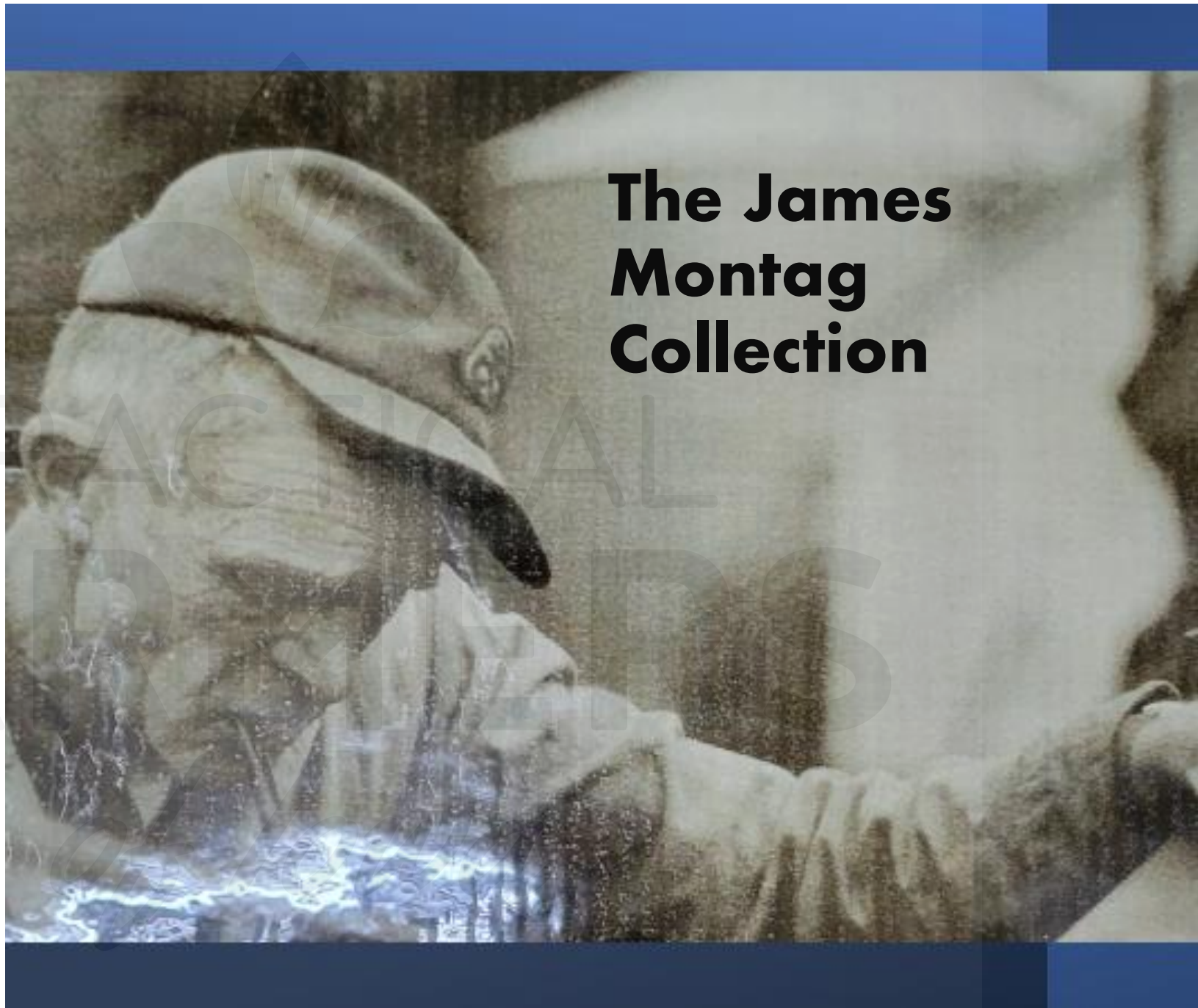


**Life before
Tractors**

**Planting &
Harvesting
by Hand**

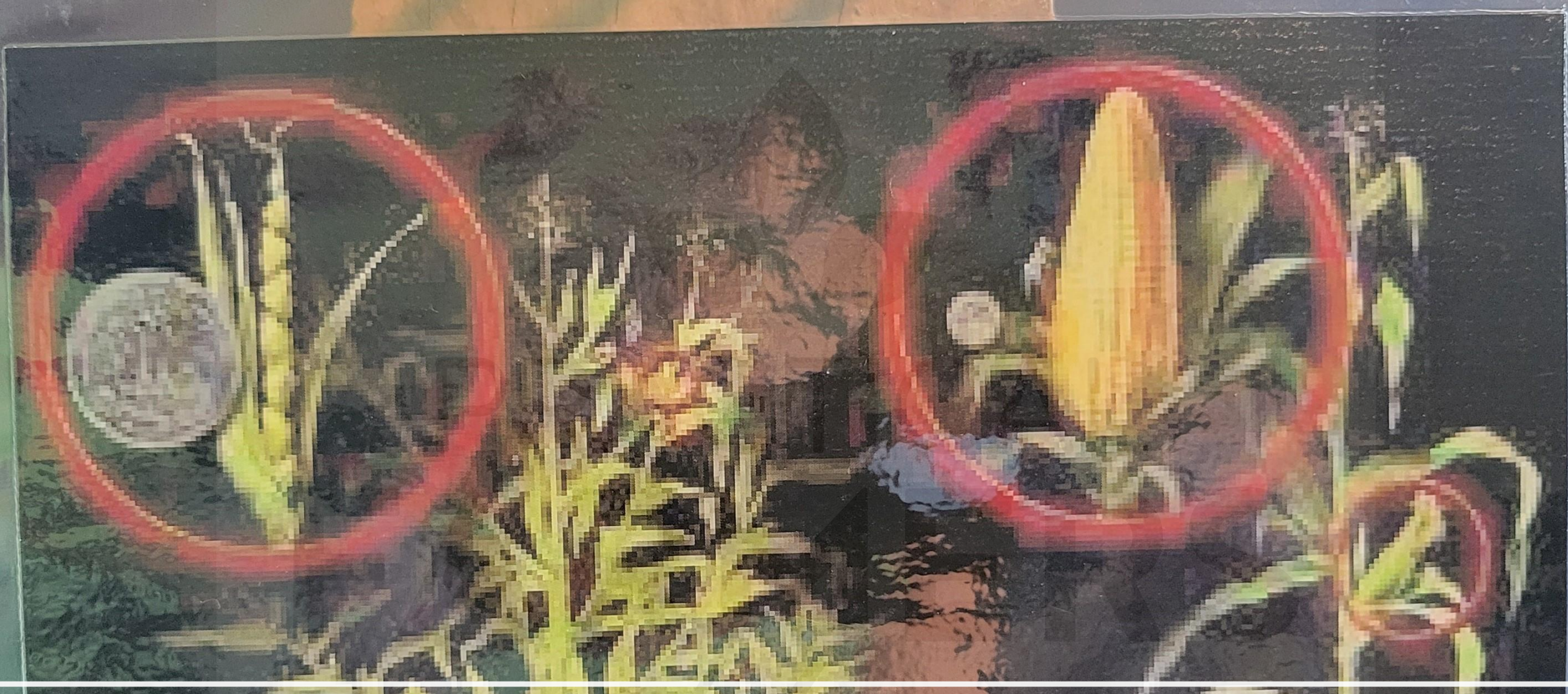
**The James
Montag
Collection**



Q? How long did man bend over manually planting seeds in the ground.

A. 12,000 years BC – 1st domesticated agriculture

Let me tell you how this evolved.



Teosinte versus modern corn; the grass family

The farm environment around 1900s.

Iowa's Homestead Act, 1862, granted an area of federal public land, typically 160 acres, to any US citizen willing to settle and farm the land for at least 5 years. Of 160 acres, about 60 acres was planted with corn for livestock & seed.

There was little commercial trade in corn because the ear of corn was covered with the husk. The rapid removal of the husk was needed before commercial yields could be produced.



Grain Seeders

The HORN SEEDER has a valve that controls the amount of grain released with the swing of the arm.


"Someone has taken the trouble to find out how far a farmer must walk to put in and tend forty acres... a total of 700 miles, besides the gathering."

Glenwood Criterion, July 26, 1883

"The Hoosier Seed Sower," late-1800s.

By the time of the Civil War, labor-saving machines made it possible for farmers to plant and harvest larger fields. One person, moving the bow back and forth on a mechanical seeder, could sow a 28-foot swath of wheat in one pass.






Simple mechanics controlled the amount of seed released.



Bow Seeder



Moving the "bow" on the BOW SEEDER turns a fan that flings the grain over the field.

