The GOLDFINCH

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Iowa City, Iowa

Early Agriculture

Those who labor in the earth are the chosen people of God, if ever he had a chosen people....

- Thomas Jefferson, 1782

Thomas Jefferson dreamed of a nation of educated Americans who owned and worked their land. The United States did not become a nation of farmers. But for a time Jefferson's dream came true for people in Iowa. This is the story of that time, which reached its peak in the golden age of agriculture that began about 1900.

After the United States government allowed settlers into Iowa in 1833, stories about the new land spread rapidly. It was beautiful country, they said, where hardworking people were sure to succeed. Thousands of farmers and would-be farmers packed up and streamed westward.

By the 1850s the migration to Iowa had become a great wave. Families camped two or three days at the Mississippi, waiting their turn for ferryboats to the other side. In only a few years these settlers would turn the forests and prairies into plowed fields.

It had taken over 10,000 years for nature to build the kind of soil farmers dream of. Every spring the prairie grasses pushed up, growing six to eight feet high in the warm summer, then dying down in the fall. The thick mat of dead grass decayed in the

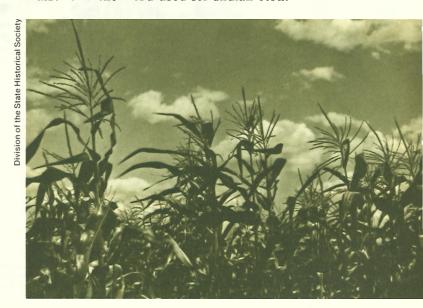
humid climate, building up the fertile soil. This grassland also absorbed and held water well. Once the mass of tangled grass roots was broken up, it became excellent farmland. When the boundary lines were drawn for the State of Iowa, three-quarters of the land was prairie. In one lucky stroke, Iowa's future was assured as a leading agricultural state.

Long before American settlers pushed westward, Indians raised crops in the damp, soft soil along the rivers of Iowa. Using tools made from buffalo shoulder blades tied to wooden handles, they planted maize,

humid adj. — damp, moist.

fertile adj. — able to grow plants easily and very well.

maize n. - the word used for Indian corn.



prairie n. — level or rolling land without trees, covered with thick, tall grass.



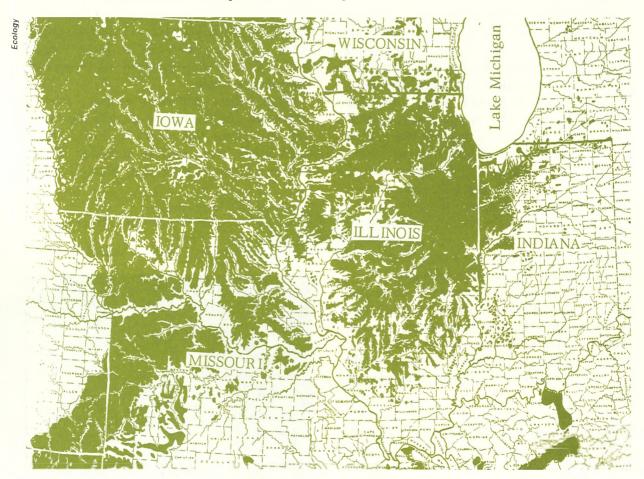
Apples have been a favorite crop on lowa farms. Here, a farmer sprays his orchard.

beans, and squash. To them, the open prairies were places to hunt. Herds of buffalo, deer, and elk ranged over the land, grazing on tall bluestem grass and prairie flowers. Thick as clouds, the flocks of prairie chickens rose from the grass, where wild fruits and strawberries ripened.

Iowa is located where the great eastern forests end and the prairies of the western United States begin. There is not a straight line where trees stop and grass takes over. Large areas of prairie interrupt the forest of Indiana and Illinois to the east. But it is in Iowa where the trees finally give way to the endless Great Prairie.

Settlers on the prairie faced a different set of problems than pioneers of the forested lands. Breaking up the matted root system of the prairie sod required large, strong plows pulled by many oxen. As settlers moved farther out on the prairie and away from the forested areas, there was no wood for homes, fences, and fuel.

bluestem grass n. — one of the tall (2 to 8 feet) grasses that covered the prairie. sod n. — the layer of soil filled with the roots of grass.



This map shows the large prairie in which lowa is located.

