

(No Model.)

S. E. HAKE.
POTATO PLANTER.

No. 336,312.

Patented Feb. 16, 1886.

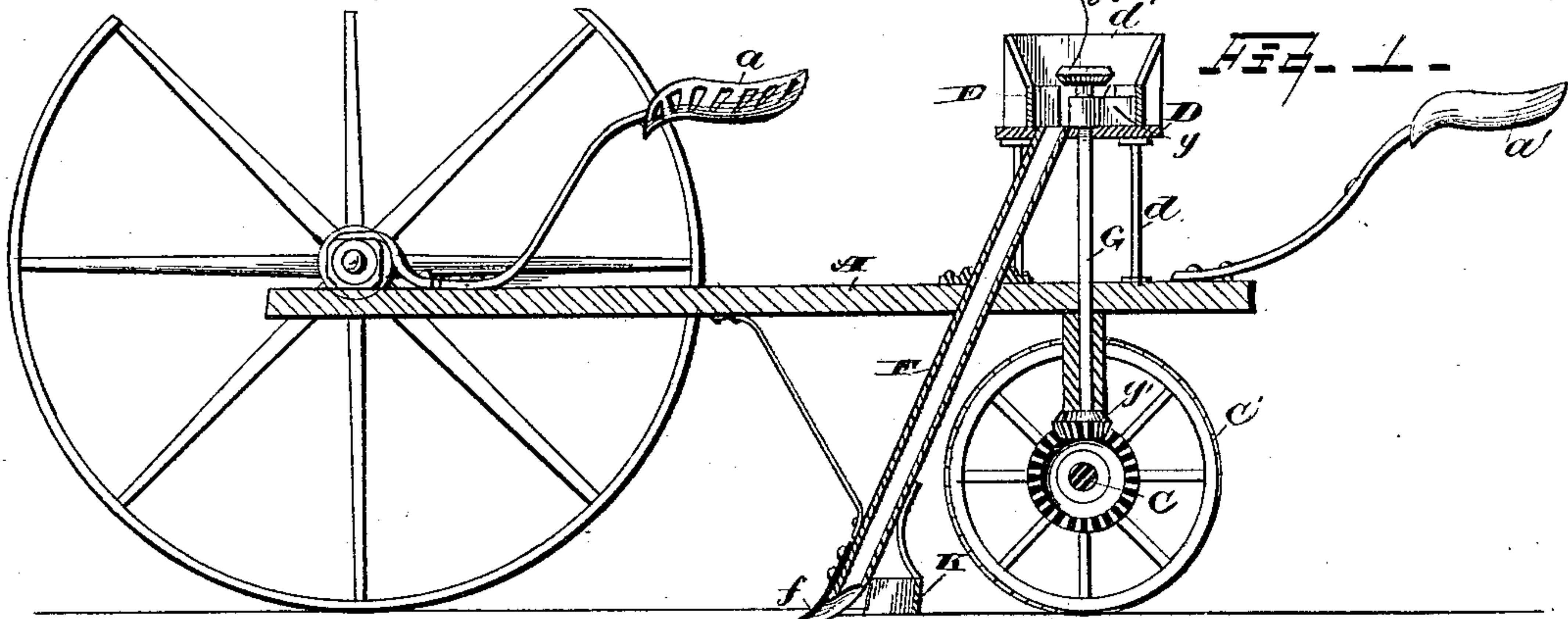


Fig. 1.

