

(No Model.)

W. T. BURROWS.

COTTON PLANTER.

No. 260,656.

Patented July 4, 1882.

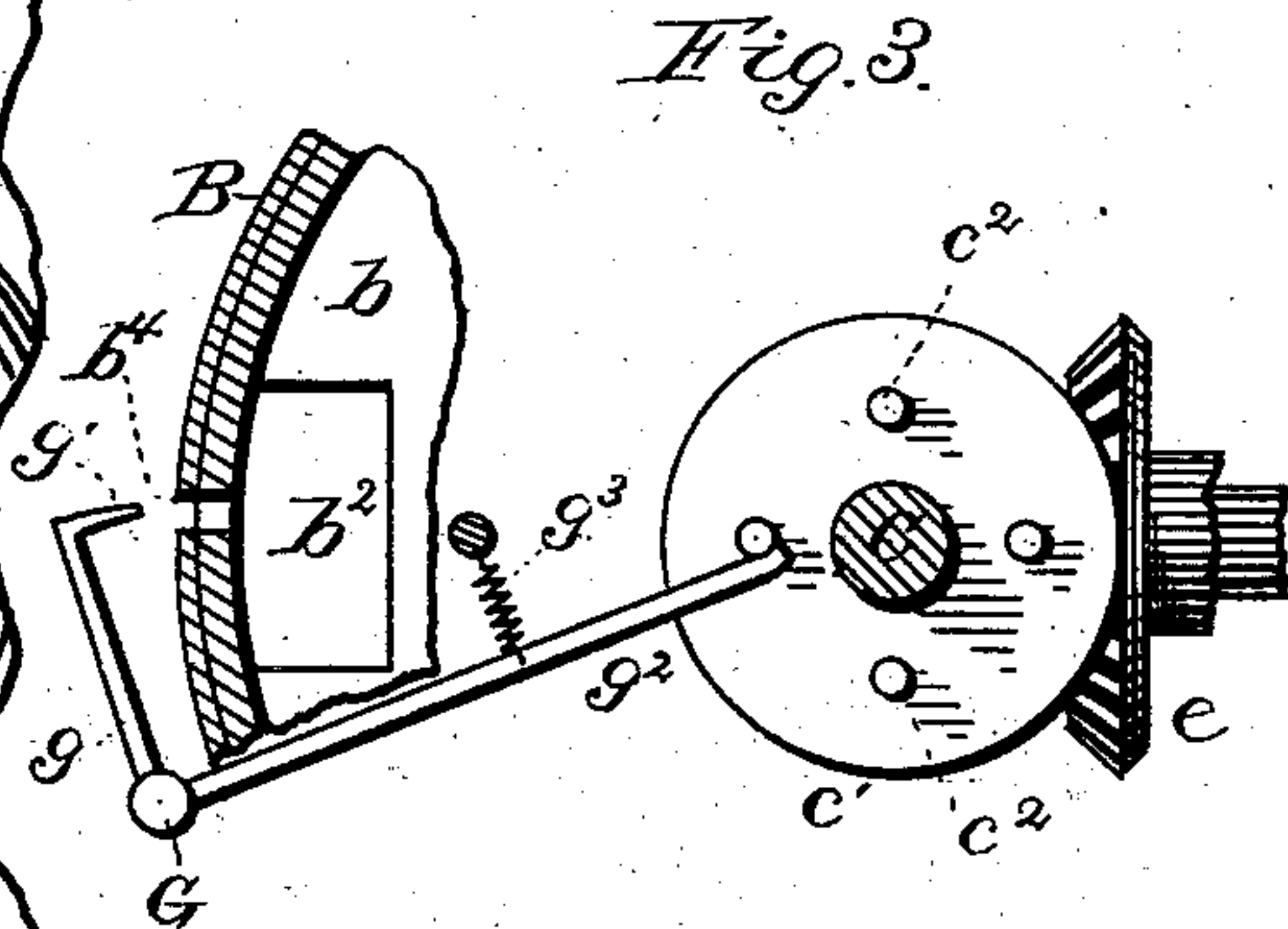
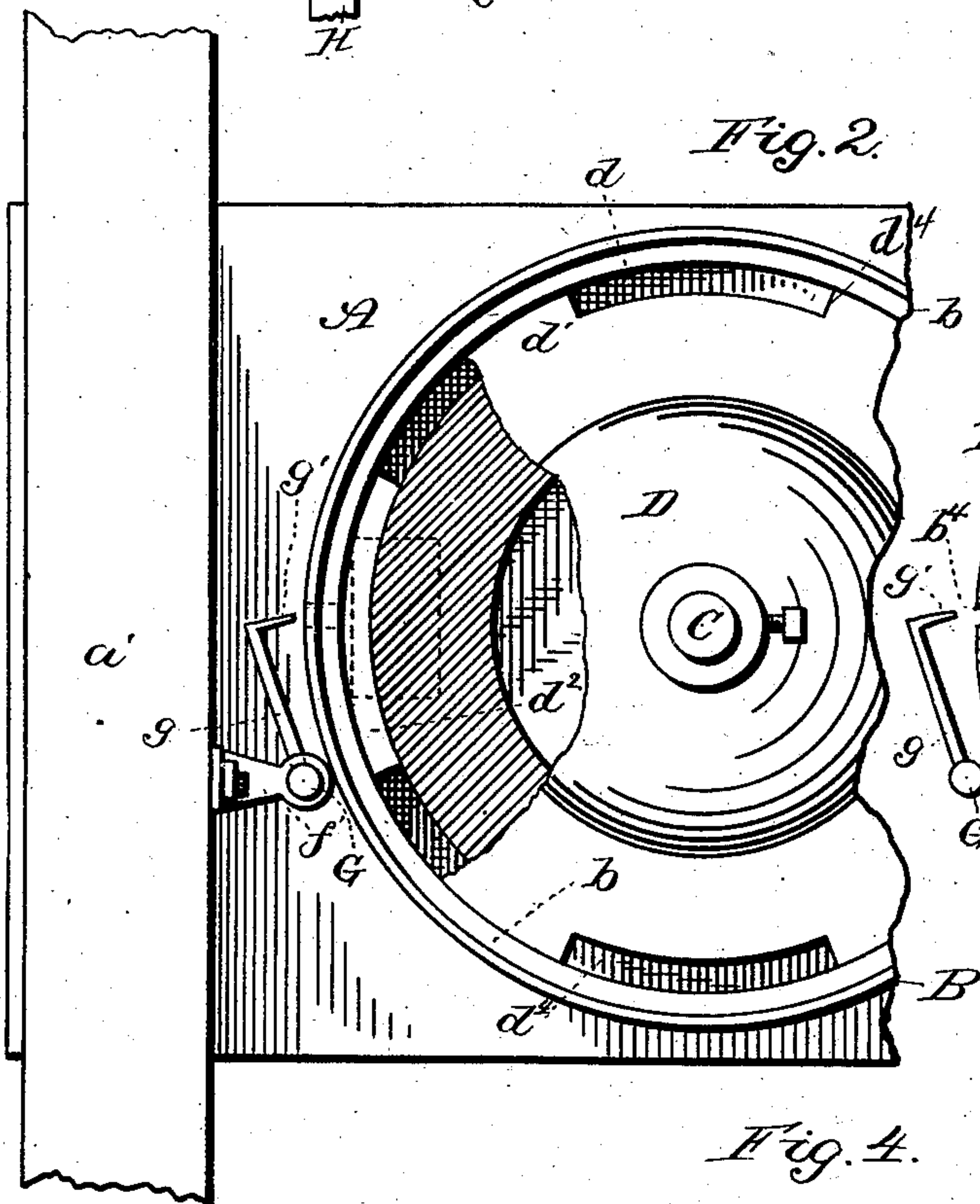