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Much of the prairie was low and swampy, and a way was needed to drain away the water before the land could be farmed.

These earliest farmers planted crops that supplied their families and livestock with food. They kept a few chickens and hogs for meat, a cow for milk, and perhaps some sheep for woolen cloth. Orchards, too, were often planted, and after a few years apples and plums added fruit to the family food supply.

In order to have something extra to trade, farmers tried to clear more land and grow a bigger crop each year. Extra wheat, corn, oats, or hogs would be traded for things that could not be made on the farm, like sugar, coffee, thread, or cotton cloth.

Farmers arriving from the many different regions of the United States brought their special agriculture with them. Those from New England and New York carried the seeds for plum, apple, and pear trees. Kentuckians brought their knowledge of improved seed and livestock breeding. From Pennsylvania and Ohio fine flocks of sheep came to graze in the dry pastures of southern Iowa.

For many years, wheat was an important crop. It grew well in newly cleared ground and the yield was high.

Making of.

Even while the first settlers were unpacking their wagons in Iowa country, some brand new inventions were changing agriculture and transportation.

People farming prairie soil faced a serious plowing problem. The soil stuck to the wood or iron blade making work slow because the plowman was forced to stop often and remove the gluey coat of dirt. In Illinois, John Deere's success in creating a steel plow solved this problem. The plow share cut through the earth, and soil fell away without sticking (called scouring).

At the same time, in Chicago, Cyrus McCormick manufactured his reaper. New farm machinery, especially the reaper, worked quickly and saved time over old hand methods. Farmers found that they could grow and harvest more acres of grain.

yield n. — the amount of a crop that is produced and harvested.

In the 1860s, when Iowa's men marched off to fight in the Civil War, farms were left to the care of wives, children, and grandparents. The new machinery made it possible for them to produce the food necessary to support the armies. Many farms were run by women. They kept up their usual washing, cooking and sewing, and child care as well as tending to the livestock and the crops in the fields.

Meanwhile, steam engines already provided power for riverboats. Now these engines pulled trains westward on shiny new rails. People and goods were getting around faster than ever before. This meant that settlers could travel to Iowa more easily and, as farmers, ship their products quickly over long distances.

Before the Civil War, trains had already reached the Mississippi River from the East, and rails had been laid to Iowa City, Cedar Falls, and Ottumwa. With the postwar railroad boom, Iowa farm products could reach the growing markets of the East, South, and West.

HOLLINGSWORTH'S

PATENTED SPRING STEEL TOOTH

SULKY HAY RAKE.

The only Tooth that can be set for Rough and Smooth bottom, adjustable Fully warranted. Send for Price List.



NOTICE---Having been burned out on the night of latinst., which disaster has been very generally circulated throughout the country, we desire to say that we are still at the old stand, and prepared to fill orders as usual.

REDUCED PRICE OF RAKE, - - - \$55.

J. HOLLINGSWORTH & CO., 60 West Lake street, Chicago, Ills.

An advertisement showing that women and girls did farm work during the Civil War.



A steam engine belches black smoke as it powers the threshing machine.

During the Civil War years wheat prices went up, and Iowans planted more, eager to make a good profit. However, the wheat, planted year after year, wore out the soil. In older fields, wheat yields grew poor. Also, pests like grasshoppers and chinch bugs attacked the wheat, destroying the whole crop in some years. Finally, with the end of the war the "bottom dropped out" of wheat prices. For many Iowa farmers, that was the signal to put their energy into corn and livestock. There was a good market for animals at packing plants in Sioux City or Chicago. Corn-fed hogs and cattle soon led Iowa agriculture, while wheat growing moved to states farther west and north.

Over the years, farmers had learned that the soils differed around the state. Certain crops did better in certain areas. Agricultural regions took shape in Iowa even though most of the soils were excellent for corn and other grains. The northeast hilly area was good for pasture, and dairy cattle thrived there. In the southern, western, and eastern areas livestock (beef and pork) found increased favor.

In general, farmers had tended to be careless in their use of the land. This was

not just Iowa's problem. Americans were used to thinking there would always be more land for new farms. By the 1880s, however, they saw this would not be true much longer. Farmers began to take an interest in keeping their soil fertile. They rotated corn with oats to prevent crop diseases and insects. Crop rotation also helped to keep the soil supplied with different plant foods, instead of wearing it out by growing the same crop year after year. In the low, swampy areas of prairie, farmers learned to tile the fields to drain off the water.

