

(No Model.)

T. S. VALENTINE, Sr.  
CORN PLANTER.

No. 414,345.

Patented Nov. 5, 1889.

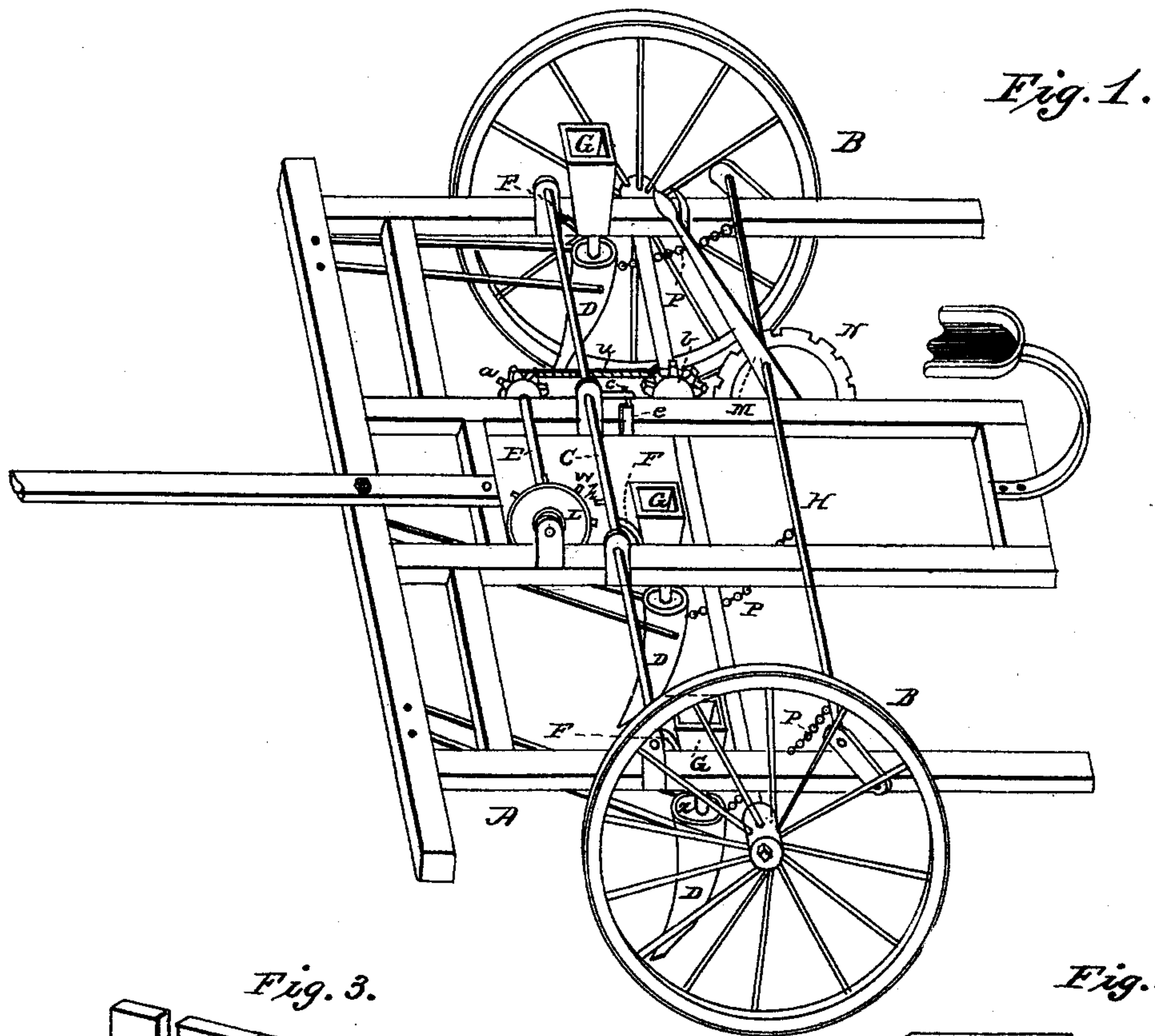


Fig. 1.

