary deck above. The frequency with which shippers experienced losses from sheep jumping over the top of the cars caused the method of loading to be changed and the reverse was tried; that is, the hogs were loaded on the temporary deck above. But this was found impracticable, because the sheep became foul from the droppings of the hogs. The difficulty was finally overcome by loading the sheep on the upper deck and constructing a permanent roof to prevent their jumping overboard. This was the origin of the present double deck stock car.

REGULATION AND DEVELOPMENT OF THE TRANSPORTATION INDUSTRY

The poor facilities referred to above caused an excessive shrinkage on cattle in transit.[202] This had the same effect

[202] ''A Boston gentleman . . . . states that he found the shrinkage of cattle on long routes to vary from fifty to two hundred pounds, and that the Assistant Superintendent of the Great Western Railroad, at Hamilton, told him that he had known 'the shrinkage to be as high as one hundred and eighty pounds to the animal, between Chicago and Suspension Bridge'.

''The Massachusetts Railroad Commissioners, on page thirty-one of their report of January 1871, say 'that the shrinkage between Chicago and Boston is estimated to be from ten to fifteen per cent' and they add 'cattle trains yield the road to most others, and pass hours on sidings; the animals are without any food or water, and often with insufficient ventilation in summer, or shelter in winter; they are jolted off their legs, and then goaded until they as a very materially increased freight charge in placing the western producer of beef at a disadvantage as compared to the producer nearer to the markets. The high carload rates, which paid no regard to the weight of the load, gave an incentive to overloading the cars. The bumping and jerking of the cars were also large factors. It is probable that the improved coupler, and the air brake patented by Westinghouse in 1872 were responsible for as much of the improved condition in which cattle reached the market in later years as were the twenty-eight hour law and the activities of humanitarians.

In the early seventies an agitation arose against the manner in which cattle were being handled on the trip east from Chicago and other points. They were being crowded into the cars and kept for long periods without water or feed. The trains were slow and this aggravated their suffering. The shrinkage between Chicago and Boston was said to be between ten and fifteen per cent.

An act was passed by Congress and signed by the President on March 3, 1873, to prohibit any carrier from transporting animals in interstate commerce for a greater period than twenty-eight consecutive hours without unloading for the purpose of giving rest, water, and feed for at least five consecutive hours before continuing the transportation. But if the animals were in cars in which they could receive feed, water, and rest, the transportation could be continued for a longer period.

This law was very defective. It brought about some im-

struggle up, for they cannot be permitted to lie down; they thus arrive at their destination trampled upon, torn by each other's horns, bruised, bleeding; having in fact suffered all that animals can suffer and live. Under the most favorable circumstances they leave the train panting, fevered and unfit to kill; under the least favorable, a regular percentage of dead animals is hauled out of the cars . . . . Animals are fed only twice between Chicago and Boston, and only three times between Kansas and Boston''.—Angell's *Cattle Transportation in the United States* (1872).

mediate improvement, but was not long enforced and soon became a dead letter until about 1905. Then it was again brought forth, this time by the Secretary of Agriculture, and prosecution was started against a large number of violators. By this time the railroads had discontinued the use of most of the stockyards which had been built to comply with the law. Its enforcement brought considerable inconvenience both to the shippers and the carriers. It was urged that, where the time in transit was not much over twenty-eight hours, less suffering was caused the cattle by being kept in the cars for a few hours to their destination than by unloading and loading again.

In 1906, Congress adopted a modified law. It repeated the essential features of the older law, but provided that, on written request of the shipper or of his agent, the stock might be continued in transit longer than twenty-eight hours, but not over thirty-six.

The need for an agency to regulate the trade of the railway system, and to guide the course which competition was to take, was seriously felt following the railroad boom of the early seventies. The mad scramble for traffic threatened at times to embarrass all of the carriers without helping any of them. In 1873, the railroads themselves took a step towards stablizing the traffic and stopping the excessive competition for the hauling of cattle.

The trunk line systems running between Chicago and the East, with the exception of the Baltimore and Ohio, entered into an agreement to divide the traffic on a basis of a given percentage to each. A few of the larger shippers were induced to adjust their shipments over one road to another in order to maintain the percentages of traffic agreed upon. These shippers were called "eveners", and received a rebate of $15 per car out of the usual charge of $115 per car, which it was agreed should be the standard rate between

Chicago and New York. This pool lasted until 1878, and was one of the few things over which these lines did not fight during this time.[203] After the eveners' pool broke up, the old war for traffic was again resumed.

[203] ''As soon as the Union Stock-Yards began to ship large numbers of live stock to New York and other eastern points, the railways began to scramble for the freights. The five trunk lines, New York Central, Erie, Pennsylvania, Baltimore and Ohio, and Grand Trunk competed for the business with cut-throat and disastrous rate wars, and worked out a more peaceful *modus vivendi* only after the panic of 1873. They then agreed to divide the traffic on a given percentage, and induced a few of the greater shippers to adjust their shipments, over one road or another, so as to even up the totals with the agreed ratio. These firms were known locally and enviously as ''eveners'', and found the reward for their co-operation in a rebate from the published rate per car that allowed them to fatten at the expense of their unfavored smaller rivals. 'This railroad competition has helped to concentrate the live stock and dressed-beef business into the hands of a few men', testified the best-informed spectator, Albert Fink, in 1883.

''For several years the 'evener' group of firms enjoyed the advantages gained by their agreement, but by 1877 the scheme had broken down because conspirators to stifle trade lacked the firmness, when bought, to stay bought, and the trunk lines tried a new experiment for the division of freight receipts according to a fixed pool. Albert Fink, who had harmonized the rivalries of various southern roads, was put in charge of this new regulative association, and until the interstate commerce law was passed in 1887 he was almost the sole force in America working to maintain uniformity and equality of rates against the bargaining tendencies of shippers and the competitive lust of carriers.

''As the trade developed and cattle shipments east of Chicago assumed the form of fresh beef, with thirty animals to the refrigerator car instead of eighteen to the stock car, competition was again aroused. The surviving shippers of live stock demanded that the rate on beef be raised far above the rate on cattle on the hoof, so as to maintain equality between the two forms of meat on the New York market. They found allies in the railroads, who wanted to keep their stock-cars in use and to get the higher cattle-car rates; in the stock yard owners along the lines who could see that their plants would become obsolete and unproductive if no more live cattle came to use them; and in the butchers of the eastern cities who resented the changes that were converting them from butchers and manufacturers into mere agents and dealers in meat. . . . The eastern butchers, fearful of extinction, raised the cry in the middle eighties that Chicago and Kansas City meats were unwholesome and were preserved with poison. . . . In 1884 there was a New York Wholesale Butchers' Protective Union, and in 1886 a Butchers' National Protective Association of the United States, both formed to boycott Chicago beef.

The next step was in the development of the refrigerator car and the business of shipping fresh meat instead of live cattle. This promised a very worth while saving. By shipping only the meat instead of the whole animal nearly half of the freight could be saved, if the same rates were charged on beef as on live cattle, and there was also a saving in shrinkage.

In this business the pioneers had to fight for the larger part of a decade, first to get transportation facilities, and then to overcome a prejudice in the minds of the public against Chicago killed meat. The trunk line railroads, except the Baltimore and Ohio, and the Grand Trunk, had invested a large amount of capital in stock cars and in stockyards for their live stock traffic. These railroads and other owners of stockyards along the lines opposed the fresh meat trade because it would put their yards and other property out of business.[204] The Baltimore and Ohio, and the

''The stock shippers got the relief they wanted in the form of an increase in beef rates from once-and-a-half the cattle rate, which the packers admitted to be fair, to once-and-three-quarters. . . . The rate wars that prepared the way for public regulation of railways and the division of great corporations among themselves so that some stood on the public's side for fair and non-discriminating rates, were founded in the beef and cattle trade''.—Paxson's *The Cow Country* in *The American Historical Review*, Vol. XXII, pp. 65—82.