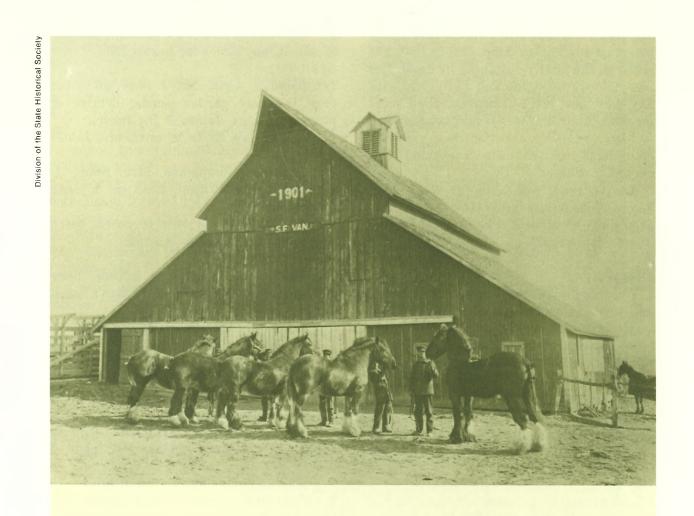
Farmers also learned that certain breeds of hogs and cattle produced better meat than others. They began to raise animals that sold best at the packing houses. Special attention was also given to the feeding of animals to produce the best possible meat.

In all these areas of farm improvement, the State Agricultural College took the lead in helping farmers to be successful at their "business."

tile v. — to place clay pipes under the ground to help drain off water.

By the start of the twentieth century, farming in Iowa was very much a business. The golden age of agriculture had arrived. But farmers were moving away from the simple country life of Jefferson's ideal. Good business planning and labor-saving machinery became more and more important. Farms grew larger and required fewer hands. As time went on, fewer and fewer Iowans worked closely with the soil.

All across the nation people moved to cities, where there were jobs in factories and shops. America was on its way to becoming an industrial nation, and drifted away from Jefferson's dream of farming as a way of life for everyone. Although Iowa, too, developed large and important industries, agriculture would remain an important part of life throughout the twentieth century.



Horse Power

Both horses and oxen provided the power on American farms up until the middle of the 1800s. But oxen were too slow to pull the new machinery Iowans began using in the 1850s and 1860s. Most of the horses were fast enough, but tired quickly. Power ful animals like the draft horses used in Europe were needed. Iowans imported Percherons, Belgians, and Clydesdales. Along with the other agricultural states of Ohio, Michigan, and Illinois, Iowa became a leader in breeding draft horses.

The Diary of a Farm Wife: Emily Hawley Gillespie

Emily Hawley came to Iowa in 1861, when she was twenty-three years old. She married James Gillespie in September 1862, and in December they began working their own farm, one and a half miles west of Manchester, in Delaware County.

The diary entries on these pages are in Emily's own words. Emily wrote about her family, friends, and neighbors. By 1872 she and James had been working the farm for ten years, and had two children: Henry, age eight, and Sarah, age six. In 1870 Emily bought a sewing machine; before that, she made all the family's clothing by hand. Her diary shows what she and James did each day, and how often farmers traded work for each other. Parents would get together to hire a schoolteacher for their children. Neighbors visited, ate together, and stayed overnight.

As you read, ask yourself: What were Emily's jobs on the farm? How did she help earn money? What did her family usually do on Saturdays?

JANUARY 1872

- 4. Thursday. children at school. I go to the mill with James, he took 14 bushels of corn we stay to dinner at Dan Ryan's. Mary buys a sewing machine like mine.
- 10. Wednesday. cut cloak & dress for Sarah, James help Estey kill hogs Trumblee here begging for poor family give butter & meal.
- 22. Monday. wash. bake etc. Bly here to get job to frame barn; offers for \$20 \$5 less than Trumblee. cold & blustery.
- 26. Friday. James pay taxes \$29.66.
- 27. Saturday. mop, bake, churn, iron, etc. go to town, bargain for 2,000 ft. of lumber. FEBRUARY 1872
- 1st. Thursday. so cold children have stayed at home all week.
- 7. Wednesday. sew carpet rags & cook. James take children to school & do chores. Nathan Nelson died yesterday consumption & derangement of mind.

