

ECONOMIC HISTORY OF THE PRODUCTION OF BEEF CATTLE IN IOWA

[This is the first installment of an article on the economic history of beef production in Iowa, by John A. Hopkins, Jr. The article will be continued in the April number.—THE EDITOR]

The following study attempts to trace the development of the production of beef cattle in Iowa. The beef enterprise is one which has been present in Iowa since the State was first settled. Since that time it has undergone a marked change, the greater part of which may be attributed to economic conditions.

Early in the study it became evident that the beef enterprise could not be considered independently. Neither could it be confined to Iowa alone. The development of the beef enterprise in Iowa has been one phase of cattle production in the nation and, therefore, some attention must be given to the development of the industry. Without this background it would be practically impossible to understand many of the developments in the area under consideration. Consequently an attempt has been made to follow the migration of the industry across the country toward the middle west until it reached Iowa. In this migration many of the underlying economic forces appeared which were later to shape its development. The importance of beef cattle in the settlement of a new territory may be expected to appear here, as may the forces which caused the decline of the grazing of herds on the prairie and the planting of the land in crops, part of which were fed to cattle which were raised under more intensive methods or in other localities.

Not only is it necessary in a study such as the present one

to orient the industry in Iowa by observing the stage of development which it had reached in the rest of the country, and to observe developments in other States as the industry grew in Iowa, but it is also necessary to keep in mind constantly the place in the farm business which this enterprise fills. In the first stage of development there was a screen of cattle drifting across the prairie behind the trapper and ahead of the plow. It is possible to study these herds without much regard to other farm enterprises. But this stage passed quickly, and thereafter, the cattle occupied a more or less definite place in the organization of a business which combined a number of other enterprises, all of which shared jointly in the use of the land, labor, and equipment of the farmer. Considerable attention must also be given to various crops used as feed for the cattle. The cattle must be considered, too, as providing a use for some of the farmer's time during slack seasons when he has a choice of getting a small return from his labor from the care of cattle, or of getting no return at all. These complementary and supplementary relationships afford a very different sort of an enterprise to consider than would be the case if cattle were produced alone, and apart from all other products.

The central problem of the farmer is to get the greatest possible total return from the resources at his command. The most profitable use of each of his resources will be determined by his circumstances. The factors of production, the prices of different commodities which he could produce, his facilities for getting his product to market, and other things must be taken into consideration. When there was a large supply of free or cheap land, with a scarcity of labor and capital, the early settler turned to the grazing of cattle on the prairies. But as his economic environment changed and the supply of labor and capital

grew, as did the consuming population, he found that other types of production became more profitable. Other types of cattle were found to return a greater income. New methods of producing feeds became imperative, and he was forced to modify his whole scheme of production to be able to compete with other producers of beef or similar products.

It is apparent that the development of the beef cattle business depended to some degree on other industries outside of the farm business as well as on other enterprises within it. The building of railroads into Iowa changed the cattle producing business quite materially, partly by providing cheaper and better transportation for the cattle and partly by making it possible to ship out of the State some bulky products which in earlier years had been fed to cattle. The transportation system is quite important to the present day Iowa cattle feeder, whose business is fattening cattle that have been raised on the western ranges. The growth of the system by which the cattle producer is financed, and the development of the live stock marketing system have also had large parts in shaping the evolution of the cattle enterprise.

An attempt was made by the author to examine the principal publications, both books and periodicals, which had a bearing on the development of cattle production in Iowa and in other sections as well. Much of this material was found to relate to the problem at hand only indirectly or in an indefinite way. Valuable but scattered bits of information were secured from agricultural publications and from the reports of agricultural societies. There were a few books, such as *The American Livestock and Meat Industry*, by R. A. Clemen, and Professor J. W. Thompson's manuscript on "A History of Stock Raising in America", which furnished valuable data. But little of this bore directly on the development of the industry in Iowa. Therefore, it was

necessary to interview a large number of old settlers and farmers who had been in the business in the State for a long period of time, as well as cattle dealers, bankers, commission men, and others. The information secured in these interviews was more descriptive than that found in most of the published works, and furnished more definite information as to the rate of settlement, the dates of the adoption of improved practices or new crops, and the function which the cattle enterprise filled in the farm organization at different stages of development.

I

ANTECEDENTS OF BEEF PRODUCTION IN IOWA

A study of the beef growing industry of Iowa can not be confined altogether to the limits of the State. Even in its earliest days the industry was forced to conform to the demand of the markets, which were well beyond the State boundaries. In later years the business of feeding cattle depended for its thin stock largely on the range country to the west. Therefore, a study of the industry, even at any one time, will be incomplete and will not give an adequate understanding of the problem unless some attention is given to phases of the industry which lie outside of Iowa.

It should be the aim of a study in economic history to give as complete an understanding as possible of the forces which modify the business under consideration. This can not be done for the beef cattle enterprise if the study is confined strictly to the period during which cattle have been raised in Iowa. Most of the practices found in Iowa were transplanted from older sections of the country farther to the east. It is necessary to regard the history of this farm enterprise in Iowa as a section of a larger and broader development which began in the earliest colonies of America, continuing to the present day without breaking off or start-

ing anew. There was a constant modification by contemporary events which accelerated or retarded the operation of forces already present in the economic organization of the time, but very seldom added an influence altogether new.

Professor James Westfall Thompson has expressed this aspect of the agricultural history of the United States in his "A History of Stock Raising in America"¹ as follows:

A regular sequence of industry, beginning with the hunter, followed by the cattle-raiser and finally by the settled farmer is observable in the historical evolution of this frontier. Each epoch of the frontier's expansion is characterized by this "common sequence of frontier types, fur-trader, cattle-raising, pioneer, small primitive farmer."

This "common sequence" may be traced right across the continent, as we shall see. The cow country of each period is always just behind the hunter and the trapper, and ahead of the permanent settler. By 1800 it was west of the Alleghanies, in Ohio and Kentucky. In 1860 it was in Illinois and Missouri. In the '80's the cow country was on the Great Plains.

But wherever the frontier line has been, cattle-raising has always been the dominant industry of the frontier. The cow-pens and cow-drivers of the eighteenth century were the ranches and the cowboys of the nineteenth century.

"A perpetually receding frontier of barbarism" wrote the late John Fiske, was to be one of the most profoundly and variously significant factors in the life of English-speaking Americans until the census of 1890 should announce that such a frontier could no longer be definitely located.

CATTLE RAISING IN EARLY MASSACHUSETTS

In early Massachusetts cattle were of great importance economically, and of great significance historically. Cattle were the most important live stock and the basis of much

¹Thompson's "A History of Stock Raising in America", Ch. IV, p. 29. This is an unpublished manuscript in the possession of the United States Department of Agriculture, Washington, D. C.

of the wealth of the colony even before the middle of the seventeenth century. There was good pasture waiting to be used when the Pilgrims arrived, and they and others who came after them went about stocking the country with cattle shipped from England or raised from earlier shipments, mostly of course from the latter. Live stock multiplied rapidly in the early settlements and it was not many decades until the pasture in the immediate neighborhood of the towns was insufficient for the maintenance of the rapidly growing herds. Short pasturage and increasing herds ranked with religious and civil dissension as a cause for the scattering of the settlers in small towns and for their migration to new sections, as from Massachusetts to the Connecticut Valley or to inland sections.

It is also noteworthy that a great many of the clashes with the Indians in colonial days were precipitated by the presence of cattle. The Indians were hunters and had no great objection to eating beef occasionally instead of venison. Furthermore it was not unusual for stray cattle to wander into the Indian's cornfields which were not fenced. Like his white successor in the land, the Indian objected strenuously to having his corn trampled and not infrequently retaliated by killing the offending cattle. The older Iowans who remember the period in Iowa prior to the passing of the fence laws will appreciate the difficulty of keeping peace between the owner of cattle running at large and the owner of an unfenced cornfield.

Not many cattle, however, were permitted to run at large in early New England. As early as 1633 cattle were tended in town herds, much as in Iowa more than two centuries later, in order that the cattle might not stray off too far and be lost. The common pastures played an important part in the economy of early New England, but as the herds grew and the commons became overstocked, it was necessary to

send the cattle farther from the town for pasture. They were usually collected in the morning by a herder who was paid by the owners. The herd was usually returned in the evening in order that the cows might be milked. There was sometimes a second herd of dry cows and other non-milking stock. This herd was usually pastured at a greater distance from town than the milking cattle, often being kept out from spring until the end of the pasture season in the fall. William B. Weeden in his *Economic and Social History of New England* describes this situation as follows:

By embodying in one communal herd the cattle of many owners, the best care was obtained with the least effort. Labor was scarce in the widening estates of the proprietors and in the growing towns. In some cases, as at Cambridge, the cattle were brought into the village twice in twenty-four hours to be milked, and were pastured out day and night. Generally the cattle were in the home lot at night or in a common cow-house, safe from beasts of prey.

The Cambridge arrangement is typical of the customs prevailing in 1635, as well as at later periods. Richard Rice was to keep 100 cows for three months, receiving ten pounds in pay. The town gives him two men to help him the first fourteen days, and one man the next seven days. This was during the primary schooling of the herd, and while the cows were learning good manners. Then that the morals of Richard, the "cowkeep", might not deteriorate in this enforced daily duty, he was to be allowed two sabbaths out of three for worship, the town providing for the herd on those days. He was to pay three pence fine for any night when he failed to bring in all his charge. He could not keep any other cattle without consent of the townsmen.²

The colonists developed a lively trade in barreled beef and pork with the West Indies long before the Revolution. Even prior to this trade, in 1640-1641, the Puritan revolution in England brought distress to the owners of cattle in Massachusetts, and Governor Bradford's vivid description

² Weeden's *Economic and Social History of New England*, Vol. I, p. 64.

of the "fall of cattle, in which most parte of their estats lay,"³ reminds the reader that the depression of 1920-1921 was far from being the first financial disaster to cattlemen.

As the population of New England grew and commerce and industry encroached on agriculture, good land for grazing became scarce in the older sections and cattle raising was driven westward to what was then the frontier. It retired into the newer sections of New Hampshire and Vermont, declining in importance in New England just prior to the Revolution.⁴ Its march to the west had begun.

THE SHENANDOAH VALLEY AND THE PIEDMONT REGION

Before the middle of the eighteenth century the rich pastures of the Shenandoah Valley had become famous as a cattle raising section, the cattle being driven to Philadelphia or Baltimore for disposal.⁵ On the outbreak of the French and Indian wars in 1755 this business was made precarious by frequent Indian raids and developed but little for a couple of decades. By the time of the Revolution it was overshadowed by the development of cattle raising in the Piedmont region to the south. In the foothills of the Appalachians in North and South Carolina and northern Georgia, there was an abundance of grass and in this mild climate cattle multiplied rapidly thus giving ideal conditions for extensive cattle raising. "In a few years after settlement was begun," declares one writer on this subject,

³ Bradford says: "for they fell indeede and that so souddanly, as a cowe that but a month before was worth 20£ fell now to 5£ and would yeeld no more; and a goate that wente at 3£ or 50s would now yeeld but 8 or 10s at most. All men feared a fall of cattle, but it was thought it would be by degrees; and not to be from ye highest pitch at once to ye lowest, as it did, which was greatly to ye damage of many, and ye undoing of some."—Bradford's *History of Plimoth Plantation* (New York, 1908 Edition), p. 356.

⁴ Thompson's "A History of Stock Raising in America", Ch. II.

⁵ Thompson's "A History of Stock Raising in America", Ch. VI.

"cattle and hogs became so abundant that they were allowed to become wild and range through the woods in large droves, no one pretending to know how many he owned".⁶

The extensive cattle raising which developed here about the middle of the eighteenth century bore many of the characteristics which a century later dominated the greater cattle raising industry on the Great Plains. In the Piedmont of Revolutionary days, and somewhat earlier, there were men whose functions were essentially the same as those of the western cowboys in the latter part of the nineteenth century. "Cow pens" or ranches were established, round-ups were held, and cattle were identified by brands and earmarks. Here too was exemplified the sequence in which cattle raising moved completely across the continent. Before cattle grazing became established the section was inhabited only by a few hunters and trappers. Then came the cattle men and most of the hunters disappeared or migrated farther west. Later, as the population increased in the east, it became more profitable to farm the better lying land than to graze it. The more intensive types of cultivation then slowly forced the grazing industry to follow the hunter westward from the Piedmont region.

While the range business was flourishing in the Piedmont, a more advanced form of agriculture had developed in southeastern Pennsylvania. By the time of the Revolution and for a half century thereafter, this locality performed for the cattle raising industry the same function which Iowa and other parts of the "Corn Belt" perform now.⁷ The Piedmont region disposed of its cattle either in

⁶ Schafer's *Sectionalism in South Carolina*, p. 277.

⁷ "The counties around Philadelphia were the paradise of the American farmer and the cattle raiser. Buying lean cattle and fattening was a profitable business and stock farms abounded. Lancaster itself was the largest inland town in the United States".—Thompson's "A History of Stock Raising in America", Ch. VI.

Charleston or in Baltimore and Philadelphia. Since the south raised but little corn and the cattle driven to Charleston were not fattened before killing, the beef sold in that city was said to be "neither fat nor of good taste". But the rich soil of southeastern Pennsylvania produced corn abundantly. Hence the cattle of the Shenandoah Valley and many of those of the Piedmont were fattened by the Pennsylvania farmers before they were sold for slaughter. Lancaster owed much of its early development to the cattle trade and is still a feeder market of considerable note.

The Pennsylvania feeding section, however, did not lose its importance in the cattle industry with the decline of cattle raising in the Shenandoah and Piedmont regions, for as these earlier grazing areas declined their place in the production of grass fed cattle was taken by western Pennsylvania and a little later by Kentucky and Ohio. The droves of cattle arriving in eastern Pennsylvania were still in need of further feeding and finishing before they were put on the Philadelphia and New York markets. Natural conditions favored this as a cattle feeding section. It was near the markets and between the cattle producing and cattle consuming areas. It had splendid pasturage for summer, and an abundance of corn for winter feeding. Last but not least, its inhabitants were industrious Quakers and Germans who were skilled and possessed good judgment in matters pertaining to live stock.

The depletion of the soil was another factor which encouraged cattle feeding in this section. Continuous production of cereals, especially of wheat, after the Revolution and during the Napoleonic wars, proved too heavy a drain on the soil and by 1820 it showed the need of a restoration of its fertility.⁸ The feeding of cattle and the careful use

⁸ Faux's *Memorable Days in America* in Thwaites's *Early Western Travels*, Vol. XI, p. 94.

of manure, together with clover and lime, offered a solution to the soil fertility problem in eastern Pennsylvania during the early part of the nineteenth century, just as it did later in other feeding sections, and as it does today in the "Corn Belt".

KENTUCKY AND OHIO

As cattle raising was declining to the east of the Appalachian Mountains in the Piedmont section, stock farms were on the increase to the west of the mountains in Kentucky. Also streams of immigrants were pouring into Ohio from over the mountains in Pennsylvania, carrying with them the frontier of agriculture. For a time at least this meant the raising of cattle and hogs, which were the most desirable commodities that could walk to market.

The development of stock farming in Kentucky was rapid, and to a large degree was carried on by immigrants from east of the mountains in Virginia. These people brought with them live stock of good blood, especially horses, and a lively interest in the improvement of stock. The result was that Kentucky early became famous as a source, if not of pure-blooded stock, at least of stock of superior breeding to that in surrounding States. As early as 1785 three sons of Matthew Patton of Virginia, in migrating to Kentucky, took with them some half-blooded heifers by an imported Longhorn bull. Other Longhorns were taken to Kentucky later by members of the Patton family and this had considerable influence in the improvement of the cattle of that section.

In 1817 a Colonel Sanders of Kentucky imported from England twelve cattle, several of which were Shorthorns.⁹ In the same year Henry Clay imported four Herefords. These were the first Herefords brought into the United States and for some years Clay's stock farm, "Ashland",

⁹ Thompson's "A History of Stock Raising in America", Ch. IX.

was one of the show places for travellers in Kentucky. The influence of these importations of Shorthorns and Herefords, particularly of the former, on the stock of Kentucky and Ohio was very great. There was very little blooded stock in either State for a long time, but the presence of a few raised the standards of the cattle breeder. Also, the pure-blooded or grade offspring of the imported cattle were used, as far as their numbers permitted, to improve the poorer grade native stock of Ohio and Indiana. The native cattle at this time represented a mixture of all types and descriptions of cattle then known in the United States. Prior to the British occupation of Vincennes and other French outposts in 1763, there were a few "large flocks of black cattle"¹⁰ kept by the French to supply the French garrisons and the small settlements around them. Other nondescript cattle were brought into the Ohio River section by the settlers as they came from Pennsylvania, New England, New York, and other States.

An interesting description of the stream of immigration which had already been flowing westward for some decades was written by Fearon in his *Sketches of America* in 1818.¹¹ During these decades, when pioneers were first dragging their effects over the Appalachians, pioneering was even

¹⁰ Milay's *Topographical Description of the Western Territory of North America*, pp. 28, 29.