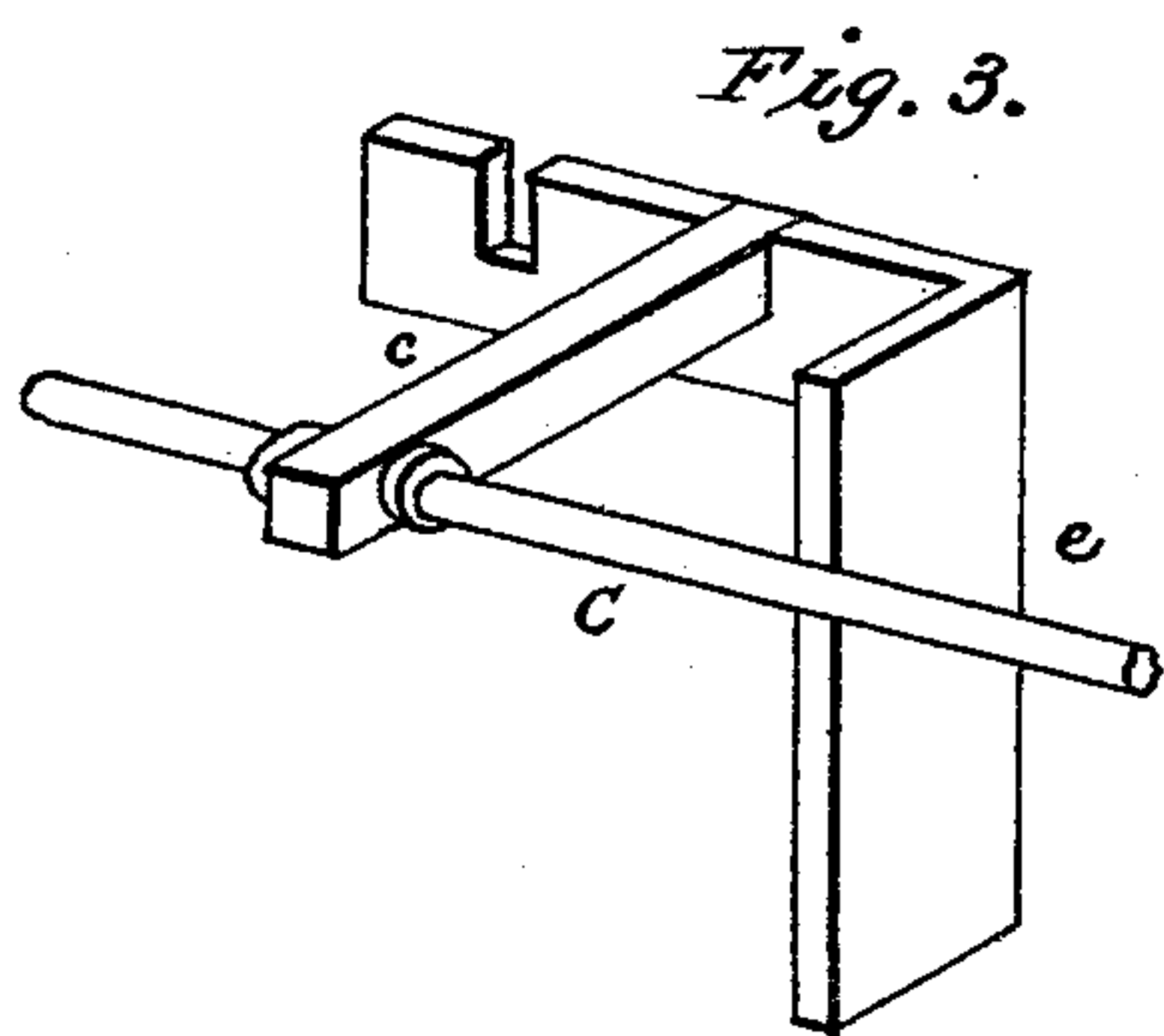


Fig. 3.

