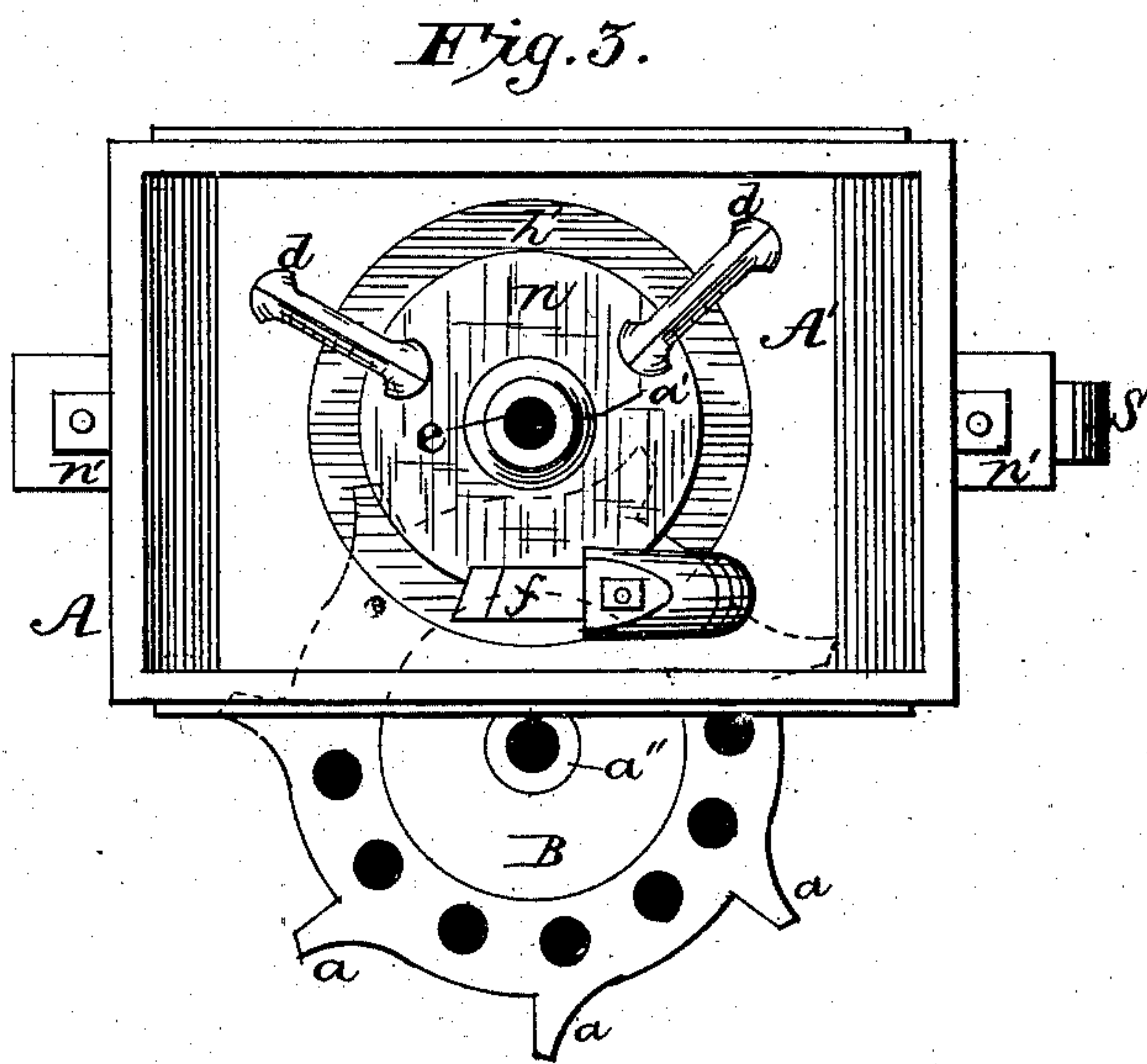
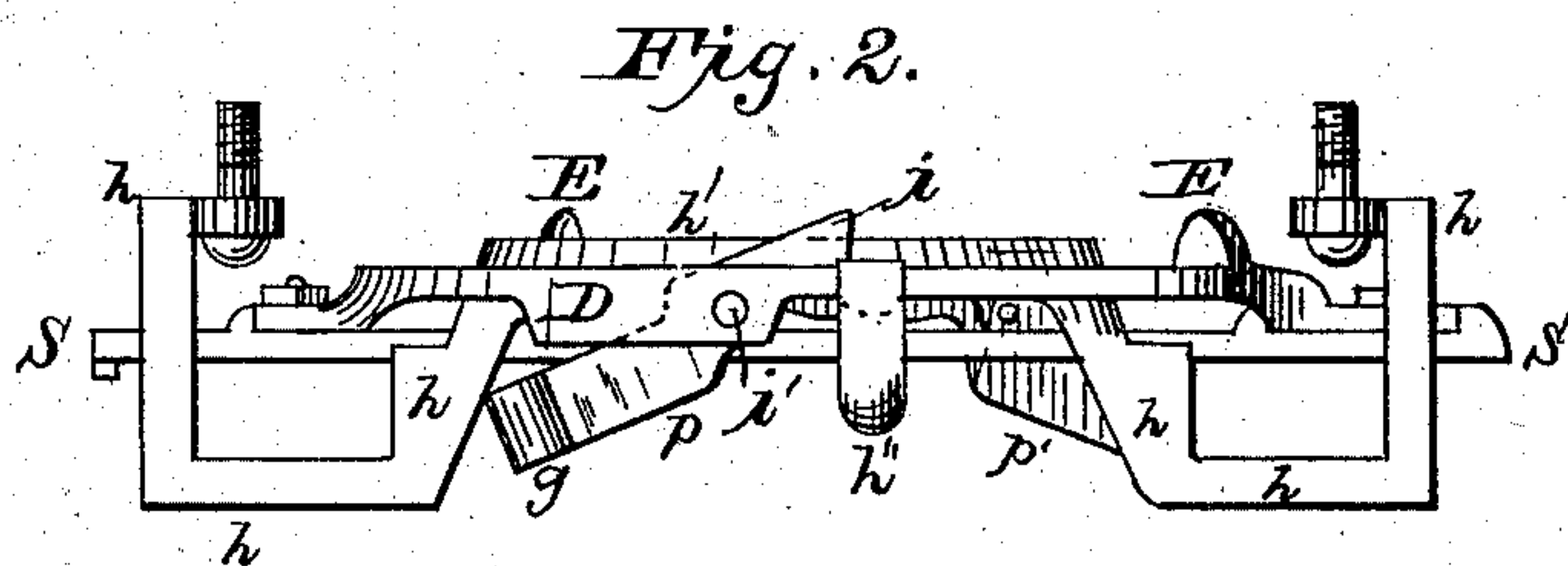