¹¹ "Recurring to my old plan of estimation, I passed on my road from Chambersburgh to Pittsburgh, being 153 miles, one hundred and three stage-waggons, drawn by four and six horses proceeding from Philadelphia and Baltimore to Pittsburgh—seventy-nine from Pittsburgh to Baltimore and Philadelphia, sixty-three waggons with families, from the several places following:—twenty from Massachusetts,—ten from the district of Maine, fourteen from Jersey,—thirteen from Connecticut,—two from Maryland,—one from Pennsylvania, one from England,—one from Holland—and one from Ireland; about two hundred persons on horseback,—twenty on foot,—one beggar, one family, with their waggon, returning from Cincinnati, entirely disappointed—a circumstance which, though rare, is by no means as some might suppose, miraculous."—Fearon's *Sketches of America*, p. 196.

more arduous and painful than during the later period which saw the same stream continue through its early deltas of settlement and cross the remaining twenty-five hundred miles to California and Oregon. These earlier pioneers had but little of the valuable experience of predecessors by which to plan their movements. There were then no railroads to take them part way. Roads were unimproved and often nearly impassable. The settlers had not yet developed even such crude facilities for transporting themselves and their effects as had come into use when Iowa was settled a third of a century later. The Conestoga wagon, heavy and awkward as it was, was better adapted to the journey of the settlers than the makeshift outfits which most of them were using. At this time the Conestoga wagon was being used in freighting from Pittsburgh to Philadelphia but judging from Fearon's description, had not come into general use among the settlers.

In the last few years of the eighteenth century, cattle raising came to be one of the most important if not the most important enterprise in Western Pennsylvania and Ohio. Prior to this there had been a danger from Indian raids which was removed in the battle of Fallen Timber in 1794. There had also been a competing market for corn by its conversion into whisky. A bushel of corn in Philadelphia was worth as much as three or four in Ohio or western Pennsylvania, and yet the intervening mountains and the distance offered an effective barrier to its profitable transportation. Therefore it was profitable either to feed the corn to cattle, which could walk to market, or to manufacture it into whisky, which being of small volume and high specific value, could be hauled to market with profit. The Whisky Rebellion ended this trade. The volume of illicit distilling at that time is of course unknown, but it was certainly smaller than the trade in cattle. Thereafter cattle

increased in importance as a means of transporting corn eastward.

"At least as early as 1802", writes Thompson, "Kentucky and Ohio cattle raisers began to drive cattle to Philadelphia and Baltimore."¹² But the trade did not become very large for at least a decade thereafter.

The trade gradually increased, but not rapidly, until some years after the close of the War of 1812 when the failure of wheat to command cash gave a great impetus to the raising and feeding of cattle and hogs. Although the selling price of such stock was very low, they were the only remaining cash articles of the farmer, and the cost of production was not very carefully considered. There was no alternative, as he was obliged to have some money wherewith to procure the necessities of life and to pay taxes. The business continued to increase rapidly until about the year 1850.¹³

In 1817, a drover named Drenning took 200 cattle from Chillicothe, Ohio, to New York.¹⁴ These were said to be the first Ohio cattle driven to that market. This trade increased as cattle feeding became more general in Ohio.

¹² Thompson's "A History of Stock Raising in America", Ch. VI.

¹³ *Eighth Census of the United States* (Agriculture), 1860, p. cxxx.

¹⁴ "The high prices of all kinds of provisions, and more especially that of cattle, was the cause of introducing cattle from Ohio. The first drove was brought on here (to New York) in the month of June, 1817, by a drover named 'Drenning'. The 'Press' gives us the following account: 'They appear as fresh as if just taken off one of our Long Island farms. When it is recollected that they have been driven nearly one thousand miles, this fact will be considered a very remarkable one. Several of our leading butchers have made an offer of *twelve dollars* a hundred for the beef of this drove; but it is supposed *twelve dollars and a half* will purchase them. Mr. Drenning started from Chillicothe, Ohio, with about 200 in the drove, driving them very slowly, and only a few miles per day; he arrived here with more than 100, having sold many of them on the way'. The 'old butchers' recollect them, and say they looked well, having been strongly fed on whole corn daily from the time they started.'"—DeVoe's *The Market Book*, Vol. I, p. 411.

It is of great interest to notice that the methods of feeding cattle in the Scioto River section of Ohio in the first quarter of the nineteenth century were very similar to those used much more recently in Iowa, where in the last quarter of the nineteenth century, cattle were often fed fodder on the ground. In the volume on "Agriculture" in the *Eighth Census of the United States*, 1860, this system of feeding, which was simply the easiest way of getting the cattle and corn together, was traced back to the practice prevailing at an earlier date in Virginia. An extract from this article follows:¹⁵

The large bodies of rich bottom-land lying on the borders of the tributary streams of the Ohio were not adapted to wheat-culture, and on the Scioto river much of the land was owned by immigrants from the south branch of the Potomac river, Virginia, where the feeding of cattle had been carried on for many years in a manner peculiar to that locality, and which materially differed from the mode practiced in Pennsylvania or further north. The cattle were not housed nor sheltered, but simply fed twice a day in open lots of ten or more acres each, with unhusked corn with the fodder, and followed by hogs to clean up the neglected grains and ears; which practice was adopted here and is still (written in 1860) the almost universal method throughout the west, having undergone but little or no material change in fifty years.

The above example may be considered as one of the earliest stages in the development of present feeding methods.

There were two grades of cattle driven to the east from Ohio during these early years. Fat four-year-olds were driven slowly for sale in the eastern markets. The second type, three-year-olds, were taken off grass and driven eastward to the Lancaster feeding area where they were sold to farmers for fattening.

Between 1820 and 1830 the Ohio cattle raising section began to undergo the same type of change as that which

¹⁵ *Eighth Census of the United States* (Agriculture), 1860, p. cxxx.

earlier had made eastern Pennsylvania into a cattle feeding instead of a cattle raising section. Immigration pushed on through Ohio and into Indiana and Illinois. The population in Ohio became less sparse, and cattle increased on the prairies to the west. It became evident in Ohio that cattle could be bought more cheaply from the prairies which lay to the west than they could be raised at home. Furthermore the Illinois and Indiana cattle raisers had an abundance of grass but a shortage of corn which was plentiful in Ohio, where the settlers were finding it more profitable to cultivate corn than to make a more extensive use of the land by grazing it. Therefore cattle began to come into Ohio to be finished on corn as they had come into Pennsylvania for a half century.

CATTLE RAISING IN ILLINOIS

Cattle raising did not develop in Indiana to as great an extent as in either Ohio or Illinois. The pasture was not so good and the early population had a reputation for lawlessness which discouraged stock raising. Moreover, its distance from the eastern markets had something of a deterrent effect on the raising of fat cattle. But in Illinois, with good pasture and a population which seems to have been more predisposed to stock raising, cattle were soon abundant and were allowed to roam more or less unrestrained on the prairies, identified by the owner's brand. Large herds were reported on the Illinois prairies by Fearon and others as early as 1818.

The cattle in early Illinois, like those in Ohio, were intended ultimately for the Philadelphia and Baltimore markets. But because of the scarcity of corn to fatten them and the great distance to market, driving cattle from Illinois to the eastern markets proved rather unsatisfactory¹⁶ and

¹⁶*Eighth Census of the United States* (Agriculture), 1860, p. cxxxi.

they were driven to Ohio to be fattened instead. From Ohio they were later driven the rest of the way to market.

The importance of the Ohio feeding section continued until about 1850. In fact, it seems to have grown in importance as the grazing industry pushed westward and covered a larger area. It is said that "before 1850 thousands of cattle were raised on the prairies of Illinois, Missouri, and Iowa each year and sold to drovers who took them to Ohio to fatten for the eastern markets."¹⁷ It is probable that not many of these cattle came from west of the Mississippi River, however, but that most of them were raised in Illinois.

The peak of cattle feeding in Ohio was reached and passed sometime between 1840 and 1850. That it did not become an even larger business was due in a large part to the development of a market which competed with that of the east and was as easily accessible to Illinois as to Ohio. This was the market for pork and beef, and even for corn, on the plantations in the South, and accessible by flatboat from points along the Mississippi and Ohio rivers. This river trade was largely responsible for the importance of Cincinnati and St. Louis as packing centers until the change from river to railroad as a means of transportation made Chicago the cross-roads of the nation rather than St. Louis or some other point.

The pioneer period in Illinois was over about 1840. The frontier had moved to Iowa and Wisconsin, and plenty of corn was being raised in Illinois by that time so that farmers could fatten their own cattle. The road to Philadelphia and New York, however, was a long one, and fat cattle shrunk heavily and were expensive to drive through the already thickly populated States which intervened.

But the building of the railroads from the east to the Mis-

¹⁷ Thompson's "A History of Stock Raising in America", Ch. VI.

Mississippi River permitted the fattening of cattle in Illinois and their shipment from there direct to the eastern markets, particularly to New York. Thus Illinois became a cattle feeding State and was able to finish its cattle for market as well as to buy others from the west and southwest to fatten as Ohio had been doing previously. At the same time the population of Ohio, having grown rapidly, was demanding much more beef than formerly for home consumption. Therefore the importance of Ohio as a source of beef for the eastern markets was greatly reduced. The new transportation system, which by affording Illinois a better market for its cattle, had the tendency to raise the price of feeder cattle to the Ohio feeder, thereby reducing the margin between the thin and fat cattle. It also raised the price of corn by making it much cheaper to transport to the east than before. Previously the high cost of hauling had made it practically impossible to ship corn. Felix Renick in the volume on "Agriculture" in the *Census of 1860* not only declared that the shipment of cattle from Ohio to the eastern markets during the previous decade had greatly fallen off, but added:

Though the railroads also facilitated the transportation of fat cattle from Ohio, adding but little to the cost, and saving the drover near or quite one hundred pounds of flesh, on an average, to each animal, yet, by affording quicker and at all time a more certain conveyance for other things as well, particularly the article of whiskey, and the manufacturers of that article being able to pay more for corn than the cattle feeders could possibly afford to do, they more than counterbalanced the advantage derived therefrom to stock-raising. Hence, in localities favorably situated for the sale of corn, the business of feeding it to cattle has become a comparatively unimportant one.¹⁸

Missouri and Iowa now occupied much the same situation in the cattle producing industry as that occupied by Illinois

¹⁸ *Eighth Census of the United States (Agriculture)*, 1860, p. cxxxi.

two decades earlier. The passing of large numbers of settlers toward and into Missouri was reported by Faux as early as 1818,¹⁹ and by Flint about the same time, but few cattle came from west of the river before 1840. But in 1850, or shortly thereafter, Missouri and to a lesser degree southeastern Iowa came to be important as sources of feeder cattle for Illinois and of some grass-fat cattle for market.

A tendency to finish cattle at a younger age was already noticeable, made possible, largely, by improved breeding of the cattle even though most of them were still of a quite inferior type. In 1860 the writer of the article on *Cattle and the Cattle Trade of the West* in the *Census of 1860* bemoaned the tendency of the cattle raisers of the time to "hurry off their *half-fatted* stock to market at the early age of three years, thereby involving an absolute waste of 'raw material', whereas if these same cattle were kept one year longer, and made ripe for the shambles, there would not only be a gain of full one-third in weight, but they would produce a quality of beef not excelled in any country or clime."²⁰

It was in the early fifties that the midwestern cattle men began to become acquainted with Texas cattle and with Texas fever. Cattle had become very plentiful in Texas. Very few up to this time had been used for beef, but most of them only for their hide and tallow. During the early fifties, with the development of the transportation system and of cattle feeding in Illinois, there appeared an opportunity for the driving of these cattle to Illinois to bring them to as high a state of finish as they were capable of taking. Some of the more enterprising Illinois drovers

¹⁹ Faux's *Memorable Days in America* in Thwaites's *Early Western Travels*, Vol. XI, p. 206.

²⁰ *Eighth Census of the United States* (Agriculture), 1860, p. cxxxiii.

who, as a class, were now deprived of their earlier function of transporting cattle to the east, attempted to develop a trade in bringing cattle from Texas to Illinois for sale to feeders.²¹

At first this trade was welcomed by both Texans and the feeders, by the former because it offered an outlet for their cattle at rates which were much above what they had received before, and by the cattle feeders because the drovers could afford to sell the Texan cattle lower than the price of native stock. But an unforeseen obstacle to the trade arose. The native cattle along the route traversed by the Texan stock became sick and died, and the disease was properly blamed on the Texas cattle, although it was a long time before its exact nature was understood. As a result, the opposition of the inhabitants of Missouri and other sections through which the Texas cattle were driven, practically put a stop to the trade, at least for a while. In some Missouri counties the farmers organized for the protection

²¹ In the volume on "Agriculture" in the *Eighth Census of the United States*, 1860, page cxxxiv, Felix Renick wrote of his experience with Texas cattle as follows: "In the winter of 1853-54 I had purchased for use about 1200 head of cattle in the northern part of Texas. . . . These cattle were brought to Illinois in the spring and summer of 1854—the first, I believe, that ever came from Texas, at least in large numbers. This enterprise created quite an excitement in the northern part of Texas and all my correspondents there manifested a strong desire to have this new trade continued . . . as they believed it would result advantageously to all concerned, . . . as they said, and with truth, that they could raise cattle and deliver them in Illinois with satisfactory profits to themselves, for less, by one-half, than they could be raised in that State. . . . but an unforeseen difficulty exploded the whole business within the next two years. It was found that the southern or Spanish cattle were subject to an epidemic or contagious disease somewhat resembling the yellow fever in the human race. . . . So serious was the loss occasioned by each drove of Texas cattle passing through, that the inhabitants of southwestern Missouri held conventions in divers places, and resolved that no more Texas cattle should pass through the country, and, by order of these conventions, armed bands or patrols were appointed, whose duty it was to turn back all Texas droves that might attempt to pass, which they did effectually. Thus ended what at one time seemed a promising trade."

of their cattle from the Texans and turned back herds which attempted to cross, using either persuasion or the force of armed patrols.

The Texan cattle were very inferior in type, even as compared to the low grade natives of Illinois at that time. They could have been fed if bought cheaply enough, but the early experiences in feeding them proved disappointing to most of the feeders. Mr. Renick said:

From the short trial, however, it became evident that from the inferiority of the Texas stock as beef cattle, the trade would not have resulted as satisfactorily as was anticipated; the cattle were very light weighers for their size of frame, with but little room for improvement, and so wild as to be almost unmanageable.²²

Consequently the Texas cattle did not become popular. Native stock, or cattle from Iowa and Missouri, were the principal ones to be finished in Illinois or shipped east up to the beginning of the Civil War, when even the possibility of bringing in others from the southwest was cut off.

II

FORCES INFLUENCING THE IOWA CATTLE INDUSTRY PRIOR TO 1896

Prior to 1896 the story of the beef cattle enterprise in Iowa was largely one of that development which naturally accompanied the settling and bringing under cultivation of a new territory. This settlement in Iowa was by pioneers who entered the State with very little but their intelligence and their ability to work. The capital which they brought with them when they first settled was very meagre and the economic history of each new section reveals an insufficiency of capital for the fullest exploitation of the virgin land. The problem of obtaining capital in the needed

²² *Eighth Census of the United States (Agriculture)*, 1860, p. cxxxiv.

forms was one of the most important with which the new settler had to wrestle for a couple of decades after he came to the new community.

The period of time during which the major part of Iowa was settled was shorter than that required by either Illinois or Ohio. The population of the eastern part of the country having grown greatly since the settlement of the country west of the Appalachians, and immigration from abroad being even more rapid than before, there was an increasing stream of settlers flowing to the west. As Iowa was the next area in the line of march of the settlers, the stages intervening between the first settlements and the attainment of an agriculture of relatively intense cultivation were shorter here than to the east. Even in Iowa with its rapid increase of population it took as long as thirty years for some of the early practices of settlement, as for instance herding cattle on the open prairie, to disappear from the State. It should be remembered, however, that this period marks the duration of the march of settlement and of the first intensification of agriculture across the three hundred miles between the Mississippi and Missouri rivers, and not the duration of the practice in any one section, which was usually not over a dozen years.

In 1840 the population of Iowa was reported by the census to be 43,112. The settled portion of Iowa included eighteen counties in the eastern and southeastern part of the State, covering between one-sixth and one-seventh of its area. In 1850 the population was 192,214, of which 128,712 people lived in the area referred to above. Practically the entire population was included within two tiers of counties to the west and north of the first mentioned area, except that in the south-central part of the State, settlement was well advanced as far west as Polk and Warren counties. The vanguard of settlement had now ad-

vanced over two-fifths of the area of the State, but in all except the southeastern corner, it was still thinly scattered. There were only fourteen counties with a density of population of ten or more per square mile.

From the sparseness of the early population, it might be supposed that practically all of the early attempts at agriculture would be in the direction of grazing stock upon the prairies — that being the most extensive way in which the land could be used. But such was not the case. The settlers were seldom people of sufficient means to own the necessary number of cattle to make a living by grazing. Usually the settler had a yoke of oxen, or a team of horses, and a couple of nondescript cows which were intended as much to furnish milk for the family as to form the foundation stock for a beef herd.²³ Therefore he was forced to apply a considerable part of his labor to the growing of crops such as wheat and corn even though on only a small part of the land available. This situation held true for the small settler for a period of several years until he had obtained more cattle.

Here and there over the later settled parts of the State, there were a few men of greater means than ordinary, who owned herds of as many as one or two hundred cattle which they herded on the prairie in the pasture season, usually fattening the cattle which were ready for sale on corn in the winter, and feeding the others on corn-fodder and hay.