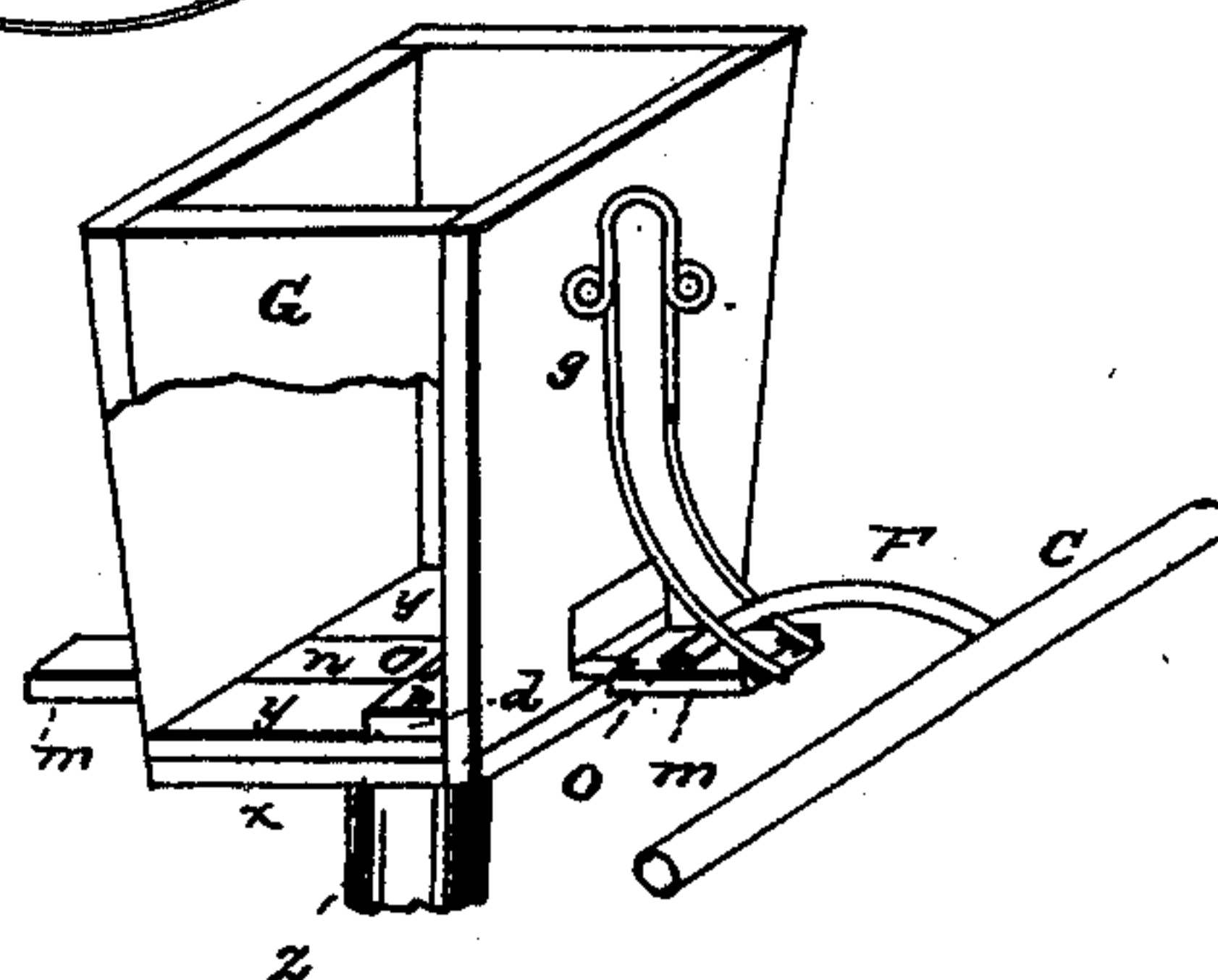


Fig. 2.

