

(No Model.)

2 Sheets—Sheet 1.

W. T. GOODSON.
PLANTER.

No. 485,188.

Patented Nov. 1, 1892.

Fig. 1.

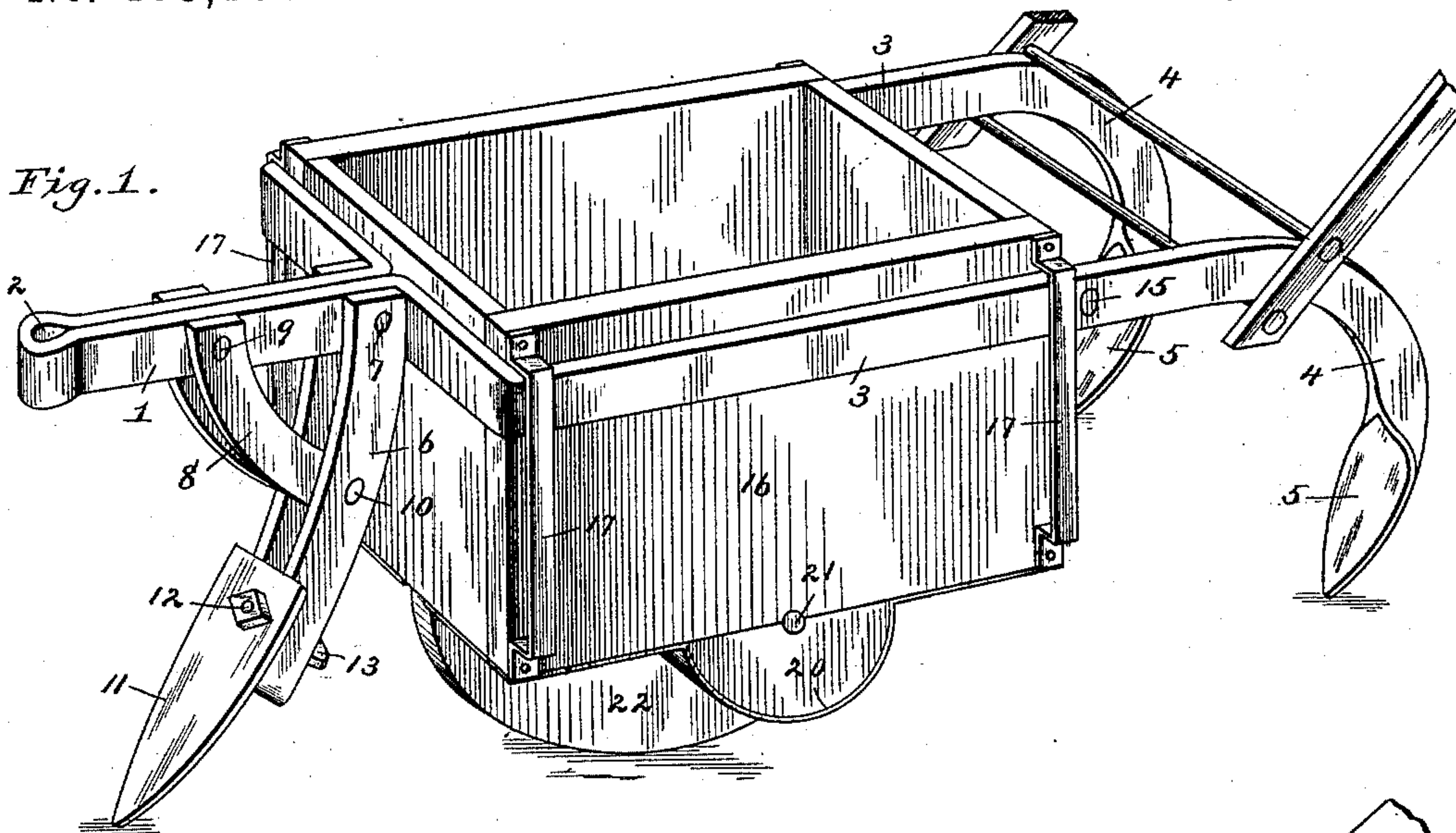


Fig. 2.