Across the southern part of the State the Mormons had crossed on their way west in 1846. This route, later called the Mormon Trail, was one of the principal roads between the Mississippi River and Council Bluffs before the railroads arrived. There was a shorter trail from Ottumwa to Creston and then west by way of the Mormon Trail which

²³ Interviews with E. L. Beard of Decorah, R. W. Moore of Cedar, C. Brazelton of Leon, and C. F. Noble of Chariton.

was used in the fifties and sixties. Settlement along the Missouri River was well advanced before the country thirty or forty miles east was taken up. Settlers in this section had followed the Missouri River north from Missouri or from its confluence with the Mississippi. Council Bluffs was the principal river crossing between St. Joseph and Sioux City both for the Mormons and for others until twenty or thirty years later. Consequently we find settlement developing in this region at an early date.

In the rich bottom lands along the Missouri River near Council Bluffs and north from there, early settlers found a species of rush growing which was suitable for grazing cattle. Concerning the settlement of the Mormons at Council Bluffs and the value of this forage crop, James Westfall Thompson says:²⁴

The Missouri crossing at Council Bluffs, was so to speak, the division point on the road. Here, in the bottom lands of the great river, over 12,000 Mormons were almost permanently encamped and miles of farm land cultivated. Thousands of cattle were driven across the Missouri, and up into what are now Winona and Harrison Counties, Iowa, to winter on the 'rush bottoms', a now extinct species of reed which remained green all winter and was something like the southern cane as a forage.

In the report of the Patent Office for 1852, J. E. Johnson of Council Bluffs speaks of cattle raising in these "rush bottoms"²⁵ in the following terms:

There is no country within my knowledge better adapted to grazing than this. Upon all the streams large beds of rushes are found, where stock will fatten all winter, only requiring herding. Then in the summer our broad prairies produce an abundance of fine rich grass, which will fatten stock much quicker than tame grasses. The cost, therefore, of rearing is comparatively nothing. The average price at 3 years old will be \$12.00 per head.

²⁴ Thompson's "A History of Stock Raising in America", Ch. VIII, p. 13.

²⁵ *Report of the Commissioner of Patents for the Year 1852*, Part II, p. 341.

Until the outbreak of the Civil War the process of settlement in Iowa continued in a normal fashion. Settlers continued to pour into the State from the east and from the southeast through Missouri. The number of cattle increased as rapidly as the settlers' means and the natural increase of the number already in the State permitted. In the older sections the cattle enterprise was undergoing a change from a means of using the prairie pasture to a means of transporting crops to market, as had been the case in Ohio, Illinois, and other sections which had been settled earlier.

One of the most important influences was the beginning of the railroad system which linked Iowa to the markets of the east. The building of railroads in Iowa was begun in 1855. From that time until the outbreak of the war they were pushed westward into the State as rapidly as possible. As they were extended it became possible to feed cattle to a higher finish since they could then be taken to market more quickly and with a smaller shrinkage than could be done when it was necessary to drive them.

THE PERIOD OF THE CIVIL WAR AND THE READJUSTMENT

In 1861 the various trends influencing agriculture were interrupted by the outbreak of the Civil War. The market, which the mid-western farmer had found for many of his cattle in the South, was cut off. Consequently, there was a decline in the gold price of cattle in Chicago, during the first part of the war, until the wartime demand in the North had attained its full proportions. At the same time the general price level in terms of currency was fluctuating greatly but, in general, was rising rapidly. Agricultural prices stood still or moved down until the middle of 1862, when they began to rise because of the demand for food and supplies for the armies and for the industrial population

which was now engaged in filling the demand for army supplies. The prices of wheat, corn, and hogs started upward in the third quarter of 1862, followed more slowly, and about three months later by cattle.

At the end of the war there was a period of violent fluctuation in the price of cattle, and even more violent in corn and hogs. This lasted until 1868, when the price of cattle began to rise until 1870, and then to decline for a year and a half. Until 1870 the price of cattle was, for the most part, improving in relation to the prices received for corn and hogs.

In general, the effect of the war was to slow down the process of development which had been in progress earlier, and to divert effort, for a while, to the production of commodities needed in carrying on the war. There was a great deal of interest in the production of wool, which previously had been of relatively little importance. Furthermore, during the war the building of railroads was much slowed down, and on most lines in Iowa was stopped altogether, labor being scarce and material high. At the end of the war the process of settlement and internal improvement made up with a rush for the period of retardation. In 1860 the population of Iowa was reported by the census as 674,913. During the war, immigration into the State seems to have been at a slower rate than in the few years just previous, and yet in 1870 the population of the State was 1,194,020, showing that the rush of settlers after the suspension of hostilities must have been very great.

THE BOOM IN SHEEP

During the Civil War there was a diversion of interest from cattle, as a live stock enterprise in the organization of the farm, to sheep. The supply of cotton from the South was cut off by the war. There was, therefore, a greater

demand for wool, even aside from the demand for clothing for the army. Few farmers seem to have considered that the high prices for wool were only temporary and would end as soon as the war was over and the full supply of cotton again became available. The result was a great boom in the raising of sheep. In the *Report of the Iowa State Agricultural Society* for 1862 a writer said: "This branch of husbandry is attracting universal attention in all parts of the State. The lightness of the labor connected with it; the large returns on the capital invested, when properly managed; and the trifling cost at which the product can be marketed, are considerations which commend the pursuit to everyone".²⁶ J. B. Grinnell in an article on *Sheep on the Prairies* in the *Report of the Commissioner of Agriculture* for 1862 was no less optimistic when he said: "The great west waits with impatience the inauguration of the reign of 'the Prince of Wool.'"²⁷

Sheep were bought in eastern States and shipped into Iowa by thousands to each county in which there were farmers to buy them. The *Report of the Iowa State Agricultural Society* for 1864 says that in 1850 the sheep in the State numbered 149,960 and in 1860, 258,228. In 1863 the census returns placed the number of sheep on hand at shearing time at but sixty-two less than six hundred thousand. Estimating the increase at one-fourth and the importation at 150,000, it placed the number at shearing time in 1864, at 900,000.²⁸

At the close of the war, wool was about a dollar per pound. Thereafter, it fell so that for a time it yielded the farmers only one-third to one-fifth of that price. There had also been serious losses from diseases, especially scab,

²⁶ *Report of the Iowa State Agricultural Society*, 1861-1862, p. 129.

²⁷ *Report of the Commissioner of Agriculture* (United States), 1862, p. 301.

²⁸ *Report of the Iowa State Agricultural Society*, 1864, p. 12.

and from dogs. Lack of experience in handling sheep on the part of many of the farmers who had bought them made the losses greater than they would otherwise have been. As a result the farmers could not get rid of their sheep fast enough to please them. In 1868, less than half of the county societies reporting to the State Agricultural Society make any mention of sheep, although during the war the reports were filled with enthusiasm concerning this class of live stock. Of the thirty reporting on sheep in this year, only six had anything favorable to say about them. The same is true of the reports of the next year, when only two out of twenty-one reports on sheep were optimistic concerning their possibilities in Iowa. Most of the correspondents speak of sheep raising as "subsiding", "abandoned", "unprofitable", and the like.²⁹

The great interest in sheep during the war explains some of the lack of interest in cattle. It was thought that sheep would, to a considerable degree, replace cattle in the rural economy of the State. The collapse in the sheep boom was likewise responsible for a part of the boom in cattle which followed the war. It was then realized that sheep were to play a minor part. Cattle were selling at good prices and promised to be profitable. Therefore an attempt was made to replace the flocks of sheep with cattle.

THE RESUMPTION OF THE EARLIER TRENDS

The war had produced violent fluctuations in the production and prices of farm products, but it had not brought to an end the normal trends previously in evidence. There had, it is true, been some changes in the relative influence and direction of some of these forces, but they were still present and actually in operation.

²⁹ *Report of the Iowa State Agricultural Society*, 1868, p. 17, 1869, pp. 12-14.

The invention and adoption of improved machinery and implements on the farm caused profound changes in agricultural production. And yet, the essential principle of the reaper, for instance, had been invented thirty years before the period under consideration. The new feature was the influence of the war, which by making man power on the farms scarce, gave a stimulus to the adoption of farm machinery and encouraged further improvements. With the release of the man power that had been taken by the war, the improved machinery accelerated settlement on the prairies. The result was cheap grain and a great deal of it, and consequently a large increase in the production of beef and pork on grain instead of pasture in many sections of Iowa as well as elsewhere.

Immediately after the war there was a short period of depression, followed by rising prices (in gold) of corn, cattle, and hogs until 1870. In the *Prairie Farmer* of March 31, 1866, it was said:

Farm products have been the first to feel the reaction that follows the closing up of the war and the gradual fall in the price of gold. But there is a general stagnation in the business of our cities both east and west, and a general uneasiness that proclaims that not to the products of the farm is the decline to be confined. There is a general impression that the end of the fictitious basis on which trade has been conducted for many months, is very near.

However, there was a recovery shortly after this date and the production of cattle was stimulated for several years.

Rapid settlement and the use of improved machinery resulted in the increased production of grain. In Iowa in 1866 there were one and two-thirds millions of acres of corn. In 1872 this had increased to two and a half millions. The situation was well summed up in the report of the Chicago Board of Trade for 1872, as follows:

The largely-increased production of corn for the past three

years has greatly accelerated stock-raising, and our receipts of both cattle and hogs have been largely in excess of any former year. Indeed, the low price of corn at the seaboard and the high rates of transportation thither, have left no alternative for the remote producer but the conversion of his crop into beef and pork.

THE PROGRESS OF SETTLEMENT

After the close of the Civil War settlement in Iowa continued at a rapid rate, and as a result land became more and more valuable. It is reported that in Wapello and Mahaska counties the best land with improvements was selling for about \$30.00 per acre by 1870.³⁰ In 1877 the report of the Iowa State Agricultural Society says concerning Benton County: "New settlers are composed of men of means, who purchase improved farms at from twenty to thirty-five dollars per acre."³¹

Farther west and in the southern part of the State settlement was more rapid than in most other parts. Into this section two streams of immigrants and of influence were flowing. The main stream came directly west along the old Mormon Trail,³² and later along or by way of the Chicago, Burlington and Quincy Railroad. Another stream of settlers followed the Missouri River to the west and north until it reached Council Bluffs.³³ The stream divided here. Most of it crossed the river and proceeded westward, but some turned to the east or northeast and settled in Iowa. The greater part of this immigration came from Missouri,

³⁰ Interview with R. W. Moore of Cedar.

³¹ *Report of the Iowa State Agricultural Society, 1877*, p. 293.

³² For a map of Mormon trails across southern Iowa see *THE IOWA JOURNAL OF HISTORY AND POLITICS*, Vol. XII, p. 8. The Mormon Trail crossed into Iowa from Nauvoo, Illinois, north of Keokuk. It proceeded westward through Lee, Van Buren, Davis, Appanoose, Wayne, Decatur, Clarke, and Union counties, then turned northward through Adair, Cass, and Pottawattamie counties to the present location of Council Bluffs.

³³ Interview with J. J. Harsh of Creston.

or from Kentucky, southern Illinois, or southern Indiana. It was comprised, for the most part, of settlers of good grade who were interested in live stock improvement, and brought good stock with them. This influx took place in the late sixties and early seventies. At the same time the heavier stream of immigrants was flowing along the Mormon Trail to western Iowa and to sections farther west at a rapid rate. An old settler of Creston recalls that he saw a mile of the trail, not far from his father's house, literally full of the wagons of settlers moving westward.³⁴

The rate of immigration determined to a considerable degree the length of time during which there was to be land available for herding and other extensive uses. The direction of the stream of settlers determined which were to be the sections where herding was to last longest or to die out soonest. The settlement spread out from the early trails, and later from the railroads. The sections nearest the source of immigration were usually the first to be taken. But this was not always true, for settlers often passed through very thinly settled localities in order to get to others where there was reported to be better land or some other advantage.

In many of the sections the first settlements were to be found on land now considered inferior for farming purposes.³⁵ These were usually in the rougher, wooded sections along the streams. Various explanations have been advanced for this. It has been said the chief reason was that many of the settlers were from the rough sections in the eastern part of the country and chose the wooded sections because they resembled those from which they had come. In the earlier years there were some ideas to the effect that the level, open prairies were inferior to the

³⁴ Interview with Joseph M. Wray of Creston.

³⁵ Interviews with Robison Baxter of Ida Grove and Patrick Griffin of Leon.

rougher sections for farming. Each of these rumors probably had some influence, but there were also more substantial reasons. The wooded areas afforded material for building and fencing which was both essential and scarce. They also afforded some protection in the form of a wind-break in winter and shade in summer. The settlers usually tried to locate their buildings near a spring in order to have a supply of water without the labor of digging a well and they settled near streams in order to have water for their stock.

The northwestern part of the State was the last to be taken up. Although there was a settler here and there as early as the Civil War, there was still land available for a few herds until after 1890 in the two northern tiers of counties west of Winnebago. In the southern part of this area there were a great many swamps and shallow lakes. Much of the land was too wet to raise good crops. Consequently, in addition to being farthest from the sources of population it was also the least desirable on which to farm. In the northern and the western tiers of counties there was rough land, much of it gravelly in texture. This also was undesirable as long as there were rich prairies to the south and east which had not been fully taken. A little later, when land began to be tile drained, the old lakes and swamps became the most fertile and productive land in the section, if not in the State.

In the northwestern part of the State, wheat became a much more important crop than in the southern and eastern parts. Late in the seventies in some sections and in the eighties in others, the crops of wheat began to decline. At the same time the farmers here began to discover that good crops of corn could be grown contrary to earlier belief. This section had a relatively slow process of settlement. A large number of settlers had been ruined by the invasions

of the grasshoppers in the sixties and the seventies. But in the nineties by a rapid though late development it came to rank higher than some that had been settled completely a third of a century sooner.

By the middle of the nineties, the entire State had been settled. The frontier had swept beyond the limits of Iowa, and in fact the real frontier was gone from the United States. Before 1895 the three earliest stages of settlement — pioneering, cattle herding, and wheat growing — had passed beyond the Missouri River and into the Dakotas.

Some conception of the relative density of population can be secured from old settlers. Along the Mormon Trail in Union County a settler of 1870 reported that his nearest neighbors were four miles to the east and seven miles to the west.³⁶ There were but few cattle, despite the great abundance of pasturage, because the settlers had not the means to obtain them. At the same time, settlement in Cass County was even more sparse. A settler from Illinois, who took up land six miles west of Atlantic, had no neighbors to the west for fifteen miles. This man was considered particularly well off as regards cattle. He had brought with him about twenty cows, a bull, and three covered wagons full of his implements and effects, drawn by ten or twelve horses.³⁷ This may give some idea of the wealth of the more well to do settlers. Another settler who arrived in Cass County in 1876 found most of the land taken up by that time.

In the northern part of Greene County, a settler of 1881 found but few others in the neighborhood. In Crawford County, the second county east from the Missouri River, settlement was about as far advanced along the main line of the Chicago and Northwestern Railroad as in Greene

³⁶ Interview with Joseph M. Wray of Creston.

³⁷ Interviews with H. W. Fulton and Charles Hunt, both of Atlantic.

County. In a few sections in these counties there was open prairie so that herding lasted until 1889 or 1890.

Buena Vista and Cherokee counties were along the route of the Illinois Central which was opened to Sioux City in 1870. Here again there was a close connection between the building of the railroad and the rate of settlement. The first settlers seem to have arrived in these counties in 1869 and 1870 with the railroad.³⁸ Between the east and west lines of railroads, which were the first opened in Iowa, there were large sections of country which remained unsettled for a considerable period of time. These intervening spaces permitted expansion of settlement, and also pasture for the herds of the older sections. The railroads were used to some extent for the conveyance of settlers into the newer regions, but there were a great many who migrated from older parts of the State and did not travel by way of the railroads. These settled, if they were able, along the railroads in order to have as good communication with the markets and the older sections as possible. The later comers were forced to take less and less advantageous locations.

In Ida County, which was between the Chicago and Northwestern and the Illinois Central lines, settlement did not become very dense until the early eighties. A settler in Ida County in 1876 found the county thinly populated, but reported an influx of settlers within a couple of years which took most of the desirable land.³⁹ But another settler in the county in 1884 said that there was still prairie land to be had until the late eighties.⁴⁰

From 1870 to the end of 1873 cattle declined from approximately \$7.00 per hundred pounds for fat cattle in

³⁸ Interview with George J. Schaler of Storm Lake.

³⁹ Interview with Robison Baxter of Ida Grove.

⁴⁰ Interview with a stock man of Ida Grove.

Chicago to about \$4.50. The decline caused a serious depression in the cattle business. And yet, the decline had, in general, been gradual and the Iowa farmers were not as badly hurt by it as were other industries.⁴¹ In 1874 there was a recovery in cattle prices for about a year. Then there was another decline to about \$4.00 in 1876. After 1876 cattle rose steadily until 1884, except for a recession in 1877-1878.