[204] ''There is 'war to the knife and knife to the hilt' between the shippers of live cattle and shippers of dressed beef from Chicago and eastern cities. The trunk railroads are also in the fight. The Vanderbilt lines and the Pennsylvania Central being largely interested in the great stock-yards constructed for the live cattle traffic, are with the shippers of live cattle; while the Baltimore & Ohio and the Grand Trunk, confining themselves purely to the legitimate carrying trade, and not having any money in the stock yards, are quite willing to afford transportation facilities to the shippers of dressed beef as to shippers of live cattle. The live-cattle shippers want the rates on dressed beef put up so they can compete successfully in New York, Philadelphia, Baltimore, etc., with beef dressed in Chicago or Kansas City and transported eastward in refrigerator cars; while the other party wants only what they say is a fair, equitable rate in proportion to the weight carried. The quarrel just now, bids fair to cause a break in the freight pool which exists between these trunk lines''.—*Breeder's Gazette,* April 19, 1883.

Grand Trunk, especially the latter which hauled but few cattle, had no particular reasons to oppose the refrigerator cars, but did not care to spend the necessary money in building them, since they were still in the experimental stage. The packers were therefore forced to provide their own cars. Despite the opposition of the railroads, and of the eastern butchers, the fresh beef trade grew rapidly, and between 1885 and 1890 came to overshadow the shipping of live cattle from Chicago.

FREIGHT RATES BETWEEN IOWA AND THE EAST

If the freight rates are very high, the farmer will be forced to produce commodities which are concentrated in form and therefore relatively cheap to ship. If the rates are low he can produce articles of greater bulk, and ship his produce in a less finished form. There is, therefore, a close connection between the freight charges and an Iowa farmer's decision to sell his corn as grain or to feed it and sell hogs or beef instead as is explained fully later.

Before the establishment of the Interstate Commerce Commission, data on the rates charged by railroad companies are hard to get.[205] In the first place there were frequent deviations from the older records of tariffs. Special rates were frequently given in order to get traffic or to prevent other roads from getting it.[206]

[205] *The Prairie Farmer*, September 6, 1860, declares: "The New York Tribune of August 30, says the following roads have entered into arrangements for transportation of all live stock at the rates mentioned below: Pennsylvania Central, New York and Erie, New York Central, Grand Trunk (Canada), Baltimore and Ohio."

The new arrangement took place September 1, 1860, and the following were the rates per hundredweight, from the several points to New York:

Chicago and Indiana State line, 90 cents; Burlington, Iowa, 1.10 cents; St. Louis, 1.20 cents. The minimum carload for cattle was 18,000 pounds.

[206] In the *Proceedings of the Conference Relative to the Marketing of Live Stock, Distribution of Meats and Related Matters*, held at Chicago, November 15, 16, 1915, J. M. Doud, a live stock commission merchant, said:

The accompanying tables give some idea of rates which existed between points in central Iowa and Chicago, and be-

''Previous to the passing of the interstate commerce act, competion among the railroads for the live-stock haul was rampant. Agents were at all western points who had the power to give what rebates were necessary to get the business. The rate at that time was 25 cents per hundred pounds from the Missouri River points to Chicago, but 40 per cent of this was given back to the shipper in nearly every case, and frequently 50 per cent was refunded on large shipments. This practice was carried on for years after the passage of the law, but not openly. . . .

''Not only were rates cut but competition was equally as sharp on running time. Stock was bought at Missouri River markets one day and sold in Chicago the following day, and a guaranteed schedule of 21 hours between the markets was entered into, with a penalty or a claim paid when the 21 hours were exceeded.

''Some 15 years ago the railroads entered into an agreement by virtue of which no company could exceed a certain time limit, and it now takes, under the best possible schedules, from 30 to 40 hours from the Missouri River to Chicago, and the same time from western Iowa and South Dakota—a lengthening out of the running time from 8 to 12 hours, while central Iowa is from 4 to 8 hours longer.

''The lengthening out of running time is equivalent to an advance in rates of fully 25 per cent, as it makes but little difference whether the owner of the stock pays in cash or in extra shrinkage''.—*House Documents,* 1st Session, 64*th Congress,* Vol. 144, Document No. 855, pp. 128, 129.

J. L. Harris, General Live Stock Agent, Chicago and Alton Railroad said:

''With reference to rebates, I think I have paid perhaps as much money to shippers as any man to-day on the railroad pay roll; and as to Mr. Doud's statement that 30, 40, and 50 per cent of the revenue has been paid back to the shipper, I am going to deal in facts and figures. The highest rebate I have ever known paid, and I think the highest that has ever been paid from Texas, was $21 a car to Chicago, and the rate ran about $100 to $110 per car. In those days the rates were made in dollars per car—so many dollars for a trip from stations in Texas to Chicago, Kansas City, or St. Louis. The highest money that I ever paid from St. Louis to Chicago was $7.50 a car, and I had to pay as much as the other fellow or I could not get the traffic.

''The service from the Missouri River . . . . Kansas City and Omaha, St. Joe to Chicago, has averaged about 26 to 28 hours. The best service that we have made, except some few special runs—I think that the shortest time that has ever been made is about 16 hours and 20 minutes. I made that with 13 cars on the Wabash Road several years ago, riding the train myself. I think the Rock Island and other lines made it in 16 or 18 hours on one or two occasions; but the average, as I state, is anywhere from 24 to 28 and 32 hours. That travel brings you to the Chicago market without a feed, providing there is no accident.''—*House Documents,* 1st Session, 64th Congress, Vol. 144, Document No. 855, pp. 132, 133.

tween Chicago and New York. Rates from Boone, Iowa, to Chicago were obtained through the kindness of A. F. Cleveland, Assistant Freight Traffic Manager of the Chicago and Northwestern Railroad Company. Rates from Chicago to New York were obtained from the *Annual Report of the Interstate Commerce Commission* for 1902, Appendix G, Part 2. Rates from Chicago to New York after 1902 were

TABLE V

FREIGHT RATES ON CATTLE FROM BOONE, IOWA, TO CHICAGO, ILLINOIS, 1872–1923

DATE EFFECTIVE	RATE PER CAR
1872, October 1	$66.00
1873, August 18	62.00
1874, July 1	53.10
1874, July 4	28.23
1887, August 25	57.00
	RATE PER CWT.
1888, October 25	.26
1889, August 14	.23
1910, May 15	.22
1920, August 25	.275
1921, December 31	.37
1922, June 30	.335

furnished through the kindness of B. H. Meyer of the Interstate Commerce Commission. It will be noticed that the rates on cattle from Iowa up to 1887, and from Chicago up to 1879 were on a flat car rate basis.

In 1873, the shipper of cattle from Iowa, could not expect to receive more than the New York price for his cattle minus a freight charge of $62 per car to Chicago, and $115 from Chicago to New York, besides the other necessary charges for handling and feeding. Considering that a normal load was probably between 20,000 and 25,000 pounds, this made about 75 cents per hundred pounds. In 1874, the freight between Iowa and Chicago was as low as $28.23 per car. This would reduce the cost by about eighteen cents per hundredweight.