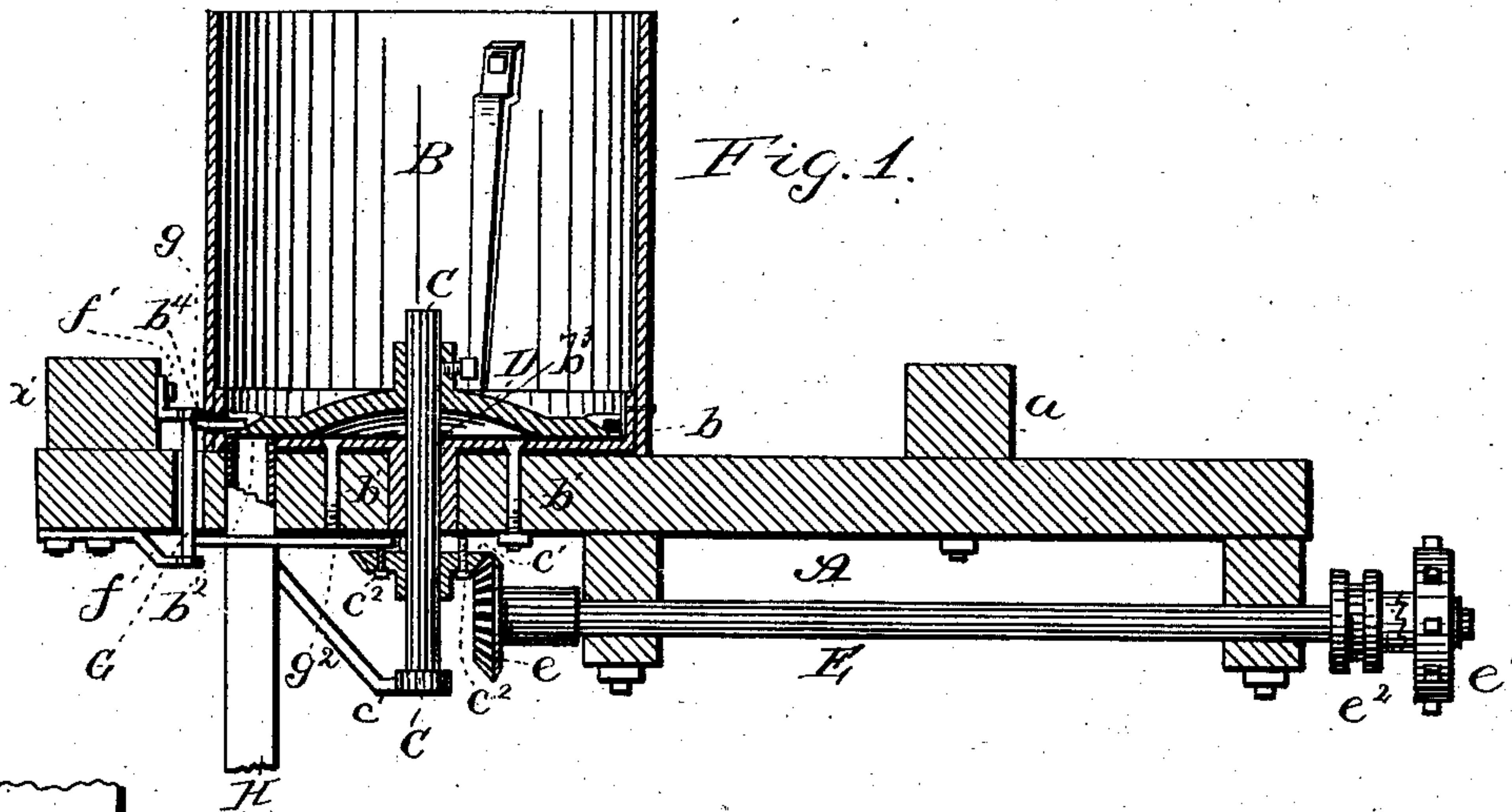
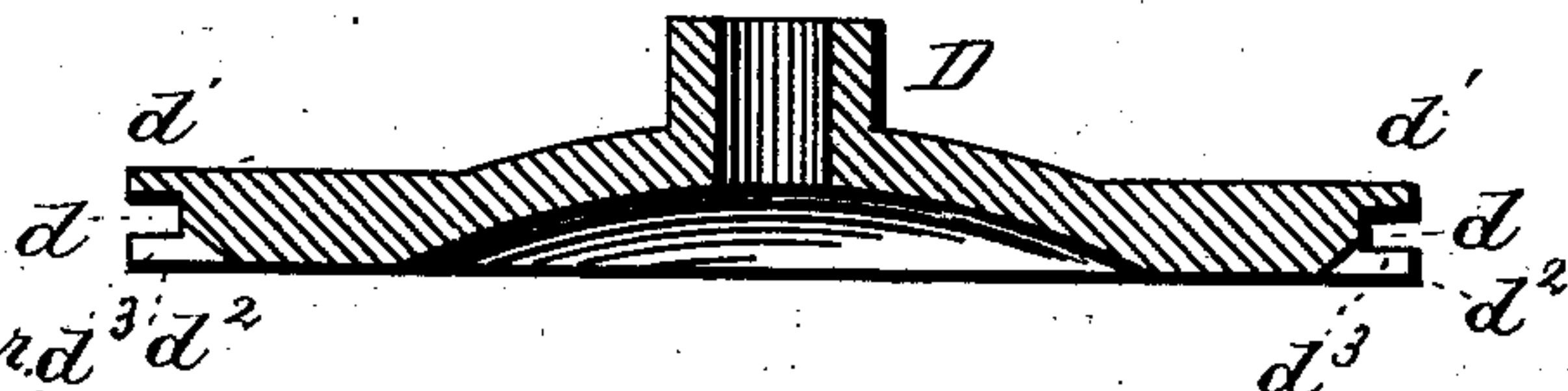