The prices of hogs, a farm enterprise competing with cattle, in 1874 recovered more rapidly than cattle. Hogs maintained their relative advantage over cattle until 1877. The result was that the farmer's interest in hogs grew while that in cattle declined. It will be observed from the accompanying table that the shipments of cattle out of Iowa fell off after the large run of 1873 until 1878, except for the year 1876. The large run in 1876 was caused by the big corn crop of 1875, which induced heavy feeding.⁴² The receipts of hogs in Chicago began to decline as a result of the lower prices of 1881. This decline would probably have begun a year or two sooner but for the big corn crops from 1878 to 1880. The figures in this table were obtained from the annual reports of the Iowa State Agricultural Society. Figures for 1864, 1874, 1875, and 1885 were incomplete.

⁴¹ "Farmers are in easy circumstances compared with persons in other occupations; the 'hard times' affect them but little, and everywhere there are evidences in the shape of new dwellings, barns, buildings, fences, etc., of steady growth and improvement."—*Report of the Iowa State Agricultural Society*, 1873, p. 382.

⁴² "The immense corn-crop of 1875, far exceeding the demand of the market for this grain, induced northwestern farmers to go extensively into stock-feeding. A sufficient number of hogs could not be obtained for its consumption, and hence cattle-feeding was resorted to for the disposal of the surplus. Hence during the fall months of 1875, a larger number of cattle were got together upon farms dependent upon the Chicago market than ever before known". The result was "the receipt of a very large number of cattle in January, a month in which transactions are usually limited."—*Report of the Commissioner of Agriculture (United States)*, 1876, p. 219.

TABLE I

CATTLE SHIPPED EAST OVER THE PRINCIPAL RAILROADS FROM IOWA			
YEAR	APPROXIMATE NUMBER OF CATTLE	YEAR	APPROXIMATE NUMBER OF CATTLE
1863	68,976	1877	247,794
1864	65,192	1878	354,117
1865	81,999	1879	372,003
1866	78,203	1880	410,139
1867	64,846	1881	548,106
1868	82,841	1882	514,281
1869	90,141	1883	697,149
1870	129,253	1884	588,836
1871	100,184	1885	552,915
1872	200,437	1886	583,121
1873	356,417	1887	568,939
1874	279,365	1888	607,744
1875	270,033	1889	463,206
1876	322,400		

The price of corn, the most important "raw material" entering into the production of beef, rose faster than cattle in 1874, but began to decline, with the increasing size of the corn crops in 1875.⁴³ Considering the relationship which had existed between cattle and corn previously, the corn prices remained low to the end of the period under consideration. The years 1881, 1887, and 1890 should be excepted here, because of small corn crops.

THE RANGE CATTLE BOOM AND ACCOMPANYING PRICE MOVEMENTS

In the meantime, the range cattle business was undergoing a period of rapid expansion. The number of "other cattle" (beef cattle) reported in the United States by the

⁴³ "The proportion of both cattle and hogs sold in this market for feeding purposes has very materially increased within the past few years and noticeably so in 1875".— *Report of the Chicago Board of Trade, 1875.*

Department of Agriculture had increased from approximately twelve to sixteen millions between 1868 and 1871. This number remained practically stationary until 1877, when it increased to eighteen millions. It then continued to increase rapidly until it reached nearly thirty millions in 1885.

The spectacular expansion of the range industry is of considerable interest here because of the influence which it had on cattle raising in Iowa. The Iowa producer of young cattle and feeders was placed at a disadvantage because of the great production of cattle of these classes on the ranges. At the same time the cheap feeders stimulated the development of the business of fattening cattle on the low priced corn referred to above.

The accompanying table showing the receipts and shipments of cattle at Chicago gives a fairly good measure of their production after the position of that market became well established in the early sixties. From 1863 to 1868 the receipts remained practically stationary at a little over 300,000 per year, except for the receipt of 384,000 in 1865. After 1868 the receipts began to increase rapidly, exceeding two-thirds of a million in 1872, and passing the million mark in 1876. Figures for the years 1857-1865 were obtained from the twelfth annual report of the Chicago Board of Trade, those for the years 1866-1896 were found in the *Yearbook of Figures for 1925 of the Chicago Daily Drovers Journal*.

The greatest boom on the ranges began in 1880-1881. In spite of the increasing receipts of cattle at Chicago, as shown in the table below, the increase in population permitted the sale of a somewhat larger number of cattle at a given price level than previously. But, more effective as a cause of the high prices was the prosperous condition of the country and the boom of 1881-1882.

TABLE II

RECEIPTS AND SHIPMENTS OF CATTLE AT CHICAGO 1857-1896					
YEAR	RECEIPTS	SHIPMENTS	YEAR	RECEIPTS	SHIPMENTS
1857	48,524	25,502	1877	1,033,151	703,402
1858	140,534	42,638	1878	1,083,068	699,108
1859	111,694	37,584	1879	1,215,732	726,903
1860	117,101	97,474	1880	1,382,477	886,614
1861	204,579	124,145	1881	1,498,550	938,713
1862	209,655	112,745	1882	1,582,530	921,009
1863	304,448	301,066	1883	1,878,944	966,758
1864	338,840	253,439	1884	1,817,697	791,884
1865	330,301	301,637	1885	1,905,518	744,093
1866	393,007	263,693	1886	1,963,900	704,675
1867	327,524	203,580	1887	2,382,008	791,483
1868	324,514	215,987	1888	2,611,543	968,385
1869	403,102	294,717	1889	3,023,281	1,259,971
1870	532,964	391,709	1890	3,484,280	1,260,309
1871	543,050	401,927	1891	3,250,359	1,066,264
1872	684,075	510,025	1892	3,571,796	1,121,675
1873	761,428	574,181	1893	3,113,406	900,163
1874	843,966	622,929	1894	2,974,363	950,738
1875	920,843	696,534	1895	2,588,558	785,092
1876	1,096,745	797,724	1896	2,600,476	818,326

From 1881 to 1883 there were short corn crops in Iowa. *The Iowa Homestead* of March 24, 1882, said: "The actual scarcity of corn with the opinion prevailing among feeders that the shortage was greater than it probably is, has nearly stopped the feeding of steers for the market. . . . At no time in many years have there been so few cattle feeding in the western States for the late winter and spring market as at present". This, of course, had an effect in raising prices during the early part of 1882. The demand engendered by the boom for stock cattle served to raise prices still higher and gave fresh encouragement to people who were thinking of going into the business, thus adding a greater impetus to the boom.

Glowing pictures were painted of the great profit in the

range cattle business, and of the pleasant life which the cattlemen lived. A large number of these alluring accounts appeared between 1880 and 1882.⁴⁴ Partly as a result of such information so many men went into the business in the few years that followed, that by 1885 the ranges were seriously overstocked and prices of cattle were on the down grade. Very different were the articles on the range business published after 1885. These painted a dark and forlorn picture of an over-expanded business, a hard, rough life, disease among the cattle, and big losses during severe winters and dry summers.⁴⁵ Thereafter, the problem was not to expand, but to put the industry on a sound and permanent basis.

As the boom for a time accelerated its own growth, so the depression which followed became worse as it proceeded. Its acuteness embarrassed a great many of the cattlemen, forcing them to liquidate by disposing of as many cattle as they could.⁴⁶ This added to the size of the runs of cattle at the markets. In 1886 there was a severe drought and a

⁴⁴ See, for example, Grohman on *Cattle Ranches in the Far West*, and Von Richthofen's *Cattle Raising on the Plains* in *The Fortnightly Review*, Vol. XXXIV, pp. 438-457.

⁴⁵ See, for example, Baumann's *On a Western Rancho* in *The Fortnightly Review*, Vol. XLVII, pp. 516-533.

⁴⁶ "The cattle situation in Iowa is now laboring under very great depression, growing out of two distinct causes. One, that of the drought, being immediate, the other . . . is the natural result of their undue inflation in 1882, '83, and '84. Then capitalists all over the Nation saw immense profits in ranches. Iowa and all of the adjoining and far eastern states were called upon for female cattle which were carried out to the ranges in immense numbers, resulting in an inflated market in the states which carried up all classes of cattle with it. With the last two years the general markets have received the increase of these range cattle, and the result has been great depression in prices, intensified by the depressed condition of the manufacturing and commercial interests. The last year has been a disastrous one to many of the ranchmen, great numbers of whom have gone into bankruptcy, and the closing up of their estates demand the immediate marketing of every steer that is at all in condition."—*The Iowa Homestead*, July 29, 1887.

short corn crop followed by another in 1887. In 1888 the corn crop was big and there followed the feeding and marketing of some of the cattle which had been held over.

Together with the increased natural output of the business, the continued liquidation caused the receipts of cattle at Chicago to continue to increase until 1892. The average monthly price of steers weighing from 1200 to 1500 pounds at Chicago declined from over \$7.00 in 1882 to less than \$4.00 in 1887, then recovered in 1888 to about \$5.50. By March, 1889, the price had declined to \$3.65. In the spring of 1891 there was another brief recovery followed by a heavy supply in the fall of that year, and the heavy run of 1892, which carried prices down to the neighborhood of \$4.00 per hundred pounds. The business had not been contracting in size during these years of low prices because, though cattle were low, corn had been relatively even lower. Since hogs had not been high enough to divert attention away from cattle until after 1890 the best that the farmers could do was to continue to raise cattle to consume the increasing crops of corn.

The cattle business in 1892 had again almost reached the limit to which it could expand, and yet the heavy run of cattle in the markets in 1892 had been followed by rising instead of falling prices. The revival in prices in 1892-1893, however, did not last long. In June the effect of the business depression began to be felt. In the fall of 1893, for instance, five cattle feeders of Sioux County went to Sioux City to buy cattle. Feeder cattle were available at low prices, but of the group of five farmers, only one had any actual money with him. The others expected to borrow the price of the cattle, as they had been doing in the past. But there was no money to borrow, and only the man with the ready cash returned with any cattle to feed.⁴⁷

⁴⁷ Interview with an old settler at Ireton.

In the summer of 1894 there was a general and severe drought which dried up the pastures and greatly reduced the corn crop in Iowa and surrounding States. The result was that still more cattle were forced on the market. The over expansion of the early nineties made a liquidation inevitable. It was started by the depression of 1893, and continued by the drought of 1894. Nevertheless the number of beef cattle in the country continued to grow. From forty million head on June 1, 1890, the census records an increase to fifty million on the same date in 1900. In Iowa the number increased from three to three and three-quarters millions, or the same rate of increase as that for the country as a whole.

THE COMING OF THE WESTERN FEEDERS

With the expansion of the business of producing cattle in the country west of the Missouri River, the beef producing business in Iowa underwent a change similar to that which had occurred earlier in Ohio and Illinois. From a producer of cattle from calthood up, Iowa became, in a large degree, a finisher of cattle raised elsewhere. The small cost for pasture in the production of cattle on the ranges gave the western cattle producing country an advantage over Iowa in the growing of young cattle which slowly forced the raising of feeder stock in the State into a subordinate position. On the other hand the advantage which Iowa possessed in the finishing of cattle for market because of the crops of corn which its rich, black soil could raise, and its position between the range country and the consuming sections of the East provided the essential conditions for a feeding section. Therefore, Iowa, like southeastern Pennsylvania three quarters of a century before, became more highly specialized in the production of beef. Although the growing of cattle from calthood continued it was in a less

important degree than before. Before the beginning of the twentieth century, it was recognized that the function of the ranges was to produce cattle fattened on grass alone, or else to produce thin cattle. The function of Iowa was to produce cattle on rough land or on by-products of crops, and to put the finish on the thin cattle from the ranges.

The Texas longhorns were the first to be brought into Iowa for feeding and finishing. These cattle are remembered rather vividly by persons who saw them. With their long horns, long legs, and wild dispositions they were not easily forgotten. But, despite their picturesque character they were not of very great importance so far as relative numbers were concerned. Only scattering herds of them found their way into Iowa. Much greater numbers of cattle were being raised in the State, and within a decade after the Texans began to be fed their places were taken by larger numbers of cattle from the west. The Texans were not satisfactory feeders and old settlers have said that they seldom knew of a farmer feeding the longhorns for a second year. They were too wild to be handled except on horseback, and they were wholly unacquainted with corn. Even when they had become somewhat tamer and acquainted with corn they did not usually put on weight nearly as well as native stock. Their significance lies in the fact that they formed a picturesque vanguard for the large numbers of range cattle which were later to be brought into Iowa on their way to market for further finishing. Texas being the first range country developed, it was to be expected that the cheaper cattle raised there would be the first from outside of the State to be fed by the Iowa corn producer.

During the eighties thin cattle from other regions than Texas began to be shipped into Iowa for feeding, and before the middle of the nineties the feeding business was well under way. It should be observed that this shipping

in of cattle from the cheaper pastures of the ranges was not a new and unusual development. It was the same change as had occurred earlier in more eastern feeding sections. Farmers realized that they could buy feeder cattle more cheaply than they could raise them. Therefore, the number of cattle raised declined and the number purchased increased. At first the thin cattle purchased were ones that had been raised on cheaper pastures in more thinly settled sections of Iowa. As the frontier moved westward past the boundaries of Iowa the feeder cattle continued to be sold from the new frontier to the older sections in that State.

Although this change was undramatic, it involved a development which was highly significant in the history of cattle production in the United States. The migration of the cattle feeding industry from section to section, from the Atlantic Coast States to the Mississippi Valley, has been outlined above. But having reached the corn belt, no further migration of the feeding industry to the westward is to be expected. Some sections of the country to the west of the present corn belt may become corn producing centers. But it is not likely that these will produce heavily enough to supplant the corn belt for a considerable period of time, barring new discoveries or new methods of producing corn under semi-arid conditions. Neither is it likely that a new grain will displace corn as a feeding stuff for cattle in the near future. The production of corn and other crops available for cattle feeding has already reached a relatively inelastic limit imposed by climatic conditions. Production of corn beyond this limit is at a rapidly increasing cost.

The feeding of cattle has finally become established in a section where it may be expected to remain for a considerable period of time. The crops which it is now profitable

to grow in the corn belt may be expected to remain essentially unchanged for some decades. The location of the Missouri and Mississippi valleys between the ranges and the consuming centers of the country is a further factor making for the finishing of cattle in the present feeding sections. In other words there are strong reasons for the feeding of cattle in the present locations, and there is no longer a place to the westward to which the feeding business may migrate, unless the methods of beef production or the feeds used, or the type of beef in demand should change very materially.

III

THE DOMINATING INFLUENCES FROM 1896 TO 1926

In 1896 the country was beginning to recover from the period of depression which it had been experiencing since 1893, and to a lesser extent since prices began to decline in 1883. Since 1889 cattle, which had undergone a serious depression after 1884, generally maintained their prices. At the same time most other prices were falling so that cattle really were rising in value. Hogs, on the other hand, were declining in price, and as a consequence were becoming less popular and fewer in number in Iowa. From over seven millions in 1892, the number of hogs in Iowa declined to three and a quarter millions in 1900.

The acreage of corn planted in the State also declined during the late nineties, and there was an increase for a few years in the acreage of wheat, due mostly to the low price of corn. The low price of corn was also one of the reasons for the increase in cattle. Corn and hogs both being low, and cattle improving in price, the natural thing for the Iowa farmer was to turn to the production and the feeding of cattle.

During the late nineties and the first decade of the new

century, there was a rapid improvement in the methods of farming in the State. There was also a very general improvement of farm buildings. The old sheds and small crude houses which characterized the frontier stage, largely disappeared between 1896 and 1914. They were replaced by substantial and commodious buildings which, for convenience and an appearance of well being, probably surpassed the general average of farm buildings in any other large farming area of the country.

The rapid rise of the price of farm land was a sign of its increasing economic productivity. With the general rise in the prices of farm products and the practically stationary rates of freight to the consuming sections of the country, the product per acre of Iowa land came to be worth much more than a decade previously. But there was a deeper and more lasting cause for the rise in agricultural than in other products. The population of the country was continuing to grow rapidly. The agricultural resources, as far as they were limited by natural factors, were able to expand very little. Therefore, as there came to be a need for a larger supply of foodstuffs, farm prices stiffened. This put an end to the disadvantageous situation which had existed a decade or so before, when a large part of the country's population was engaged in producing farm products from the newly opened prairies. The relatively inelastic demand for foodstuffs was now as strong in forcing prices upwards as it had been before in forcing them down.

The rising prices were not the only cause of the improvement in the position of the farmer. There were improvements in the methods of farming which helped him also. These comprised such gradual changes as the adoption of more efficient feeding methods, the planting of crops which offered advantages over the ones previously used, the trying out and partial adoption of the silo, and other factors.

The farming industry seemed to have reached a sound and safe basis. Between 1900 and 1914 the farmers were enjoying an improved and constantly improving situation. There was still much room for improvement, but generally speaking it was a period of prosperity, and one which was not interrupted by any economic cataclysm, nor any serious and unusual interruption in the trends of development. It is, therefore, an excellent period in which to follow the normal and, for the most part, the uninterrupted working out of economic forces.

