

(No Model.)

A. H. PATCH.
CORN SHELLER.

No. 407,549.

Patented July 23, 1889.

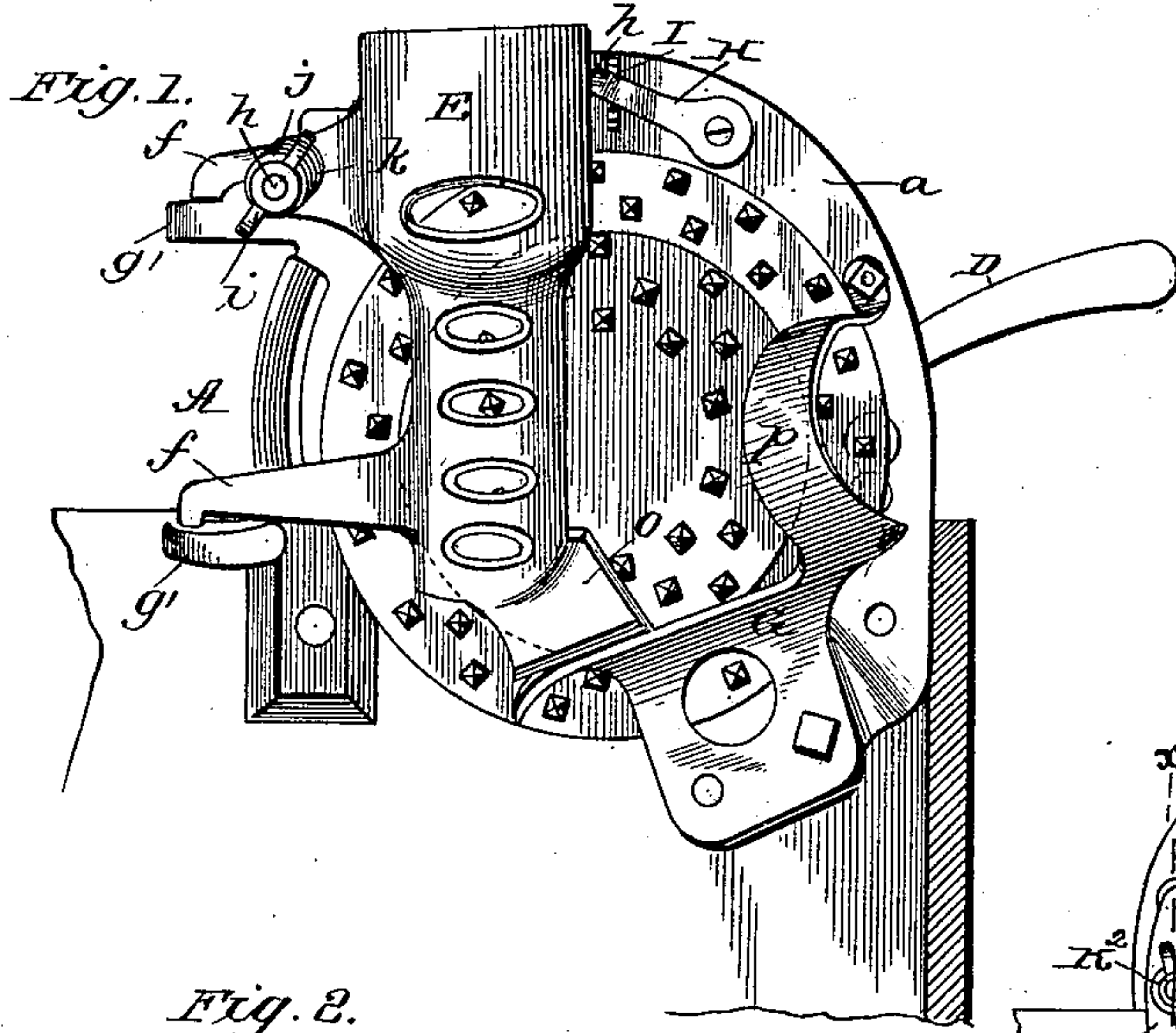


Fig. 2.

