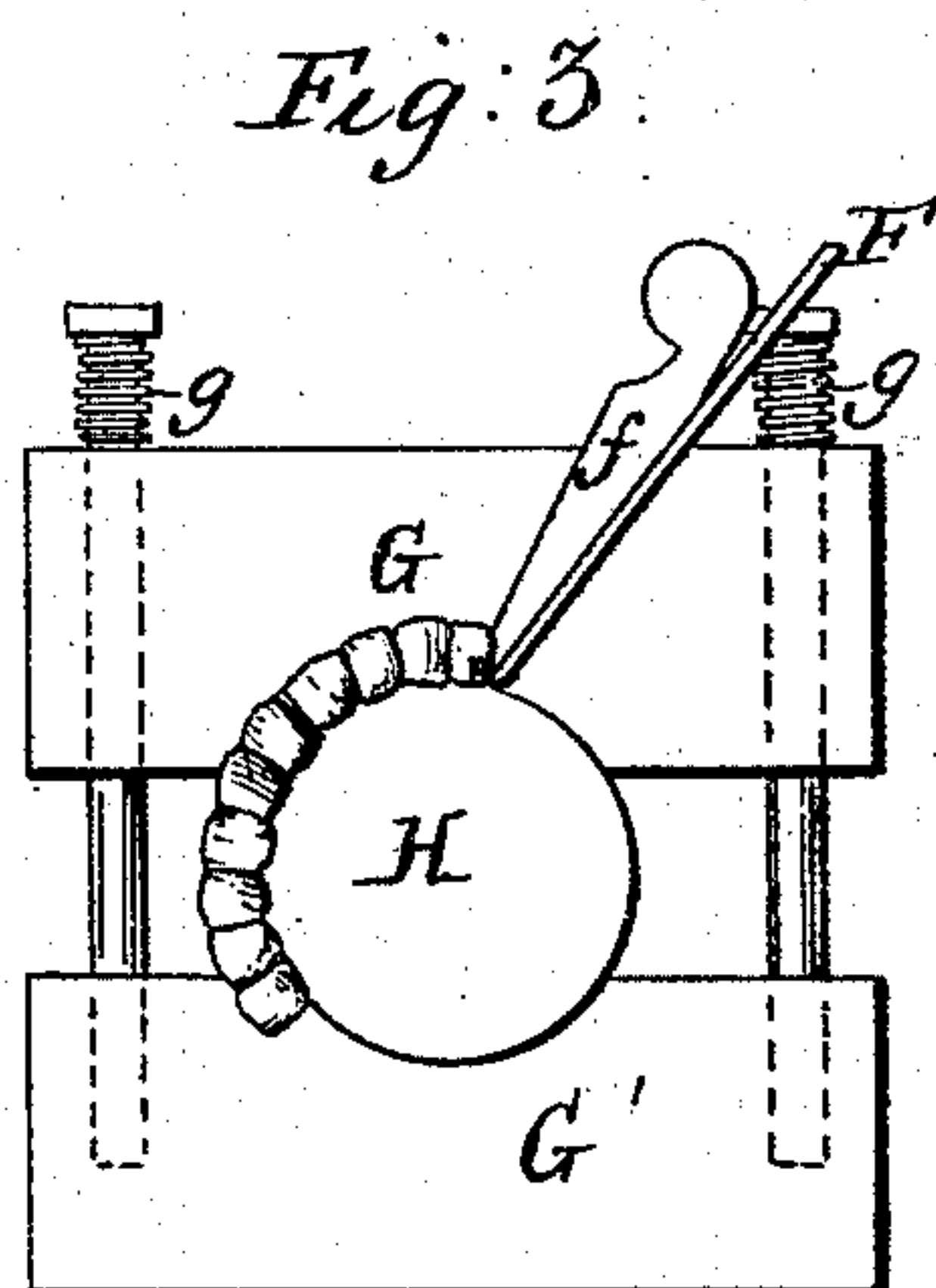