TABLE VI

FREIGHT RATES ON CATTLE FROM CHICAGO TO NEW YORK CITY, 1872–1923

Date Effective	Rate Per Cwt.	Date Effective	Rate Per Cwt.
1872, Mar. 26	(Per Car)	1888, July 5	.11
	$115.00	July 6	.095
1879, June 9	.35	July 7	.085
Aug. 4	.50	July 9	.075
Nov. 10	.55	July 10	.065
1881, Mar. 14	.50	July 11	.055
May 9	.25	Aug. 20	.145
1882, Apr. 17	.40	Aug. 25	.10
1884, May 5	.30	Sept. 24	.15
Sept. 1	.20	Dec. 17	.22
Dec. 8	.40	1889, May 1	.26
1885, May 3	.30	1890, June 16	.225
July 1	.25	June 26	.21
1886, Mar. 1	.35	June 30	.195
1887, Nov. 21	.315	July 3	.18
Nov. 23	.285	Nov. 24	.26
Nov. 24	.255	1891, Apr. 20	.28
Nov. 25	.23	1899, Feb. 1	.25
Nov. 26	.205	1900, Jan. 1	.28
Nov. 28	.185	1915, Jan. 1	.294
Nov. 29	.165	1916, Jan. 13	.33
Dec. 26	.35	1918, Mar. 25	.38
1888, May 14	.25	June 25	.475
June 18	.165	1919, Dec. 31	.45
July 2	.145	1920, Aug. 26	.63
July 3	.125	1922, Jan. 1	.565

In 1888 a violent rate war broke out among the trunk lines from Chicago to New York. Rates on live cattle were cut from thirty-five cents to twenty-five cents, then to sixteen and one-half cents. In July there began to be reductions in the rates almost every day. On July 11th, they reached five and one-half cents per hundredweight where they continued until August 20th. Thereafter rates were raised slowly until they reached twenty-eight cents in 1891, and the rate wars were over.

In the territory west of the Mississippi, the rate wars never became so violent as during this period in the East. But much the same practices were resorted to. Rebates were given, and there was a sharp competition in running time.

From 1889 the rates on cattle from central Iowa to Chicago remained quite stable until 1910. The change in rates published during this time was seldom over a cent per hundredweight at the principal shipping points. In 1918, as referred to in a previous chapter, there was granted an increase in rate of twenty-five per cent, and in 1921 a further increase of thirty-five per cent. In 1922 there was a reduction of ten per cent on farm products.

Before 1896, with the price of cattle slowly falling and the freight rate fluctuating widely, it is difficult to say for certain just what per cent of the value of the cattle the cost of transportation took. After 1896, with cattle prices rising and the freight rate following much less rapidly, the cost of transportation required a smaller part of the price. In 1896 the average price of 1200 to 1500 pound steers in Chicago was $4.20 per hundredweight, and the freight over the Chicago and Northwestern from Boone to Chicago was twenty-three cents per hundredweight. In 1913 the average price of the same class of stock was $8.35, and the freight was twenty-two cents. In 1921 the price of the steers was $9.50, and the freight before the ten per cent reduction was thirty-seven cents, and afterwards was thirty-three and one-half cents.

Between 1896 and 1918 freight rates lagged considerably behind the rise in cattle and in corn prices, as was the case during the years of the World War. This occurred both when prices were rising and when they were falling. The mechanism by which rates are now made works but slowly. Perhaps if there were no such control over the rates, they would respond more rapidly to changed economic conditions, but the advantage of stable rates to the producers, and an authority with power to enforce fair dealing and impartiality on the part of the carriers has certainly been worth more to the shipper than he has lost from this cause. The same can be said for the carriers themselves.

Late in 1917 and early in 1918 the railroad system of the country became severely congested and service was greatly curtailed. Farmers who had cattle ready to ship to market often waited days or weeks before they could get cars.[207] In the meantime the cattle were still eating heavily of high priced feed and, having already been put in fat condition,

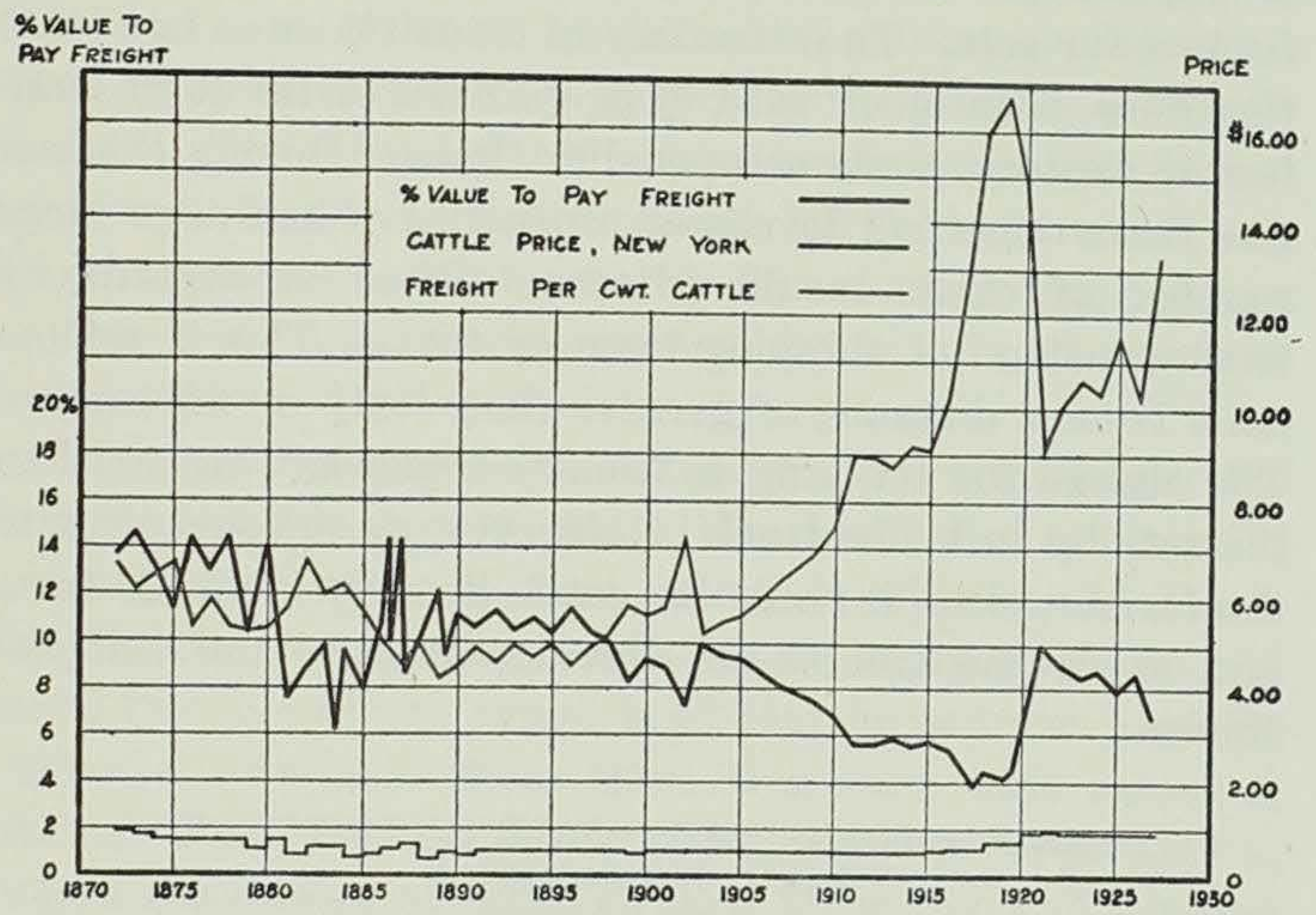
[207] ''I would like to have someone tell me what to do under my present circumstances. I have had cars for live stock ordered since January 1st, to ship my cattle and hogs, but there has not been a single stock car furnished here since January, until today, when there was one car set at the chute. This car, however, properly belonged to another farmer who had filed his application ahead of me. The M. & St. L. claims that they got but nine cars this week to supply their customers at points between Fort Dodge and Estherville and from Spencer to Storm Lake. So at this rate we can not expect ours for another month or six weeks.

''My cattle have been on a full feed of corn, hay and cottonseed meal for almost five months. They weighed over 1,000 pounds when I started them, and are now in extra fat condition. . . . I have been feeding corn which I sorted out to keep for next summer's feeding purposes, and have only enough to last me about one more week. On top of this, I have bought nearly 1,000 bushels more corn than I expected to feed to these cattle and hogs, and there is no more corn for sale in this locality. I have put all my corn crop into them, and, in addition, most of the corn grown by my neighbors''.— From a letter by an Emmet County farmer, dated March 3, 1918, in *Wallaces' Farmer*, March 29, 1918.