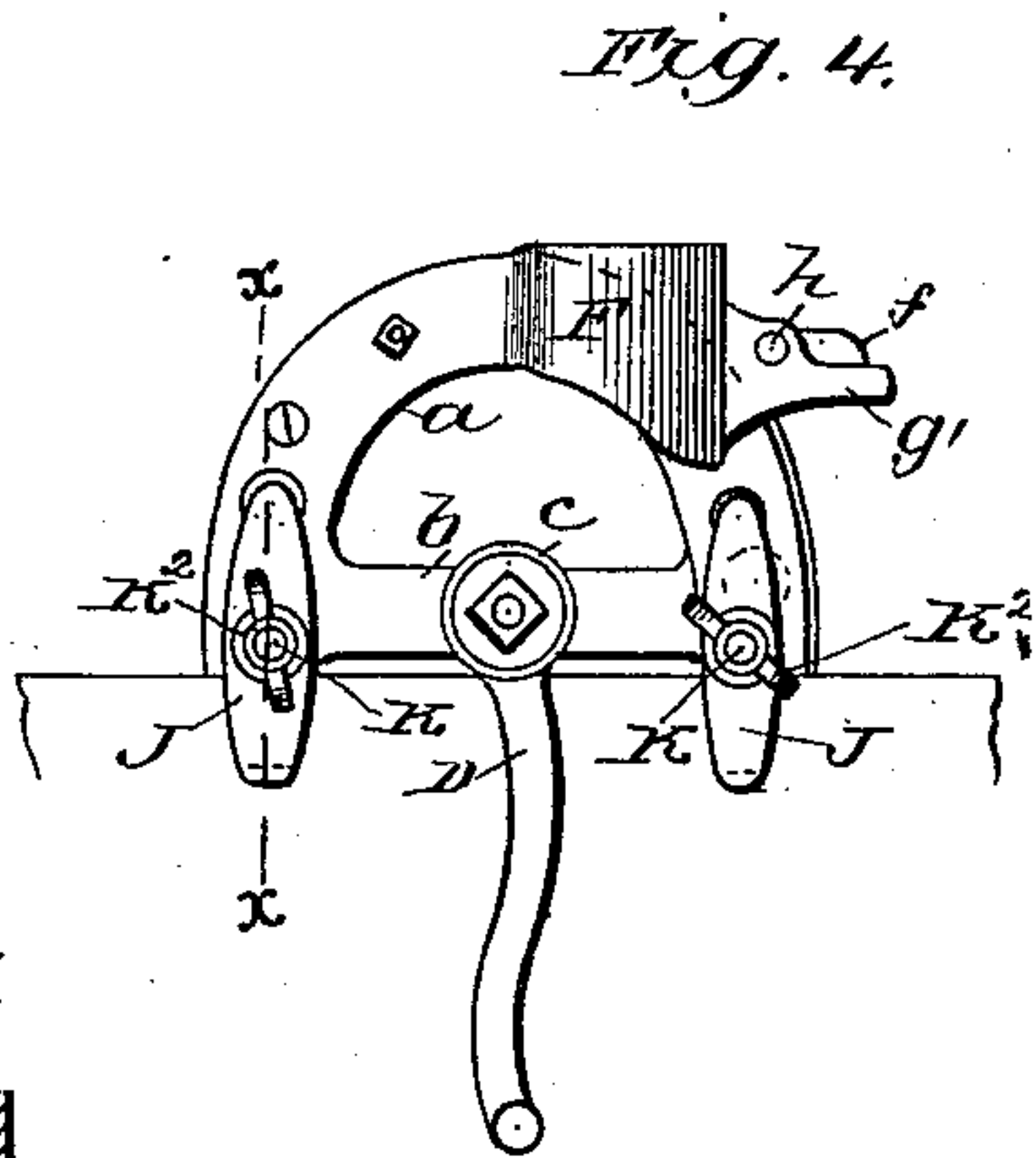


Fig. 5.