Hoosier Seed Sower
The Goshen,
Goshen, IN

FAN SEEDER spread grain with
the turn of the crank.

*My Great Grandpa taught that
the gauge for how many oat
seeds to spread was 9 kernels
per horse hoof footprint.*



PLANTING CORN

For thousands of years planting corn was a 2-person job; one digging the hole and the other placing the seeds and covering them. With this method 2 men could plant about 1 acre per day.

In 1856 there was a patent for a hoe equipped with a canister on the shank. One man could dig the hole, pull a string to release seeds, and cover the hole with his foot allowing for 1 man to plant up to 2 acres per day.

The 1902 Sears, Roebuck & Co. catalog advertised the Acme planter for .56 cents (first manufacturer). Many wooden planters were patented in the 1850s-1860s and are considered rare today.

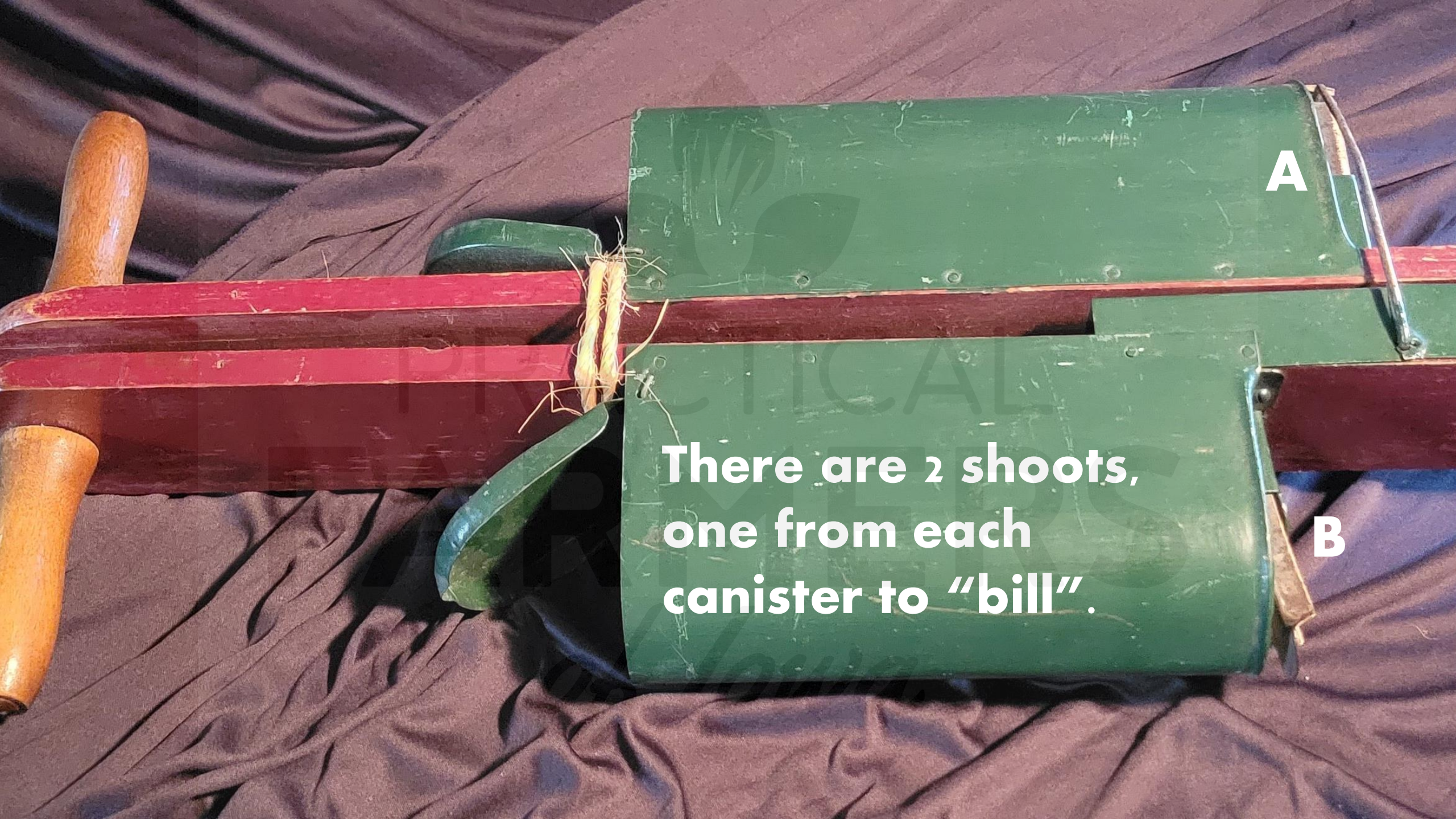
Hand-held planters evolved rapidly during the ~60-year period before large mechanical planters became commonplace. The planters varied in their trigger-release mechanisms. Initially they had 1 hopper, then two hoppers - one for seed and the other for fertilizer.