(This was an extreme case. The small railroads, as the Minneapolis and St. Louis, had a particularly hard time to get cars).

were making but little gain. The protests of the feeders give ample evidence of the cost of poor transportation.

On June 25, 1918, a twenty-five per cent increase in freight rates was put in effect, amounting to between five



RELATION OF FREIGHT RATES TO THE VALUE OF CATTLE

and six cents per hundredweight on cattle from central Iowa points to Chicago. On August 26, 1921, an additional increase in rates of thirty-five per cent was granted, amounting to about ten cents per hundredweight. Because of the slowness of the rate making mechanism this occurred after the price of cattle had fallen sharply for a year. On January 1, 1922, there was a ten per cent reduction in rates on agricultural products, equal to about four cents per hundredweight.

The "feeding in transit" rates for the Iowa feeder have already been mentioned. These permit the saving of a considerable part of the freight usually paid from the producing regions to Chicago. To take advantage of these rates, however, it is necessary to buy the feeders west of the

Missouri River markets. The cattle feeder does not always desire to do this. He may want the wider choice of animals which are to be found in the markets, or he may not be acquainted with ranchers who have the desired type of feeders for sale. The "feeding in transit" rates have not, therefore, been much used in proportion to the total number of western cattle shipped into Iowa. During the last few years there has developed a practice of hauling a large number of cattle to the Missouri River stockyards by trucks, instead of shipping them by train. This is seldom done from a distance of greater than forty or fifty miles. The charge for trucking is usually somewhat higher than the rate by rail. The truck is, however, more convenient to the farmer, since it hauls the cattle directly from his farm and saves the trouble of driving them to the railroad station.

THE RAILROADS, THE CATTLE INDUSTRY, AND FARM ORGANIZATION

It has already been pointed out that the rates charged for hauling specific farm products from the surplus regions to the regions of relative scarcity have much to do with determining which commodities are to be produced in each section, and consequently on the organization of the farms producing them. From central Iowa to New York the freight costs approximately forty-eight cents per hundredweight for corn and ninety cents per hundredweight for cattle. But between 800 and 1100 pounds of corn are required to make a hundred pounds of beef. Therefore there is a difference in freight on 900 pounds of corn in the form of grain and the same quantity after it has been converted into beef of about $3.42. This is a strong factor in determining just how much corn is to be sold as grain and how much as beef, and in what sections of the country each is to be produced.

If the cost of transportation results in a very great differential in favor of the production of cattle, the farmer will keep more cattle on his farm and will try to adjust his farm to their care. As a general principle this is simple enough. The difficulty to the farm organizer arises in that there are in each section a number of products which pay about the same rate of return. The farmer must choose among them, and decide just how far to go and where to stop in the production of each.

If the transportation differential is very large, the farmer may find it profitable to devote most of his farm in one way or another to the production of beef. If it is a very minor one he may keep only as many cattle as will make full use of the rough land that he can not possibly cultivate. Between these there is a very wide range of choice. The freight differential will have to be greater to induce the raising of cattle on land especially well adapted to corn than on poor corn land. If there is much rough land poorly adapted for anything except use as pasture, a smaller differential will make the feeding or raising of steers the more profitable system.

The routes of traffic have much to do with the location of markets intermediate between the producer and the consumer of beef. This is especially true since refrigeration became practicable, permitting the killing of the cattle at any convenient point. The place at which the greatest number of trade routes converge, and through which the greatest volume of traffic in live stock flows, possesses an advantage as a market, which soon leads to the establishment of the necessary facilities.

There is a tendency to avoid unnecessary hauls and expense in handling, since the business possessing the greatest number of economies has an advantage over those which do not. Therefore, there is a line of markets along the Missouri River at points where trade routes from the West converge. As it is profitable to kill the cattle as soon as possible after they leave the ranges due to the saving made by shipping carcasses instead of live animals, packing plants are located at these markets. The Missouri River markets are also the natural feeder cattle markets. They are on the western border of the corn belt and less freight is involved by distributing the feeders from here.

The routes which the railroads take to the east from the Missouri River, often determine just where the feeding of the western cattle is to take place. In the neighborhood of Sutherland in O'Brien County it is reported that there was no feeding of western cattle until after the railroad was built into that section in 1881-1882.[208] There was also no outlet for fat cattle except by driving them a considerable distance. In the neighborhood of Hampton in Franklin County there was little or no feeding of western cattle until the building of the Chicago Great Western through that section in 1903.[209] This gave the people of the neighborhood a direct line from Omaha and direct connections with Chicago.

There has probably been too much said about the effects of freight charges and too little about the service as influencing the cattle industry. It should be remembered that the difference between good and poor service in shipping may amount to much more than a doubling of the ordinary freight rate. It is doubtful if the Emmet County farmer mentioned earlier would have fed cattle had he known that there was to be a traffic congestion to keep him feeding high priced corn long after the cattle were ready to

208 Interview with Silas Steele of Sutherland.

209 Interview with D. M. Mott of Hampton.

go to market. It is quite likely that he would have sold the corn as grain and not fed it at all.

The process of transporting the cattle from the farm to the market may cause a large or small shrinkage in weight, depending on how long they are kept in the cars, how much they are crowded, the smoothness of the roadbed, and other factors. If cattle are selling at $10 per hundredweight, an additional one per cent of shrinkage is equal to an increase of ten cents per hundredweight in freight — about a thirty per cent increase, as freight rates from central Iowa to Chicago stand in 1927. The difference between good and poor service in running time and accommodations may cause several times this variation in shrinkage.

X

THE MARKETING OF IOWA CATTLE

In his book on the *Principles of Marketing*, Fred E. Clark classifies the functions of the market mechanism as follows:[210]

A. Functions of Exchange
  1. Demand Creation (selling) 2. Assembly (buying)
B. Functions of Physical Supply
  3. Transportation 4. Storage
C. Auxiliary or Facilitating Functions
  5. Financing 6. Risk-taking 7. Standardization

The functions of transportation and financing have already been discussed. The carrying of risk has been mentioned as far as it applies to the cattle prior to slaughtering.

Standardization has some outstanding limitations as applied to cattle. The variations among cattle are so great that they can not be graded or sold in standard lots in the

[210] Clark's *Principles of Marketing*, Ch. II.

same sense as grain or even some fruits. There may be some tendency towards such standardization but as yet it has made but little progress. This introduces one very important qualification into the marketing of live stock. Each lot must be examined by the would be buyer and bought on the basis of its own peculiarities, which means the peculiarities of each individual animal in it.

This chapter is intended to deal primarily with the functions of exchange. These are performed by a group of associated markets. First there is a large number of local markets made up of cattle producers on the one hand and local buyers on the other. Next there is a small group of central markets, composed of the local buyers or large cattle producers on the selling side and buyers for packers, exporters, and the like, on the other. These various markets are very closely related in some cases and at some times, but at others the connections are quite tenuous and uncertain.

At this point the principal changes that have taken place in the organization of the marketing mechanism that handles cattle and also the changes in its economy of operation should be noted.

The character of the product and the semi-seasonal nature of its production prescribe the conditions under which it must be handled after it reaches the stockyards. The producers, especially of range cattle, find it to their advantage, because of the seasonal nature of the feeds on which cattle are produced, to market more heavily in the fall of the year than at any other time. The number slaughtered would vary even more than it does from fall to spring and summer but for two facts. One is that a large part of the range crop is held back from three to eight months while the cattle are being fed on corn. The other is that the baby beef crop becomes saleable in the summer, partly offsetting the small number of range cattle sold at that time.