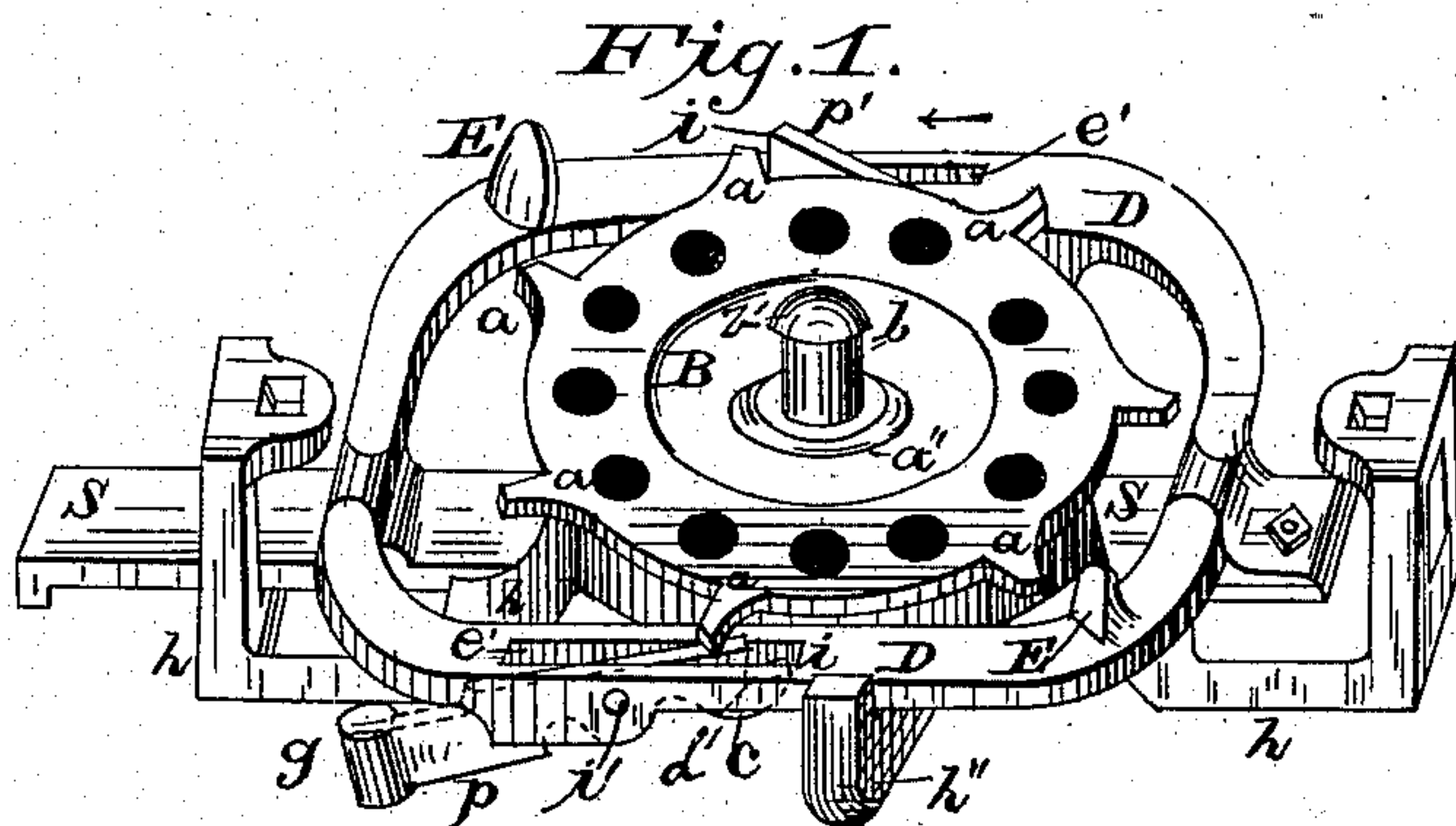