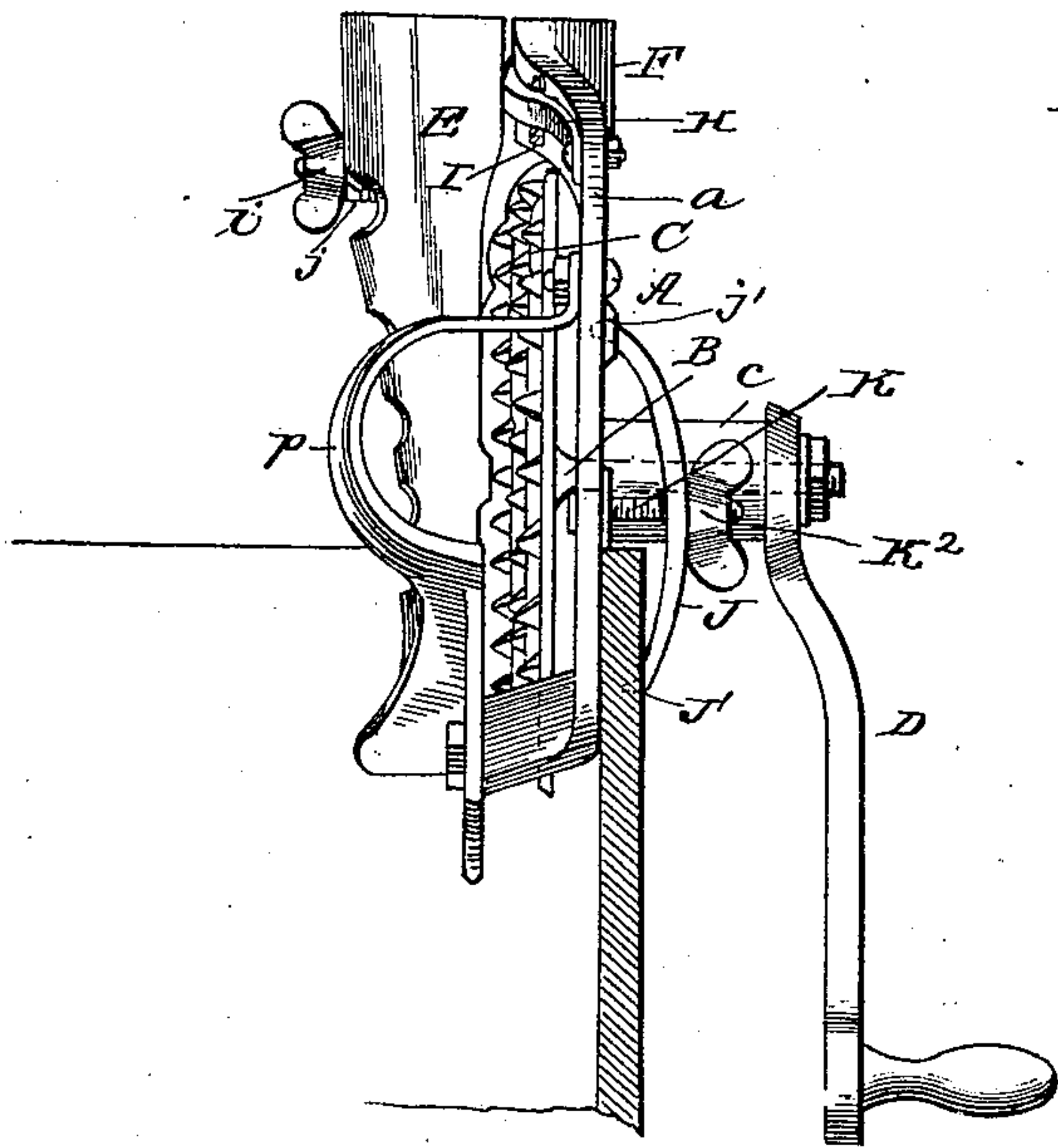
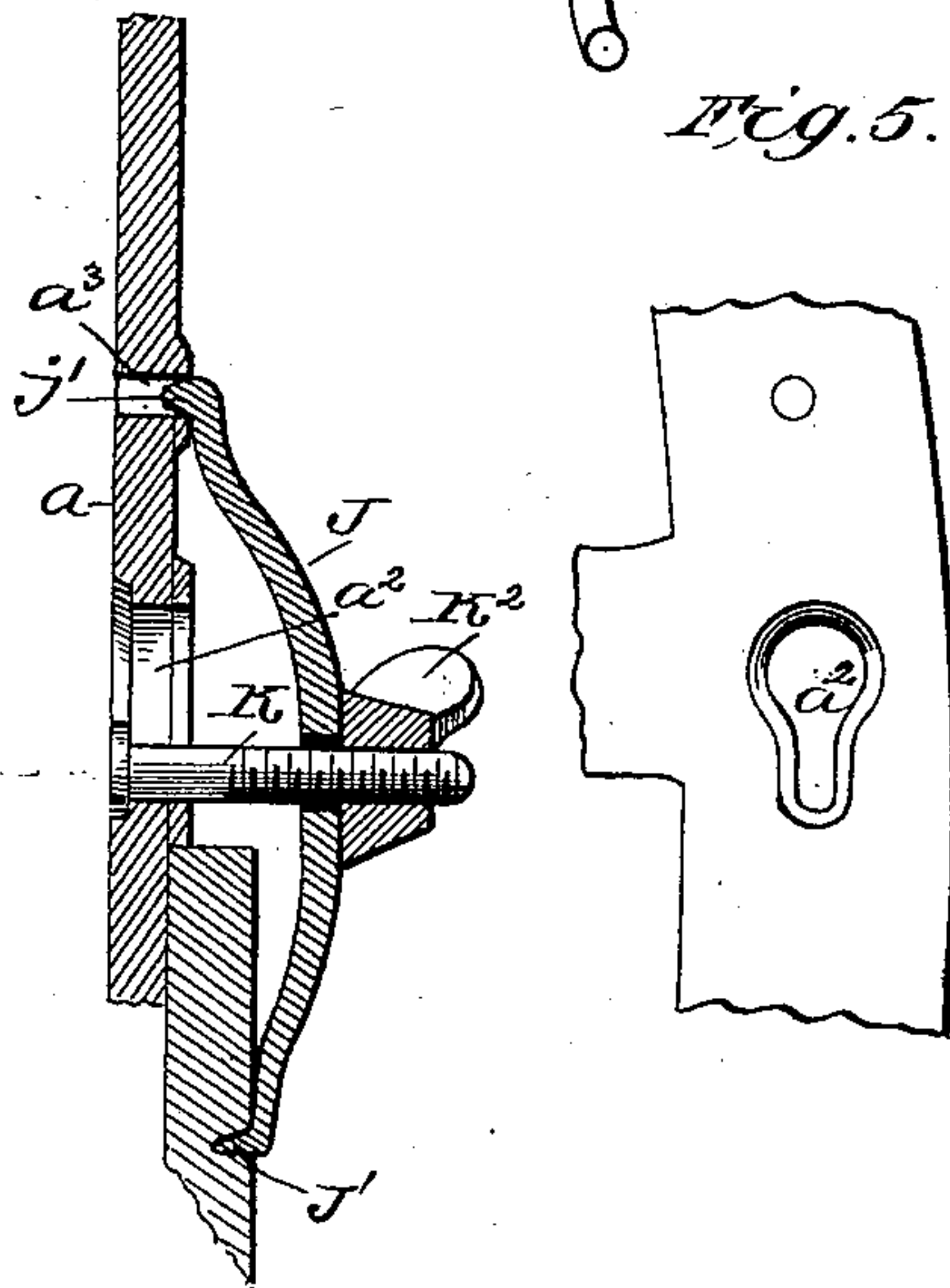