**Twine
added for
hanging
planters**







A

**There are 2 shoots,
one from each
canister to "bill".**

B



S



The “automatic” corn planter was patented ~ 1891. The operator walked along while pushing the tip into the ground. As he moved forward, a lever assembly on the bottom of the unit touched the ground causing a seed to be dropped. 4 acres a day could be planted using the automatic model.



SEGMENT Corn and Bean Planter



A
**Automatic
Planter**



B 1891 Wood & Metal Planter,
single shaft, side
mechanism for
seed release.

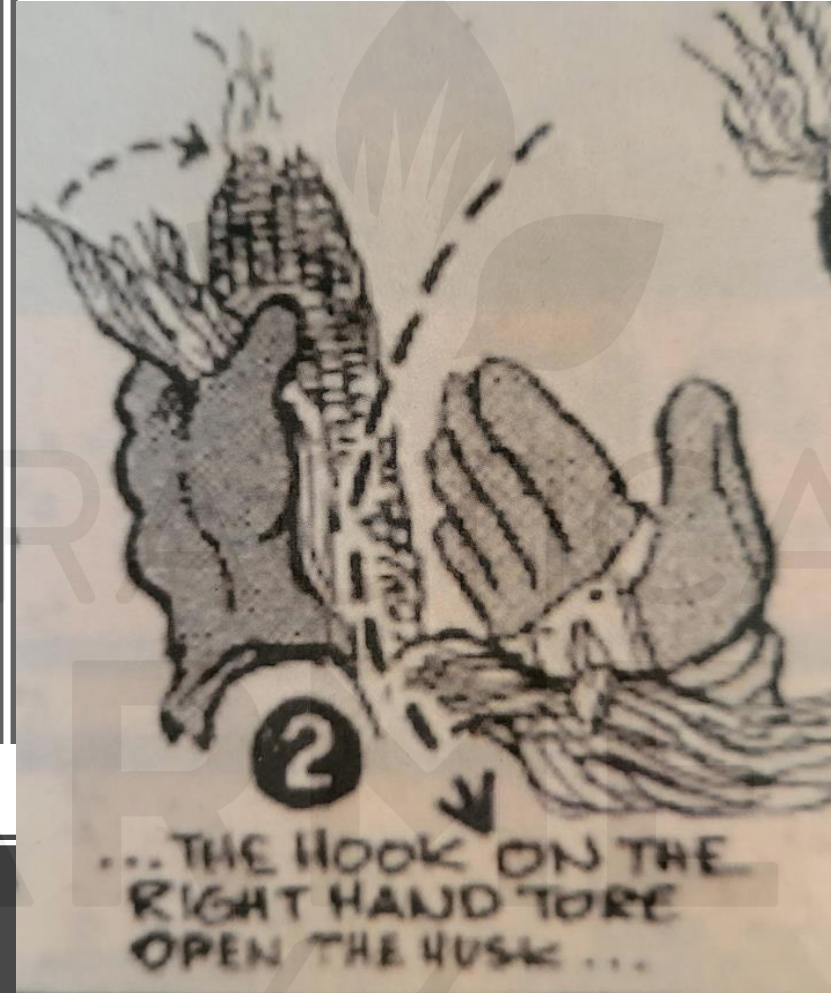


**2 row planter,
seeds in tubes
released with
aggressive wrist
action, rare**



Ultimately, the hand-held planter was relegated to garden use, or to “fill in” gaps in fields missed by the machine planter. But they had served their purpose for their time. “All of these enabled the farmer to plant his field without bending over to plant each seed.”

Harvest



How do you husk corn?

