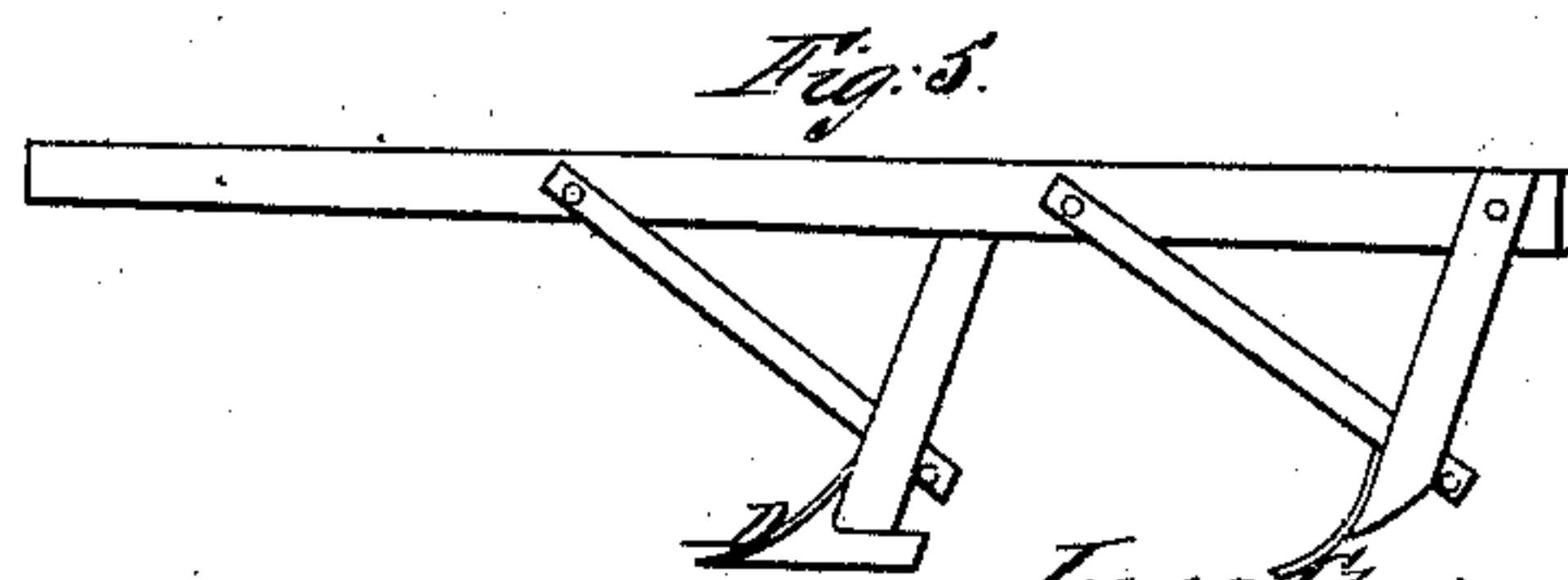