(No Model.)

A. C. EVANS.
CORN PLANTER.

No. 258,037.

Patented May 16, 1882.



Attest:

J. M. Burnham.

G. J. Amus.

Inventor:

Austin C. Evans.

B. C. Converse.

Atty.

UNITED STATES PATENT OFFICE.

AUSTIN C. EVANS, OF SPRINGFIELD, OHIO.

CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 258,037, dated May 16, 1882.

Application filed November 14, 1881. (No model.)

To all whom it may concern:

Be it known that I, AUSTIN C. EVANS, a citizen of the United States, residing at Springfield, in the county of Clarke and State of Ohio, have invented certain new and useful Improvements in Corn-Planters, of which the following is a full, clear, and exact specification.

My invention relates to improvements in corn-planters having rotary seed-dropping devices in which the seed-disk is made so as to be removable at will, allowing the introduction or replacement of another without removing the cap or any portion of the seed-hopper or the driving or supporting frames beneath it.

My invention relates also to improvements in the pawls (and in the manner of pivoting them) by which the seed-disk is rotated.

My invention relates, further, to the manner of pivoting the seed-disk, whereby it may be instantaneously released from its bearing, so as to be removable at will.

Two sheets of drawings accompany this specification.

Figure 1 is a perspective view of my device. Fig. 2 is a side view of the same. Fig. 3 is a top view, showing the hopper in position and the seed-plate partly withdrawn.

In the drawings, A is the seed-hopper; A', the bottom plate of the same, the latter projecting slightly below the sides of the hopper, as seen in Fig. 3.

B is the seed-disk, which is similar to that shown in my patent of May 10, 1881, but which is rotated by an entirely different method. The seed-disk B is made so as to be detachable, it being held in place by a loose pin, *b*. By withdrawing this pin the seed-plate can be drawn out from either side, it being held loosely in the opening upon pin *b*, between the bottom A' and the top *h'* of the supporting-frame *h*. As the instantaneous removal of the seed-disk and the placing of another in its position ready for operation depend upon the manner in which it is pivoted, I have adopted the loosely-fitting pin *b* for that purpose, it being turned with a head, *b'*, having its bearing upon the raised collar *a'* of cap *n* when dropped into the hole *e* of the crown-plate. As the substitution of one seed-disk for another (having a greater or less number of holes) while the implement is in operation in

the field is sometimes a matter of importance, the time required to remove the hopper for that purpose is entirely obviated by my improvement, which applies to any rotary dropping device in which the seed-disk is pivoted between the hopper-bottom and the top of the supporting-frame.