PRICE TRENDS UNTIL 1914

Prices of cattle increased at a steady rate from 1896 until 1901. In that year an optimistic business outlook started cattle upward at a rapid rate along with hogs and corn for the larger part of a year. This was accelerated by a drought in the summer of 1901 which seriously reduced the corn crop. Consequently, many cattle were sold only partly fat. In 1902 there was a good crop of corn but much of it was soft, and fit only for feeding. There was a large crop of feeder cattle in the range country the same year, many of which had been held over from the preceding year. The result was a heavy run of cattle in the markets in the fall of 1902 and the winter and spring of 1903 with a consequent falling off in prices.⁴⁸

In 1903 there was a slacking up in business and a slight recession in the general price level. Partly as a result of this and of the large production of cattle, corn, and hogs in 1902, the prices of these commodities declined to the level of the early part of 1901. Here they remained with but little change for the next two or three years. Better methods of managing the ranges and the increased productive capacity of the corn belt States resulted in the receipts of

⁴⁸ *Wallaces' Farmer*, December 5, 1902, February 20, 1903.

cattle at Chicago running heavier from 1903 to 1907 than at any time since 1892. The price of cattle, during these five years, sunk to the level of the price of hogs or below it.

The supply of range land was beginning to be reduced by settlers, but the rancher could still sell feeder cattle to the Iowan more cheaply than they could be raised in the State. Beef, in Iowa, was becoming a by-product of more intensive farming. This change began to be noted in 1903 or 1904.⁴⁹ The farmers who were trying to stick to the older method of production were beginning to complain that there was no money in cattle.

There was also a change in the demands of the market for beef. Whereas the principal demand had been for heavy cattle, and the market had shown its preference for the larger animals by higher prices, there had been a gradual change so that there was no longer a premium on the heavy stock. In 1902 the top price for steers weighing from 1200 to 1350 pounds was the same as for those weighing from 1350 to 1500, and for those weighing over 1500 pounds. There were times after 1902 when there was a premium on

⁴⁹ "The cattle interest is now in a transition state, and, as in all transition states, there is as a result a great deal of loss and suffering. . . .

"We have in the past two or three years been passing from the period of wide open ranges, great national pastures where cattle grazed freely on government land, to that of a nation fully settled up and where nearly all of the land that is worth owning has passed into private ownership, and that which has not passed into private ownership is of little value under the conditions now existing.

"The great pastures tributary to water courses have been fenced up, whether legally or illegally. The government may order the fences enclosing these lands taken down, but this means that in many cases these pastures shall not be used for beef production. The corn growing land of the nation has nearly all been occupied, and any increase in the corn crop and any cheapening in the price must result from improved methods of cultivation. There is a possibility of a very large increase, say fifty per cent at least, but this possibility can be realized only by the education of the farmers, which, though certain and sure, is a slow and gradual process."—*Wallaces' Farmer*, June 17, 1904.

the heavy stock but, in general, the preference for the lighter animals became stronger. This tended to accelerate the change in production from the big, mature animals to younger and smaller ones.

THE BOOM AND PANIC OF 1907

In 1907 the cattlemen and other agricultural interests of the West rediscovered the close connection between agriculture and the business of the rest of the country. The boom of 1907 carried corn and cattle prices up with it. There was no objection to this, but there was an outcry against the rise in prices for the things which the farmer had to buy. It was generally realized that the financial and speculative operations in Wall Street were being carried on at too high a level of prices. As early as March, 1907, a panic of some sort was expected as the outcome. But it was not realized that it would seriously affect the farmers. "Farmers were never in better shape to meet trouble than now", said *Wallaces' Farmer*. "The banks are full of money, the cribs full of grain, and the yards full of stock. Lower prices would of course have to be accepted in case there should be a general lack of confidence until confidence is restored."⁵⁰ But in any event, there appeared to be little for the farmer to worry about, even if the speculators in Wall Street did become involved in difficulty.

In the last days of October, the "Rich man's" panic began in New York. A banking system, which centralized the reserves of the country in New York, quickly extended it over the rest of the country. The panic and the depression incident to it did not last long, but long enough to embarrass the purchasers of feeding cattle, as well as the rest of the farming population for a few months.

The feeder who had intended to purchase cattle on bor-

⁵⁰ *Wallaces' Farmer*, March 22, 1907.

rowed funds in November or later in 1907 found it was practically impossible to carry out his plans. There was practically no money to be had for a month or so, and the result was that many feed yards remained empty. For a short time premiums were demanded for cash at banks in many parts of the country.⁵¹ Clearing house certificates were circulated in place of money. Because of the lack of confidence there was a much greater demand for cash than usual. Where checks or drafts would ordinarily have passed actual money was demanded. It took all the power and ingenuity of the government and financiers of the

⁵¹ "The practical suspension of currency payment on the part of most of the banks of the principal cities of the west on Monday of this week no doubt came as a rude shock to most western farmers and business men. While everybody in the west knew that New York was having quite severe financial trouble, it had not been supposed that it would affect western interests to any extent. The action of the New York banks last week suspending currency payments there, however, brought trouble to us in the west very quickly

"On Saturday the New York banks notified the Chicago banks that they could not draw their surplus cash which they carried there, except in drafts, checks, or clearing house certificates. . . . On Saturday the Chicago Clearing House Association met to determine what should be done in the matter. They found themselves in the position of being called upon to furnish the money they had belonging to other banks but not being able to get their own money which they had on deposit in the New York banks. . . . The Chicago banks, therefore, Saturday night determined to adopt the policy of the New York banks and suspend the cash payments. This passed on the trouble to the banks in cities like Des Moines which carry balances in the Chicago banks. They in turn found themselves in the position of being unable to call in the money which belonged to them in the Chicago banks, and unless they took measures to protect the cash they had in their own vaults at that time it would soon be paid out and none coming in to replace it. On Monday, therefore, the Des Moines clearing house adopted the same policy and notified the people of the state that no money would be sent out but that drafts and checks would be issued as heretofore. This passes the trouble on to the country banker; he has cash in the Des Moines banks but on adoption of this resolution by the clearing house cannot get it. . . . Unless the country bank happens to have in its safe enough cash to meet the needs of its customers for the present week and possibly longer the customers will find themselves in the same position as the banks — they will have the money deposited but they cannot draw it out".—*Wallaces' Farmer*, November 1, 1907.

country to restore confidence in the credit machine. But by borrowing gold from abroad and issuing large quantities of money for a short time, normal credit conditions were restored in January, 1908.

DEVELOPMENT FROM 1907 TO 1914

In 1907 and 1908 there were short corn crops in Iowa, and consequently there was a smaller production of cattle and hogs in 1908 and 1909. The feeding business was affected more than the business of raising cattle. The reduction in the number of cattle raised was not great for two or three years. The greatest number of "other cattle" (beef cattle) ever reported on Iowa farms was reached in the report of the United States Department of Agriculture for January 1, 1907. According to this report, there were nearly four million "other cattle" in Iowa on this date.⁵² Thereafter the number gradually declined to two and a half million in 1914, the greatest reduction taking place in 1909.⁵³ During the same period, the number of hogs fluctuated widely with the corn crops and other factors, but was generally on the increase.

More cereal or vegetable food can be produced per acre

⁵² *Yearbook of the United States Department of Agriculture*, 1907, p. 714.

⁵³ "The west has had two years of high priced corn, and the effects are much more far-reaching than may appear to the casual observer. . . . It has led to the heavy marketing of cattle; and it will without much doubt show in the decreased number of cattle in the United States. Considering the uncertainty of the market and the extent to which it is under the control of manipulation, whether that be much or little, many farmers have hesitated to put sixty-cent corn into feeding steers, as they have been accustomed to do in the past. They feel that it is safer to sell the corn and the steer separately than together. The effect of this is seen in the small movement of feeding steers from feeding centers to the farm. Meanwhile there has been a lessened demand for really fat cattle, and a higher price for thin steers which were heretofore regarded as feeder quality, the packer being the competitor of the feeder for anything that showed any amount of fat, and thus increasing the difficulty of filling up the feed yards with any show of profit."—*Wallaces' Farmer*, January 29, 1909.

than food in the form of meats. The growing population and the slowly increasing need for food was causing cereals and vegetable crops to encroach more and more on the domain which had previously been devoted to the production of beef and other meat products. This tendency had been evident for a considerable number of years. It had been obscured by the improvements in farm production between 1900 and 1907. But between 1907 and 1914 it was again becoming evident in the diversion of land from the production of cattle to the production of grain or other crops. A few of the more far seeing producers began to recognize the trend.⁵⁴ But as a usual thing there was little apparent

⁵⁴ "Many articles are written in all our agricultural papers, telling the farmers how and why they should raise more live stock, in order that the meat supply should not be lessened per capita. Does the thought ever occur to any of these writers that, owing to our rapid increase in population, this condition is naturally logical, and probably unavoidable. The reason the farmer cannot raise more live stock, or perhaps continue to raise as much in the future as he now has, is that it simply does not pay financially to do so; the reason for this being that the price of cereals and vegetable foods tend to increase faster than the price of meats; the reason for this being that the great mass of consumers, in endeavoring to get as much life-sustaining food as possible for the amount of money they have to spend, find it will go much farther if spent for vegetable foods than for meat. The human race can live and go about their business on much less meat than they now consume, and any marked rise in the prices of meats at once reduced the demand and consumption, which automatically reduces the price. This is not true of cereals and vegetables, such as potatoes, beans, etc., as the consumer must have them or starve, and the buying power of the consumer of vegetable foods has never been anyways near exhausted by the highest prices we have ever had. Should oats sell for \$1 per bushel, and corn double in price, oatmeal, corn meal, corn starch and various corn products could still be procured by the average man. Anyway, he would have to have them or starvation would ensue. The same relative advance in the prices of meats would almost prohibit consumption.

"There is no use in blaming the packers, farmers or any other class of people, for these fundamental facts, though, of course, monopoly and inefficiency have been contributing minor influences. European conditions will repeat themselves here as our population becomes more dense. Consumption of meat per capita will steadily decrease, and the struggle to procure a plentiful supply of bread will become the main question. The fertility of our soils will have to be maintained largely by pasturage and the manure made from roughage, our rougher lands being kept in pasture and meadow probably all the

conception, on the part of the "practical" man, of the nature of the underlying forces which were increasing the cost of his feeds faster than of his cattle and were, therefore, slowly making it less profitable for him to raise cattle and more profitable to raise other things. It was easy to complain about the packer, or the railroad, or commission men, or to say that a mysterious "they" were forcing down the price of his product and robbing him of the return which he should have, but it was difficult for the "practical" man to generalize correctly, or to comprehend the impersonal forces which in the long run govern his economic life. It was much easier to blame his troubles on something which he could see or which he knew existed in tangible form.

IMPROVEMENT IN CROPS AND IN METHODS OF PRODUCING

The increase in prices of corn and hogs, which was tending to displace the production of beef from the farm business, was arrested about 1900 by improvements in forage crops and in the methods of production which gave the beef enterprise a new lease on life. The first of these improvements was the supplanting of the low grade prairie hay and timothy by leguminous forage crops. Clover began to be planted in almost every section of Iowa soon after it was

time, while the bottom lands and the rich, black, level lands will sell nearly all the grain produced. Should the fertility be depleted or threatened, it can probably be maintained by sowing legumes and increasing the percentage of pasture land, most of the cattle being sold grass fat, and the grain sold for human consumption.

"I sell both grain and live stock, and for several years back have obtained an average price of about 70 cents per bushel for my corn, some time during the summer following the year in which it was grown, which, everything considered, brings me more clear money than any method of feeding I have discovered. By keeping a relatively large per cent of my land in pasture and meadow, and making all the manure possible from the roughage and some grain, I am increasing the fertility of the soil. I find many of my neighbors think as I do on this question."—Letter from C. L. Snow of Illinois in *Wallaces' Farmer*, March 17, 1916.

settled, but it was often several years before good crops were grown. This crop permitted a conservation of soil fertility and the production of a larger quantity of more nutritive feed per acre than had been possible with prairie hay or timothy which had also been planted soon after settlement. Clover, too, helped in putting a higher finish on the cattle and in keeping the young stock gaining more rapidly through the winter, thereby adding impetus to the tendency to finish and sell the cattle at an earlier age. About 1903 farmers began to experiment with alfalfa in various parts of the State. It provided a heavier yield per acre than clover and contained even more protein.

Between 1904 and 1910 silos began to be built for beef cattle in some sections. The silo found its most profitable use in the eastern feeding area—in Iowa and Johnson counties and to the east. In this section little alfalfa was grown, and the silage provided a succulent forage which helped to keep cattle on a heavy feed and permitted a good rate of gain.

Experiments at agricultural experiment stations in the latter part of the nineteenth century demonstrated the insufficiency of the protein content of corn for feeding purposes. The use of nitrogenous supplements increased rapidly from the last few years in the nineteenth century until 1907 or 1908 when their use had become common if not general. The higher cost of pasturage which resulted from a higher value of the use of land for other purposes, forced a more careful use of land in the production of cattle. This included an attempt to mature the cattle for market at an earlier age than previously. The age of the finished steer was reduced from three or four years in the eighties to about two years or two and a half in the period just prior to 1910.

The beef producing industry of Iowa had assumed a

rather stable character by 1905 or 1907. It had developed into two fairly distinct forms of enterprises. In the rougher sections of the State where there was some land which could be tilled only with difficulty the beef industry developed through the use of pasture land in maintaining small herds of breeding cattle. The breeding stock was used to convert the roughage of the farm, which was largely a by-product, into marketable beef. The calves were produced under relatively intensive conditions, and were used to convert the higher grades of feed, such as corn, into a high grade of beef. The other type of beef enterprise consisted in feeding the western steers which had been grown under extensive conditions on the ranges but which had not been brought to a high state of finish. By feeding them for a few months on a grain ration it was possible to increase the quality of their flesh and to save freight on the corn which they consumed.

THE EUROPEAN WAR AND ITS INFLUENCE ON CATTLE PRODUCTION

During the years 1912, 1913, and 1914, the average prices of beef cattle were on a higher level, relative to the general price level, than they had been for any period since 1840 when the available data relative to the two series begins. With the outbreak of the war in Europe in August, 1914, there was a period of business uncertainty due to the breaking off of trade connections and interruptions of ocean traffic. The price of fat cattle at Chicago declined from an average of \$9.60 per hundred which was reached in September, 1914, in anticipation of a heavy and immediate wartime demand which did not materialize, to an average of \$7.90 per hundred in February, 1915. The price then fluctuated between this low point and \$9.50 until March, 1916, when it began to rise.

The weakening of cattle prices at the beginning of the war was accompanied by a similar movement on the part of hogs and corn. The same was true of many products which were not in immediate demand for military purposes. In November, 1915, the price of corn started upwards preceding cattle by about three months. Hogs started up in December two months ahead of cattle. These three products continued to rise rapidly until the late fall of 1917. Corn advanced the most rapidly, and cattle the least. Meantime, the prices of most non-agricultural commodities were likewise climbing but at a slower rate than farm products. This condition, which was caused by the increased demand for food products from Europe, resulted in an advantageous condition for the producer of cattle, corn, and hogs, and greatly stimulated their production. The acreage planted in corn in the United States increased from one hundred and three million acres in 1914 to one hundred and sixteen million in 1917, the greatest acreage of corn which had ever been planted in this country. From 1914 to 1919 the number of "other cattle" in the country increased from approximately 36,000,000 to 45,000,000, and the number of hogs from 58,000,000 to 74,000,000. In Iowa the corn acreage grew from 10,248,000 in 1914 to 11,100,000 in 1917. The number of beef cattle on Iowa farms increased from 2,555,000 in 1914 to 2,919,000 in 1918, and the number of hogs from 6,976,000 to 10,822,000 in 1919.⁵⁵

As in the case of the Civil War, the World War disturbed and distorted the natural trends, so that for a time it may have appeared to some that the old forces and tendencies had ceased to operate. Because of the rapidly rising prices, the farmers were stimulated to use every device known to them to increase their production. Although the price of

⁵⁵ Data from the Bureau of Crop Estimates of the United States Department of Agriculture.

corn rose most rapidly and highest, there was a greater proportional increase in the number of beef cattle in the country than in the acreage of corn. This was largely due to the depletion of the supply of farm labor by the demands of war industries, which outbid the farmers for labor. It became more pronounced after the United States entered the war and drafted a large portion of the remaining supply of farm labor, forcing the farmers to turn to the growing of more wheat and other crops of extensive culture from necessity as well as from patriotic motives.

The remarkable increase in the productivity of the farmers of the country, who with fewer men worked longer hours, and applied all the improved methods they could, increasing their capital to replace the missing laborers, gave to most persons a new conception of the possibility of agricultural expansion. It was much the same as the growth of productivity during the Civil War, and was stimulated by very similar causes. The increased prices of their products provided the necessary stimulus to a class of people who reaped the profits on their own exertions.

The fall in prices late in 1914 and early in 1915 discouraged the farmers, especially the cattle feeders, who had bought cattle in the fall at high rates, expecting prices to rise immediately, and then had sold at a loss in the winter before any rise commenced. In the summer there was a sharp rise, which again gave some hope to the prospective feeder. But the epidemic of hoof and mouth disease, which had broken out in the fall of 1914, still caused a quarantine against some markets as sources of feeder cattle. A general apprehension of danger to cattle within a wide radius of any area where the disease prevailed discouraged some from feeding. Moreover, a needless fear of beef on the part of some consumers helped for some months to keep down the prices of beef.

The expectation of higher prices, however, led to the putting of more cattle on feed, and there was a turning to better methods which was largely forced on the farmers by the high prices of feeds and labor.⁵⁶ The rising prices, when they came, caused a heavy shipment of any stock that was at all fit to sell. It also caused the keeping of more heifer calves than before. The result was a very heavy run of live stock beginning in 1916. This was accomplished by the selling of all cattle that could be dispensed with, and the selling of steers younger and lighter in weight than at any time previously.