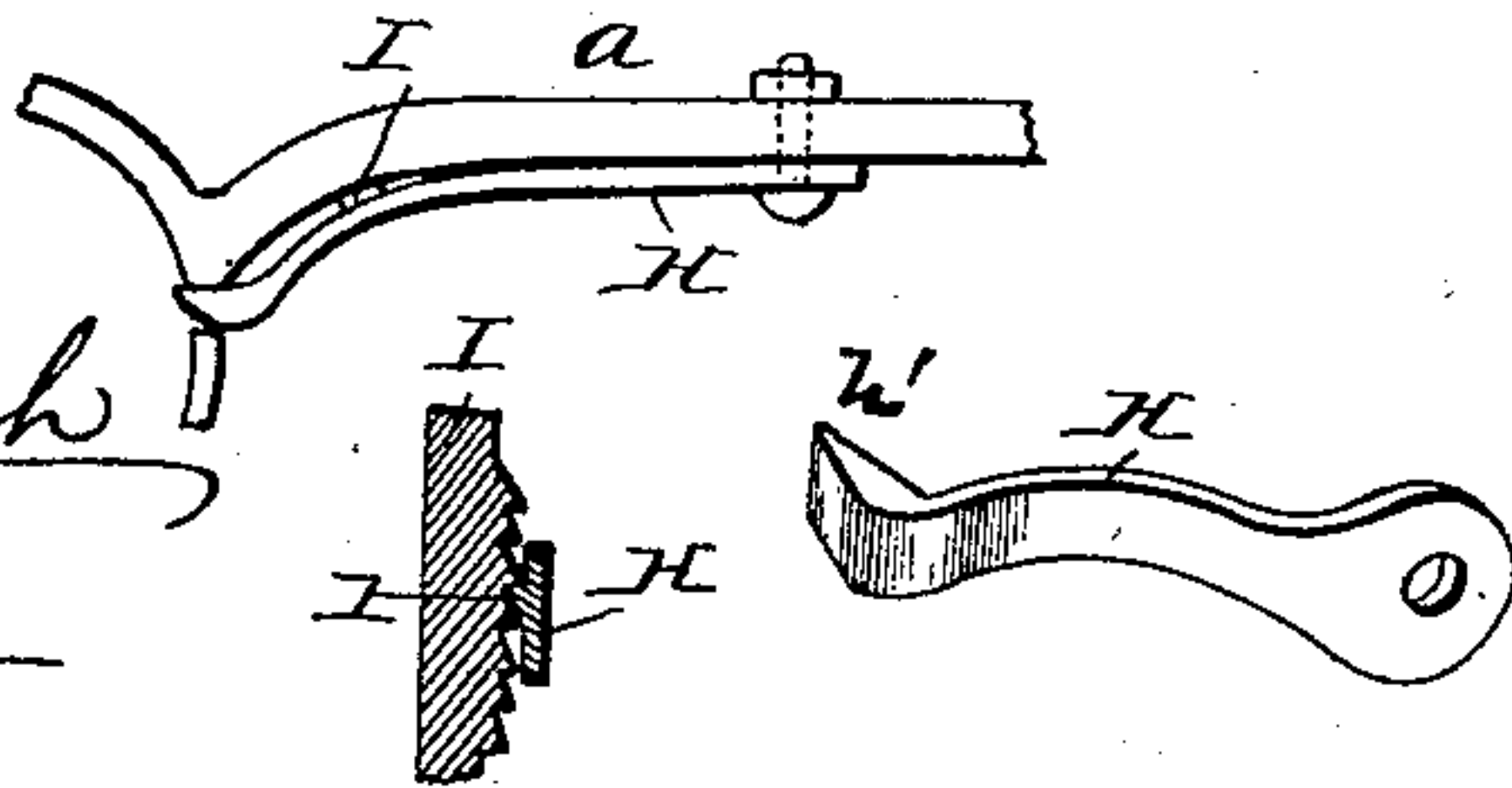