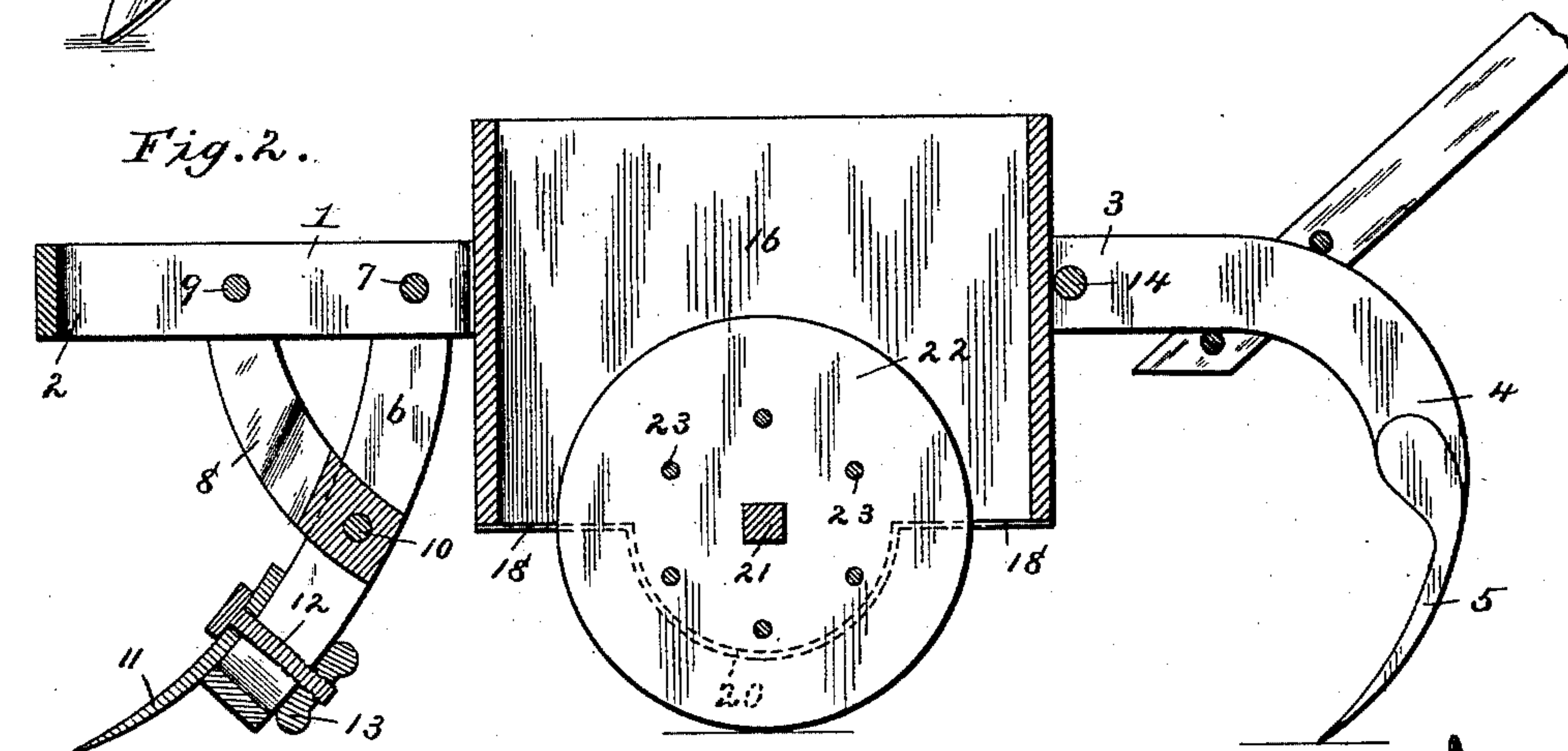
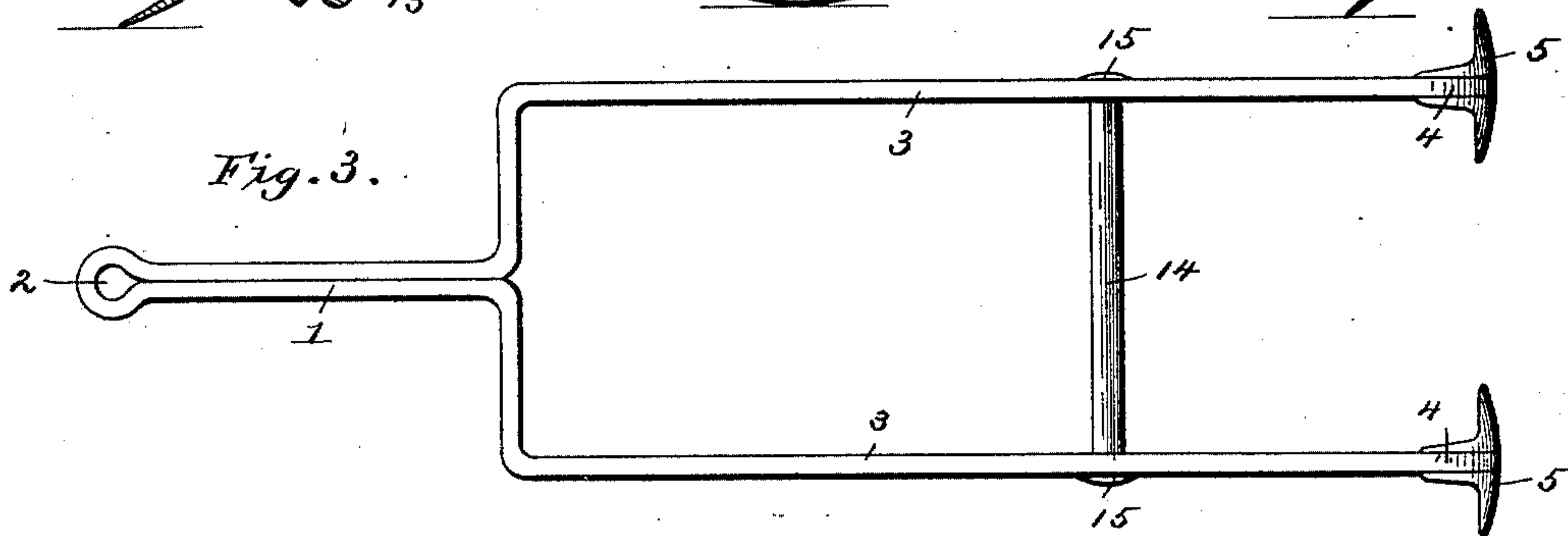