The cattle feeder, who had cattle to buy in the fall of 1916, bought under conditions in which there was a spread of two to four dollars between the price of thin stock and fat cattle. In the fall of 1917 the spread was from four to six dollars. In 1918 it was from five to seven dollars. This was a more favorable condition than had obtained in the feeding business for a great many years, as far as the proportionate margin was concerned. It was the most favorable that had ever existed considering the actual margin. In addition to the wide margin, the rising prices were a source of profit to the man who was holding cattle. The longer he kept them the greater was the gain over the price paid for them. Thus if a farmer bought feeder cattle in October, 1916, paying the average price of that month for them, they would have cost him \$6.60. If he put them on a short feed, of ninety days for example, he would have been able to get for them about \$10.70 in January, 1917, giving him a margin of \$4.10; but if he kept them three months

⁵⁶ A Missouri correspondent writes: "I have been feeding cattle for forty-five years, and when I could buy feeders and corn at a reasonable price, I could generally make a little money, but since cattle and corn have become so high, I find that I can not break even by feeding straight corn. I must quit the business or try some new methods. I have decided to try some of the new fangled schemes which the experiment stations recommend so highly".—

Wallaces' Farmer, December 24, 1915.

longer and sold in April he would have received \$12.35, or a margin of \$5.75.

Under these conditions there was a heavy demand for cattle for feeding purposes in the fall of 1917. Although there was a recession in price early in 1918, it recovered in the spring, and the average price for 1200 to 1500 pound steers rose to \$17.65 in September, the highest average price for this class on record. There was, however, a great deal of uncertainty in the situation.⁵⁷ Conditions fluctuated so rapidly that a good deal of courage was required to buy feeders. Feeders had never before been so high, and corn could easily be sold at prices which would have seemed fantastic a few years before. The speculative feature of feeding was greatly in evidence.

During 1917 the prices of hogs shot up past that of cattle because of European demands. The general average price of hogs in Chicago reached \$18.20 in September, while cattle were at \$14.50. Thereafter, until late in 1919, hogs maintained a lead over cattle. This made the production of hogs even more profitable than that of cattle. Consequently the number of hogs in Iowa increased from less than seven millions on January 1, 1914, to nearly eleven millions on the same date in 1919, while the beef cattle in

⁵⁷ "The customary spread between fairly good feeders and good fat steers (average, not top) has been just a little over two cents. During the past year, however, the spread has been considerably greater than this, probably on account of the extremely high price of corn. It is a remarkable thing at the present time to see feeders selling for from \$8 to \$11 per cwt., whereas fat steers are bringing \$16 to \$18 per cwt. In other words, there seems to be three or four times as much spread as is customary. . . . With \$1.20 corn in prospect, the cattle feeder would seem to have a chance to make good money. On the basis of \$90 for a fairly good 1,000-pound feeder in October, and \$1.20 for new corn, the average man ought to make a good profit if his steers sell fat in the spring at anything over \$12.50 per cwt. But of course corn may be higher than \$1.20 per bushel, and cattle may be lower than \$12.50 per cwt. That's where the gamble comes in. Nevertheless, all signs point to an extremely profitable winter for cattle feeders."—*Wallaces' Farmer*, October 12, 1917.

the State increased during the same period, only from 2,555,000 to 2,861,000.

The price of corn was rising even more rapidly than that of either cattle or hogs. From January, 1916, to September, 1917, the monthly average price of corn in Chicago rose from 76 cents to \$2.09. This meant that it was more profitable to sell corn than to feed it either to hogs or cattle. The profit which might be made in feeding came from an increase in the price of the live stock while they were being kept on the farm and fed, and not from a favorable relationship between the prices of corn and cattle. The result was that beginning in 1917 there was a tendency to market the corn and cattle separately. In 1917, however, corn was severely damaged by early frosts and this forced the feeding of a large amount of corn that would otherwise have been sold.

With the entry of the United States into the war in 1917 the government assumed control over many industries. Dealers in food products especially were placed under a licensing system which gave the government more or less supervision over the trade. The prices of meats and other food products were strongly influenced by the large purchases for war purposes. To prevent a possible shortage of meat products, "meatless days" were inaugurated to the disappointment of the producers of meat, who had hoped to see prices go higher still. All possible objections were advanced during this period to government regulations; not to government regulations over most industries, or over industries in general in time of war, but to the specific regulation which each person thought was putting him and his industry at a disadvantage as compared to others. Thus, cattle feeders believed that "meatless days should be confined to pork only".⁵⁸

⁵⁸ *Iowa Yearbook of Agriculture*, 1917, p. 349.

DEPRESSION AND RECOVERY AFTER THE WAR

The farming industry had hardly become adjusted to war time conditions when the war closed. There followed a short period of uncertainty, and then, in anticipation of a heavy demand for foods from Europe, the prices of cattle strengthened and held at about \$17.00 for fat steers for nearly a year. The price of hogs, meantime, continued to advance, because of the demand in Europe for pork products and fats. In the summer of 1919, hogs were from three to six dollars above cattle, despite the smaller receipts of cattle at markets caused partly by the drought in the southwestern range country. There had been three dry years there, and as a consequence cattlemen had been forced to sell heavily to reduce the numbers of cattle on the range.

In the fall of 1919, the government launched an attack on the high cost of living by selling surplus war supplies of food products. This precipitated a rapid decline in the price of hogs from nearly \$22.00 to below \$14.00 in five months. Cattle declined more slowly. But the period of highly profitable feeding was ended for a few years. While prices were on the decline no matter what the margin between fat cattle and feeders was when they were bought, the decline between the date of purchase and sale would wipe out the margin and cut off most of the possible profit. Now the reverse of the earlier situation arose — the longer the cattle were kept the greater the loss.

In the spring of 1920, with the post war boom well under way and nearing its peak, farmers began to pluck up courage. The fall in prices, most of them argued, had already taken place, and the storm was over.⁵⁹ During the sum-

⁵⁹ In reply to an inquiry as to the outlook for cattle feeding a writer in *Wallaces' Farmer* said: "In the first issue of every month we publish a chart showing steer profits and losses. If our correspondent will refer to page 1515 of our issue of June 4th, he will note in our last profit-and-loss chart that fat cattle have now been exceedingly unprofitable for over a year. After they

mer, however, with the industrial boom at an end and prices already beginning to fall, many realized that tight money might possibly interfere to some extent with the fat cattle market in the fall.⁶⁰ Corn began its phenomenal fall from an average of \$2.03 in March, 1920, to 78 cents per bushel in December. Between October and February, cattle dropped from \$15.30 to \$8.80. Between September and January hogs fell from \$15.90 to \$9.40.

The indignant astonishment which resulted from this rapid decline in prices was well described in *Wallaces' Farmer* on November 5, 1920: "The farmers of the nation are thoroughly stirred up over the tremendous drop in the prices of their crops. Meetings are being held; conferences are called; committees are sent here and there; protests are being made in the papers; farmers are urged to hold their crops off the market. Everybody who has a real interest in Agriculture is casting about to find some way to stop the ruinous decline in prices, but no one seems to know just how to do it".

Corn, which is largely a raw material for the making of pork and beef, fell first and fastest. If hogs and cattle were unprofitable, there was to be little demand for corn. Consequently corn declined from \$2.03 in March, 1920, to 46 cents in October, 1921. During the period of the most rapid decline hogs moved a little ahead of cattle but fell by about the same amount. The decline in cattle was from

have been unprofitable for this length of time, there is a chance for things to start the other way. Of course, fattening cattle may not become profitable again as early as this fall, but if not by that time, the chance for profitable prices by next spring will be better. No one can predict with any certainty as to the short swings of the market, especially in these uncertain times. We believe it possible, however, to make a rough guess as to the long swings, and therefore venture the opinion that some time during the next year the fattening of cattle will again become relatively profitable."—*Wallaces' Farmer*, June 11, 1920.

⁶⁰ *Wallaces' Farmer*, July 9, 1920.

\$15.70 in July, 1920, to \$7.20 in December, 1921, using as a basis the average monthly price for 1200 to 1500 pound steers in Chicago. The decline was disastrous to many cattle feeders, who saw their investment in feeding stock melt away so that many received less for their fat steers, after feeding their corn crop to the cattle, than they had paid for the feeders.

In 1922 the price of cattle moved upward strongly until October, when a slight recession set in. With prices rising the year proved a favorable one for the cattleman, and especially for the feeder. Consequently the late summer and fall saw practically a doubling of the ordinary shipments of cattle into Iowa for feeding. The farmers and cattlemen were again getting on their feet after the deflation of cattle prices, and were again venturing as boldly as ever. There was heavy feeding in 1922 and 1923 but in general the number of cattle in Iowa and the numbers fed showed only minor year to year fluctuations until 1926.

The attempts to shift production on Iowa farms from the less to the more profitable enterprises are particularly interesting in giving some idea of the degree of flexibility of the farm business.

The relationship between beef production and the production of milk, for example, in sections which were essentially beef producing districts, was modified in a significant manner. Prior to 1914 the drift from beef towards dairying was very slight. After 1915, with the price of grains rising rapidly and with labor becoming more and more scarce, the number of cows milked fell off. The prices of dairy products were then lagging behind those of beef, hogs, and grain, hence the movement was towards the production of these other commodities. At the end of the war the situation was reversed. The prices of dairy products were again lagging behind grain and beef. But this time

the prices were moving down instead of up. The beef producer was now in a bad way. He had invested his labor and capital in the production of cattle, and in growing grain at a high level of costs. He now had a choice between selling his grain at an extremely low level of price and incurring a heavy loss on it, or of feeding it to his cattle likewise at a loss. No matter which way he looked there was no opportunity for a profit on the crops of 1920. He could not sell out and quit farming, because the price of land and everything else he owned was at such a low level for the time being, that to sell, even if he could find a buyer, would be to incur a still heavier loss than from continuing to run his farm.

The problem was one of choosing the smallest loss, and of scraping together every penny that could be obtained until times improved. The dairy industry was one that weathered the storm better than most others. But there were very few farmers who could have gone into the dairy business in 1920 or 1921. They did not have the money to buy dairy cattle. The beef cattle already on the Iowa farms, however, offered a partial solution. The farmer discovered that milk or cream was worth something and that he had not been selling nearly as much of these commodities as he could. Therefore the milking of cows in beef herds increased greatly in nearly all parts of the State from 1920 to 1922. In a few sections there was an increase in actual dairying, and a considerable number of cows of the dairy breeds were brought in from dairy sections such as Wisconsin and Minnesota.

For the most part the milking of more cows was a temporary thing. As soon as the prices of grain, beef, and pork began to recover, and it became worth more to take care of these enterprises than to milk, milking was largely abandoned. Only in a few counties near the older dairying sec-

tions and in a few isolated areas, was there any permanent increase in dairying.

The problem of combining dairying and beef production was again taken into consideration. This time, however, not so much was made of the possibility as on earlier occasions. The cows of the dairy breeds had become more specialized as milk producers, and partly as a consequence, their average production was so much above that of the beef cattle that farmers generally agreed that the bona fide dairy cow and not a beef type was the one to be used if real dairying was to be undertaken. On the other hand the use of calves from dairy herds as second rate beef animals was still thought of as a possibility.⁶¹ The growing number of dairy cattle in the country was making this type of beef too plentiful to be overlooked. In Iowa it was represented by the feeders which were produced in the dairy area and from there sold to other parts of the State. The number of these cattle had been fluctuating from time to time as the market discriminated more or less in the type of feeders it would take, and as the dairy business waned or waxed prosperous.

IV

STOCKING A STATE WITH CATTLE

It is not the purpose of this study to recite the history of breed improvement in Iowa at length. The leaders in the development of the purebred cattle of the State have rendered a valuable service, and their achievements are well

⁶¹ "About 40 per cent of the beef marketed in the United States comes from the dairy. Probably 18,000,000 calves are born from dairy cows every year, and of these at least 12,000,000 are slaughtered as calves. Some few are probably grown and marketed as steers. In addition to these 12,000,000 calves, about 4,000,000 dairy cows and about 5,000,000 dairy bulls are sent to the butcher annually. On a rough estimate, more than 3,000,000,000 pounds of edible beef comes from the dairies each year, as compared with about 5,000,000,000 pounds of edible beef from beef cattle."—*Wallaces' Farmer*, February 1, 1918.

worth setting forth at length, as are the blood lines of the outstanding cattle of the principal breeds. But a study in economic history, such as the present one, is more concerned with the causes for the improvement in breeding in the form of higher possible profits from the better cattle, and with the economic consequences of the breed improvement.

The first cattle of Iowa were driven into the State either from the region east of the Mississippi River or from Missouri on the south. The meeting of these two lines of influence in Iowa is an interesting event in the history of the settlement of the Middle West. Missouri, or the eastern and central parts of it, was settled earlier than Iowa. Iowa was, therefore, an area in which two streams of settlement converged, bringing into it the practices of the feeding areas of Illinois and of the more extensive types of cattle raising from Missouri. The first cattle of Iowa came from the common stock of these two sections. They were from stock that had been driven from section to section of the country since its colonization, generally moving westward and mixing more or less with cattle from other sections in each new locality. Consequently they were, as the report from Allamakee County to the Iowa State Agricultural Society of 1857 states, "Much like the other stock, a mixture of everything".

The cattle which entered Iowa from Missouri were described as being small in size and inferior in breeding.⁶²

⁶² "Now what breeds of cattle do we find in Iowa? The most of our fine stockmen will say scrubs. . . . In Michigan, Wisconsin, and northern Iowa we find grades from the Devons, central Iowa grades from the Shorthorns; in fact the leading blood is shorthorn. In the southern part of Iowa there is a small race of cattle that have travelled westward through the Carolinas, through Tennessee. These are generally called scrubs, and are inferior. But farmers in Iowa have for many years been breeding from the highest grades in their possession.

"Some very common steers, that I raised and fed, at four years old — or

They were descended from the stock which formed the basis of the cattle industry in the Carolinas in the late eighteenth century. The stock had travelled westward through Tennessee and into Missouri on its way to Iowa. The cattle in the more northern parts of Iowa had been introduced into the State largely from Illinois and had had the advantage of the improved breeding of the stock of Kentucky, Ohio, and Illinois, into which States stock of improved English breeds had been coming since the beginning of the century.

The cattle of Iowa were characterized differently by different observers. A correspondent in Blackhawk County in reporting to the Iowa State Agricultural Society in 1857 says that there the cattle are generally good, that there are some purebreds, the breeds being "Durhams, Devons and Ayrshires". In Iowa County, according to the report, there were then no purebreds but some grade Shorthorns. Shorthorns were reported the favorite breed in nearly all parts of the State.

Even to a casual examiner of the records of the time it is obvious that much, or perhaps most of the stock reported as "purebred", "blooded", and "improved" were only grades and often not very good grades at that, a rather fine distinction to this effect is made by a correspondent in Kossuth County in reporting to the Iowa State Agricultural Society in 1858. He said, "We have no bulls in the County of any known pedigree, but two of the Devon variety."⁶³

From the beginning of the settlement in Iowa there have rather three and a half—three weighed over 1800 pounds, and the balance ranging from 1400 to 1800. These steers were fed some oats and meal when calves, afterwards wintered upon prairie hay. Now, after many years of breeding and crossing with the shorthorns, my steers at the same age weigh from 1500 to 2000 pounds, with a better quality."—Communication from Andrew Hastie of Warren County in *The Iowa Homestead*, January 14, 1870.

⁶³ *Report of the Iowa State Agricultural Society*, 1858, p. 301.

always been some men with an interest in improving the cattle of the State, and each year claims are made to substantial improvement made during the immediate past. But the first breeders of better stock had a particularly difficult problem. Fences were very few and the cattle were almost always to be found running at large on the prairies, mixing indiscriminately with the best and the worst of the section and often wandering a considerable distance from home. Under these conditions it was extremely difficult to improve the blood of any one herd. The incentive to the purchase of better stock was therefore very weak until fences became more general.

There are conflicting claims as to the identity of the "first" purebred cattle of beef breeds brought into Iowa. In the *Report of the Iowa State Agricultural Society* for 1857 it is stated that "In 1840 Charles A. Hatfield brought a Shorthorn bull to this country (Muscatine County) which was a very superior animal. He was from an imported cow and sired in England". This bull was later taken to Scott County. The name of Timothy Day of Van Buren County stands out as an early breeder of Shorthorns and as one who accomplished much in raising the standards of quality of beef cattle in Iowa. It has been said that Mr. Day brought into Iowa the first purebred Shorthorns⁶⁴ and that he was the first systematic breeder of registered Shorthorns in Iowa.⁶⁵ In the spring of 1850 he bought of Brutus J. Clay of Bourbon County, Kentucky, a yearling bull, weight 1,000 pounds, for which he paid one hundred dollars, and three heifers, paying seventy-five dollars for one and fifty dollars for each of the other two. He also bought the bull calf Fillimore for one hundred dollars.

⁶⁴ *Proceedings of the Eighth Annual Meeting of the Iowa State Improved Livestock Breeders Association*, 1881, p. 102.

⁶⁵ Sanders's *Shorthorn Cattle*, pp. 330-332.

