

THE PALIMPSEST

EDITED BY RUTH A. GALLAHER

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The Corn Gospel Trains

The word "gospel" is an inheritance from the Anglo-Saxons and today it means, as it did to them, "good tidings". So it was not surprising that the men who planned to disseminate knowledge concerning the value of testing seed corn thought of the project as spreading the gospel — the good news — that a man could know whether or not the corn he planted would germinate.

And so it was that in the spring of 1904 the first seed-corn special train moved out of Des Moines on the Rock Island Railroad headed north. The engine puffed along, pulling the two private cars and the passenger coach equipped as a lecture room. In one of the private cars Professor Perry G. Holden, Professor of Agronomy at the Iowa State College of Agriculture, organized his notes and demonstration equipment, for twenty-minute stops would give little enough time to preach the gospel of good seed corn. There will be time, however, before the train reaches Gowrie, its first

stop, for us to take a brief survey of the beginnings of this project.

Richard P. Clarkson, editor of the *Iowa State Register*, was one of the early preachers of the gospel of seed-corn testing in Iowa. Year after year as the snows of winter melted away, Clarkson filled column after column with well-chosen words of sound advice to the farmers, urging them to make careful tests of their seed corn before planting it. He argued that "if a very ordinary crop could be harvested by planting a haphazard lot of seed corn, a marvelous crop could be secured if seed corn was planted, every kernel of which was known to be capable of germination". Moreover such testing was insurance against the additional labor involved in replanting, if the first seed did not produce even a poor "stand" of corn.

In the meantime, "Uncle Henry" Wallace, founder and editor of *Wallace's Farmer*, had be-thought himself of a scheme to improve dairying in Iowa. His plan was to send a train across the State carrying experts in dairying who would give lectures to the farmers at the railroad stations. He approached railroad officials on this matter and a "dairy special" was provided in 1893, but the trip was a short one and for some reason the interest was not great.

The immediate impetus which produced

"The Corn Gospel Train" was the early frost in northwestern Iowa in the fall of 1903. According to an account written by Perry G. Holden, the officers of the Grain Dealers' Association of Iowa were worried about seed corn for 1904 and appealed to Mr. Holden for advice. He suggested that they ask each grain dealer to select three farmers and request each of them to send ten of his best ears of corn to Ames. A test of 1,256 sample ears indicated that less than sixty per cent of the kernels would grow in the germination box; even fewer would be likely to grow in the soil.

While Mr. Holden was still busy with this testing a representative of the grain dealers at Des Moines called him and asked him to attend a banquet to be held at Hotel Savery on April 9, 1904. The invitation was accepted, with the proviso that no speech would be required. Just to be safe, however, Mr. Holden took his germination box with him.

After the eating was over and the first speaker had entertained the company, the toastmaster called on Mr. Holden, who responded, "I had no time to prepare a speech so I brought one already prepared." With that he went to the door, picked up the germination box, and laid it on the table before him.

"When I opened up that box", relates Mr.

Holden, "and showed them that not half of the ears from which those kernels were taken were fit to plant and told them that I had tested over 1,200 samples, I simply stampeded the bunch — they rushed up to see the corn in the box. Not another speaker was called on that evening. I finally had to call them to order and apologize to the President who had promised he wouldn't call on me. There seemed to be no disposition to go on with the program. With almost one voice at least with one mind came the question, 'what can we do about it?' " Mr. Holden replied that he intended to drive from town to town and show the farmers just how to make the germination test. In as many cases as possible he and his assistants would leave a germination box with corn in it in each community.

The idea of sending out instructors on seed-corn testing soon took root. Someone suggested that a train would reach a lot of farmers and a proposal that the railroads assist in the project was presented to W. H. Given, superintendent of the Des Moines Valley Division of the Chicago, Rock Island and Pacific Railroad. The argument for the coöperation of the railroads was simple; the more corn the farmers could produce, the more freight there would be for the railroads to carry. Given doubted if hard-headed, practical farmers

who had farmed all their lives would leave their spring work to attend a lecture on seed corn by a college professor who raised corn in a "hot-house", but he agreed to try the plan.

On April 15, 1904, the *Iowa State Register* announced that the Rock Island Railroad would send a special seed-corn train over its northern Iowa line the following week. It was to start at Des Moines and make its first official stop at Gowrie in Webster County. Thence it would proceed northward, stopping at towns along the line, including Rolfe, Mallard, Ayrshire, and Ruthven. It would then continue northward to Sibley in Osceola County, and return southward by another route, stopping on the second day at Melvin, Hartley, Royal, Rossie, Pocahontas, and other stations. On the third day the train would continue on southward through Palmer, Manson, Perry, Dallas Center, and Waukee to Des Moines. The train consisted of an engine, two private cars to accommodate the party and the press correspondents, and a passenger coach with seating capacity for seventy persons.