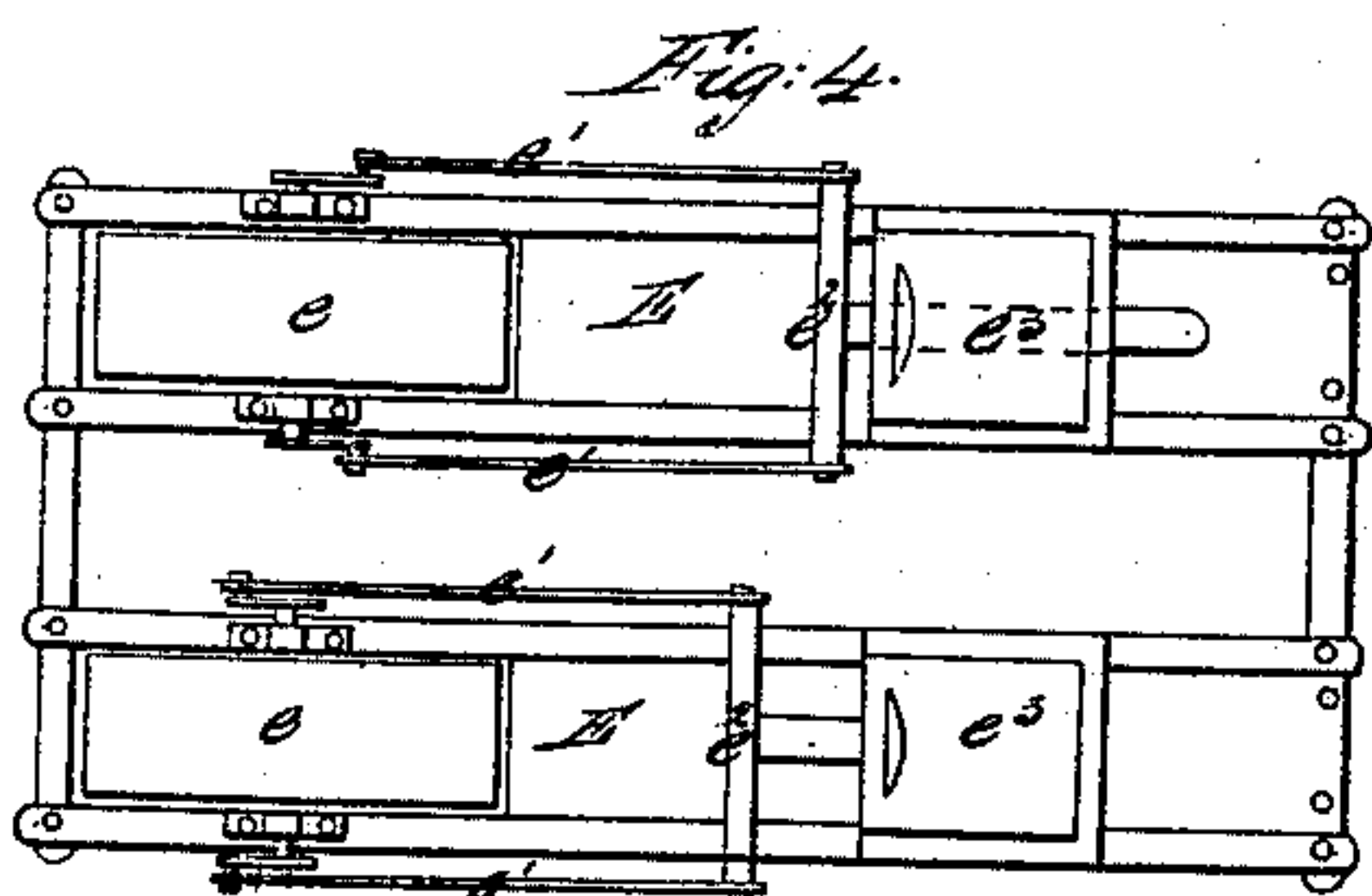
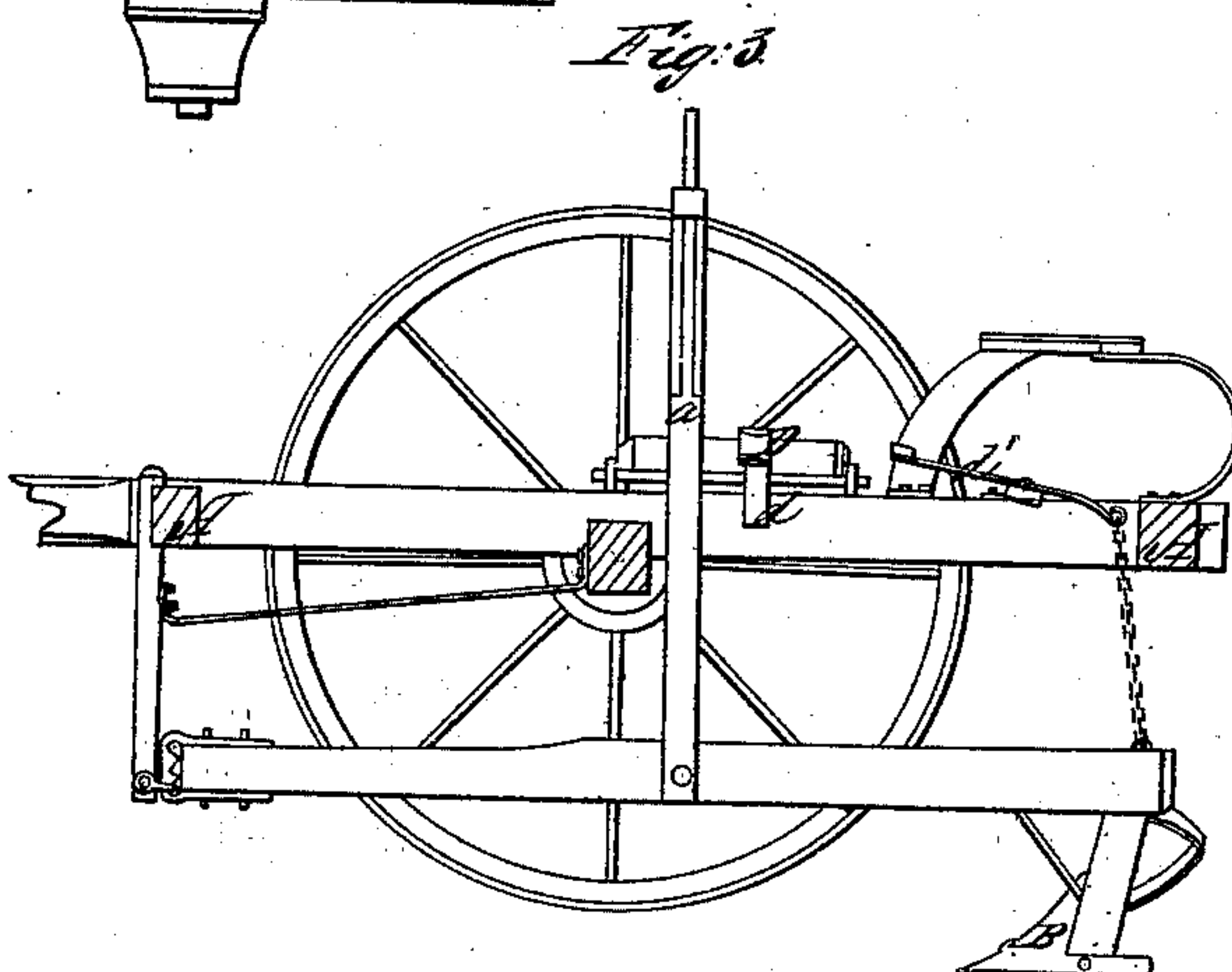