The perishability of the meat necessitates an extensive cold storage system for keeping such meats as the packers or others desire to hold for a while, and a system of refrigerator cars to use in transporting it. The proportion of the fresh meat crop which is held for longer than two weeks is very small. It is possible to hold a small percentage of the surplus meat by freezing it, but the live cattle must be disposed of with very little delay. The loss in weight and the cost of keeping cattle in the stockyards from one day to another is very high, and would result in a large wastage if the system were not developed to the point where they seldom need wait for more than a few hours to find a buyer and be on their way to the shambles.

In the earlier days of cattle production, when they were produced and fattened mostly on grass, a relatively large part of the beef used in the winter was preserved by salting. But this salted beef was not comparable to fresh beef, which consequently commanded a considerably higher price than the cured beef both because of its greater palatability and because of the greater cost of fattening cattle in winter. The coming of refrigeration resulted in a great reduction in the salting of meat. It permitted keeping a part of the fall surplus of fresh beef and resulted in a more even seasonal distribution of the supply, making part of the fall surplus available during the winter months.

DISPOSITION OF CATTLE PRIOR TO THE CIVIL WAR

In the period prior to the Civil War, as has been mentioned above, there was a considerable movement of cattle westward instead of eastward from Iowa. It is not possible to get any definite measurement of the volume or rate of this movement. For the most part it took the form of the sale of a yoke of oxen or a cow or two to an immigrant passing by an older settler's place and bound for a newer section.[211] A large number of cattle were also sold by older settlers to newer ones in the same neighborhood, one or two head at a time. It was by this process, which might be called a sort of seepage of live stock into new areas, that the cattle industry extended itself and the new country was stocked.

This marketing was accomplished by direct sale by the raiser to the new man who was starting a herd of his own. It may be considered that this involved no market mechanism at all, as the term is usually understood, yet the function performed, in facilitating the stocking of the new country, was of the greatest importance. Marketing as ordinarily understood, began only after the new section had been settled long enough to produce some steers of marketable age, say at four years old, and had a surplus of stock to be sent out of the neighborhood for killing. Then a need arose for the cattle dealer to assemble this stock and take it to Chicago or some other market. This duty devolved upon anyone who thought he saw an opportunity for profit in taking these cattle to a place where their value was higher than in the community where they were raised. Each of the reports of the Iowa State Agricultural Society up to the time of the Civil War gives some inkling of the beginning of this marketing in mentioning the number of cattle ''driven to Chicago'' from various new counties. The driving of the first few herds was a matter of some interest. For instance, the report from Kossuth County in 1858 informs us that ''about twenty cattle have been driven to Chicago this season'', while in the same year Jackson County, being

211 Interviews with H. C. Weir of Mount Pleasant and R. W. Moore of Cedar. See also the reports in re cattle from counties in Iowa in the *Report of the Iowa State Agricultural Society*, 1858.

older by a few years, had "exported" about four thousand cattle to other sections.

As time passed and the surplus of cattle for market increased, the dealers became more numerous. The dealers who bought up cattle or hogs, starting in the western part of the State and driving their purchases eastward, represent the highest form of development of the pre-railroad marketing system of Iowa. The service which these men performed was undoubtedly a valuable one. The cost of performing it was, however, quite high. The prices paid to the settlers for their stock were much below those obtained in the market.[212] The system of communication which most of the settlers had with the markets was very slow, and often consisted to a considerable degree in contacts with these same dealers. Since there was no other way of disposing of the cattle, the dealers' margin tended to be quite wide until the coming of railroads and quicker communication.

During the Civil War and the period immediately following it there were changes of considerable importance. The marketing of cattle from the Middle West was becoming centralized in Chicago. Within the State the railroads were displacing the cattle dealers as agents for getting the stock to the central markets. The facilities of the railroads for shipping cattle began to be used freely about 1866 or 1867. While the railroads were being built across the State the station farthest west usually became an important shipping station to the people still farther west until the line was again extended. Thus, during the Civil War, cattle from Newton were driven to a station near Grinnell on the Rock Island, where construction had stopped on that road.[213] In the south-central part of the State, the Chicago, Burlington

[212] Interview with Joseph M. Wray of Creston.

[213] Interview with M. A. McCord of Newton.

and Quincy stopped for a time at Ottumwa, which became an important shipping point for that section.[214]

With better transportation the type of cattle marketed from Iowa also changed. The feeding and finishing of cattle increased and fat cattle came to be the principal type shipped east. The business of selling feeder cattle to feeding sections in Illinois fell off greatly, and the cattle were fattened in Iowa instead.

The movement of Iowa cattle to the range section continued.[215] In 1861 a herd was driven from Wapello County to Denver,[216] and in 1862 a herd of about three hundred cattle were driven from Decatur County to a place near Denver where they were sold to ranchmen.[217] In 1881, seven hundred head were driven from the same location in Iowa to South Platte, Nebraska, where they were sold for stockers.[218] This movement continued to about 1885. The cattle driven or shipped west were usually she stock, but occasionally young steers were also taken to the ranges to be kept for a couple of years. They were then sold directly to the markets for beef, or were returned to the corn belt to be fattened on corn. Cattle were shipped from widely separated parts of Iowa to Colorado, Kansas, Nebraska, Montana, and the Dakotas.[219]

During the cattle boom of the eighties there were a few cattlemen from Iowa who drove or shipped cattle from this

214 Interview with F. V. Hensleigh of Clarinda.

215 See a report in regard to the range and cattle business made by T. J. McMinn to Joseph Nimmo, Jr., in *House Executive Documents*, 2nd Session, 48th Congress, Part 3, Document No. 7, p. 195.

216 Interview with an old settler at Omaha.

217 Interview with Clabe Brazelton of Leon.

218 Interview with Clabe Brazelton of Leon.

219 Interviews with E. H. Mallory of Hampton, Frank B. Montgomery of Muscatine, Joseph M. Wray of Creston, and Clabe Brazelton of Leon.

State to various locations in the range country where they established ranches. In 1883, for example, a herd of about five hundred head was taken from Decatur County to Colorado by a cattleman of that county. In Colorado these cattle were used to start a ranch, which was sold out a few years later, however, when the boom had come to an end.

About 1880 a ranch company was organized among farmers and stockmen in the neighborhood of Spencer. Under the influence of the boom which was then on, it was proposed to start a ranch in Montana. Between two and three thousand cattle were bought up in the neighborhood of Spencer and to the west of that town. These were driven to Montana. The company failed because of hard winters, falling prices, and various other causes.[220] The effect of such shipments to the range country in addition to sales to the East was to encourage cattle raising in Iowa still further and to intensify the boom.

Another, and a longer lived movement of cattle to the West was the sale of purebred stock to the range sections. This business was well under way by 1880. It grew greatly during the boom of the eighties, and for some time thereafter continued to furnish an outlet for a large part of the output of the Iowa purebred business.[221]

TRANSPORTATION AND DEVELOPMENT OF MARKETS

During the late fifties, Chicago began a rapid growth as a live stock market.[222] This was largely because of the

[220] Interviews with D. C. Gillespie of Spencer, and H. E. Jones of Everly.

[221] *Lippincott's Magazine,* Vol. XXIV, p. 573.

[222] "The past year has shown a very great increase in the cattle trade of Chicago. Not only have the vast prairies of Illinois contributed largely to this market, but Indiana, Iowa and the entire beef-growing territory of the Northwest, have all made Chicago the center of their operations. Within the past year, too, large droves of cattle have been driven hither from Texas, and this trade which has increased at least two hundred per cent during the

convergence there of railroads from northern Illinois, and the country to the west, and from Wisconsin and other sections to the northwest. From 1857 to 1870 the receipts of cattle at Chicago increased from less than 50,000 to over a half million a year. The bulk of the cattle produced in Iowa naturally moved to the East through Chicago. The Iowa output of cattle increased at a relatively slow rate until about 1870. Then the process of stocking up the State was well advanced, and a larger number began to be sold. In 1863, according to the report of the Iowa State Agricultural Society, there were about 69,000 cattle hauled to market over the railroads of Iowa. In 1869, this number had increased to 90,000. During the next three years it varied between 100,000 and 200,000. By 1881 and 1882 the number hauled to market each year had increased to over half a million.