At the first Iowa State Fair at Fairfield in 1854 H. G. Stuart of Lee County and Timothy Day of Van Buren County exhibited Shorthorns or "Durhams" as they were then called. It was stated in the report of the ninth Iowa State Fair held at Dubuque in 1862 that Judge T. S. Wilson of Dubuque had imported "Durhams" into Iowa "twenty years" prior to that date.⁶⁶ In 1858, J. H. Wallace, Secretary of the Iowa State Agricultural Society, published what he called the *Iowa Herd Book* and continued it for a few years. This shows no record of cattle calved prior to 1849. But there is a record of a purebred bull having been taken into Muscatine County in 1841 by Charles A. Warfield, and one was bought by Colonel E. W. Lucas of Iowa City in 1845.

It is not worth while to quibble about who was the "first" to introduce any given breed into the State, but it is important that such men as Day succeeded in arousing a lively interest in the improvement of stock, so that in the *Report of the Iowa State Agricultural Society* for 1858 it could be said "you will scarcely find a farmer, of any pretensions whatever, who is not making some effort at improvement" of his cattle.⁶⁷ Most of the purebreds in Iowa at the time were Shorthorns, for the same *Report* declares, "we know of no Herefords in the State". It also mentions frauds made possible by a lively but indiscriminating interest in improvement, which led to the sale at various places of grades under the name of purebreds.

As to the number of cattle in the State and the rate of their increase, the best evidence is to be found in the census reports, but the development between 1840 and 1860 was so rapid that figures at more frequent intervals are to be desired. For this it is necessary to rely on the indefinite data

⁶⁶ *Report of the Iowa State Agricultural Society*, 1862, p. 206.

⁶⁷ *Report of the Iowa State Agricultural Society*, 1858, p. 12.

to be gotten from the memory of old settlers and estimates in the reports of agricultural societies. On the volume of business done in selling cattle for eastern consumption or to stock the western part of the State, only the latter two sources of information are available.

TABLE III

CATTLE IN IOWA ACCORDING TO THE CENSUS			
YEAR	NUMBER OF BEEF CATTLE IN IOWA OTHER THAN MILK CATTLE	YEAR	NUMBER OF BEEF CATTLE IN IOWA OTHER THAN MILK CATTLE
1840	38,049	1890	3,394,765
1850	69,025	1900	3,943,982
1860	293,322	1910	3,041,214
1870	614,366	1920	3,048,198
1880	1,755,343		

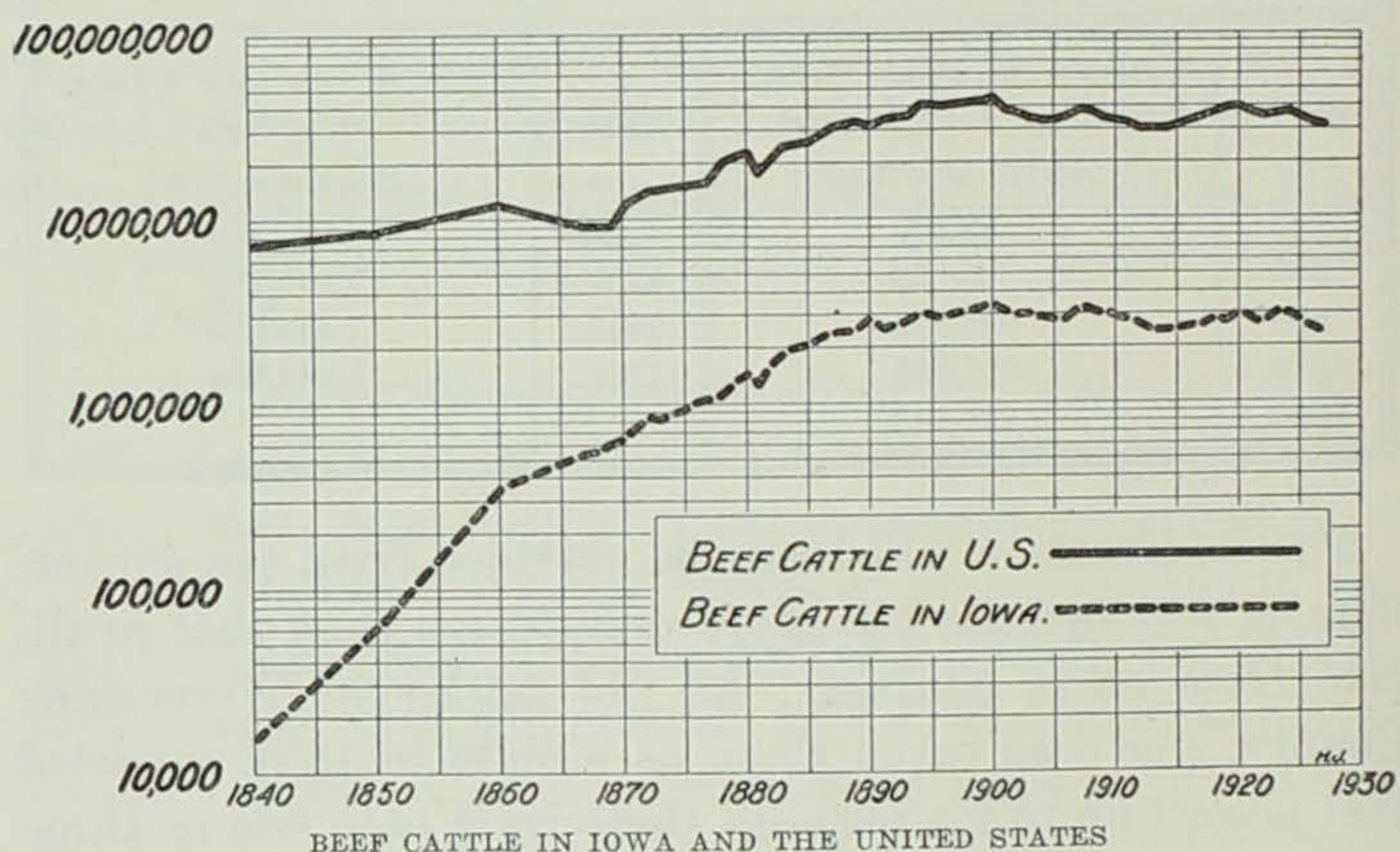
The information which can be obtained from the old settlers is less definite but more descriptive than that available from other sources. An old settler in Winneshiek County, who was taken there as a child in 1853, reported that according to his memory there were only two or three cows per farm up to the late fifties.⁶⁸ These were scrubs kept mostly for milk for the family. The calves were killed for veal, or if kept for steers were for home or neighborhood consumption rather than for sale to the East. In this section the cattle did not seem to multiply very rapidly. But the rate of increase and the interest shown in cattle varied from county to county. In Decatur County, which was settled a few years earlier,⁶⁹ and where Leon was an organized town in 1853, droves of as many as 160 head

⁶⁸ Interviews with E. L. Beard of Decorah.

⁶⁹ From a correspondent in Decatur County: "Our county is a new one. We have been organized only five years, but still we have about 8,000 inhabitants."—*Report of the Iowa State Agricultural Society, 1857, p. 231.*

were being driven east to Chicago or to markets along the Mississippi or in Illinois as early as 1857, showing that cattle had already become rather plentiful in that section.

In the *Report of the Iowa State Agricultural Society* for 1857, it appears that considerable numbers of cattle were being sold from the eastern and southeastern counties of the State, but few from the sections a hundred miles or more west of the Mississippi. In Jackson County about

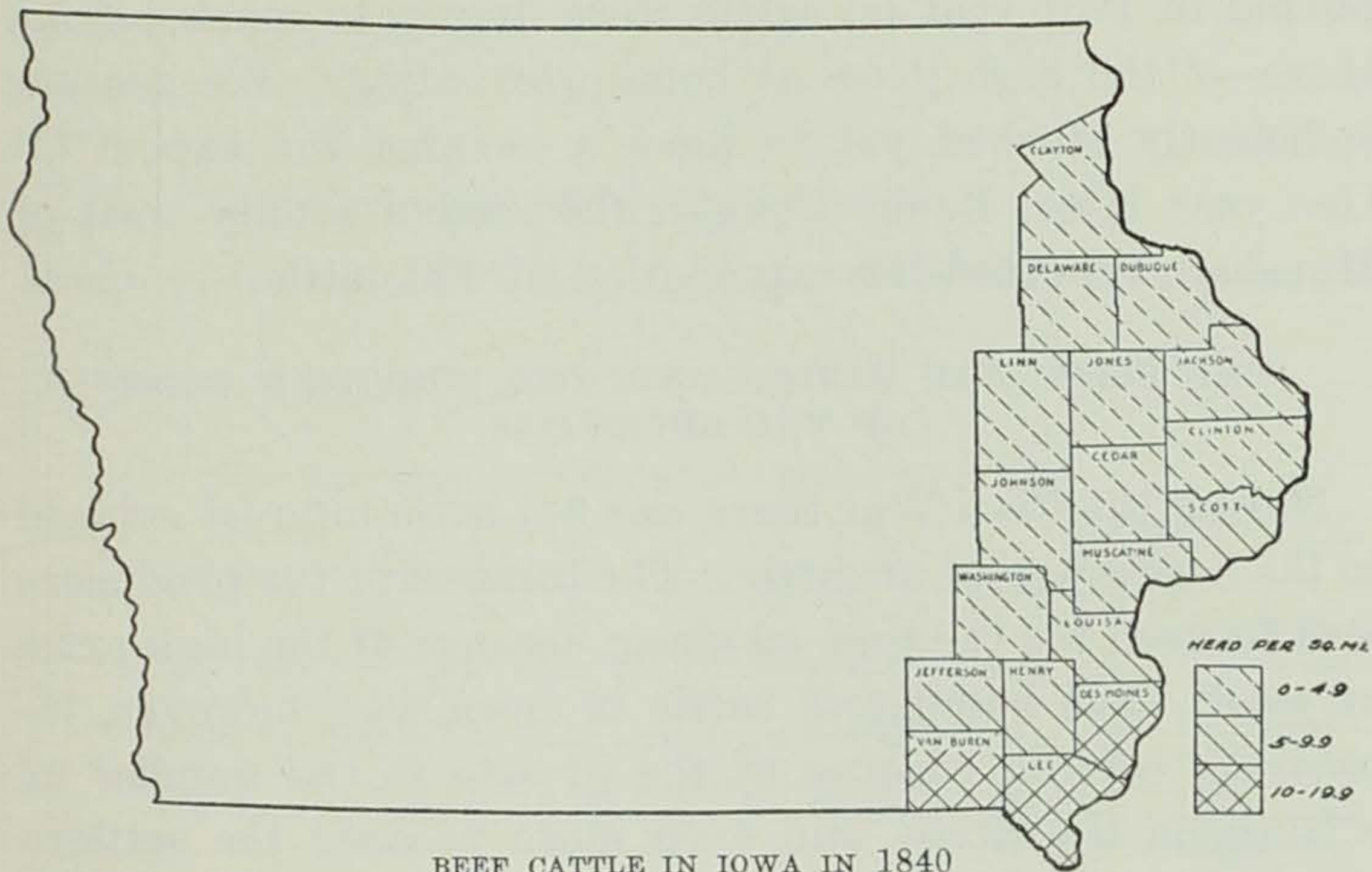


4000 were slaughtered "for export" or driven out of the county.⁷⁰ In Johnson County cattle and hogs were raised in large numbers for export, and were "mostly marketed in Muscatine, Chicago and New York". From Lee County about 2000 were driven to the Chicago, St. Louis, and New York markets. From Mahaska County, a few cattle were driven out, but 14,300 head were enumerated by the assessors and were assessed at \$167,000. Along the southern border of the State in 1857, Davis County reported that it had no large stock raisers, but two or three who raise 100 head annually, and estimated that 5726 head were sold that

⁷⁰ *Report of the Iowa State Agricultural Society*, 1858.

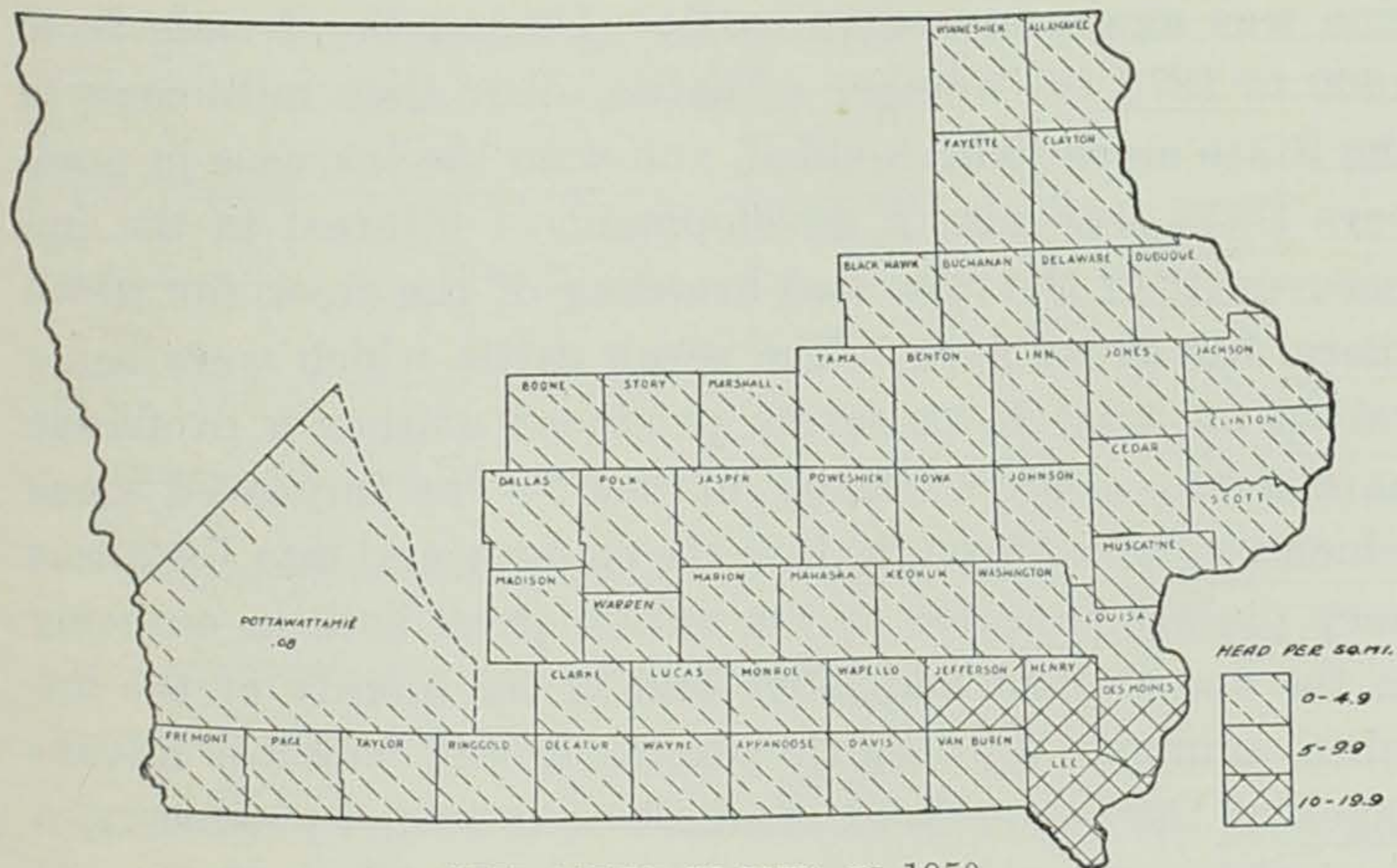
PRODUCTION OF BEEF CATTLE IN IOWA 135

year for \$109,256, an average of \$19.08 per head. This county was filling up rapidly with settlers and reported



BEEF CATTLE IN IOWA IN 1840

90,000 acres in cultivation. A year later in Appanoose County adjoining Davis on the west the number of cattle



BEEF CATTLE IN IOWA IN 1850

driven to market was reported at about ten or twelve hundred, a situation which illustrates the abruptness with

which settlement ended to the westward at this early date.

In the central part of the State, Marshall County reported in 1857 that no cattle were driven to market from there—"the high price at home preventing. We are not sufficiently stocked yet to have a surplus for export".⁷¹ One year later, Boone County, the second county west of Marshall, reported the exportation of 300 cattle.