The frame D is rigidly attached to the slide-bar S, and has a long vertical slot, *e'*, through each side bar, in which are pivoted the driving-pawls *p p'*. These two pawls are weighted at their rear end, which is enlarged, as seen at *g*, so as to throw up their forward ends into the operative position. The forward end has a notch, *d'*, cut back in it, so as to leave a jaw, C, on the underside, which latter strikes against the under side of the frame D, preventing the point *i* of the pawl from rising too high or the latter from being thrown up out of the slot. In operating the dropper the disk receives its impulse from alternate sides by the pawl *p* and *p'* alternately as the driving-frame D is driven by the slide-lever S from right to left, and vice versa.

The working members of this device are few and simple, and there is a decided advantage in operating the disk over the pawls in passing them, as the weighted ends of the pawls have a tendency to slightly raise the disk on its center pin, thus easing it so as to allow it to turn more freely.

I claim as my invention—

1. In a rotary seed-dropping device for a two-horse planter, the combination, with a seed-hopper, its supporting-frame, and the reciprocating slide having vertically-moving pawls, of a detachable seed-disk, which may be removed edgewise from either side of the hopper, as set forth.

2. In a rotary seed-dropping device for planters, the combination, with the hopper-bottom A', having cap *n*, with hole *e* therein, and the supporting-frame provided with a central hole in its top *n'*, of the loosely-fitted center pin, *b*, extending through said cap and frame and having the interposed detachable seed-disk B pivoted thereon, as and for the purpose herein set forth.

3. In a rotary seed-dropping device operated by a slide-lever, the combination of the detachable disk, the supporting-frame over which it

is pivoted, the loosely-fitted center pin, and the seed-hopper in which said disk is operated, having an open slot on either side to permit its removal edgewise therefrom, as set forth.

5 4. A rotary seed-dropping device for a two-horse planter, in which a rigidly-attached hopper having an open slot on either side is supported upon a bearing-frame, with an interposed seed-disk pivoted upon a loose center
10 pin extending through the cap, disk, and bearing-frame, said disk being driven by a slide-lever and a system of pawls engaging with teeth upon the edge of the same and being removable edgewise through a slot on either side
15 of the hopper by the withdrawal of the center pin without disturbing the other elements of the device.

5. In a rotary seed-dropping device for planters operated by a slide-lever, the combination,
20 with the hopper-bottom, the supporting-frame, and a removable seed-disk loosely pivoted between them, of a loosely-pivoted center pin, on which said disk is pivoted, having a head resting upon the crown-plate or cap of the hopper-
25 bottom, and held in place by gravity, so as to be easily and quickly withdrawn for the purpose of removing the seed-disk edgewise therefrom, as set forth.

6. In a rotary seed-dropping device for planters operated by a slide-lever, as specified, a
30 center pin held in its place by gravity, and a removable seed-disk with its engaging-teeth on

the edge thereof and having its bearing upon said pin, whereby the disk is made removable edgewise by the withdrawal of said pin, as set forth. 35

7. In a rotary seed-dropping device for planters, the combination, with the oblong frame D, bolted to slide-lever S and operated thereby, and having slots e' on each side, of the weighted
40 upward-acting push-pawls $p p'$, having the upper cut notches, d , in their ends, and provided with a jaw, C, extending therefrom on the under side beyond the opening of said slot, whereby the upward movement is arrested at the en-
45 gaging end of said pawls, as hereinbefore set forth.

8. In a rotary seed-dropping device for planters, as hereinbefore described, the combination of the hopper-bottom A' , having cap
50 n , with hole e therein, removable disk B, the loose center pin, b , on which said disk is pivoted, having head b' resting on said cap, the supporting-frame h , having top h' , with a central hole for the lower end of the pin b , the
55 slide-bar S, with the oblong frame D, having slots e' , and the pawls p and p' , pivoted therein and operating upon the teeth a of the disk outside the circle of seed-holes, as hereinbefore set forth.

AUSTIN C. EVANS.

Attest:

B. C. CONVERSE,
L. WINDHURST.