Professor Holden had enthusiastically accepted the responsibility of presenting the lectures and demonstrating the germination boxes and to him belongs the credit of making the seed-corn trains a complete success. At Gowrie, the platform was

loaded with farmers waiting for the corn special. "Fur coats, top boots, waving scarfs and broad hats showed that they were of the industrious class, who would listen and then tell their neighbors. The railway officials were satisfied and doubted no more. For twenty minutes the farmers sat in that long car and listened in open-mouthed wonder when the mild-mannered college professor explained to them things so simple in the raising of corn they wondered why they had not thought of them before." They discovered that instead of being instructed by a college professor they were being "talked to" by a man who had had charge of a farm of 25,000 acres, with 8,000 acres planted to corn each year.

On April 22nd the *Iowa State Register* reported that Professor Holden's "Special Corn Lecture Tour" was an outstanding success and devoted a half page to a story entitled "Thousands of Iowa Farmers Receive Timely Advice on Corn Growing". According to this report the seed-corn special had traveled 450 miles and stopped at 50 stations. A total of 18 hours had been spent in delivering 60 lectures to 2,000 farmers in 15 counties, and the territory covered included 3,000,000 acres of Iowa land, 25 per cent of which would be planted to corn. There is no report on publicity, but local newspapers doubtless carried notices of

the time the special train would arrive. Railroads advertised the trains by posters and grain dealers were expected to notify farmers in their areas.

Professor Holden, the "corn evangelist", emphasized especially the necessity of exercising the utmost care in selecting seed corn. Take six kernels of corn from each ear of seed corn, he said, two from the butt, two from the tip, and two from the middle. Make a test of these to ascertain which of them come from good ears and then plant accordingly. The germination test was simple. The farmer was instructed to put a layer of moist sand, dirt, or sawdust in the bottom of a box and cover it with a layer of cloth marked into one and a half inch squares, each with a number. The six kernels of corn from the ear numbered one were placed on the square numbered one and so on down the list. When all the squares were filled, the corn was to be covered with another piece of cloth larger than the box and on this was placed about two inches of moist sand, dirt, or sawdust. The box was then kept in a warm place — the sitting room was suggested. From four to six days later the top cloth was to be removed and the kernels examined. If any of the kernels in a square had failed to germinate properly, the corresponding ear was to be discarded.

The lecturer called attention to the fact that the

average yield of corn in Iowa was thirty-three bushels per acre, and with this average Iowa produced more corn than any other State in the Union. He believed that with the exercise of due care in planting, the average yield could be materially increased and Iowa could produce more corn than any other two States. This, he said, was not merely a matter of local concern; it was of world-wide interest, for the nations of the world looked to Iowa for leadership in the production of corn.

During 1904 the corn special went into various parts of the State, a number of railway companies participating without charge. It was reported that these tours covered thirty-seven counties of the State and that enthusiastic crowds gathered at every station. The lectures given on these tours centered chiefly upon three points:

1st — where to secure the best seed corn.

2nd — the most convenient way of testing it.

3rd — the best method of securing a full stand of three stalks to the hill.

Because Professor Holden presented the view that the farmer should obtain his seed corn from his own fields or from fields near by, he met with some opposition from commercial seed companies and now and again a newspaper editor criticized him. On the whole, however, his message was

well received by the press and by the farmers who heard him. One newspaper referred to him as a "spellbinder" and said that he beat William Jennings Bryan "because he has a better subject to talk about".

Early in 1905 plans were made for a continuation and enlargement of the work of the seed-corn special. On February 22nd, the Cedar Rapids *Gazette* announced that the "Gospel of Good Seed Corn" would continue to be taught by Professor Holden, and that on the previous day the "Seed-Corn Special" had gone west from Marion over the main line of the Chicago, Milwaukee and St. Paul. The train supplied for this tour consisted of "a baggage car, two fine day coaches and two elegant private cars". George A. Wells, secretary of the Iowa Grain Dealers' Association, was in charge of the tour. Several railroad officials were on the train which was staffed by an engineer, a veteran conductor, and a "chief chef". In addition to Professor Holden, lecturers included J. W. Jones, M. L. Moser, and M. L. Wilson, all from the Iowa State College at Ames, and A. D. Schamel of the United States Department of Agriculture, a former assistant of Mr. Holden's at the University of Illinois.