CORN HARVEST

Circa 1880-1940s

Circa 1880-1940



To pick corn by hand, the corn picker traveled up a field between 2 rows of corn with the wagon and team of horses to his right. He found the corn ears on each stalk with his left hand and raked them across the husking hook or peg on the right hand. In the husking action, the ear was transferred from the left to the right hand where the ear was thrown in the wagon with a snap of the wrist. The best corn huskers had an ear in the air at all times. The wagons had a bang board on the opposite side, providing a large target for the picker's flying ear.

Corn was grown for livestock feed and seeds for next year's crop. Commercial sale of corn would wait until there was a mechanical way to remove the husk.

In the earlier hand-picking days, the average farm size was about 160 acres, 60 of which would be in corn. An average day of picking could result in 1 to 1 ½ acres completed per picker. Thus, if corn yielded 60 bushels per acre, between 60-100 bushels could be averaged in a day per picker. So for a farm with 60 acres of corn, it would take 45 to 60 days of picking. The pay for picking was generally 6 or 7 cents per bushel. As a boy of 16, Montag remembers picking corn for 3 cents a bushel during hard times in 1934. Picking 60 bushels a day resulted in something less than \$2.00 for a day's work in less than optimal conditions.



Handheld, no moving parts, one-size fits all corn picking equipment



HUSKING PIN or **PEG** was held closely to the hand with a variety of leather straps, guards and finger loops. The curved end of the metal pin extended beyond the first finger so the husks could be grasped between it and the thumb. The pin required 2 passes to remove the husk which was very wearing on the thumb of the man and glove. **THUMBSTALLS** were created for use with pegs as well as double-thumbed gloves.



Husking peg or pin



**Thumb stall,
or thumb cot**



1887 H.H. Perkind, a Kewanee, IL farmer, applied for a patent for a slim, round piece of metal with a pointed end which was held to the hand by leather loops around the fingers.

He called it a husking pin. In 1889, the Boss Mfg. Co was formed.





THE BOSS





**Universal Husker, Pat 1882
Left-handed unit**



**Robert Thomas,
Shenandoah, IA**

Thumb cots or stalls

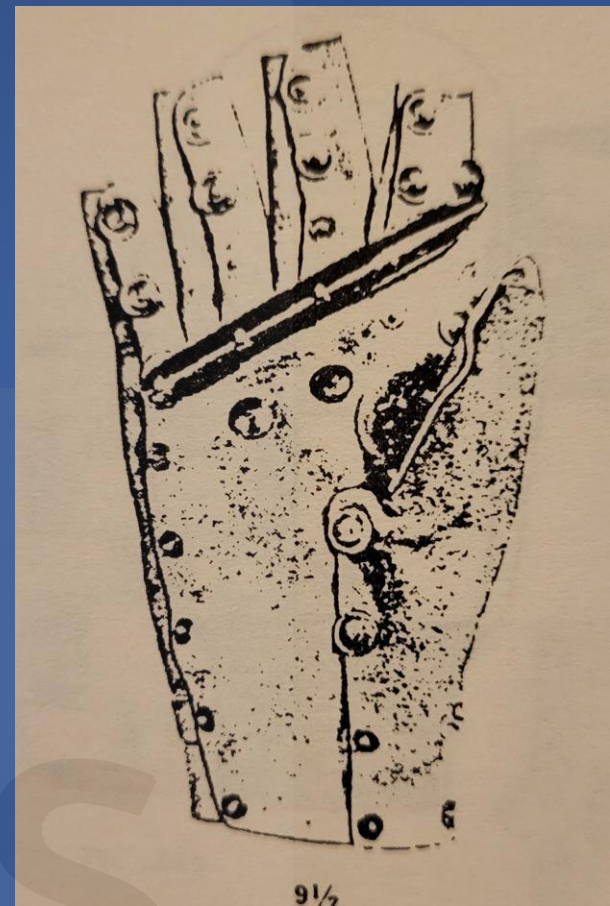
Designed to help in grasping the ear or in husking and used on either hand. The stalls slowed the wear on the thumb and extended the life of mittens or gloves. The stalls were made of leather with metal spikes or chain mesh.