With this increase in the output of cattle, the number of local buyers increased in proportion. But with the railroads offering a much quicker and cheaper means of transportation to Chicago, the larger cattle growers began to take their own stock to market. This saved the cost of the dealers' services and their profits. Their services had consisted chiefly in the assembling of scattered stock which needed to be "bunched" before it was shipped to the buyers at Chicago.

Prior to 1880 Chicago was for the most part a stopping place where cattle from the west could be sold by their growers to dealers who would reship them alive to the cities in which they were to be consumed. The killing and shipping of beef, which was then handled in cured form, was relatively unimportant. Between 1875 and 1880 the process of refrigeration began to be applied to the meat business.

year 1858, promises to be one of no small magnitude".—*Report of the Chicago Board of Trade*, 1858.

This development and more rapid transportation resulted in a complete change in the method of handling the cattle after they reached Chicago. In the packing season of 1883-1884 the number of cattle packed and shipped dead from Chicago exceeded for the first time the number shipped alive. Thereafter competition between the packers and eastern butchers forced a refinement in the methods of distributing the beef among the consumers. The men engaged in the fresh beef trade depended for their profit on economies in getting the beef to the eastern cities.[223] It was only by making use of these that they were able to compete with the butchers of the East, and overcome the opposition to Chicago killed beef which was fostered by the vested interests in the eastern meat trade, the railroads, and others who had been performing the service in the old way.[224]

The following table shows the number of cattle packed

[223] "The mode of cutting, curing and disposing of meats has as radically changed as the character of the stock itself. The old fashioned method of disposing of the whole of a carcass of beef by salting it away in a barrel has been almost entirely superseded by the process of cooking and canning it, and by the rapidly growing trade in shipping it in the carcass to consuming points in refrigerator cars, without any attempt at curing it by the use of salt. Chicago-killed fresh beef is to be found in almost every city and village in the country, and consumers are realizing that this method of transporting their meat from the West is far preferable to the former method of sending the animals alive by rail, which tends to depreciate the quality of the flesh, or by the still older method of having them 'hoof it' for a thousand miles, more or less, to the slaughter houses of the East".—*Report of the Chicago Board of Trade*, 1883, pp. 17, 18.

[224] In an article on the *Cost and Methods of Transportating Meat Animals*, in the *Year Book of the Department of Agriculture*, 1908, p. 243, Frank Andrews declares:

"From Chicago to New York in 1908 the freight and other expenses of the road on an export steer of average weight (1250 pounds) were $4 to $4.40, while the freight on the average amount of fresh beef yielded by the animal, 700 pounds, would amount to only $3.15, not including the expense of icing. From Kansas City to New York the corresponding difference between live and dead freight is still greater, amounting possibly to $2.25 or $2.50 per head".

in Chicago from 1864 to 1925. The year in each case begins on March 1st. Beginning with 1876-1877 the figures include Chicago consumption of beef. Figures for this table were obtained from the annual reports of the Chicago Board of Trade.

TABLE VII

NUMBER OF CATTLE PACKED IN CHICAGO			
Year	Number of Cattle Packed	Year	Number of Cattle Packed
1864-1865	92,459	1894-1895	1,958,206
1865-1866	27,172	1895-1896	1,810,593
1866-1867	25,996	1896-1897	1,756,431
1867-1868	35,348	1897-1898	1,732,296
1868-1869	26,950	1898-1899	1,603,380
1869-1870	11,963	1899-1900	1,734,776
1870-1871	21,254	1900-1901	1,814,921
1871-1872	16,080	1901-1902	2,047,489
1872-1873	15,755	1902-1903	2,017,563
1873-1874	21,712	1903-1904	2,163,976
1874-1875	41,192	1904-1905	1,918,665
1875-1876	63,783	1905-1906	1,988,955
1876-1877	324,998	1906-1907	1,988,504
1877-1878	310,456	1907-1908	1,817,737
1878-1879	391,500	1908-1909	1,637,295
1879-1880	486,537	1909-1910	1,698,921
1880-1881	511,711	1910-1911	1,735,189
1881-1882	575,924	1911-1912	1,733,188
1882-1883	697,033	1912-1913	1,639,364
1883-1884	1,182,905	1913-1914	1,520,440
1884-1885	1,319,115	1914-1915	1,442,870
1885-1886	1,402,613	1915-1916	1,962,048
1886-1887	1,608,202	1916-1917	2,073,553
1887-1888	1,963,051	1917-1918	2,411,750
1888-1889	2,050,627	1918-1919	2,823,463
1889-1890	2,206,185	1919-1920	2,252,291
1890-1891	2,680,333	1920-1921	1,836,442
1891-1892	2,667,523	1921-1922	1,701,637
1892-1893	2,469,373	1922-1923	2,108,015
1893-1894	2,181,366	1923-1924	2,111,906
		1924-1925	2,128,368

The method of marketing Iowa cattle was not greatly changed by the new developments in the beef trade. The cattle continued to be sold in Chicago, but instead of being sold to shippers, they were now sold in increasing numbers to packers for killing in Chicago. With the development of Chicago as a killing center, it came to be more than ever the outstanding cattle market of the country.

Meantime, marketing facilities were being developed at points other than Chicago. In the Missouri Valley, stockyards naturally grew up between the range country and the corn belt country at points where railroads or cattle trails converged. As time passed the transportation routes shifted, and the driving of cattle was displaced by the railroads. Some of the small early shipping points became less important. Others, such as Kansas City, St. Joseph, Omaha, and Sioux City grew in importance.

Between 1870 and 1880 the increase in the number of cattle moving to the East from the Southwest caused Kansas City to become an important cattle market. Between 1880 and 1890 this market continued to grow until it handled between a million and a quarter and a million and a half cattle per year, as compared to one hundred and twenty thousand in 1871 and a quarter of a million in 1880. During the same period a stockyard at St. Joseph, which was more of a pork packing town than a cattle market, likewise began to grow but at a much slower rate. In 1884 the Union Stockyards at South Omaha were organized, superseding earlier yards which had not prospered. In 1887 the Sioux City Stockyards were established in response to the growing need of the cattle producing country immediately to the northwest of Iowa.

The development of the live stock markets in the Middle West accompanied and was closely associated with the development of more economical methods in the transportation of live stock and meat. As a result the terminals of cattle marketing may be said to have moved westward and the relative importance of the markets along the Atlantic seaboard decreased greatly.

These developments and the improvements in communication with the country districts tended to make the entire live stock marketing mechanism of the country into something like a unified system. Previously it might be said that each local buying point constituted a separate market in which prices might often be considerably out of line with those in the central markets. Indeed the central markets themselves were but loosely knit together in the earlier days, and the trend toward a unified market characterized the whole period from the late sixties to the present.