- 8. Thursday. warm & pleasant. good sleighing. we attend the funeral of Nathan. there were 37 sleighs followed in procession to the grave.
- 11. Sunday. we attend meeting in evening. Brother Wood Lecture on the subject of Marriage & Money.

MARCH 1872

- 1st. Friday. James' birthday 36, he & Bly go to town in forenoon, [build] frame on barn in afternoon. sell 2 pigs to Smith.
- 27. Wednesday. James go to mill, 6 bushels of wheat. buy shoes for Sarah \$.95.

APRIL 1872

- 1st. Monday. wash, mop & cook. go to get grist, buy garden seeds, licorice & postage stamps. James & Bly frame.
- 17. Wednesday. fix hens' nests etc. James sow wheat.
- 27. Saturday. Chapmans, Mrs. Smith & Sellens, Henry Stimson & us go & clean schoolhouse.
- 28. Sunday. we ride over to creek, catch five minny fish. Henry get one.

MAY 1872

- 1st. Wednesday. sew some & cook. have 100 turkey eggs setting & 55 hen's eggs. James plow.
- 4. Saturday. churn, bake, mop, iron etc. James plant potatoes, we go to town in evening. sell 20 lbs. butter \$2.80; buy 2 readers, 3rd, \$1.20 8 lbs. of sugar \$1.00.
- 5. Sunday. John & Harriet & David here to tea. I bake 3 pies & a cake.
- 6. Monday. children commence to go to school. Miss Pope, teacher, to teach 5 months for \$80.
- 7. Tuesday. James mark corn ground.
- 8. Wednesday. churn. make straw tick (mattress cover) & cook. James plant corn. rain.
- 26. Sunday. we are at home. have 90 chickens & 60 turkeys.

JUNE 1872

13. Thursday. bake, sew some. James hoe onions in forenoon. he & Chapman break in afternoon.

- 18. Tuesday. clean house. have fed salted meal to my turkeys accidentally, killed 18. James make bedsteads in forenoon, plow corn ½ day.
- 19. Wednesday. bake, churn, pack butter etc. James plow corn. Henry and Sarah have the chicken pox.

JULY 1872

- 10. Wednesday. bake pies & cook. James build fence in forenoon & rake hay for Sellens in afternoon. very warm.
- 17. Wednesday. churn. go rasberrying. James bind wheat.
- 18. Thursday. clean house. Sellens & Chapman cut hay for James. James rake hay.
- 31. Wednesday. James work for Chapman in harvest.

AUGUST 1872

- 26. Monday. can 5 qts. peaches. children go to school. James help McMillen thresh. SEPTEMBER 1872
- 24. Tuesday. clean up house & cook. James help Uncle thresh. 'tis the first day of the fair, I would like to go very much indeed. 25. Wednesday. we go to the fair but too late to enter my things.

OCTOBER 1872

- 4. Friday. bake bread. threshers came. 4 to dinner & 8 to supper, stay all night.
- 5. Saturday. they finish threshing, though rainy, 125 bushels wheat & 140 oats.

- 9. Wednesday. knit etc. help James put up oats. cold. freeze.
- 11. Friday. sew & bake, churn. James dig potatoes, he sold cows to Beal for \$40.
- 23. Wednesday. Mr. Oviat's barn burned last night, cause kerosene from lantern. NOVEMBER 1872
- 4. Monday. wash, bake, churn, etc. James husk corn ½ day. we go to town in afternoon sell 56 doz. eggs for \$11.20
- 21. Thursday. finish [sewing] coat & cut pants. James husk corn. we visit at Sellens. DECEMBER 1872
- 6. Friday. patch, sew, etc. James take 81 chickens to market, get \$12.60.
- 7. Saturday. we go to town in afternoon sell 67 lbs. butter \$6.70.
- 10. Tuesday. bake etc. James get up some wood. he & Bly lay foundation for barn ½ day.
- 25. Wednesday. Christmas. make me an apron, a shirt for Sarah & cook. James do chores. children get magazines & papers in their stockings.
- 30. Monday. visit at Dan Ryans while James attend Auction, he bought two yearling heifers, paid \$20.75. snow.
- 31. Tuesday. the year ends in a most beautiful day. James go after his yearlings.



