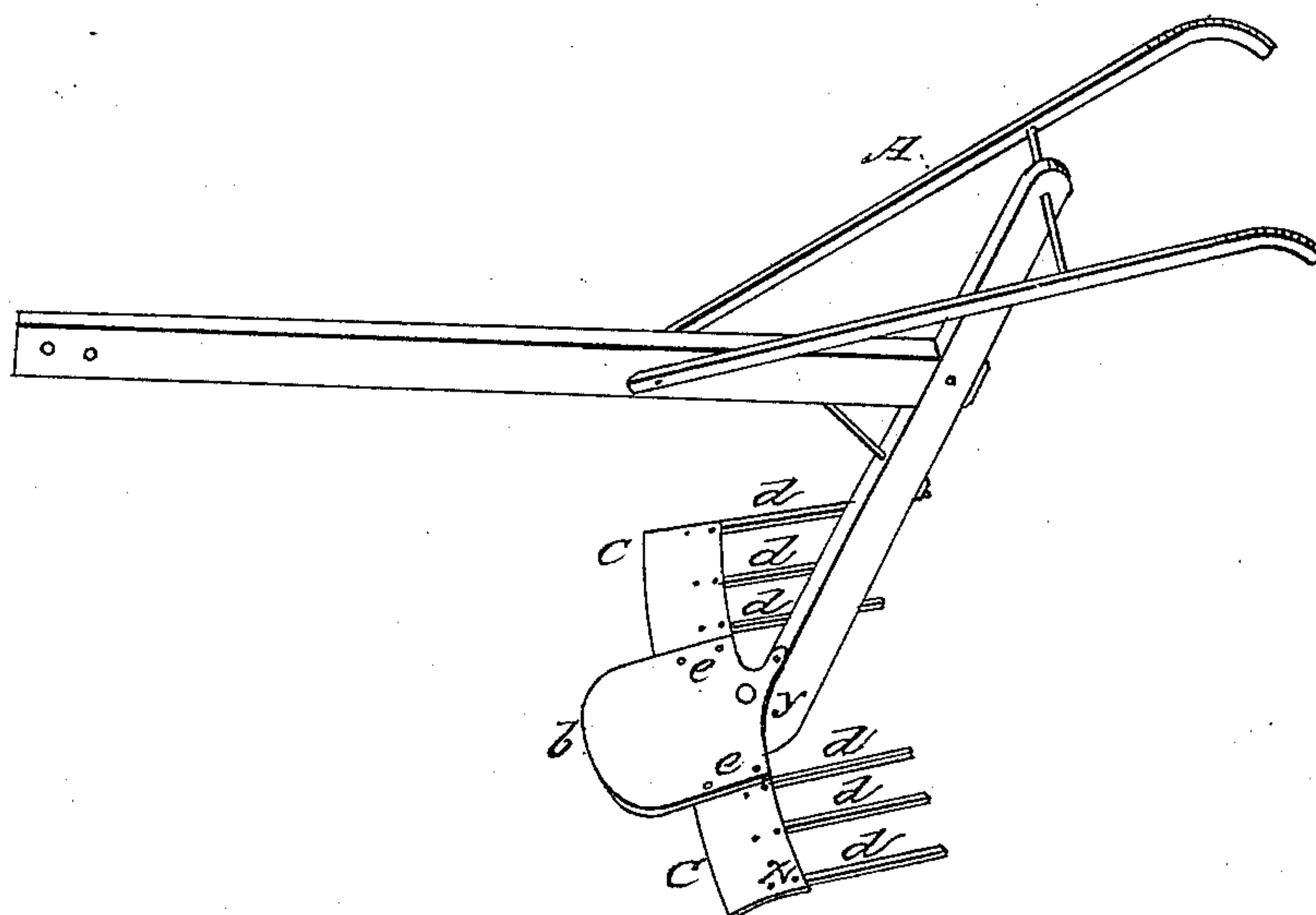


W. JOSEPH.
Potato Digger.

No. 109,217.

Patented Nov. 15, 1870.



Witnesses:

J. H. Parsons
H. J. Barnes

Inventor:

W^m Joseph

United States Patent Office.

WILLIAM JOSEPH, OF QUINCY, MICHIGAN.

Letters Patent No. 109,217, dated November 15, 1870; antedated November 5, 1870.

IMPROVEMENT IN POTATO-DIGGERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM JOSEPH, of Quincy, in the county of Branch in the State of Michigan, have invented a new and improved Potato-Digger; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention consists in attaching to the frame of a common shovel-plow a blade made of two pieces of cast-steel plate, riveted together cross-ways, and formed so that it resembles a shovel-plow with a wing on each of the two sides. On the back side project six or more steel rods, to separate the potatoes from the dirt, hereinafter more fully described.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation, in which—

The drawings are perspective views.

I construct the frame of my potato-digger similar to that of the common shovel or corn-plow, with a beam, upright, and two handles, framed or bolted together, as at A.

My invention consists in the construction and arrangement of the plow-blade.

The plates *b* and C C I make of steel, of the thickness generally used for cultivator-teeth, which are riveted together at *e e*.

The plate *b* is made nearly flat at the point for about two inches back, then gradually rises and forms an incline to the shank, where it is bolted to the frame at *y*.

The plate C C and back side of the plate *b* are curved down a little, giving a slight convex surface on the upper or back part. The front edges of the plates are ground thin.

On the back side I attach six or more round steel rods, as shown at *d d d*.

One end of each is flattened and firmly riveted on the bottom side of the plate C C, (see at *x*.)

These rods serve to separate the dirt from the potatoes, and are made of sufficient size and strength to retain their proper places. They may be made either straight or curved down a little.

The straight curve of the plate or wings *c c* also assists in separating the dirt from the potatoes by distributing it more evenly over the surface of the plow.

The operation of my potato-digger is as follows:

I first clear away all the vines, and with two horses plow through the rows, which excavates and separates all the potatoes from the dirt, the dirt falling between the rods and the potatoes rolling over the ends on the back side, leaving them on top of the ground.

The digger has proved itself (with one man and two horses) to do the work that would require six men.

I claim as new and desire to secure by Letters Patent—

The combination and arrangement of the plates *b* and C C, the rods *d d d*, with the frame A, as herein described, and for the purpose set forth.

WM. JOSEPH.

Witnesses:

J. H. PARSONS,
W. J. BARNES.