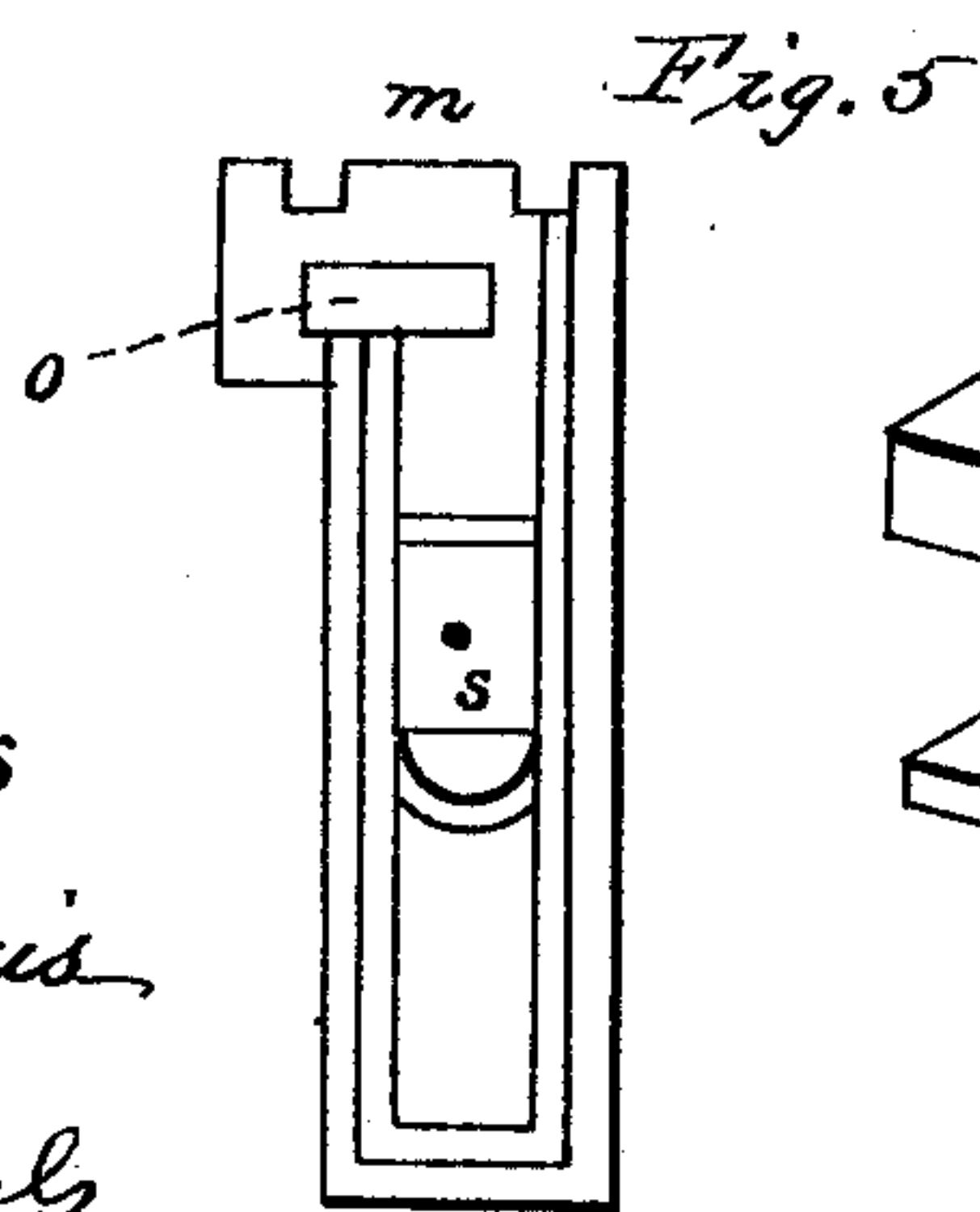


Fig. 5.