Plowing in the Past: A Look at Early Farm Machinery

During the 1800s farmers took everything from a simple hoe to a thresher "snorting black smoke" into lowa fields, seeking better harvests. Machines were run by hand, by oxen or horses, and finally by steam engines. Farm machinery grew up with the state, whose farmers were always eager for anything that helped them get more work done.

On these pages you will see some of the machines lowans used during the heyday of man and horse powered farming — and after the arrival of the steam engine. Both these sources of power were "put out of business" by the machine that still runs the lowa farm today — the gasoline tractor.

For over a hundred years, American farm tools were made by local blacksmiths. Plows were made of wood, held together with metal bolts and bars. Some blacksmiths experimented with changes to make their plows turn better furrows. (A furrow is the shallow trench of turned soil left behind the plow.) In the 1800s, cast iron parts were added to the cutting edge.

Prairie soil stuck to the wooden or iron plows. Plowing took a yoke (pair) of oxen and three workers: one to drive the team, one to steer the plow, and the third to clean dirt off the blade. Or, one man could do all three jobs in turn — very slow work, indeed!

John Deere's slick steel plow solved the problem of sticking. It also pulled more easily than any plow that had been tried before. Farmers could now switch from slow oxen to faster teams of horses for plowing power.

PLOW, BY DEERE & CO., MOLINE, ILL.

The sharp wheel-shaped piece on this plow is called a colter. It cut into the surface of the ground to help the plow blade move through the soil more easily.



Iowa Agricultural Report, 1867



This sulky gang plow was said to plow seven acres a day. A hand plow could only do about two acres a day. The gang plow turns more than one furrow at a time. Sulky is the word used for a horse-drawn machine on which the farmer could ride.

Corn was first planted by hand, like other grains. After the corn began to grow, it needed cultivation (stirring the soil to kill the weeds). Because straight rows made cultivation easier, farmers marked out their field rows before planting. They drew lines across the field lengthwise and crosswise, making a checkerboard pattern. Corn seed was planted where the lines crossed. The field could then be cultivated either crosswise or lengthwise.

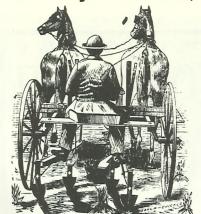
> Making of America Inventions in the

The Celebrated HUDSON HAND CORN & PUMPKIN SEED PLANTER!



Corn seed was placed in the box of the hand corn planter. The tip of the planter was pushed into the ground. The handles were opened and closed, dropping a few seeds into the ground.

"Hawkeye Cultivator,"



lowa Homestead and Horticulturist, 30 May 1866

VICTORIOUS IN EVERY CONTEST! AWARDED THE FIRST PREMIUM

ILLINOIS STATE FAIR FOR 1865,

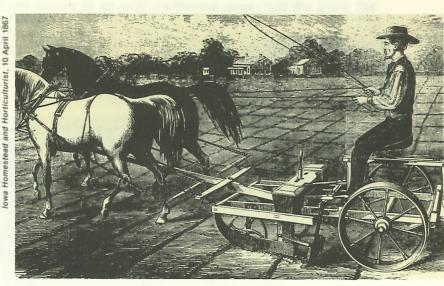
Held at Chicago, 40 machines competing, And the First Premium at the IOWA STATE FAIR (BURLINGTON) FOR 1365'

In a Field Trial of 2 days, 23 machines competing.
The principle upon which it is constructed is the most simple and durable, and combines more and ensire rching as —adapting it to the various stages of growth of the cont—than any other Cultivator in use.

For sale by BROWN & SPOFFORD.

Des Molnes, and other Dealers throughout the State.

3mil

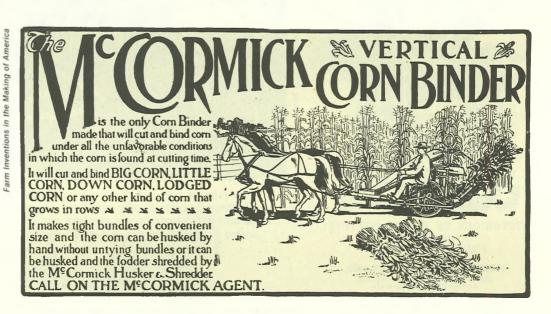


This planter was operated with an extra helper who pulled the seed planting handle as the machine came to each cross. The paddle behind the seed planter pushed dirt over the seed, then the wheel rolled over, patting the dirt firmly down.