Fig. 4.

Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM T. BURROWS, OF EAST DUBUQUE, ILLINOIS.

COTTON-PLANTER.

SPECIFICATION forming part of Letters Patent No. 260,656, dated July 4, 1882.

Application filed February 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM T. BURROWS, a citizen of the United States, residing at East Dubuque, in the county of Jo Daviess and State of Illinois, have invented certain new and useful Improvements in Cotton-Planters, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improvement in seed-planters; and it consists in the peculiar construction and arrangement of parts, as will be more fully set forth hereinafter.

The accompanying drawings illustrate my invention.

Figure 1 is a vertical longitudinal section. Fig. 2 is a top plan view, partly in section. Fig. 3 is a detailed view of the seed-dropping mechanism. Fig. 4 is a cross-section of the seed-plate.

A represents the base upon which the mechanism is supported, provided with the transverse bars $a a'$, by means of which it can be bolted or otherwise secured to an ordinary sulky-plow parallel to the axle thereof.

Near the rear end of the base A is the hopper B, which is secured rigidly to the casting b , which casting has its upper face planed true and is secured to the base A by means of the bolts $b' b'$. The casting b forms the bottom of the hopper, and is provided at the edge nearest the rear end of the base with the opening b^2 , through which the seeds fall, and at the center with a hole, b^3 , through which extends the vertical shaft C, the lower end of the shaft being supported by the hanger or brace c .

Bearing upon the upper side of the casting b is the circular seed-plate D, which is rigidly secured to the upper end of the shaft C and has the groove d formed in its outer edge, forming the upper and lower flanges, d' and d^2 , as shown at Fig. 4. These flanges are cut away at $d^3 d^4$. The cut-away segments d^4 , taken from the upper flange, d' , will register with the portions of the flange d^2 which have been left entire, thus forming open chambers around the edge of the plate of which the segments of the lower flange constitute the bottoms.