Double Thumb Glove

when one side wore out, the glove was turned over





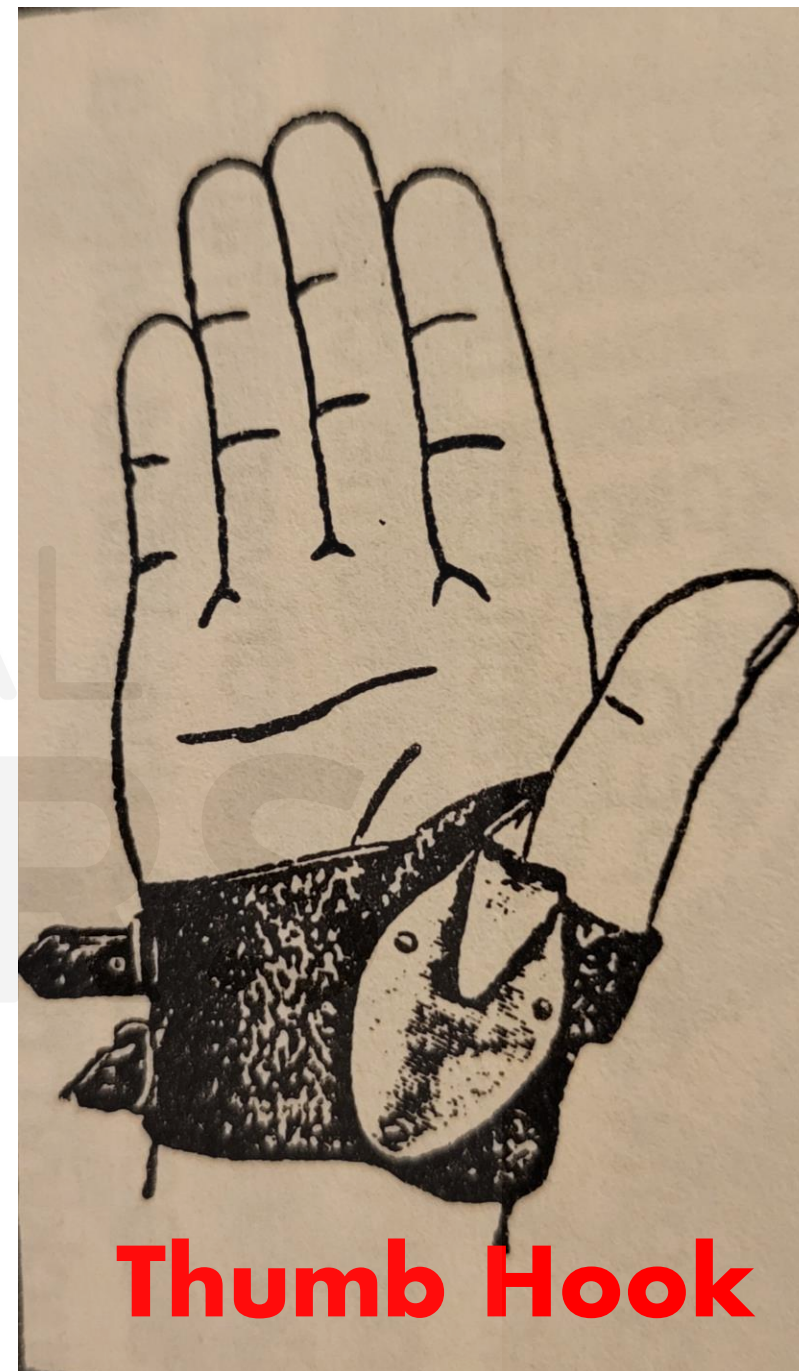
**Riveted full hand
glove with
husking pin.**



Palm Hook



Wrist Hook



Thumb Hook

In 1892 Kees of Beatrice, NE introduced *The Little Husker*, describing it as a labor-saving invention.

Husking Hooks - Palm hooks had the hook in the area of the palm while **wrist hooks** were placed on the wrist and thumb hooks were towards the thumb. Adjustable hooks could be moved to various positions on the hand. The choice of husking hook variety was a matter of personal preference.



The PALM HOOK is a metal plate curved to fit the right, or left hand. A V-shaped hook was punched from the upper center and bent out and down towards the base of the palm. It was cushioned against the palm by a heavy leather pad and held in place by leather straps. The *adjustable* palm plate had a series of holes to accommodate small removable spurs that could be positioned for the user's hand size.