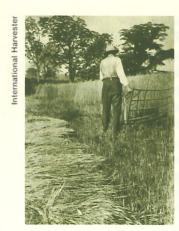
After years of walking along behind plows, bending over to hoe weeds, and working through a field on foot during harvest, farmers welcomed a chance to "farm sitting down." This two-horse sulky cultivator was wide enough to do two rows at once.



Hand husking (picking) corn was slow, difficult work. As each ear was picked it was tossed into the wagon. The high board on one side is called a bangboard. It acted much like the basketball backboard. The farmer tossed the ear of corn, it hit the board and dropped into the wagon.



Sometimes farmers harvested the whole corn plant at once. Corn stalks are heavy, and setting them up in a shock was back-breaking work. A machine to cut down and tie corn stalks into bundles helped make the harvesting of corn faster and easier. But the bundles still had to be lifted, stacked, and tied into shocks.



When his wheat field began to ripen, half of the farmer's job was still ahead of him. First, the ripe wheat was harvested with a cradle. At the bottom of the cradle was a scythe that sliced through the wheat stalks close to the ground. The cradle of wooden rods caught up the loose stalks as the farmer swung the cradle around, and the stalks fell to the ground in neat rows. A helper then tied the stalks into bundles, and set them into shocks to dry.



Men bundle and stack wheat into shocks as an early mechanical reaper cuts the grain. The reaper replaced the scythe and cradle.



The Growth of Industrial Art

Threshing is the process that removes the grain from the wheat stalks. Before the threshing machine was invented, wheat was beaten with flails to knock the grain loose.

The first threshing machines were powerd by horses. In the 1890s steam powered engines began to replace horses. These "snorting monsters" on wheels made threshing into a neighborhood get-together. It took as many as twenty men to keep the thresher running, and farmers helped one another. Some brought the shocks in from the fields on wagons, some fed the wheat into the machine, still others handled the sacks of new grain. Another worker stacked the straw, while a fireman kept the engine supplied with wood. Farm wives, too, worked long hours during threshing time, fixing a huge dinner for the large threshing crew.

Book Farming — Who Needs It?

"Book farming! Away with your book farming. I want no books to teach me how to raise wheat, corn, and potatoes; I can raise as good crops as any of my neighbors, who seem to be filled with agricultural books and papers. . . ." This was the popular feeling among Iowa farmers in the 1800s. Careless, wasteful farming was the usual habit of Americans. Cattle and hogs had no sheds over them. Wheat was planted on last year's corn field without plowing. Often when plowing was done, it was not deep enough to allow plant roots to grow deep into the ground.

Meanwhile, newspapers and farm journals were reporting on new methods and machines, and urging farmers to take better care of their land and animals. And there were some Iowans who saw the need for such "scientific" farming. Among these men was Suel Foster, a nurseryman from Muscatine. He pushed forward plans for a state agricultural college and farm where careful, scientific farming could be taught. The school farm would be a place for experimenting with new ideas. The state legislature voted in favor of the idea, and in 1859 a place was chosen: 648 acres of unfarmed prairie in Story County.

There was not much money in Iowa at this time, and very little to spend on a new college. To help the school, manufacturers gave machinery, Polk County nurserymen promised fruit trees, and animal breeders supplied livestock.

About this time a lucky thing happened. The United States Congress passed the Morrill Land Grant Act to help states start

nurseryman n. — a man who raises and sells plants and trees.



colleges for agriculture. Each state received 30,000 acres of land for each representative and senator that it had in the Congress. Iowa had eight, and so was given 240,000 acres. The state sold some of this land and rented out the rest. Then Iowa used this money to get the college running. Colleges that were started by this gift of land from the government were called land grant colleges.

So Iowa State Agricultural College opened in 1868, with 77 men and 16 women enrolled. Students took classes, worked in the fields, cooked, and even helped to put up added buildings. But few Iowans had the time to go to college. So the school looked for ways to reach farmers at home.

All over the state, the College set up meetings for farm men and women. Women went to cooking and sewing classes. Their husbands learned which breeds of cows were best for beef or milk, and which kinds of grass made the best feed. They were told how to keep their fields from wearing out or eroding away. These were important matters, if a man wanted to keep the farm in good shape for his children. The college teachers wanted Iowans to start thinking about the future of their land. They also studied how to keep accounts of their money.