The vertical shaft C is provided near its lower end with the rigid mitered gear-wheel c' , through which extend in a circle a suitable

number of screws, c^2 , the upper ends of which extend above the upper surface of the gear-wheel, for the purpose to be explained farther on. The gear-wheel c' meshes with a second gear-wheel, e , secured to the horizontal shaft E, mounted in suitable bearings under the base A, which shaft E extends to the front end of the base and is provided at its front end with the loosely-mounted sprocket-wheel or pulley e' and the feathered clutch e^2 , as shown in Fig. 1. By means of the pulley e' motion can be imparted from the wheel of the sulky-plow to the shaft E and through the miter-gear to the vertical shaft c , carrying the seed-plate D, thus causing the latter to revolve at the bottom of the hopper, as will be readily understood.

Mounted in suitable bearings, ff' , at the rear of the hopper, is the vertical rock-shaft G, from the upper end of which extends the arm g , having its outer end bent at right angles and flattened at g' and adapted to enter a hole, b^4 , made at the rear of the bottom of the hopper (over the hole b^2 , formed in the casting b) and to project into the groove d , formed in the periphery of the seed-plate D.

From the lower end of the rock-shaft G extends a tappet-arm, g^2 , the outer end of which engages successively with the protruding ends of the removable screws or tappet-pins c^2 , with which the gear-wheel c' is provided, thus causing the arm g^2 to move outward as the gear-wheel c' revolves, (against the tension of the spring g^3 ;) imparting motion to the rock-shaft G, which causes the end g' of the arm g to enter the hopper into the groove d of the seed-plate and sweep the seeds contained in the chambers of the plate into the opening b^2 of the casing, from whence they are discharged through the spout H into the ground.

By means of the screws c^2 the distance between the hills can be regulated at will by taking some of them out, so that they cannot operate the rock-shaft, as will be readily understood. A seed-planter thus constructed will do its work well and thoroughly, is simple and inexpensive, and is not likely to get out of order.

Having thus described my invention, I claim—

1. In a seed-planter, the seed-plate D, pro-

vided with the groove d in its periphery, the flanges d' d^2 , and openings d^4 , the said openings being arranged alternately around the rim of the seed-plate, thereby forming compartments in which the seeds are retained as the plate revolves, substantially as set forth.

2. The seed-plate D, adapted to revolve in the bottom of the hopper B, the said seed-plate having the groove d , and flanges d' d^2 , portions of which, d^3 d^4 , are cut away, mounted upon the vertical shaft C, in combination with the rock-shaft G and its tappet-arm g^2 and seed-arm g , all arranged to operate substantially as shown and described.

3. The vertical shaft C, bearing at its upper end the seed-plate D, and connected by a miter-gear with a horizontal shaft, E, the gear-wheel e' being provided with the removable pins e^2 , in combination with the tappet-arm g^2 , rock-shaft G, and arm g , the said arm g having its outer end bent at right angles and adapted to enter the slot b^3 made in the hopper and sweep the seeds from the compartment d^4 of the seed-plate into the discharge-spout H, substantially as and for the purpose set forth.

4. The gear-wheel e' , provided with the re-

movable tappet-pins e^2 , in combination with the shaft e and seed-sweeping apparatus G g g' g^2 g^3 , whereby the distance between the hills can be regulated at will, substantially as set forth.

5. The combination of the hopper B, casting b , forming the bottom thereto, the vertical shaft C, carrying at its upper end the seed-plate D, the shaft being provided with the miter-gear e' , and the shaft E, having affixed thereto the chain-wheel e' and clutch e^2 , the miter-gear wheel e' , being provided with the removable tappet-pins e^2 , in combination with the tappet-arm g^2 , spring g^3 , rock-shaft G, and arm g , having its outer end bent at right angles thereto and adapted to enter the opening b^4 in the hopper B, whereby it can sweep the seeds from the compartments d^4 into the discharge-pipe, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM T. BURROWS.

Witnesses:

JOHN BUCKLEY,
E. C. GODDARD.