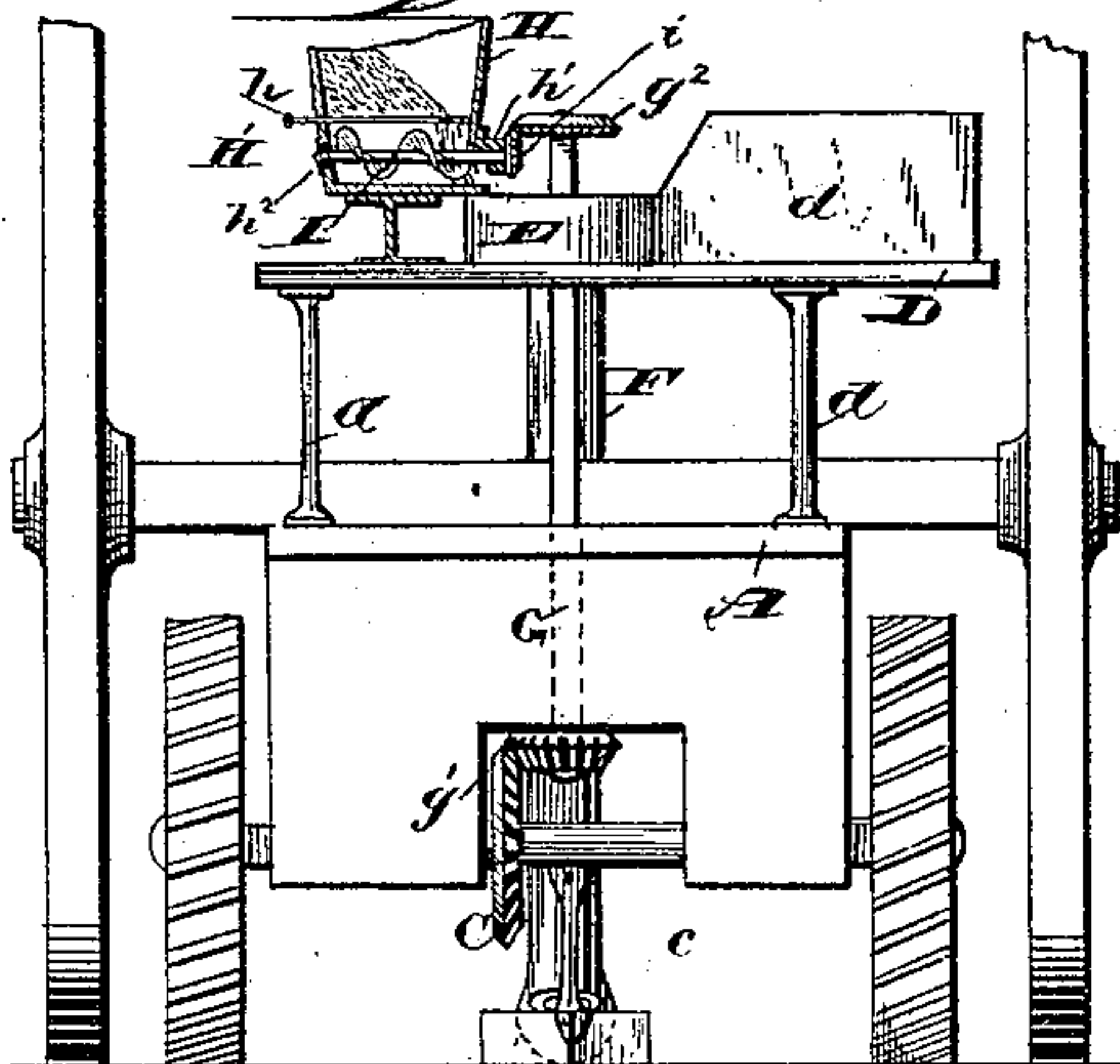
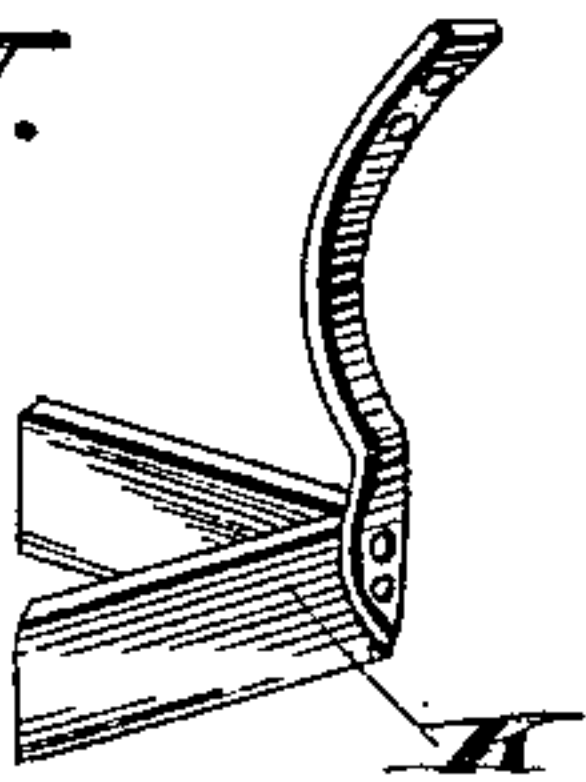


Fig. 3.