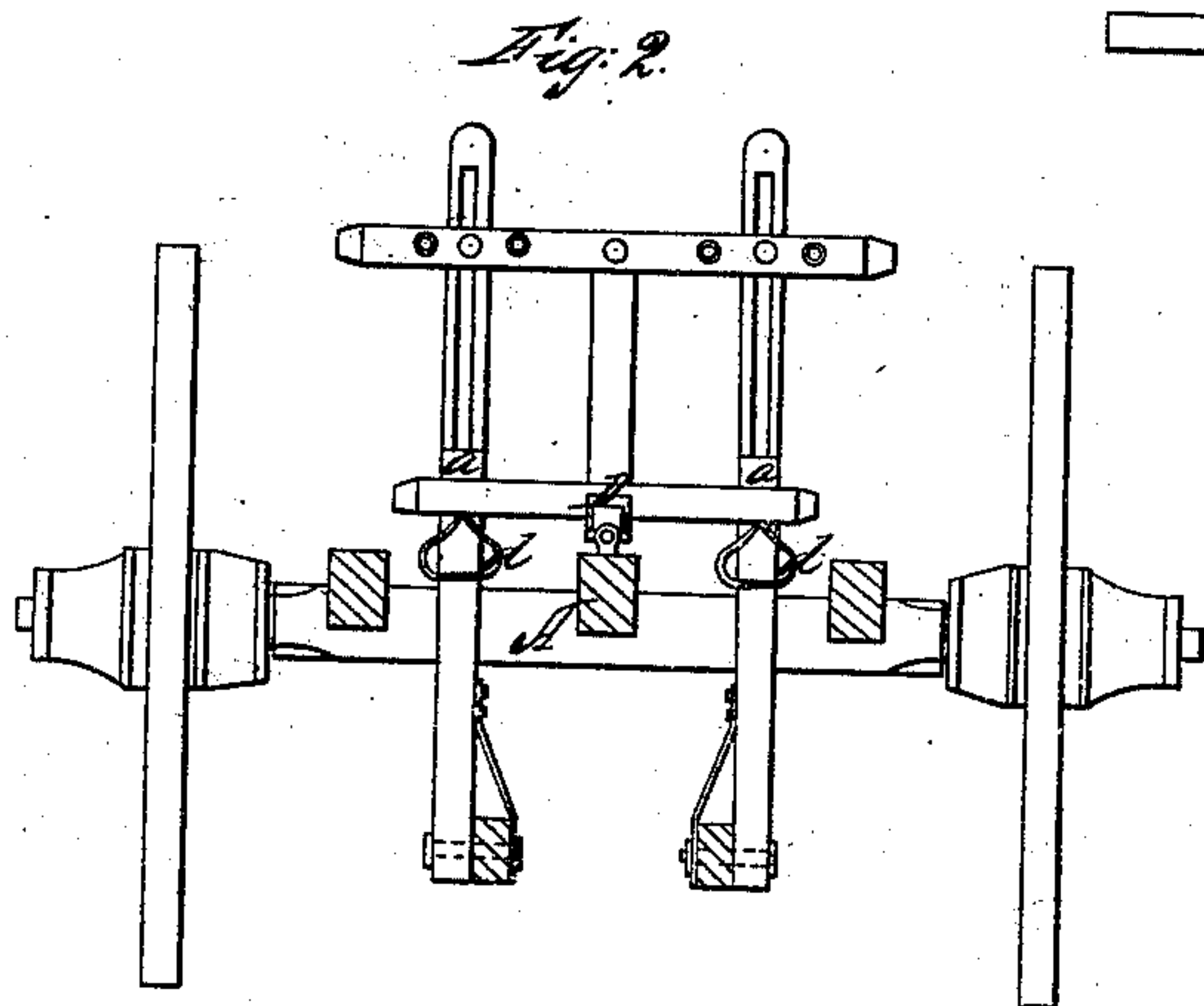