Fig. 6.



WITNESSES:
Fred G. Dieterich
Jos. A. Ryan



INVENTOR
Asahel H. Patch.
BY *Mum & Co.*
ATTORNEY

UNITED STATES PATENT OFFICE.

ASAHIEL HUNTINGTON PATCH, OF CLARKSVILLE, TENNESSEE.

CORN-SHELLER.

SPECIFICATION forming part of Letters Patent No. 407,549, dated July 23, 1889.

Application filed April 12, 1889. Serial No. 306,990. (No model.)

To all whom it may concern:

Be it known that I, ASAHIEL HUNTINGTON PATCH, residing at Clarksville, Montgomery county, and State of Tennessee, have invented
5 a new and useful Improvement in Corn-Shell-ers, of which the following is a full, clear, and exact description.

My invention consists in certain new and useful improvements on the invention for
10 which Letters Patent No. 353,080 were issued to me, dated November 23, 1886, and my invention will be hereinafter fully described and claimed.

Referring to the accompanying drawings,
15 Figure 1 is a front elevation of my improved corn-sheller. Fig. 2 is a side elevation of the same. Fig. 3 is a sectional view taken on line xx of Fig. 4. Fig. 4 is a rear view of the sheller. Fig. 5 is a detail view showing one
20 of the slots a^2 in the yoke a ; and Fig. 6 illustrates in detail the adjusting-plate and rack.