In Iowa the local marketing underwent a change in the trade in feeder cattle. The services of the dealers in collecting the feeders from the regions where herds were to be found were dispensed with. The herds disappeared, and the cattlemen could no longer depend on the newer settlements for a full supply of feeders. They now began to go to the Missouri River markets to buy their feeders. The larger stockmen had usually bought up cattle for themselves and had given little business to the dealers previously. Now both the large and the small cattlemen began to do their own buying. Practically the only business left to the dealers was in buying up the small lots of fat cattle and shipping them to market. This continued on a smaller scale until the present time. The decline in the business of the local cattle dealers and in their relative importance as a marketing agency was most rapid between 1890 and 1900.[225]

In the sale of thin cattle to feeders the old and less accurate methods of sale persisted longer than in the handl-

225 Interview with J. Murray of Rock Rapids, and with an old settler at Ida Grove.

ing of the fat stock. As late as 1909 a writer in *The Iowa Homestead* said:[226]

> In every state of the corn belt you will find certain counties or parts of counties devoted wholly to the production of grass, and in these places cattle raising is the chief industry. Steers are kept there until they are three years old, but quite often they are shipped out as yearlings and two year olds. The industry seems to have developed a new species of the human race and you will find more sharp practices engaged in by men who are in that business in one day than you would in a year, circulating among corn belt farmers.
>
> When you go into a so-called cattle country to buy steers, one of the first things that you will go up against will be the fact that the practice of weighing cattle is unheard of. I can take you to counties right in the heart of the corn belt where I believe you could not find a single cattle scales there. Even where the railroads have put in scales at shipping points, these have become useless because they are never used, or they have purposely been put out of business.

As in most business enterprises, the seller felt justified in selling as high as possible, and in taking advantage of unskillful buyers. It is not surprising that there was little weighing of cattle in the sections of the corn belt which produced feeders. The number of cattle sold from a farm each year was small. It would not have been profitable for the farmer to buy scales for weighing these few head, and he had but little use for them other than this. Therefore, there was a strong tendency to "lump off" the cattle, that is, to sell at so much per head rather than by weight. To some extent this practice has continued to the present in some sections. The larger feeders and farmers who produced larger numbers of hogs, or large quantities of grain for sale eventually bought scales so that they could do their buying and selling on a more accurate basis.

[226] *The Iowa Homestead*, December 9, 1909.

ATTEMPTS TO REORGANIZE OR CONTROL THE MARKETS

The organization of coöperative live stock shipping associations began in 1904.[227] The number formed for a few years was small. Only fifty-seven had been organized to the end of 1916, but the number increased to six hundred and ten by the end of 1920. These associations dealt more largely in hogs than in cattle, but even in the sale of cattle, the coöperatives began to displace the dealers to some extent. In most sections where coöperatives were organized, they competed with the dealers without putting them out of business. This was probably as great a service as they could be expected to render. The presence of the coöperatives offered an alternative outlet for live stock and thereby tended to prevent the dealers from taking too wide a margin, or resorting to unfair practices.

The growth of the markets resulted in a specialization of functions among those engaged in handling the stock. In the early years it was not uncommon for the same man to perform the functions of most of the present market personnel. The same man might sell on commission, deal in cattle on his own account, and buy on orders. In more recent years, while it has not been unusual for the same firm to fill some other than their principal function, the commission men confine their activities very largely to selling on commission, the order buyers to that function, and the traders carry on only a minor business in commission sales.[228]

[227] See the article on *Coöperative Livestock Shipping in Iowa in 1920,* by E. G. Nourse and C. W. Hammans, in *Bulletin No. 200* of the Agricultural Experiment Station, Iowa State College of Agriculture and Mechanic Arts.

[228] "I feel satisfied in my own mind that the services of twenty years ago was as efficient, if not more so, than what we are receiving today. In my first experience with the Kansas City markets salesmen took a great deal of trouble in sorting up the cattle so that they could get the best results for the sales; but now if you go to the market with a train load of feeders, what does the commission man do? Does he take the trouble to sort up your cattle and hunt for a country buyer, so as to get the best results? No, he does not. He

The rapid increase in the number of coöperative shipping associations after 1914 gave some leaders in the live stock industry a hope that it might be possible to organize a large part or even the majority of the producers into a single coöperative marketing organization. A committee of fifteen was appointed by the president of the American Farm Bureau Federation on October 8, 1920, at a conference of live stock producers and allied interests. What was hoped or expected to be the final outcome is not altogether apparent. In the back of the heads of many farm organizers of the time there was plainly some idea of influencing or manipulating prices in such a way as to increase the income of the producers. The committee in its report stated that it had found it necessary to consider "coöperative marketing, orderly marketing, live stock production and marketing information, transportation and financing".[229] The National Live Stock Producers Association was organized, at the behest of the Committee of Fifteen, to be the central and controlling agency. Under this agency it was proposed to establish commission associations at the principal markets, to handle the stock shipped to them by the local live

takes the easiest way possible for himself—sells the cattle to a scalper, and the scalper sells them to a countryman, through probably the same commission house which sold them to the scalper. . . .

"What is said here with reference to Kansas City applies with even greater force to Omaha. Experienced shippers and buyers of feeders say that it is almost impossible for the feeder to buy a bunch of feeders at first hands in the Omaha market; they must pass through the hands of one, and sometimes two scalpers, and the commission firm adds a second commission to the total of the scalpers thus raising the price to the buyer twenty to fifty cents per hundred".—*Wallaces' Farmer*, February 9, 1906.

The above is indicative of the growth of more specialized marketing agencies. From the reports of cattle feeders, it also shows an abuse which grew up during the early part of the century. It became common for the commission firms to sell feeders to scalpers or traders, rather than to farmers whom they knew wanted the cattle. The trader then sold to the farmer, making a profit on the transaction by selling as high as he could.

[229] *Report of the Committee of Fifteen*, November 10, 1921, p. 2.

stock shipping associations, which were also to become parts of the coöperative marketing system. Other organizations were planned to buy stockers and feeders for the farmers belonging to the system and to disseminate information. These in brief were the principal features in the coöperative marketing program.

Like most ambitious plans to change the economic organization of an industry, the plan of the Committee of Fifteen was not adopted by the producers as quickly as it was hoped. The shipping associations did not all fall in with the plan. Even had they all acquiesced, the organization would not have represented a very large part of the industry. The next step was to undertake the organization of the projected commission associations, and to foster the growth of the subordinate parts of the system. The result was a slow growth from the central organization downward towards the ranks which took the form of a campaign to organize coöperative commission associations, and to induce those already organized to become parts of the system.

The opinion has frequently been expressed by farmers and others that the prices of cattle were largely controlled by the packers, who have been the principal buyers of stock and have plants in all of the larger live stock markets of the country. From the nature of the business it is evident that the packers could not actually determine the prices of live stock for any considerable period of time. There are too many small independent packers competing with them for the cattle, and the small local butchers constitute a potential competition in case the packers were to combine and to depress live stock prices or raise the price of meat to any appreciable extent. An attempt by the packers to maintain the prices of meats above the level to which live stock had fallen in 1907, actually brought this potential competition into play, as has been related in Chapter VIII.[230]

There is, however, the possibility of the largest buyers influencing the prices of cattle for a short time under favoring conditions. It seems likely that such an influence as that in 1907 may have been brought about without a definite agreement among the packers. Under the conditions existing at the time, the packers, acting individually, would naturally refrain from buying as many cattle or hogs as usual until they had disposed of what stores they had on hand. And it is not to be expected that they would voluntarily reduce the prices and thereby incur a loss on products for which they had paid high prices. It is a legitimate following of self-interest to buy as low and sell as high as it is possible without incurring permanent injuries in trade.[231]

230 *Journal of Political Economy*, Vol. XVI, pp. 97-102.

