J. A. SPEER, Jr.

Cultivator.

No. { 1,006, / 32,010. }

Patented Apr. 9, 1861.

Fig 1

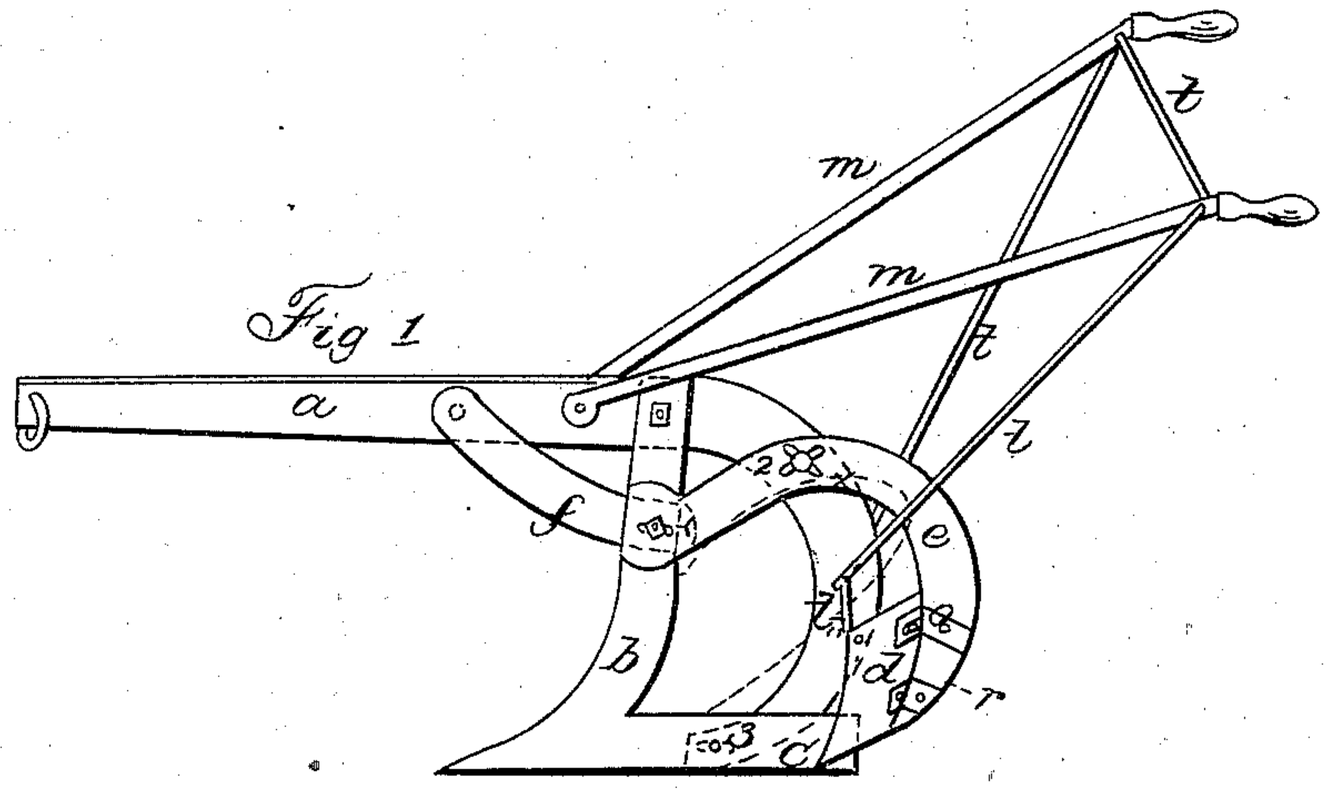

Fig. 2

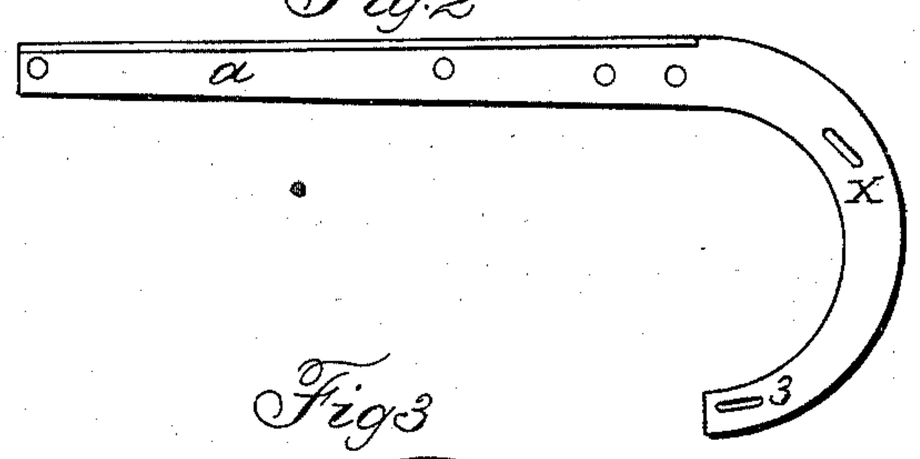

Fig 3

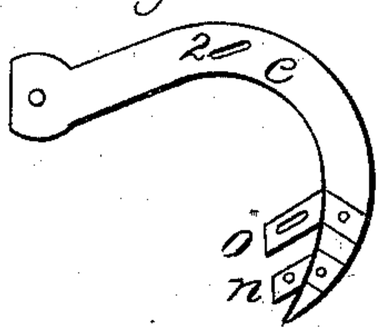

Fig 4

Fig 5

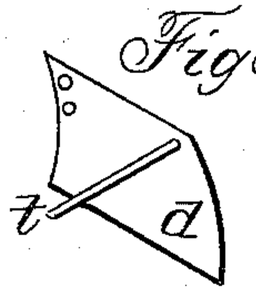

Fig. 6

T

Witnesses,

James J Johnston

George P Steck.

Inventor,

James A Speer Jr.

UNITED STATES PATENT OFFICE.

JAMES A. SPEER, JR., OF MANCHESTER, PENNSYLVANIA, ASSIGNOR TO WM. J. KANE, OF SAME PLACE.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. **32,010**, dated April 9, 1861.

To all whom it may concern:

Be it known that I, JAMES A. SPEER, Jr., of Manchester, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Cotton-Plows; 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, similar letters referring to similar parts.

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

In the accompanying drawings, Figure 1 is a side view of the plow. Fig. 2 is a side view of the draft-beam. Fig. 3 is a side view of the second beam. Fig. 4 is a side view of the brace for the draft-beam and plow. Fig. 5 is a perspective view of the scraper and its brace. Fig. 6 is an end view of the draft-beam.

a is the draft-beam. *b* is the plow. *c* is the "landside." *e* is the second beam, which is placed aft of the plow, and is furnished with a scraper, *d*. To the beam *e* is attached two lugs, *o* and *n*. The lug *o* is furnished with a slot, which is used for the purpose of giving the scraper *d* the desired set as it wears.

f is the brace for the beam and plow, and is furnished with a slot, (marked 1.) *m* are the handles of the plow. *t* are the braces of the handles *m*. *t'* is the brace of scraper *d*, and may be secured to any point on the beams or plow desired. The slots 1, 2, and 3 are used for the purpose of raising or lowering the point of the beam *a*, thereby giving to the plow the desired set. The slot *x* is used for raising or lowering the scraper *d*.

