

The Roe Electric Plow

by Lynne Belluscio

Back in 1994, I wrote an article about the Rowe Electric Plow. I suspect no one remembers, but it is an interesting story and this week I bought a photo of the plow on Ebay to add to the collection. On the back of the photo, dated August 1927, is a description: "National Attention is now drawn to the experiments being conducted on the 6000 acre farm of Donald Woodward at Le Roy N.Y. by the H.L. Roe of New Castle, Pa., the inventor of an electric plow. The electric generator is belt driven from the tractor and by a system of induction coils the voltage is stepped up. A double plow is used, one plow as a negative and the other as a positive pole. They are set approximately thirty inches apart. The high voltage passing through the ground from pole to pole as the plow moves along, kills all insects, worms and weeds in its wake and gives to the ground the basic fertilizer nitrogen. The experiments have been most successful."

Donald Woodward invested in the Roe Plow and there were several promotional booklets published. We have two in the collection. On the back page of one of the booklets is a poem, probably written by Hamilton Roe:

A Song

And now electric plowing
Is the true and better way,
It kills all weeds and insects
And makes all farming pay.

No further need of spraying,
A better way's been found,
We hitch 'lectric plow to tractor
And we kill 'em in the ground.

Roe Wireless Electric Plow
Tills ground in Nature's way.
The undisputed reason
That it makes all farming pay.

Electricity works wonders,
We can see on ev'ry hand,
God made it first for farmers
For He made it for the land.

According to the booklet, "The Roe Wireless Plow not only opens-ups the soil for the reception of air, water and sunshine, as do other plows; it also



separates the air and water of the soil and makes the air of the soil into soil-nitrogen, soil-carbon and soil-oxygen.

In July 1927, the LeRoy Gazette published an article on the front page about the success of the Roe Plow. One plow had been shipped to Honolulu to be used on the Libby pineapple plantation to eradicate a worm that preyed on the young pineapple plants. Another plow had been shipped to Illinois to combat a nematode. At the Detroit-Edison farm at Ann Arbor, Michigan, Russian agricultural experts were investigating fields where the electric plow had been used to eradicate quack grass. They said that it was one of the most impressive things they had seen in America.

In 1929, an article appeared in the November Popular Mechanics magazine: "The Farmer Turns on the Juice." It explained how electricity was changing the life on the farm. Farm wives had electric stoves and refrigerators, and washing machines. The article described a farmer in Wisconsin who had rigged up an endless-chain with wooden crossbars, driven by electricity for cleaning the gutters behind the cows. At Cornell's College of Agriculture, they had constructed an electric screen door

"The Law was our school-master"

ROE WIRELESS ELECTRIC PLOW

The Plow That Tills Ground Nature's Way.
It Kills Quack-grass, and other foul growth.
It Eradicates All Insect Life in the Soil.
It Makes Seed Beds as fine as Powder.
It Eliminates the use of Sprays.
It Germinates Plants In Less Time.
It Matures All Growing Crops Quicker.

It Segregates Air and "Fixes" Nitrogen, Oxygen and Carbon on and Enriches the Soil with these Essential Elements. It offers a System of Drainage that Conserves Soil Moisture. It Makes the Only Plant Food that Nature Uses to Feed the World. Electricity is the Only "Farm Relief."

The Roe Wireless Electric Plow is accomplishing More for Agriculture than any Other Discovery Heretofore Invented.

that electrocuted flies in barns. And the article went on to describe the Roe Electric Plow and how it would eliminate the need for fertilizer by passing electric current through the ground. It also killed weeds and insects in the ground.

It's not certain how long the Roe Plow was marketed, or how much money Don Woodward invested in the plow, but it probably became too expensive for farmers in the Depression, and went out of production.