of 10



Palm Hooks

of Iowa

Palm Hooks



The Boss

Thomas

DANDY



Palm Hooks

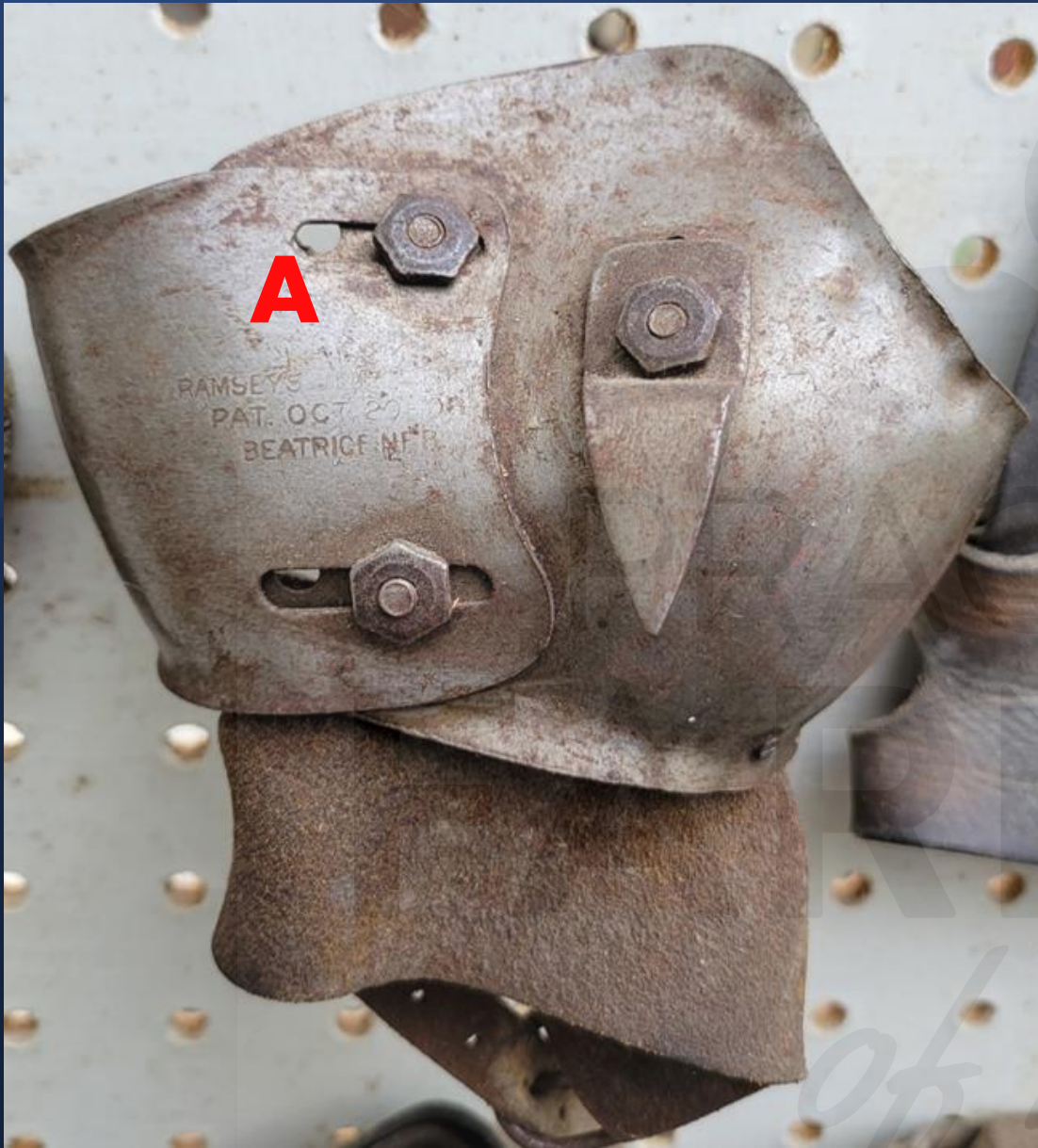


A Common Sense brand, left handed
B Thomas on Right



The **WRIST HOOK** has a hook farther down the palm near the wrist. It was anchored to the base of the palm by a long thumb strap and an extra wide wrist strap, usually double-wrapped.

Wrist Hooks





Wrist hooks

The THUMB HOOK strapped to the thumb pad. It could be stationary or adjustable. A long thumb strap usually passed around the thumb & around the back of the hand buckling on the wrist strap. The early husking competitors preferred the thumb hook nearly 2 to 1 over other types.