Fig. 3.



Witnesses

Harry L. Amer.
J. B. Giggers,

Inventor

William T. Goodson.

By his Attorneys,

C. A. Snow & Co.

(No Model.)

2 Sheets—Sheet 2.

W. T. GOODSON.
PLANTER.

No. 485,188.

Patented Nov. 1, 1892.

Fig. 4.

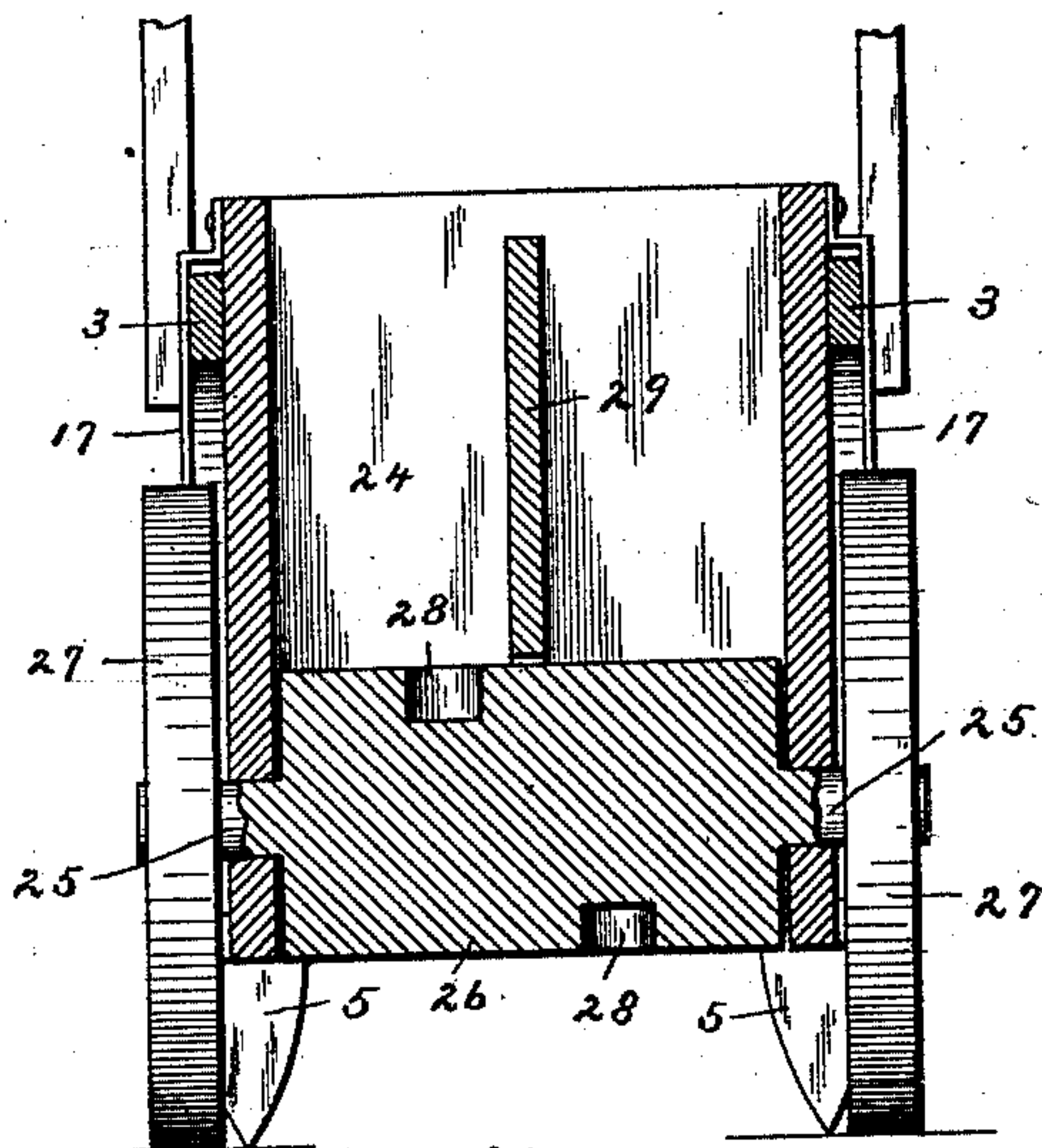


Fig. 5.

