

From Wheat to Corn

The wheat-growing industry in Iowa began with the coming of the first immigrants. In 1840 one hundred and fifty thousand bushels of wheat were grown in Iowa. By 1850 Iowa was producing more than a million and a half bushels of wheat annually — ten times as much as it had raised a decade before. In 1856 the State had more than 380,000 acres of its fertile land devoted to the wheat crop, and in that year its wheat production exceeded five million bushels. By 1870 it had reached an annual production of twenty-nine million bushels — more than one tenth of the nation's crop. Iowa then ranked second among the wheat producing states of the nation, being surpassed by Illinois alone. In 1875 Iowa had reached its peak in the wheat-producing industry. The farmers of the State had sown more than three million acres to wheat and harvested more than forty-four million bushels of the golden grain.

One of the factors favoring the extension of wheat farming was the liberal land policy of the government. Moreover, wheat grew best on new land, and little capital was needed to begin wheat farming. With the passing of the years the intro-

duction of improved farm machinery stimulated increased interest and constituted an important factor in the extension of the wheat-growing industry.

As wheat production increased, mills multiplied. In the decade of the seventies when Iowa's wheat production exceeded forty million bushels a year, mills became numerous. In 1879 there were 713 flouring and grist mills, and 1,002 water wheels and 287 steam engines in the milling industry. Iowa was indeed a land of wheat, and a land of mills.

There came a day, however, when a decline in the production of wheat became clearly apparent, and the number of mills likewise declined. There were a variety of causes for this change of conditions. The acquisition of government land at a low cost, which had once been a boon to wheat culture in Iowa, came at length to be a deterring factor. Land prices in Iowa increased materially while cheap government land was still available in Minnesota and the Dakotas. Hence farmers interested in wheat culture tended to move into the Northwest. Soon it was discovered that wheat could be grown in other states, ground into flour, and shipped to Iowa more advantageously than it could be produced here. The extension of railroads into the Northwest tended to increase this differential.

Another factor that tended to reduce wheat

production in Iowa was the ever-increasing interest and profits in the cultivation of oats and corn. In 1880 Iowa ranked second among the states of the Union in the production of oats, and twenty years later it ranked first. Likewise, in 1870 Iowa ranked second in corn, and attained first place in 1890. Iowa was fast becoming a land of corn, and more corn.

Not the least of the influences which contributed to a reduction in the growing of wheat and the operation of mills in Iowa, were the insects which ravaged the fields. While the Union and Confederate armies were fighting at Bull Run, in July, 1861, the Iowa farmers were fighting an army of chinch bugs. In 1871 twenty-one counties in southern Iowa reported that spring wheat was "almost an entire failure" because of chinch bugs. Many fields in Washington, Appanoose, Monroe, Montgomery, and Madison counties were plowed up and planted to other crops. In 1874 grasshoppers visited the northwestern counties of Iowa, and in some areas, when harvest time came there was little to harvest.

In 1879 the chinch bugs again infested southern Iowa, and in 1881 they were so thick throughout the Middle West that a "chinch bug convention" was held at Kansas City, where a resolution was passed "to abstain from the cultivation of wheat," and to grow oats, buckwheat, clover, flax and hemp. The greatest damages were incurred,

however, in 1887 when there was an estimated loss of \$25,000,000 because of chinch bugs. One of the best remedies seemed to be the abandonment of wheat culture.

As the mills had moved westward with the wheat industry in the decades of the fifties and sixties and had made Iowa a land of mills, so also mills followed wheat culture into Minnesota. Characteristically, wheat raising and milling were closely allied on a new frontier.

Thus it was that prior to the decade of the eighties, there was a gradual rise in wheat production in Iowa, and a corresponding growth and expansion in the milling industry. In like manner, following the eighties, there was a marked decline in wheat culture and a corresponding decline in milling. Hence, any history of the old water mill must be concerned with the rise and fall of wheat.

When wheat growing became difficult in Iowa, farmers learned that if oats were sown in fields where there had been chinch bugs, the crop might be damaged to some extent, but the bugs would probably not continue to breed there the following year. Hence oats and corn could be rotated without creating a favorable condition for the chinch bug. If a crop of clover or alfalfa became a part of the rotating program, the land would be strengthened for corn, and the insects would tend to disappear.

In his book, *I Remember, I Remember*, Cyrenus

Cole commented upon the transition from wheat to corn, and the role that was played by the chinch bug. Mr. Cole remembered how his parents had suffered a complete failure of their wheat crop. As his father and mother walked through the blighted wheat field one day, he had heard the father say: "There will not be a loaf of bread in the whole field." The mother, wringing her hands, asked: "Then where will we get bread for our children?" Whereupon the father made the stately reply: "The Lord gave, the Lord has taken away, blessed be the name of the Lord."

If the Lord did not provide wheat that year, He provided corn, which the chinchbugs had passed by. So when winter came, the Cole family "ate cornmeal mush in the morning, cornmeal mush at noon, and cornmeal mush at night — always with a great big tablespoon." They also ate bread made from cornmeal, muffins and griddle cakes hot from the fire, with butter and molasses to spread over them. Indeed, they fared so bountifully that when they emerged from winter quarters the mother boasted that her children never before had been so strong and well.

Many years later Mr. Cole declared that perhaps his father was right when, in the devastated wheat field he gave thanks to the Lord. The chinch bugs had, indeed, "turned out to be a blessing in disguise." At all events it seems clear that chinch bugs impeded wheat culture, and stimu-

lated an interest in corn and livestock. If, then, we lament the decline in wheat culture and the passing of the old water mill, we may ascribe it, in part, to the invasion of grasshoppers and chinch bugs.

If Iowa has declined in its production of wheat, it has attained a place of high rank in the production of other agricultural products. It is widely acclaimed as the "State where the Tall Corn Grows." It ranks first among the states in the finishing of fattened cattle. Meanwhile, old mills for the grinding of wheat have been superseded by new, larger, and more modern mills. A notable example of this has been the development of the Quaker Oats Company at Cedar Rapids, which has come to be the largest milling industry of its kind in the world.

But despite the ravages of time, the changes in economic conditions, and the development of new and modern industries, there is yet a deep-seated and affectionate interest in the charms of the old water mill.