The same letters of reference indicate corresponding parts in all the figures.

Referring to the several parts by letter, the
25 main frame A of the machine consists of a yoke a , provided with a cross-arm b , upon which is formed a sleeve c , for receiving the shaft B of the toothed wheel C. The shaft B has a hand-crank D, by which it is turned.

30 In the yoke A is formed a part of the hopper E, and F indicates the shell, which is supported opposite the wheel C by its pivot-arms f f , the downwardly-bent ends of which are inserted in the perforated ears g' g' of the
35 yoke a . A bolt h' , projecting from the yoke a , passes loosely through an aperture in the upper arm f , and has a wing-nut i on its threaded end, between which and the arm f is placed a washer j and a spiral spring k .
40 The lower part of the hopper is provided with a guide o , for directing the cob, and in front of the wheel C, near the guide o , is supported an inclined chute G, by attachment to the
45 main frame.

The above parts are all precisely the same as in my original patent before referred to, and I will not, therefore, describe them more fully.

50 The guard p is formed, preferably, integral with the chute G, extending up from the outer end of the same and curving around in nearly a half-circle, having its upper end secured to

the side of the yoke a , as shown. This semi-circular guard forms a perfect guide for the cob as it passes up and out of the chute G. 55

To adjust the size of the hopper to receive larger cobs than the general average, which in some parts of the country is necessary, I pivot at one end to the side of the yoke a an
60 adjusting-plate H, which is curved and of such length that when its free end h' is pushed down it will enter between that edge of the hopper E and the corresponding edge of the shell F, when the shell will turn on its hinges
65 to admit the end of the plate, and the size of the interior of the hopper will be thus increased. The free end of plate H is beveled, as shown, so that it can open the hopper
70 to a greater or less extent, according to the distance which the beveled end is forced between the edges, as will be readily seen.

A notched rack I is formed on the yoke a , with which a rib 1 on the adjusting-plate engages, serving to lock the plate at the point
75 to which it is moved, and prevent its shaking or being accidentally moved out of that position.

The frame A is usually secured to its support by clamps consisting of arched plates J, through the center of each of which passes a
80 clamping-screw K, having a winged nut K^2 on its outer end, the head of the nut passing rearwardly through a slot a^2 in the yoke a , while the upper end of each plate is formed with a projection j , which enters a hole a^3 in
85 the yoke and prevents that end from slipping, and the lower end of the plate is formed with a projection J, which penetrates the wood of the support and thus holds that end of the plate from slipping. The frame can be fast-
90 ened to its support by screws when desired.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a corn-sheller, the combination, with
95 the wheel C, shell F, having the guide o and chute G, of the semicircular guard p , having its upper end extended around and secured to the yoke a , substantially as set forth.

2. In a corn-sheller, the combination, with
100 the yoke-frame a and hopper E, and the shell F, hinged to the yoke-frame at one side and having the pressure-spring, of an adjusting-plate pivoted at one end to the yoke-frame

and adapted to have its free end inserted between the free edge of the shell F and the corresponding edge of the hopper, substantially as set forth.

5 3. In a corn-sheller, the combination, with the yoke-frame *a* and hopper E, and the shell F, hinged to the yoke-frame at one side and having the pressure-spring, of the pivoted adjusting-plate H, having the beveled free
10 end *h'*, substantially as set forth.

4. In a corn-sheller, the combination of the yoke-frame *a*, having the notched rack I and the hopper E, the shell F, hinged to the yoke-frame at one side and having the pressure-
15 spring, and the pivoted adjusting-plate H, having the rib 1 on its inner side, substantially as set forth.

5. In a corn-sheller, the combination, with the yoke-frame *a*, of the curved clamping-plates J, having the projections *J'* at their
20 lower ends, and the central apertures, and adapted to be secured to the yoke-frame by a clamping-screw, substantially as set forth.

6. In a corn-sheller, the combination, with the yoke-frame *a*, having the rear slots *a*² and
25 apertures *a*³, of the curved clamping-plates J, having the projections *j J'* at their ends, and the screws K, having the winged nuts K², substantially as set forth.

ASAHEL HUNTINGTON PATCH.

Witnesses:

J. E. FOX,

B. A. PATCH.