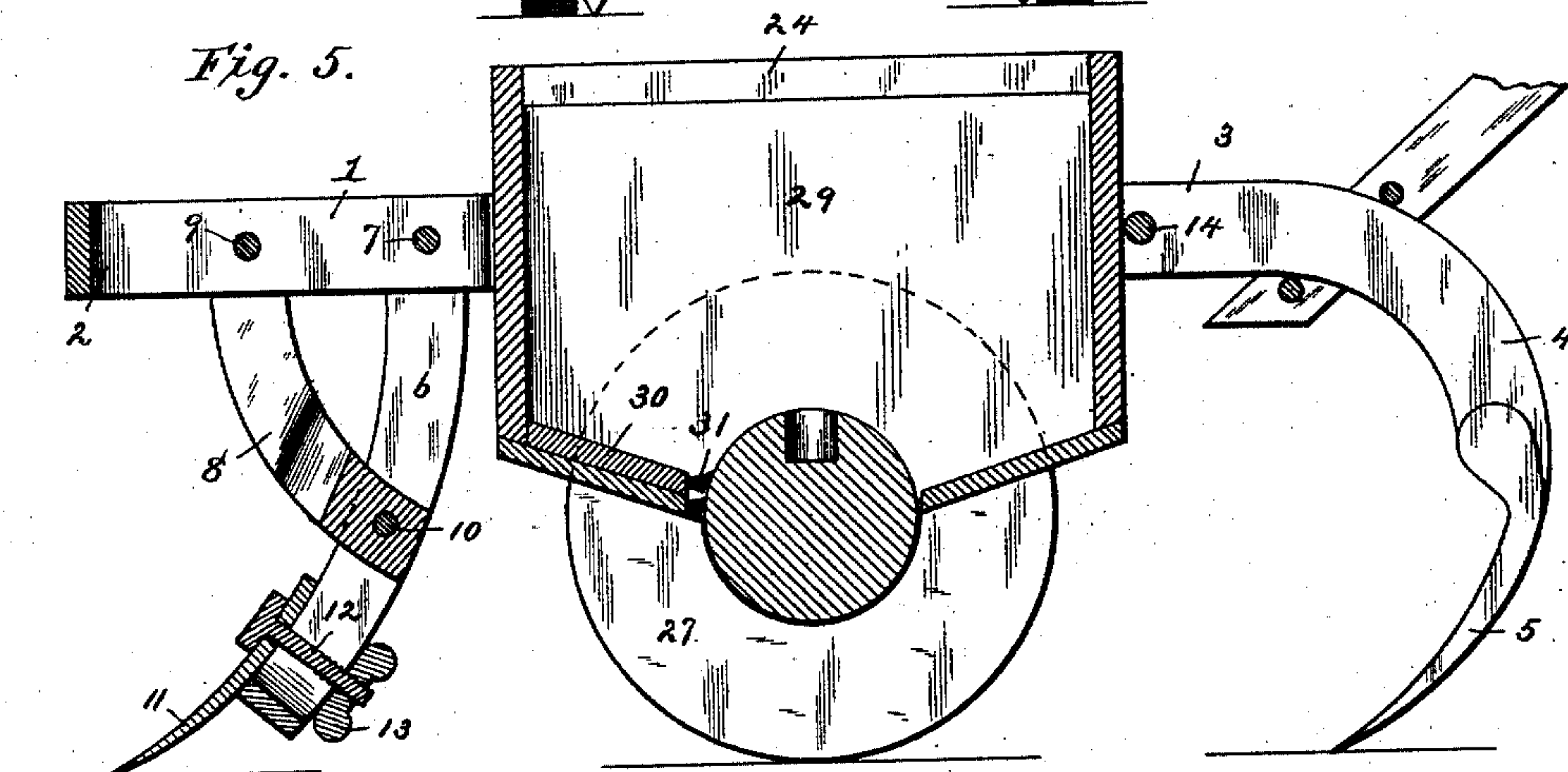