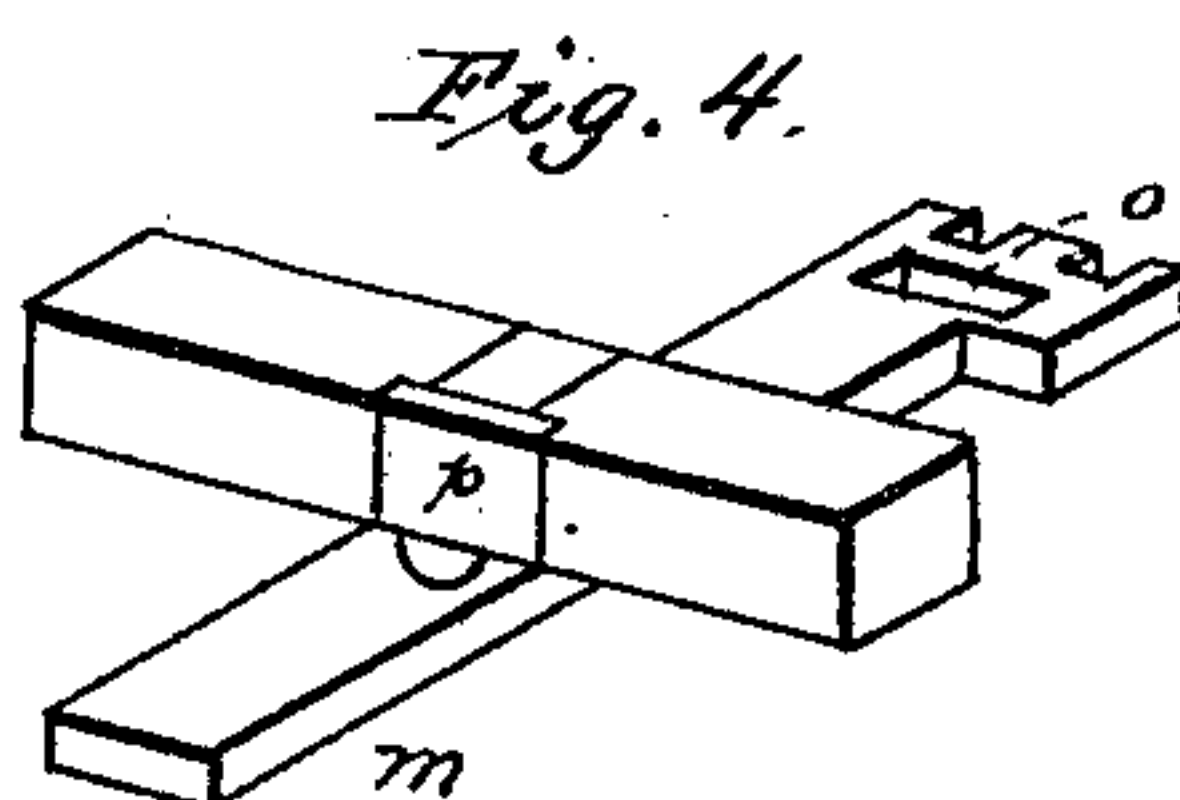


Fig. 4.

Witnesses  
W. A. Harris  
H. A. Daniels

Inventor  
Theodore S. Valentine, Sr.  
By *Benj. G. Cowell*  
Asso. Attorney



# UNITED STATES PATENT OFFICE.

THEODORE S. VALENTINE, SR., OF CUMBERLAND, MARYLAND.

## CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 414,345, dated November 5, 1889.

Application filed March 30, 1889. Serial No. 305,635. (No model.)

*To all whom it may concern:*

Be it known that I, THEODORE S. VALENTINE, Sr., a citizen of the United States, residing at Cumberland, in the county of Alleghany and State of Maryland, have invented a new and useful Corn-Planting Machine, of which the following is a specification.