231 Regarding the possibility of the prices of cattle being influenced by the packers, the following excerpt from an article by William Hill, in the *Journal of Political Economy*, Vol. XIII, pp. 1-12, is interesting and suggests something of the conditions existing in the markets and the packing industry in 1904:

''There are about ten important firms which buy cattle at Chicago for the export trade or for eastern markets. It is not suggested that they act in collusion with the packers. They compete in the market for such cattle as are needed to fill their orders. But after their orders are filled about 80 per cent of the beef cattle coming to the Union Stock Yards remain unsold. Formerly the packers competed with these 'order buyers' for cattle. Then by so manipulating things that most of the cattle were received on Monday and Wednesday of each week, making practically a two-day market, it was possible for the packers to keep out of the bidding till the 'order buyers' had filled their orders, and secure what remained at reduced prices. Frequently prices would drop twenty to thirty cents as soon as the orders were filled and the market left to the packers. Since the strike a serious attempt has been made to spread the receipts over the week, and a five-day market has been resumed. But the salesmen in the yards maintain that the packers still keep out of the market till the outside orders are filled, and that the buyers for Armour, Swift, Morris, and the National Packing Co. never bid against each other. It is common for buyers for these firms to ask the salesman: 'who is bidding on these cattle?' An outsider's bid will sometimes be raised, In 1917 the control of the government over the packers and dealers in meats had considerable influence on the cattle business. The limitation of the packers' profits to nine per cent of the capital employed and to two and one-half cents on the dollar of sales was intended to stabilize the price of meat.[232] The meatless days, and other attempts to induce the people to economize on meats, undoubtedly prevented the prices from rising as high as they would otherwise have done.

In 1921 the agitation for market regulation culminated in the passing of the Packers and Stockyards Act by Congress. The law emerged in a form which had little immediate effect on the trade. The packers, who are dealt with under Title II, were not prohibited from any act not

but if told that the bid is by one of the combine, the reply is: 'Better sell them.' The buyers for the four firms in the combine seem to agree with mathematical accuracy on the value of any drove of cattle. At least their bids are remarkably similar. A few years ago there was greater difference in their estimates of the value of cattle. Perhaps greater experience has rendered them more skillful in estimating values. Perhaps the conferences which the buyers not infrequently hold as they ride through the alleys looking at the cattle affect the conclusions reached. Possibly the fact that three of the most important representatives from each of the big firms—Armour, Swift, and Morris—meet together frequently as directors of the National Packing Co., discuss the trade situation, and determine upon prices and policy for this firm which they own jointly, may explain the harmony of action by representatives of the three firms. Whatever be the explanation, there seems to be no doubt, among those best informed, that the great difficulties in the way of monopolizing this industry have been overcome, and that the big packers are working in harmony''.

The foregoing is illustrative of the general opinion at the time it was written concerning the packers and their control over prices and markets. That they may have attempted to manipulate the markets and control prices at various times does not seem improbable. That their position in the business permitted them the profit by market movements as in the fall of 1907, or at least to avoid much of the loss which fell to live stock producers and other classes seems quite likely. But it should be remembered that ''working in harmony'', and monopolizing the business and controlling prices are very different things.

232 *War Industries Board Price Bulletin*, No. 20, p. 12.

already prohibited under the earlier laws aimed at trusts and monopolies. Attempts to manipulate or control prices, or to create a monopoly or restrain commerce were made unlawful, as they were in the Sherman Anti-Trust Act and later acts on the same subject.

The new feature of the act of 1921 was that it set up a machine for constant use for the enforcement of the law. The administration of the act was lodged with the Secretary of Agriculture who was authorized to promulgate such rules and regulations as necessary. The Secretary was given access to the accounts of persons coming under the law, and was authorized to prescribe the form in which they should be kept.

The purpose of the act was to maintain a constant supervision over the meat industry, instead of waiting for abuses to grow up before anything was done to improve matters. The "Packers and Stockyards Administration" was organized by the Secretary to administer the law and was placed under an assistant to the Secretary of Agriculture. A force of accountants, live stock market supervisors, and special investigators served to maintain a vigilance over the practices of the stockyards and packers. When practices prohibited by the law are discovered the Secretary issues an order to desist. If it is disregarded, prosecution is begun, followed by a fine or the imprisonment of the offending parties.[233]

In the development of the live stock marketing system some abuses inevitably grew up. Others were suspected without there being satisfactory proof of their existence. The result was a constant agitation among some producers against the marketing agencies and the packers, and an

[233] See, for example, an article on *Legislation for the Farmers, Packers and Grain Exchanges*, by G. O. Virtue, in *The Quarterly Journal of Economics*, Vol. XXXVII, pp. 687-704.

occasional prosecution. The development of the markets had, in the main, been a normal and natural one bringing into existence an institution which served its purpose well. The government regulation as imposed by the Packers and Stockyards Act of 1921 instead of embarrassing the marketing mechanism, as some of its more rabid opponents seemed to desire, promised to minimize the abuses and to remove the grounds for complaint.

THE PRESENT MARKETING MECHANISM

The mechanism which transfers cattle from the grower to the packing plant may be divided into two parts, exclusive of the transportation system. The first part has to do with the assembling of the stock at the shipping points in the country. The second has to do with the actual selling in the markets. The first function is filled by the local dealers, the coöperative shipping associations, and the larger cattle feeders or producers who are able to ship for themselves. The local buyers, many of whom are farmers themselves, buy from farmers and ship when they get a carload. The price received by the farmer is a result of bargaining with the dealer. The dealers not infrequently buy cattle at so much per head, depending on their greater experience in judging the weight and qualities of cattle to enable them to get the better of the bargain. The pay of the dealer consists in whatever increment in price he can get over that paid the farmer.

The coöperative shipping association acts as the agent of the farmer. It performs essentially the same function as the local dealer and frequently some others which the local dealer is not able to do. It facilitates combination by a number of farmers of their small lots of stock. These are shipped together by the coöperative association, but a separate account is kept of the sales of each lot. The expenses are prorated over the shipments and are deducted from the proceeds of the sales.[234]

The coöperatives also generally keep their members in somewhat closer touch with the market and its requirements than do the local dealers who are acting primarily in their own interests and only incidentally in those of the producers. One of the ideals of the development of coöperatives is that they should keep the producers in close touch with the markets and help them foresee the consumers wants in advance of the sale of their products. This means that the coöperatives should help the producers plan their production programs, and then to direct the marketing process in a rational and systematic way, to obtain the maximum advantage from production. In a few commodities this development has advanced a considerable way, but it must be confessed that with a few exceptions it is still an ideal rather than an accomplishment in marketing live stock.

When the cattle arrive at the markets they are ordinarily sold through commission men. They act as agents of the shippers and are obliged to sell for as high a price as they can obtain. The expenses such as freight, feed, and terminal charges are deducted by the commission man from the proceeds and the balance is forwarded to the shipper. By the use of the facilities of the shipping associations and of the commission men, the farmer obtains greater convenience and skill than he himself could furnish in getting the stock to the market and in getting the highest price possible.

The commission man may sell the cattle to the buyers of the packing companies, or to buyers who represent dealers or wholesale butchers in eastern cities, or to exporters. In

[234] See an article on *Coöperative Livestock Shipping in Iowa in 1920*, by E. S. Nourse and C. W. Hammans, in *Bulletin No. 200* of the Agricultural Experiment Station, Iowa State College of Agriculture and Mechanic Arts.

the case of stockers or feeders, the buyer is usually either a cattle feeder or else a trader or speculator who intends to sell to a feeder. These traders or scalpers fill much the same function in the cattle market as the speculators do in the grain pit. They have a steadying influence on the market. If they see a lot of cattle that can be bought at what they consider a low price, they buy and hold till the next day in order to find a buyer. Some scalpers even send trainloads of feeders into cattle feeding sections to be auctioned off. The potential demand of the traders thus helps to stabilize the prices of cattle as between days when the supply on the market is greater or smaller than usual.

The function of the central live stock market is to provide a place where the cattle can be exhibited for sale, and where the packers or other buyers can obtain the stock they need. In other words the market provides a place in which the men who have produced or who have control of various parts of the supply of cattle can meet the representatives of various demands for cattle. The attendants, pens, and other facilities provided by the corporation owning the stockyards are intended to reduce the effort and expense in getting the cattle from the producer to the consumer.

The live stock exchanges are organizations of the firms engaged in the handling of stock as it passes through the yards. It is the function of these organizations to formulate rules to standardize methods of procedure in the market and prevent dishonest practices which would interfere with the prosecution of the business, increase the marketing expense, and put the particular market at a disadvantage by giving it a bad name with shippers or buyers.

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