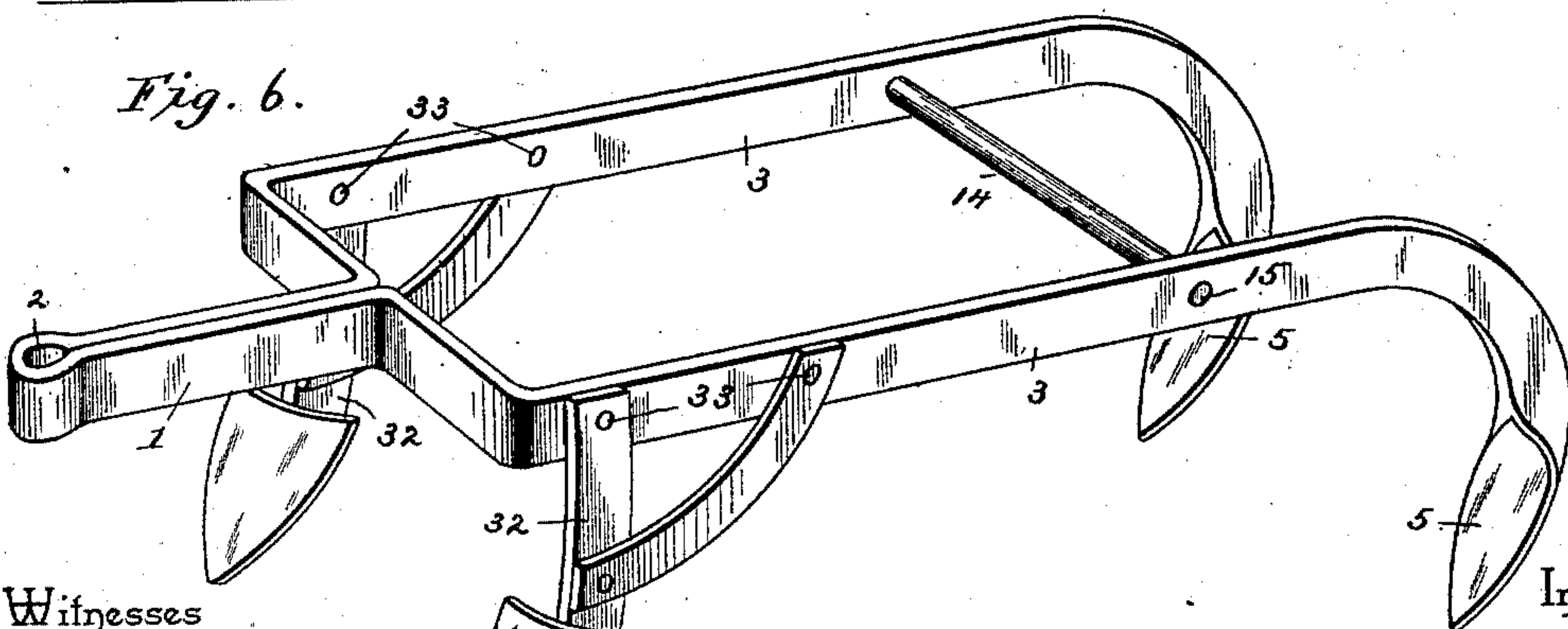