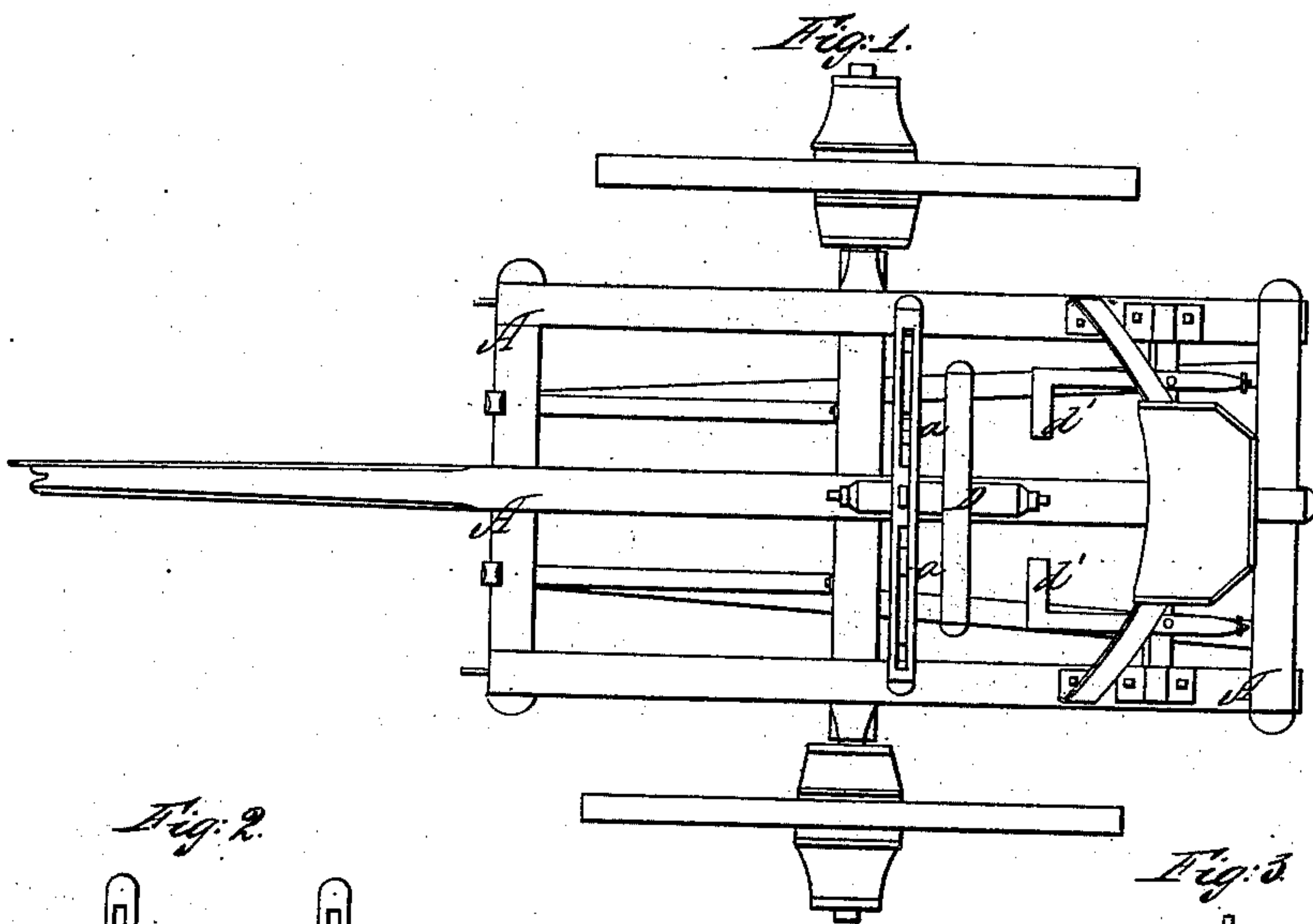