My invention relates to those planters which are operated by horse-power; and the object of the invention is to perform the work of planting corn more expeditiously and with less labor than by hand or with those machines heretofore in use. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a perspective view of a corn-planter with my improvements. Fig. 2 is a perspective view of one of the seed-boxes with a portion broken away to show the interior. Fig. 3 is a detail view of a shaft and its connections. Figs. 4 and 5 are views of details connected with the seed-boxes.

A designates the main frame, and B the carrying-wheels, from the axle K of which motion is imparted to the planter mechanism, as hereinafter stated. Upon the said axle is mounted a chain-wheel *b*, which rotates therewith.

E indicates a shaft, which is journaled in bearings which are carried by the frame A. A chain-wheel *a* is mounted on said shaft E, and is connected with the wheel *b* by the chain-bolt *u*.

A shaft C, extending across the machine from side to side, is journaled in bearings carried by the main frame, and is provided with a latch *c*, adapted to fit in either of the notches in a bar carried by a standard *e*. The said shaft C is provided with a lug or spur *h*, extending forward, and with the curved fingers F, extending rearward, for the purposes hereinafter stated. On the shaft E is mounted a wheel L, which is provided with lugs or spurs *w*, which are located at intervals, the said wheel being in position for the said spurs to successively impinge against the lug *h* on the shaft C, and thus partially rotate said shaft.

The seed-boxes G are secured to the frame and are arranged on a line parallel with the axle K, the said boxes being spaced apart at distances corresponding with the distances between rows of corn. Each of said boxes G

is provided with a slide *m* at the bottom, the said slide being provided with a slot or aperture *o* at its forward end, into which extends one of the curved fingers F on the shaft C. A spring *g* is secured to the front of each box in position to press against the forward end of the slide *m* and effect the return movement of the slide after it has been drawn forward by the finger F and released.

As the machine is drawn forward rotary motion is imparted from the axle K, through the connected chain-wheels *a* and *b*, to the shaft E, and the wheel L being rotated the spurs *w* successively come in contact with the spur *h* on the shaft C, said shaft being thus turned somewhat by each spur *w*. This movement of the shaft C through the fingers F draws forward the slide *m*, which moves on the floor *x* of the seed-boxes. When the spurs on the wheel L pass the spur *h*, the spring *g*, attached to the seed-box, Fig. 2, and operating upon the end of the slide *m*, throws it back to its former position, and this backward-and-forward movement of the slide continues as long as the machine is in motion. The slide *m* is provided with a tapering hole or receptacle *n*, which can be enlarged or diminished by moving the block *s*, which is on the under side of the slide, into or withdrawing it from the hole, Fig. 5. When the corn is placed in the box, the hole *n* is filled with the number of grains it is regulated to hold, and when the slide is brought forward the grains pass with it under the rubber scraper or cut-off *p* until they arrive at an opening in the floor *x*, through which they fall, passing into the rubber tube Z, and from thence into the furrow made by the hoes D. Spurs may be adjusted on the wheel L close or wide apart, and thus regulate the distance apart of the hills to be planted.

By means of the lever M, rod H, rack N, and chains P the hoes are lifted and held from the ground in turning the machine at the end of the rows or in going to or from the field.

What I claim is—

1. The combination, with the frame-carrying wheels and axle of a planter, of a shaft E, provided with gearing connected with the axle, a wheel mounted on shaft E and provided with spurs *w*, a number of seed-boxes provided with slides *m*, and a shaft C, which is

provided with a spur *h*, in position to be engaged by spurs *w*, and with curved fingers, each of which extends into an aperture in one of the slides *m*, substantially as and for the  
5 purposes described.

2. The combination, with the seed-boxes provided with the slides *m*, which are provided with apertures in their forward ends, of the springs *g*, which are secured to said  
10 boxes and are in position to press said slides

backward, a shaft provided with the curved fingers *F*, which extend into the apertures in said slides, and mechanism for partially and intermittently rotating said shaft, substantially as set forth and described.

THEODORE S. VALENTINE, SR.

Witnesses:

GEORGE H. THOMPSON,  
ALEXANDER KING.