Fig. 6.



Witnesses

Harry L. Ames.
John H. Siggers.

By his Attorneys,

Chas. Snow & Co.

Inventor

William T. Goodson.

UNITED STATES PATENT OFFICE.

WILLIAM T. GOODSON, OF HOMER, LOUISIANA, ASSIGNOR OF ONE-HALF TO
BLUFORD F. ALLEN, OF SAME PLACE.

PLANTER.

SPECIFICATION forming part of Letters Patent No. 485,188, dated November 1, 1892.

Application filed July 6, 1892. Serial No. 439,126. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM T. GOODSON, a citizen of the United States, residing at Homer, in the parish of Claiborne and State of Louisiana, have invented a new and useful Planter, of which the following is a specification.

My invention relates to improvements in planters, and to that particular class thereof employing a front furrow-opening shovel, rear covering-shovels, and an intermediate hopper.

The objects of my invention are to provide a planter of this class which shall be of cheap and simple construction in that I obviate all necessity for the use of gears, crank-wheels, sprocket-chains, &c.

With these and other objects in view the invention consists in certain novel features hereinafter specified, and particularized in the claims.

Referring to the drawings, Figure 1 is a perspective view of a planter constructed in accordance with my invention. Fig. 2 is a vertical longitudinal section thereof. Fig. 3 is a plan view of the frame. Fig. 4 is a transverse section of a modified arrangement of hopper. Fig. 5 is a longitudinal section of the same. Fig. 6 is a detail in perspective of the frame converted to a cultivator.

Like numerals of reference indicate like parts in all the figures of the drawings.

In constructing the frame I employ a metal bar of proper length, bending the same at its center and upon itself a short distance, so that the combined terminals constitute a beam 1, at whose front end the eye 2 for the reception of the clevis is formed by the afore-said bend. After the terminals have been continued together for some distance, sufficient to form the beam, they are bent outward at right angles to the beam and in opposite directions, and thence directly rearward, forming side beams or bars 3, whose extremities depend or are curved downward to form plow-standards 4. These extremities may be bent to form the covering-shovels 5, or may be provided with such shovels, as in the present instance. A standard 6, bifurcated as shown, has its bifurcations at their upper ends embracing the beam at the rear end of the latter, and by bolts 7 is secured in position. A

curved brace 8 embraces the beam in front of the standard, is bolted at 9 to it, and at its lower end is bolted at 10 between the bifurcations of the standard. A furrow-opening shovel 11 is located at the front of the standard, and by means of a heel-bolt 12, passed between the bifurcations of the standard and provided with a nut 13, said shovel is maintained at a desired adjustment upon the standard, and is thus designed to be set for running deep or shallow. Near their rear ends the side bars or beams are connected by a transverse bar 14, whose extremities are bolted to the side bars, as indicated at 15. This transverse bar combines with the side bars and the front transverse portion of the frame to form a rectangular open frame, and in the same is seated and adapted to reciprocate vertically a seed-hopper 16. In the present instance this seed-hopper is provided at opposite sides with pairs of vertical keepers 17, offset between their ends from the walls of the hopper, and they receive the said side beams or bars of the frame, whereby the hopper is free to move vertically within the frame. The bottom of the hopper is provided with a slot 18, extending throughout its length, and the bottom sections or halves are at their centers bent semicircular at 20. A shaft 21 is journaled in the opposite side walls of the hopper concentric with the curved bottom, and upon this shaft a ground-wheel 22 is mounted and rotates therewith. The ground-wheel has its opposite faces provided with an annular series of agitator-pins 23, which move in a circle over the curved bottom of the hopper.