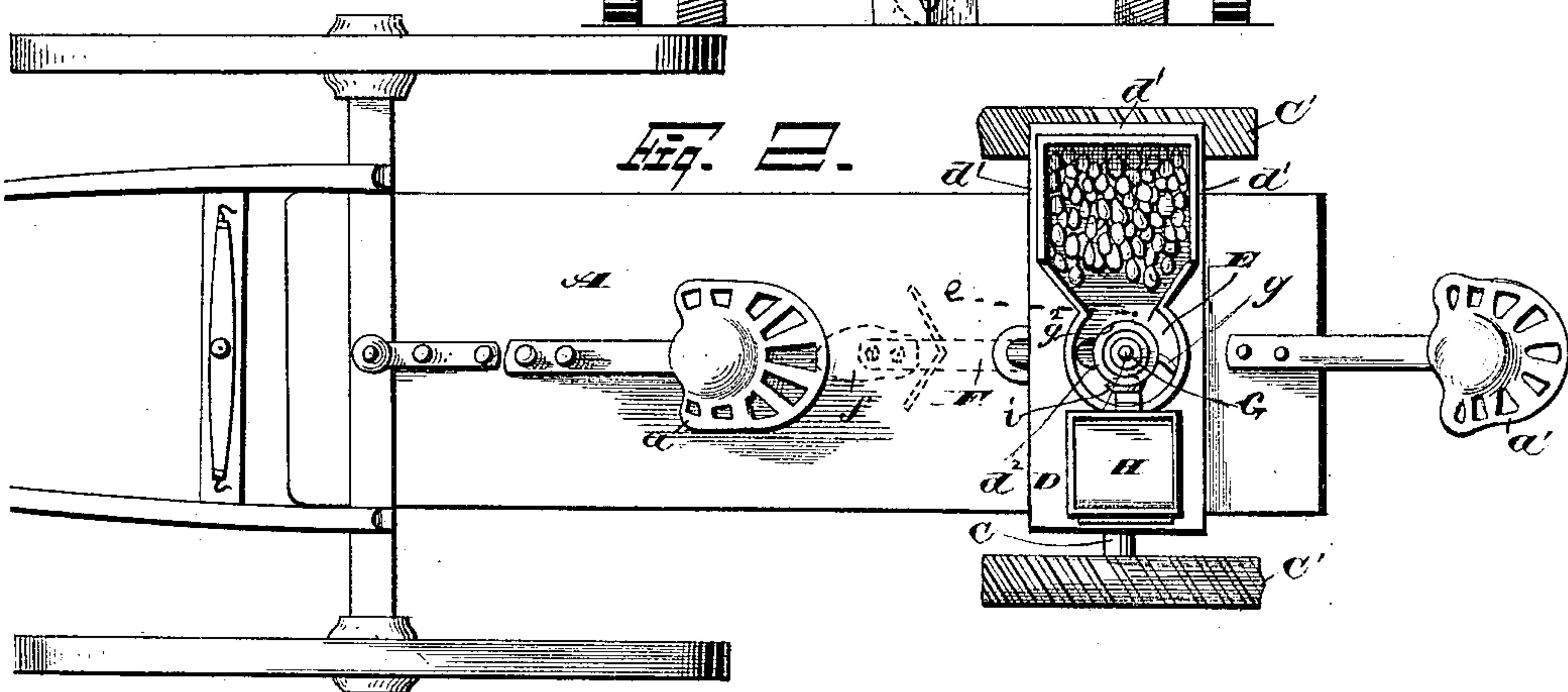


Fig. 4.

WITNESSES

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SAMUEL E. HAKE, OF NILES, OHIO.

POTATO-PLANTER.

SPECIFICATION forming part of Letters Patent No. 336,312, dated February 16, 1886.

Application filed November 4, 1885. Serial No. 181,822. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL E. HAKE, of Niles, in the county of Trumbull and State of Ohio, have invented certain new and useful
5 Improvements in Potato - Planters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

10 My invention relates to improvements in potato-planters; and it consists in certain features of construction and in combination of parts hereinafter described, and pointed out in the claims.

15 In the accompanying drawings, Figure 1 is a side elevation in longitudinal section of my improved potato - planter. Fig. 2 is a plan view. Fig. 3 is a rear end elevation. Fig. 4 is a view in perspective of a scraping device
20 for covering the furrow.

A represents the platform or body of the device that is mounted on the axles C C, as shown. The axle C has traction-wheel C' rigidly secured thereto. Seats *a* and *a'* are secured to the platform, the former for the driver
25 and the latter for the operator.