r is the draft ring or clevis.

The mold-board of the plow is represented by dotted lines in Fig. 1.

The second beam, *e*, with the scraper *d*, may be removed when so desired, and the plow will still be complete, and all the remaining parts will work in harmony with each other.

By making the draft-beam of T-shaped iron, as represented in Fig. 6, I combine strength with lightness, which is a very desirable thing in the manufacture and use of plows.

I wish it to be clearly understood that in my improved manner of constructing plows the entire plow can be made of wrought-iron or steel, or of wrought or cast iron and steel combined. The form of the beams and their accompanying parts should correspond with the form represented in the accompanying drawings.

I am aware that scrapers have been used in connection with plows and cultivators prior to my invention. I therefore do not claim the scraper of itself as my invention.

I am aware that plow-beams have been made in T shape by the use of two or more pieces; and I am also aware that iron of a V form has been used in the manufacture of plow-beams; hence I do not claim either of these two modes of constructing plow-beams as my invention.

I am also aware that iron formed in T shape is manufactured and used for various purposes. I therefore do not claim T-shaped iron as my invention.

I claim—

The arrangement of the draft-beam *a*, second beam, *e*, scraper *d*, and slots 1, 2, 3, and *x*, when constructed substantially as herein described, for the purpose set forth.

JAMES A. SPEER, JR.

Witnesses:

JAMES J. JOHNSTON,
ALEXANDER HAYS.