In 1891 a new professor, James "Tama Jim" Wilson, was hired by the College. James Wilson's life goal was to bring science and education into farming. As director of the experimental farm, he made it respected by scientists and accepted by farmers. The kind of scientific research James Wilson made happen at the State College would become an important part of American agriculture.

Six years later, President William McKinley asked him to be U.S. Secretary of Agriculture. As he had done in Iowa, James Wilson made the Department a busy and respected place. Research and education programs grew and reached out to touch the lives of American farmers.

eroding v. — washing or blowing away of soil.

"Tama Jim" was chosen for this job by three Presidents: William McKinley, Theodore Roosevelt, and William Howard Taft.

Meanwhile, the Agricultural College continued to promote bookfarming in Iowa. With the help of editor Henry Wallace, trains were sent around the state to "show and tell" the latest methods to farmers. In their first year these travelling classrooms stopped at 670 towns. Teachers from the College travelled nearly 10,000 miles and talked to more than 127,000 people. Iowans learned they could look to the State College at Ames for leadership as farming moved into the future.



In October of 1854, the first Iowa State Fair opened at Fairfield. It was a chance to mix social life with the serious side of farming—and who could pass that up?

Like most early fairs, the yearly State Fair in Iowa was an agricultural event. Farmers from all parts of the state brought their best cows or horses, ears of corn, potatoes, or apples. Women carefully packed their needlework, bread, and fruit preserves. There were cash prizes for the winning exhibit of each kind, and a chance to see what your neighbors were doing.

Livestock and crop winners proudly shared their methods. Farmers compared which kinds of grain or animals were best suited to Iowa. Did Merino sheep give the best wool? Which grew fatter, Suffolk hogs or Chester Whites?

There were exhibits of pickles, flowers and paintings, as well as choice types of corn and vegetables. Manufacturers displayed their latest machinery. In the evenings, farmers sat around tables by lamplight, talking about what they had

tried that year—what methods worked, what didn't. From seeing prize-winning exhibits and listening to others, a farmer could get some new ideas and the desire to go home and try them.

The favorite form of excitement of early fairs was the plowing match. This pitted the straightness and depth of one man's plowing against another's. In 1858, the winner of the match used a John Deere plow with a revolving colter. He proved to many the importance of this new invention.

The State Fair was moved to a new place every couple of years. It was a social highlight in the farming year. Besides the plowing matches, there was the thrill of trotting-horse races. Later, balloon ascensions, bicycle races, and band music all became part of the Fair's entertainment. In 1884, permanent State Fair grounds were set up in Des Moines. There the yearly display of prize livestock, vegetables, and the latest machinery continued side-by-side with the great fun and social life of the Fair.

George Washington Carver (1864?-1943)

In 1891 a tall, slender Black youth enrolled at the Iowa State Agricultural College. He was 25 years old, and his name was George Carver.

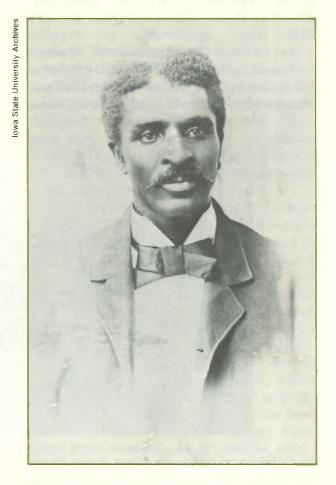
The College, with about 300 students, was surrounded by the rich fields of Iowa. Under Director James "Tama Jim" Wilson, it was bringing scientific methods to American farming. James Wilson was especially interested in breeding plants and livestock to improve them. He found an able student in George Carver.

George was born a slave in the last years of the Civil War, and raised by Moses Carver, a hard-working farmer. Early in his life, George showed a special love for flowers. He could take a sick plant and give it what it needed - more light or richer soil. Because of this gift the neighbors took to calling him "the plant doctor." At the age of 14 George travelled from Missouri to Kansas and then to Iowa, working and stopping when he could at schools for "colored children."

In 1890 Simpson College, at Indianola, opened its doors to the penniless but eager student after another college had turned him away because he was Black. Friends encouraged him to study agriculture, and the next year he went to Ames.