Thumb Hooks

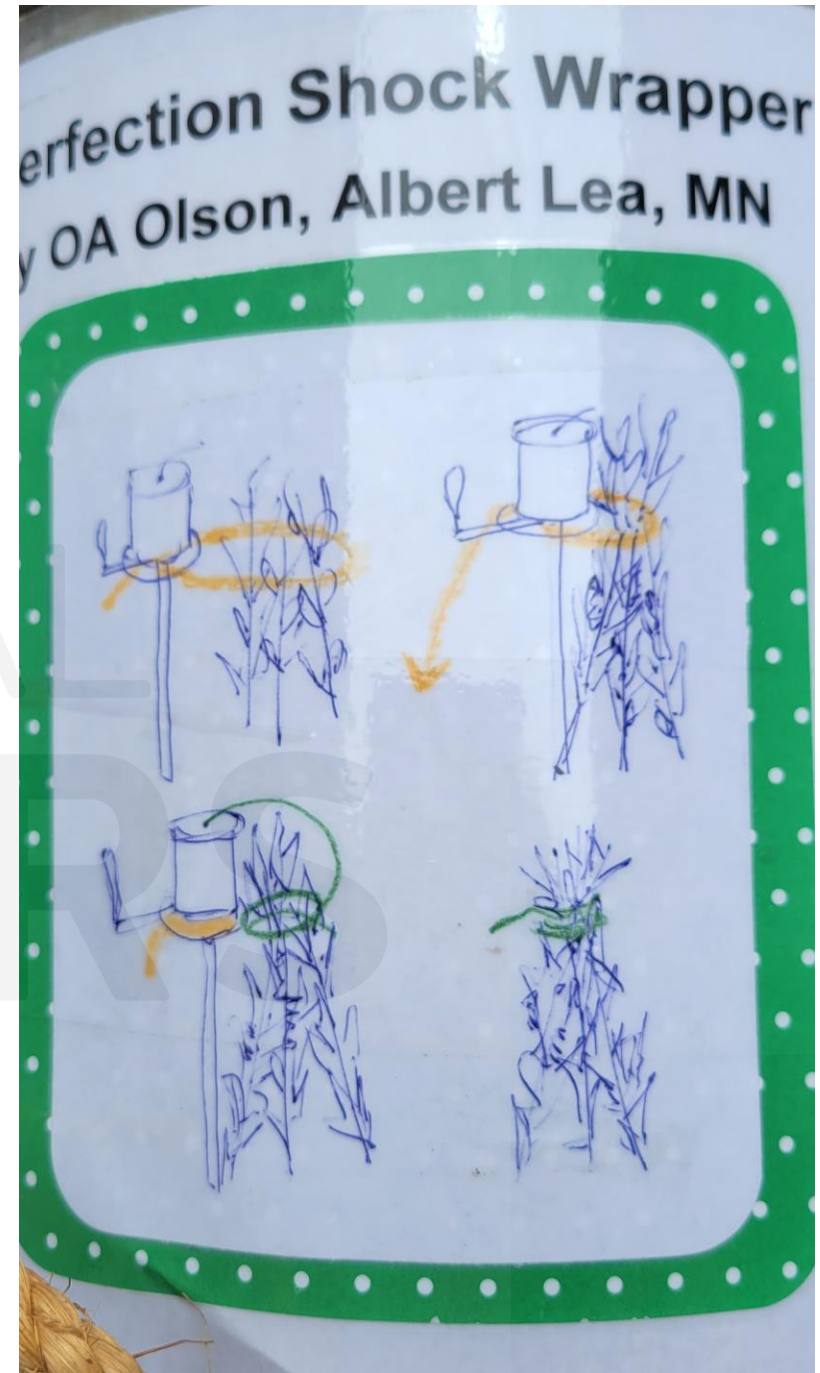




Hand Cranked Corn Sheller

By the 1930's the days of the husker passed into history. Mechanical corn harvesting began with the tractor leading the way.

A few random pieces of this same story...



CORN DRYING

Once the corn was picked, it was typically stored in pole cribs to dry until it was fed to animals. (It was not being sold commercially at this time.) As the farmer husked the stalk, he would look for the best ears. These were set aside in the field and then carefully dried to be used as the “seed” corn the following spring.

FARM
of Iowa





It is told that these 10 x 10 metal racks were used to ship “ear corn” to farmers to plant in the spring. They would not accept the shelled kernels. Farmers then used the racks when drying their own ears of corn in the fall.

**Ezra Brooks
Liquor
Decanter 1977
honoring the
Iowa farmer.**



**A TOAST and
Thank you to
our agricultural
workers.**

The History of Ordinary Things