J. D. Marshall.

Wheel Flow.

Nº 70,237.

Patented Oct. 29, 1867.



Inventor:
J. D. Marshall
By his Attys
Wardolph & Co

Witnesses:
C. R. Pratt
Chas H. Boyle

United States Patent Office.

JAMES D. MARSHALL, OF RENICK, MISSOURI.

Letters Patent No. 70,237, dated October 29, 1867.

IMPROVEMENT IN PLOUGH AND PLANTER COMBINED.

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, JAMES D. MARSHALL, of Renick, in the county of Randolph, and State of Missouri, have invented a new Combined Plough and Seed-Planter; and I do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to such an arrangement of the parts of a gang-plough, or a set of cultivating-ploughs, and a seed-planter, that the different parts may be substituted, the one for the other, in their attachment to a common carriage.

To enable those skilled in the art to make and use my improved combined machine, I will proceed to describe its construction and operation. Of the drawings—

Figure 1 is a plan of the ploughing machine.

Figure 2 is a rear end elevation.

Figure 3 is a side elevation.

Figure 4 is a plan of the planter.

Figure 5 is an elevation of the cultivator-plough.

The carriage A is common to all the purposes of the combined machine. The two vertical posts *a* are used as points of attachment for either the ploughs or planters. Either the breaking-ploughs B or the cultivating-ploughs C are to be attached to the said posts, as shown in the drawings in fig. 3. The ploughs in either case may be guided laterally by the swinging frame D, which is to be operated by the driver's feet resting on the stirrups *d*. Either of the ploughs may be lifted independently of the other, or both together, by means of the levers *d' d'*. When the planter E is to be used, it is to be attached to the posts *a* in the same manner as the ploughs were, and its rear end may also be lifted up by the levers *d' d'* when it is not desirable to plant with it. This planter has two wheels, *e e*, the axles of which terminate in cranks that actuate connecting-rods *e'*, and these rods operate the seed-slides *e''* in the bottoms of the hoppers *e'''*.

Having described my invention, what I claim is—

The carriage A, ploughs B, vertical posts *a*, swing frame D, and stirrups *d*, when combined and arranged in the manner described.

JAMES D. MARSHALL.

Witnesses:

M. RANDOLPH,

CHAS. H. BOYLE.