The operation is as follows: Seed being placed in the hopper, the wheel traveling over the ground rises and falls with the hopper in accordance with the undulations of the ground. In this manner the hopper is supported at a proper distance from the ground at all times. The furrow-opening shovel performs its usual function, after which the seed passing from the hopper falls into the furrow through the slot in the hopper, and the covering-shovels following thereafter return the dirt to the furrow, thus completing the planting of the seed.

From the foregoing description, in connec-

tion with the accompanying drawings, it will be seen that my planter is very simple in construction, having a positive feed without the employment of sprocket-chains, numerous gear-wheels, &c., and that the frame, with the exception of the rear cross-bar, is formed of an integral or single piece of metal.

In Figs. 4 and 5 I have illustrated a slight modification of the invention. In these figures the beams 3 embrace the hopper 24, which is provided at its sides near its lower end with transversely-opposite bearings in which take the bearing ends 25 of a transverse axle 26. Ground-wheels 27 are mounted on the ends of the axle outside of the hopper, and seed-cavities 28, arranged at diametrically-opposite sides of the axle, are located between the walls of the hopper. The axle in this instance, between its bearing ends, is cylindrical and enlarged. A partition 29 is longitudinally arranged within the hopper, dividing the same into two compartments, and with each compartment one of the seed-pockets is adapted to communicate. The hopper is suspended in the framework by the metal straps 17, as in the former instance, and has all the advantages of the former construction, and in addition is designed to plant alternately corn and peas or any other two varieties of seed. A block 30 may be located in front of the axle and carry a series of brushes 31, which act as a cut-off for the seed.

In Fig. 6 I have illustrated the framework with the hopper removed, which removal is readily accomplished in any simple manner, as will be obvious. As herein shown, the furrow-opening shovel and its standard have been removed, and at the front corners of the frame ordinary cultivator-standards have been applied, as indicated at 32, which cooperate with the shovels 5 to produce an efficient cultivator that may be used independent of the planting mechanism. If desired, an additional furrow-opener may be also employed, though such is not necessary.

For the accommodation of the shovels and standards 32 bolt-holes 33 are formed in the side bars or beams 3, and, as will be obvious, the standards and shovels 32 may be readily removed when it is desired to plant.

Having described my invention, what I claim is—

1. In a planter, the combination, with the rectangular frame provided at its front end with a beam, a standard depending from the beam and carrying a furrow-opening shovel, and a pair of standards connected to the rear corners of the frame and carrying furrow-closing shovels, of a hopper loosely fitting in the frame and having a slotted bottom, a shaft journaled in the walls of the hopper, and a wheel provided with agitating-pins, mounted on the shaft and extending through the slot in the bottom, substantially as specified.

2. In a planter, the frame formed integral and consisting of the opposite terminals combined to form the beam, in rear of which they are diverged and rearwardly disposed to form side bars, bent at their rear ends to form standards, the shovels on the standards, the standard depending from the beam and carrying a furrow-opening shovel, a transverse bar connecting the standards, of the rectangular hopper, mounted in the frame and adapted for vertical movement therein, opposite pairs of vertical straps or keepers connected to the sides of the hopper and loosely embracing the said side bars, said hopper having its bottom provided with a slot, the axle or shaft in bearings above the slot, the wheel mounted on the axle and having radiating pins projecting from its faces, and the metal keepers connected to the walls of the hopper and embracing the side bars of the frame, substantially as specified.

3. The combination, with the rectangular frame terminating at its rear end in permanent shovel-standards and adapted to receive and loosely support a hopper, of bolt-openings located at the front corners of the frame and adapted to removably receive additional shovel-standards, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM T. GOODSON.

Witnesses:

W. H. MAXEY, Jr.,

C. T. MORELAND.