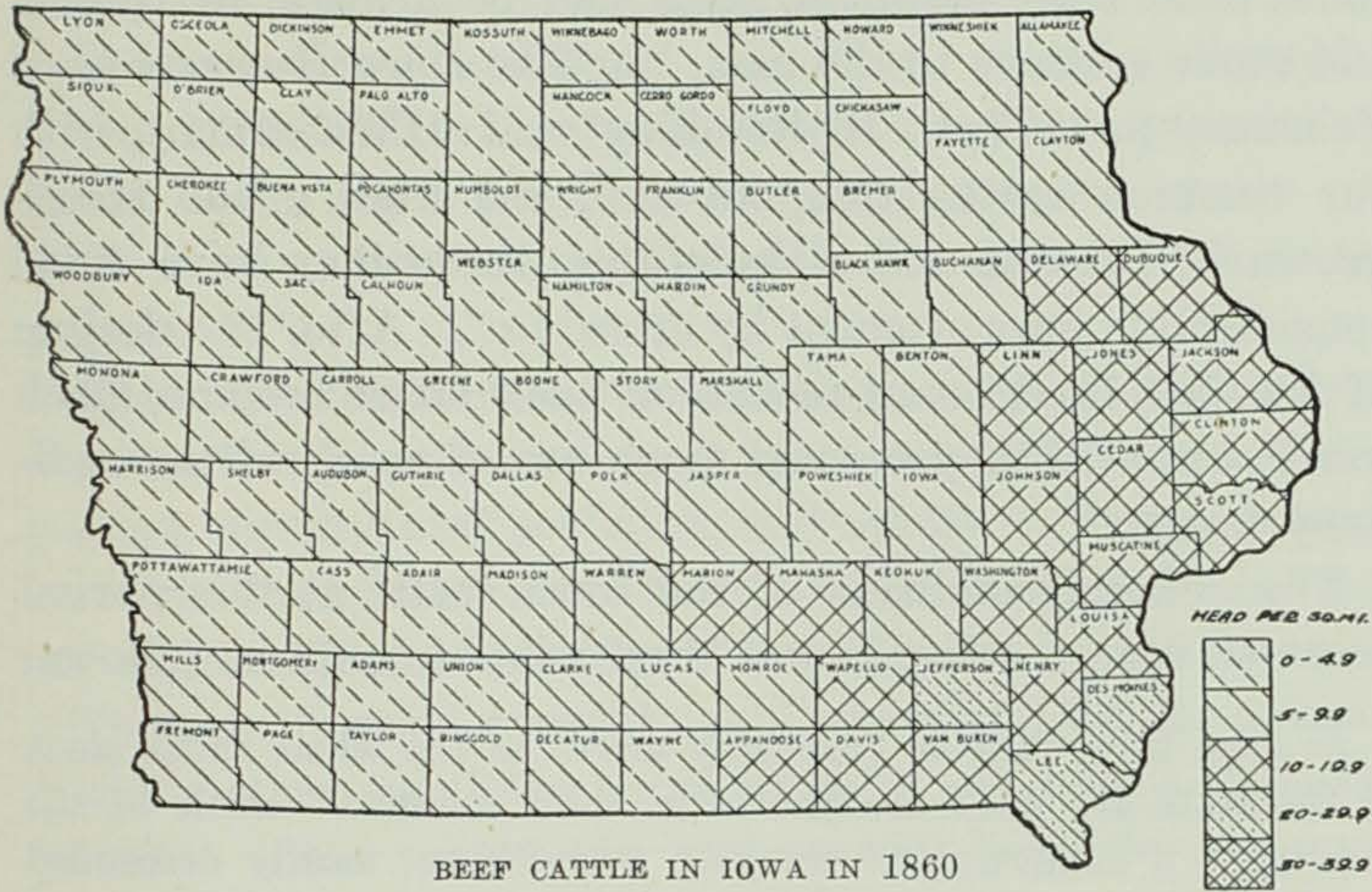
THE CIVIL WAR PERIOD AND THE PUREBRED BOOM
OF THE SEVENTIES

During the Civil War there was but little interest evinced in the improvement of cattle. The interest of the producers was focused for the time on sheep because of the high price of wool. The number of cattle in Iowa was, however, increasing rapidly because of the growth in the number of settlers in the State, and even more because the settlers were trying to increase their live stock as much as possible in order to make use of the prairies. At the end of the war, with sheep unprofitable and consequently unpopular, attention was again turned to cattle. During the decade from 1860 to 1870 the number of cattle other than milk cows in the State more than doubled, and with the increase in numbers there was also a development of interest in the improvement of the type and breeding of the stock for which there was great need. The scrub cattle which were being raised on most Iowa farms produced neither a profitable animal nor a good quality of beef. The improved stock which was being brought into the country and into Iowa was very plainly superior to the native stock both in economy in the use of feed and labor and in the quality of the finished animal. With cattle profitable and with the advantages of the better bred stock obvious to the producers, a lively boom in pedigreed stock resulted. The unfortunate

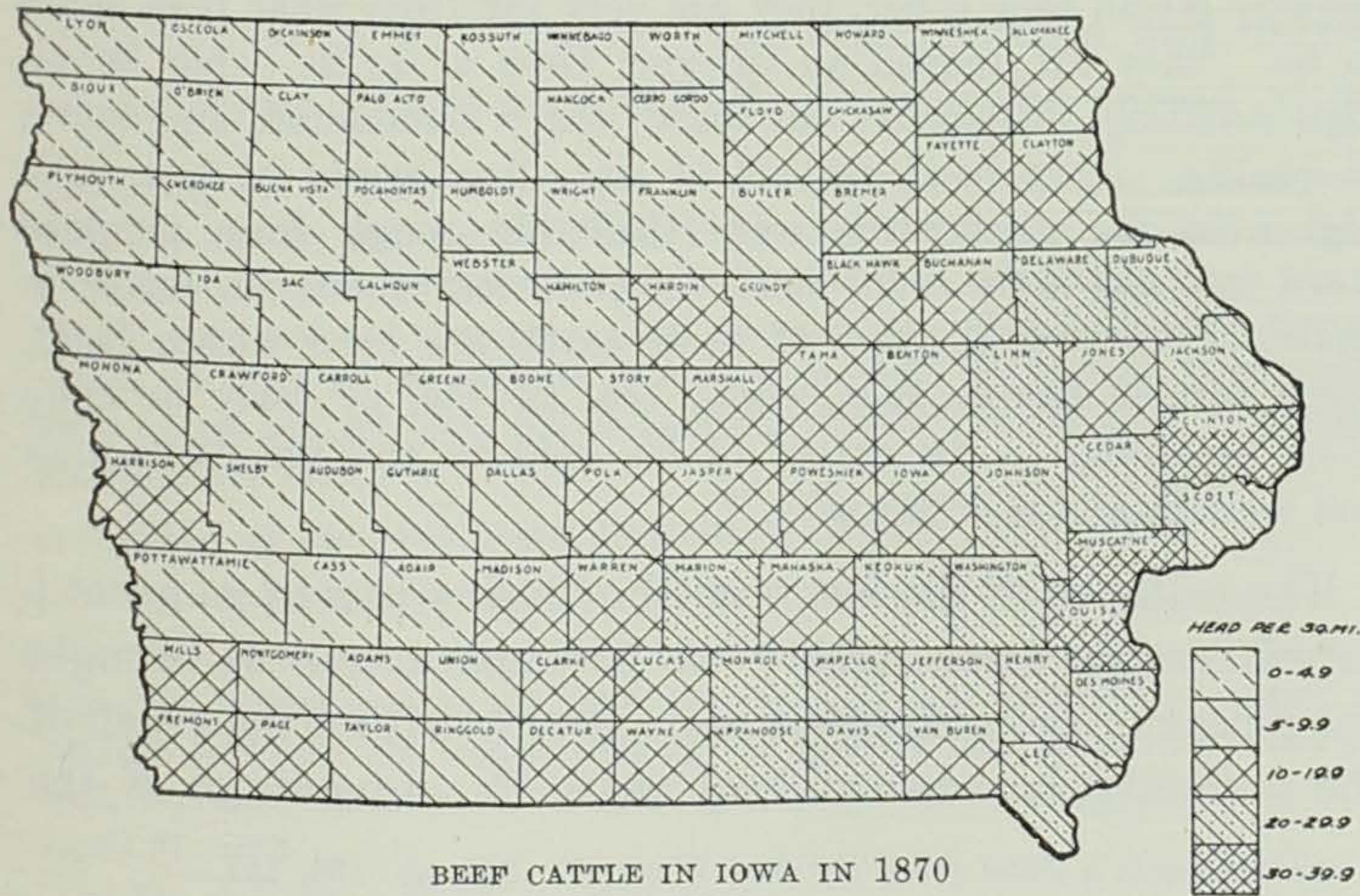
⁷¹ *Report of the Iowa State Agricultural Society, 1857.*

PRODUCTION OF BEEF CATTLE IN IOWA 137

part of the boom was that the purebreds were kept for the most part in the herds of a few men who were speculating



on their pedigrees, and their prices rose beyond the reach of the ordinary breeder.



The high prices of the purebreds made them unattainable to most of the farmers. Also, the newness of the country,

and the fact that the settlers were able to afford only the cheapest cattle postponed the improvement of the stock for some time after material gains had been made in Illinois and other sections to the east. In *The Iowa Homestead* of February 9, 1877, C. D. Reinking said: "We cannot, with our common cattle, compete with the high grade steers grown in Illinois, and other states where they have made considerable improvement by crossing". After the decline of the purebred boom prices on such stock became much lower, but still they seemed much out of reach of the ordinary farmer.

The general condition of the Iowa cattle at this period was well described by James MacDonald in 1878 as follows:

At least three-fourths (probably more) of the whole cattle stock of the state are what are known as the "common" cattle of the country — a nondescript, strangely mixed class, mostly descended from one or other or all of the different breeds early introduced into America. To be sure, they are a degree or two better than the Colorado and Texas cattle; but still, considering the fine rich country which they cover, they are very far from what they ought to be. They are indeed an inferior class of cattle — big boned, high standing, unshapely, flatribbed, sharp shouldered, and coarse in quality. They have no lack of size; they would in fact, rank higher in the stock-yards were their big rough form moulded down into one more even, more compact, and above all, better in quality. All Iowa's share of these cattle are bred within itself, every farmer having four, eight, ten, twenty, or forty or more cows, according to the extent of his holding and the dimensions and content of his dollar sack.⁷²

The collapse of the boom in Shorthorns was of as great a benefit as the boom itself — or perhaps more. It brought the prices of the purebreds more nearly within the reach of the ordinary breeder of beef cattle.⁷³ Advantage of the

⁷² MacDonald's *Food from the Far West*, Ch. XV, pp. 120, 121.

⁷³ "When Short-horns were selling at from five hundred to five thousand dollars, and the market was in the hands of fancy breeders and speculators,

lower prices was taken, and purebreds were more freely bought by the farmers. In 1884 it was claimed that from thirty-five to forty per cent of the Shorthorn bulls in the central-western district of the State were pedigreed.⁷⁴ About 1880 the Herefords also began to gain in prominence in the State, and a few Polled Angus began to come in. In 1886, it was said that the Polled Angus had become "very popular".⁷⁵

The importance of better breeding as well as better feeding was being impressed on the farmers by the agricultural papers, agricultural societies, and others.⁷⁶ It was coming to be realized that the producer of the better bred stock had an advantage over the one with the lower grade stock. "There is no good reason", said one writer on the subject, "why a steer should be three years in reaching a thousand pounds. That weight can just as well be made with even less feed in eighteen months."⁷⁷

In 1886 a report from Johnson County said that purebred cattle were "increasing very rapidly." Prices ranged from \$75.00 to \$300.00 per head while grades and dairies ranged from \$35.00 to \$50.00.⁷⁸ During the period of de-

who often, by collusion and bogus bids, loaded pampered and useless cattle upon the unwary granger; the best thing that the granger could do was to keep out. But now that the bubble had burst, and good Short-horns can be bought at from one hundred dollars upward, and they have been brought within the reach of the common farmer, or granger, the business is on a solid basis and is not only safe but is highly profitable."—*The Iowa Homestead*, February 13, 1885.

⁷⁴ *Report of the Iowa State Agricultural Society*, 1884, p. 358.

⁷⁵ *Report of the Iowa State Agricultural Society*, 1886, p. 448.

⁷⁶ "We are satisfied that four hundred and fifty pounds will catch the average steer twelve months old, and nine hundred and twenty-five pounds the average two year old feeder. We say to farmers only what they know full well, that there is no money in raising these cattle."—*The Iowa Homestead*, April 27, 1888.

⁷⁷ *The Iowa Homestead*, April 2, 1886.

⁷⁸ *Report of the Iowa State Agricultural Society*, 1886, p. 393.

pression in the cattle business in the late eighties and early nineties there was a wide divergence in the development of cattle breeding. Improvement was continued by a part of the breeders. But a great many lost interest for a while, so that a number of sections report that their cattle were going backward in grade rather than improving.

FENCING

Although the desirability of fencing may now seem clear, in the sixties and seventies there was vigorous argument in favor of and against the practice. The question was raised as to whether it was most profitable to fence the stock *in* the pasture or to fence them *out* of the crops. On the one hand was the damage to the crops caused by cattle, or other stock running at large. It was practically impossible to breed good stock, declared one writer, when "as a general thing, the scrub males are allowed to run at large". Speaking on this subject in 1865, H. B. Hoyt said, "Until we have a more stringent law in regard to male animals roaming over our prairies at will, those that would improve their stock, cannot."⁷⁹ On the other hand there was the expense of building fences in neighborhoods where timber was scarce, and where the labor was needed for other things which seemed more pressing. Likewise, there was still free pasturage in most parts of the State and the man with little property but cattle and without help to tend the cattle, objected strenuously to being deprived of the use of the free prairies. The "poor man's rights" were being invaded.⁸⁰

The battle waged over this question of free pasturage.

⁷⁹ Address by H. B. Hoyt in the *Report of the Iowa State Agricultural Society*, 1865, p. 317.

⁸⁰ Mr. Spurrier of Johnson County, in a debate in the "Farmers' Club" of the legislature said: "The poor man with eighty acres of land can keep as many cattle as the man with his many sections, as long as he is not required to fence them in."—*The Iowa Homestead*, March 16, 1864.

It provided a source of income which was not to be surrendered without opposition. J. W. Cessna of Nevada in *The Iowa Homestead* of March 1, 1872, declared that the free pasture would be lost through the herd law. In his opinion this would be a great damage to the farmer of moderate means.

As it is, he can invest every spare dollar in young stock, turn them out on the unbounded pastures of Iowa, and by a few dollars thus expended, he would receive a greater return with less labor than from all the rest of his farm. But deprive him of this privilege by your herd laws, and compel him to herd his cattle through thick and thin, at a cost of \$2.00 per head, and you have taken away one of the greatest inducements to men of small capital, in the East, to emigrate to Iowa.

The above was not an idle claim. The coming of the fence was a symptom of the passing of a form of agriculture in which it had been to the advantage of the farmers to make use of such a large area that they could not profitably fence it. Here was an actual struggle between an extensive and an intensive form of agriculture. Fences were a needless expense and a nuisance under the earlier system. They were a necessity in the later one. As soon as all the land was taken up, and there were enough people per square mile so that they must till the land if they were all to live on its produce, there was no further objection to fencing. The interests of all then required that livestock be restrained. But, even as late as 1871 it was still being said in eastern Iowa that "it is a part of our peculiar civilization which demands that stock shall be free commoners, and any law to the contrary will work an injury instead of a blessing."⁸¹

As the State filled up with settlers, the advantage of fencing or herding became greater, and arguments in its

⁸¹ See the report from Adair County in the *Report of the Iowa State Agricultural Society*, 1871, p. 355.

favor became more frequent. In 1870 a law was passed by the State legislature making owners of live stock running at large liable for damage done by such stock. It was provided that the owner of any cultivated land in the State, or the person actually in charge of it, should have a lien on any wandering stock trespassing on it. Means were provided by which damages could be recovered from the owner of the livestock. But the enforcement of the law was left to local option. The board of supervisors of each county was given authority to determine each year whether the county should vote on the adoption of the law.⁸² In 1872 it was provided that a township might vote on the adoption of the law, on the presentation to the township trustees, of a petition signed by one-third of the legal voters of the township.⁸³ In 1874 the local option features were extended, so that on petition by a fourth of the voters of a county, or on their own initiative, the county supervisors might submit to a vote the question of restraining stock from running at large, or of restraining them between sunset and sunrise, or of restraining them between dates to be named in the ballot.⁸⁴

There was, of course, a great deal of opposition to this law by the persons who had been using the open prairies for grazing. On the other hand, there was also opposition to the local option feature.⁸⁵ This came from persons who

⁸² *Laws of Iowa*, 1870, Ch. 26.

⁸³ *Laws of Iowa*, 1872, Ch. 18.

⁸⁴ *Laws of Iowa*, 1874, Ch. 70.

⁸⁵ The result of the local option provision of the law of 1870 "was that in many cases adjoining counties voted in opposite directions upon it, and the border wars which have ensued, make matters worse than before. We have need of a general statute or nothing, and it is the duty of our representatives to put this matter at rest this winter. Petitions for such a law will not be wanting; the whole bent and tendency of civilization is in its favor, and there is nothing opposed to it but the vestiges of a very early condition of things, which lingers about the timber, and looks with ill concealed dislike upon those

were completely convinced of the utility of the law and whose interests lay in the direction of tillage rather than grazing. On the whole, it is probable that the local option feature was one of the most valuable parts of the law. In most of the State, settlement was still quite thin and it was profitable to permit the cattle to run at large or else to herd them. To compel the owner of a few head of cattle in such sections to fence them in would have meant an unnecessary expense. Voting on the fence law continued throughout the seventies. Its adoption seems to have moved westward about as fast as the intensity of settlement made it economical.

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who are toiling to make homes on the prairie, and by making them are 'spiling the range'.

"What more direct argument in favor of the herd law, in an economic point of view, personal to every farmer in the Northwest, are the columns of *The Homestead* filled as they are every week with estray notices of cattle and horses which have been turned into space in the fashion common here, and who have wandered aimlessly off, to be recovered only at an expense, as often as any way, equal to their value."—Article signed "R" in *The Iowa Homestead*, January 26, 1872.