At the Agricultural College, Carver earned his way by working as a janitor and in the dining room. He amazed his teachers with his natural ability and gained the scientific training to match it. After receiving his college degree, George Carver was appointed assistant botanist in the College experiment station. He was the first Black to graduate from the College and the first to hold a faculty position.

After five years, Carver went to work and teach at Tuskegee Institute. During his life's work at this all-Black college in Alabama, Dr. George Carver made many discoveries about plants. He developed



over 300 foods and other useful products that could be made from peanuts alone! At a time when Blacks were being denied the right to an education, two Iowa colleges opened their doors to George Carver-and he became one of their most famous graduates.



The basic source for this story is Rackham Holt's George Washington Carver: An American Biography (Garden City, New York: Doubleday, Doran and Company, Inc., 1943).

Henry Wallace (1

(1836-1916)

In 1879 Henry Wallace, a forty-three year old ex-preacher, bought part of a small Iowa newspaper, the *Winterset Chronicle*. He knew nothing about publishing, but he was a landowner, and thought the local papers paid too little attention to farmers' needs. So, in this way, began a new career of speaking to and for the Iowa farmer.

Four years later, Wallace was hired as editor of *The Iowa Homestead*, a larger farmers' paper. Meanwhile, with James Wilson—a life-long friend—he founded the Farmers' Protective Association. The Association fought the eastern barbedwire manufacturers. Barbed wire was needed by every prairie farmer. A few eastern companies controlled the supply of this fencing material to Iowans and charged high prices. The fight was successful, and in 1885 the companies were forced to cut their prices in half.

More and more, Henry Wallace became an important voice in Iowa politics as well as farming. With his friend James Wilson, now a congressman, he fought the high rates railroads were charging farmers. It made him angry that grain cost so much to ship, while pro-railroad congressmen were given free railroad passes to travel anywhere they wished! In 1887 The Homestead helped to re-elect Governor Larrabee, who had spoken out against the high railroad prices. The Governor then set fair shipping rates for farm products.

Henry Wallace became known as a man who helped farmers work together to defend their interests against business. He also believed in breeding livestock to improve it, and other kinds of scientific or "book farming." He experimented on his own cattle and clover, and urged others to do so. He believed that farming was taught badly—or not at all—at the State Agricultural College. He felt the teachers were not the best, and heard people joke about the "cow college."

editor n. — person who directs a newspaper or magazine.

reformers n. — persons who suggest and try to carry out changes or improvements.

With James Wilson and other reformers, Wallace set out to make the Iowa State Agricultural College as good as the land grant colleges in Illinois or Massachusetts. They urged the College to give training in actual farming methods, not just the study of science and math.

His son, Henry C. Wallace, was an assistant professor at the College, and they shared many of the same beliefs. Together, they started farmers' meetings, where farm men and women could share their everyday experiences. Rural living problems in education, sanitation, and child care were discussed.

In 1895 Henry Wallace had an argument with his employers at *The Homestead* and was fired. Now he was sixty years old, broke, and unemployed. But his sons came to the rescue. They turned over to their father a small paper they ran in Ames. This paper, renamed *Wallaces' Farmer*, became Henry Wallace's greatest success. It grew powerful, and was read throughout the Midwest.

In the years that followed, the Wallaces spoke for the farmer in Washington, D.C., as well as in Iowa. In 1908 President Theodore Roosevelt called on Henry Wallace to find out about the problems of rural living.

Henry Wallace died at the ripe age of eighty. Wallaces' Farmer was left in the able hands of Henry C. Wallace, a teacher and animal breeder. Henry C. went on to be U.S. Secretary of Agriculture under two Presidents. His son, Henry A. Wallace, was to be the most famous of the family. He became editor of Wallaces' Farmer in 1921, when his father became Secretary of Agriculture. Later, Henry A. Wallace would serve as United States Secretary of Agriculture, Secretary of Commerce, and Vice-President under Franklin D. Roosevelt.

The basic source for this story is Russell Lord's *The Wallaces of Iowa* (Boston: Houghton Mifflin Company, 1947).

rural adj. — having to do with country life or agriculture.

sanitation n. — the method of bringing about clean conditions that protect health.

One Step Farther ...

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Iowa State Historical Department Division of the State Historical Society

EDITORIAL STAFF

Margaret Atherton Bonney Alan M. Schroder William Silag Peter T. Harstad, Editor-in-Chief

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