The previous week a tour had been made in northeastern Iowa from Waucoma southward

through Fayette, Strawberry Point, Delhi, Hopkinton, Wyoming, and Eldridge. The train had stopped at fourteen stations, and at only three stations were there less than 100 farmers in attendance. At Hopkinton 170 heard the lectures and at Wyoming there were 200. The total attending the fourteen stations was 1,986. Wherever it was necessary, two lectures were given simultaneously. The itinerary for the week ending February 25th included towns from Keystone to Perry, Perry to Herndon, Herndon to Storm Lake, Storm Lake to Spirit Lake, and thence to Rockwell City, and from Rockwell City via Herndon and Madrid to Des Moines.

The time employed in selecting and testing seed corn, speakers on the Corn Gospel Train said, would be well repaid in yield. Suppose the farmer spent part of his time for four weeks at this work. Because of that one month's work, he might make a gain of from fifteen to thirty-five bushels of corn per acre. At the prices then current that would mean from \$500 to \$2,000 increase in return from a hundred-acre field. When someone asked, "Is not 95 per cent of good kernels a satisfactory showing?", Mr. Holden replied: "Why should you be satisfied to allow five acres out of every hundred to grow nothing, when by a little care you can have good seed for all?" Four weeks of

seed-corn testing at the proper time would do more for Iowa than Congress, the Commerce Commission, and the tariff would do "in the next twenty years".

On February 28th, the Burlington *Hawkeye* announced an itinerary over the Burlington road and its branch lines, extending almost across the State, with stops at Indianola, Shenandoah, Villisca, Creston, Bedford, Chariton, Batavia, and Fort Madison. On March 4th, it reported that 750 farmers met the "corn special" at Bloomfield. A crowd of "about five hundred men" attended the meeting at Birmingham. A "very large crowd" of people from Henry and Lee counties came to hear the lectures at Mount Pleasant, while at West Point the train was met "by the West Point brass band and a large and appreciative delegation."

Thus up and down, and back and forth across the State, the Corn Gospel Train proceeded, with enthusiastic crowds attending all along the way. Participating in this ambitious advertising and freight-promoting project were the Chicago, Burlington and Quincy, 1,139 miles, the Chicago, Milwaukee and St. Paul, 1,488 miles, the Chicago and Northwestern, 1,958 miles, the Chicago, Rock Island and Pacific, 1,862 miles, the Des Moines, Iowa Falls and Northern, 76 miles, and

the Illinois Central, 1,332 miles. The total attendance reported for 1905 was 127,763 at the 670 stops made.

As a result of these meetings more than 200,000 copies of *Experiment Station Bulletin*, No. 77, dealing with "Selecting and Preparing Seed Corn", had been distributed to the farmers of Iowa. It was estimated that enough interest had been stimulated so that within five years the Iowa farmers would be producing as much corn on 6,000,000 acres as they had previously produced on 9,000,000 acres.

The idea of a special train to promote agricultural interests was taken up by the growers of other crops. Interested parties came from the South to study the plan, so that they might apply it to the cotton belt area. If the importance of good seed corn could be brought to the attention of the people "by a whirlwind tour", why not bring the gospel of good cotton, good dairying, good roads, and good soil in the same manner.

In 1906 the Corn Gospel Train made additional tours. Railway officials continued to coöperate with grain dealers, college professors, and farmers for the mutual benefit of all. In a little book — *The ABC of Corn Culture* — by Professor Holden, there is a spot map showing the Iowa towns which were visited by the seed-corn special in a

period of sixty-seven days in 1904, 1905, and 1906. This reveals that the train had covered 11,000 miles in these tours and made 789 stops. A total of 1,265 lectures were given to 145,700 people.

After 1906 the seed-corn special trains were discontinued in Iowa, although they were used in other States in 1907 and 1908. The "gospel" had been carried to almost every town in Iowa and most of the intelligent and progressive farmers had visited the train and tried out the testing process. The lecturers had insisted that a very substantial increase in corn yield could be produced. Statistics proved that this was actually accomplished. The total corn yield for Iowa in 1903 was about 230,500,000 bushels, an average of thirty-one bushels per acre. By 1906 this had been increased to 388,836,000 bushels — an average of forty-one bushels per acre. The Corn Gospel Train had been a success, and today, as a State and as a Nation, we are richer because men of vision were willing to coöperate for the promotion of their ideas and ideals and for the common good.

JACOB A. SWISHER