D is a table elevated on the legs *d* a suitable distance from the platform A.

E is an annular rim secured to the table D
30 and extending upward, inclosing what might be called a "main hopper," said rim having an opening, *e*, on one side, and the table on the side opposite the opening has end and side boards, *d'*, attached, forming a box-like
35 structure or supplemental hopper of sufficient size to hold, perhaps, a bushel, more or less, of potatoes. A hole, *d''*, is made through the table inside the rim E, said hole being of
40 suitable size to discharge potatoes one at a time. A tube, F, is secured so as to register with the opening *d''*, and the lower end of the tube is provided with a small cultivator-tooth, *f*, for making a suitable furrow for receiving the potatoes. Any suitable device—for in-
45 stance, such as shown at K in Fig. 4—may be secured to the tube F, or to the platform, if preferred, for covering the furrows.

G is a vertical spindle that has an arm, *g*, attached at the upper end. Said arm is con-
50 caved in the direction of the line of motion

and sweeps the table inside of the rim E. The lower end of the spindle has attached a small bevel-pinion, *g'*, that engages the bevel-gear *c*, the latter being attached to the revolving
55 axle C.

The operator feeds the potatoes through the opening *e* into the hopper, and the curved arm *g* carries them along over the opening *d''*, where they fall by gravity through the tube F into the furrow and are covered by the
60 scraper K.

The gears *c* and *g'* should be of such relative size according to the circumference of the wheels C' as will plant the potatoes at the desired distance apart. For instance, if the
65 wheels C' are six feet in circumference and it is desired to plant the potatoes three feet apart, the relative sizes of gears *c* and *g'* will of course be made two to one.

With the construction shown the spindle G
70 is conveniently driven by means of the gears aforesaid, but it is not essential. If the spindle and hopper were not located over the axle C, it might be more convenient to drive the spindle by a belt, endless chain, or other
75 means.

H is a hopper discharging into the conveyer-trough H', with a gate, *h*, to regulate the discharge of fertilizing material to the conveyer. A worm, I, operates in the trough and dis-
80 charges into the hopper E. The trunnions of the worm I are journaled in suitable boxes, *h'* and *h''*, connected with the trough. A small bevel-pinion, *i*, is mounted on the one trunnion, and engages a larger gear, *g''*, that is
85 mounted on the spindle G, above the arm *g*. The relative sizes of the gears *i* and *g''* should be about two or three to one, to give the desired motion to the worm. The arm *g* sweeps the potatoes together with the fertilizing ma-
90 terial, and discharges both together through the tube F into the furrow.

Although the apparatus is designed more especially for planting potatoes, beans, corn, and other seeds and grain may be planted suc-
95 cessfully, the operator feeding into the hopper E the required number of grains or seeds required for each hill. I therefore claim the apparatus for all purposes for which it is adapted.

The hopper, together with the conveyer, can be readily detached when not wanted, or may run idle when no fertilizing material is wanted.

What I claim is—

5 1. In a potato-planter, the combination, with a main hopper having curved side walls, and provided with an opening in the bottom thereof, a supplemental hopper located along-
10 therewith, a tube located under the opening in the main hopper, and a tooth or implement secured to said tube for making a furrow, of a horizontal arm operating in the main hop-
15 per, a spindle supporting said arm, and mechanism for rotating the spindle by power transmitted from the traction-wheel of the machine, substantially as set forth.

20 2. In a potato-planter, the combination, with the main and supplemental hoppers located in the same planes and in open communication with each other, the main hopper having the opening d^2 in the bottom thereof, and the tube

F, of the horizontal arm located within the main hopper, the spindle supporting said arm, and means for revolving the spindle and arm. 25

3. The combination, with a potato-planter arranged substantially as indicated, of a hopper for fertilizing material, said hopper having a conveyer arranged to discharge into the hopper E, substantially as set forth. 30

4. The combination, with a hopper, E, a curved arm, a spindle for operating said arm, and a dropping-tube communicating with said hopper, of a hopper for fertilizing material, and a conveyer intergeared with the spindle 35 G, and adapted to convey the fertilizing material to the hopper E, substantially as set forth.

In testimony whereof I sign this specification, in the presence of two witnesses, this 23d day of October, 1885.

SAMUEL E. HAKE.

Witnesses:

SAMUEL M. SUTLEFF,
F. E. HUTCHINS.