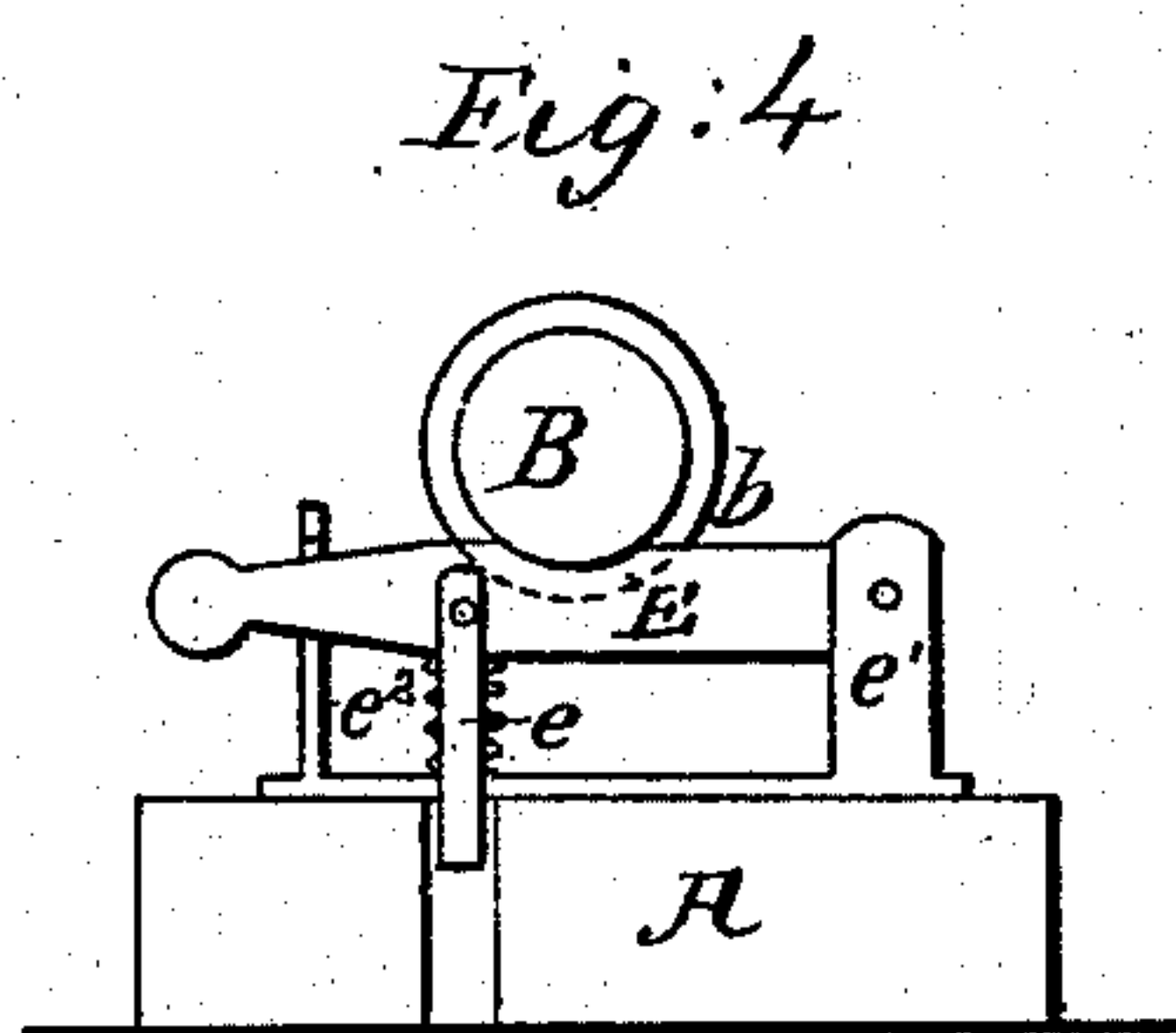
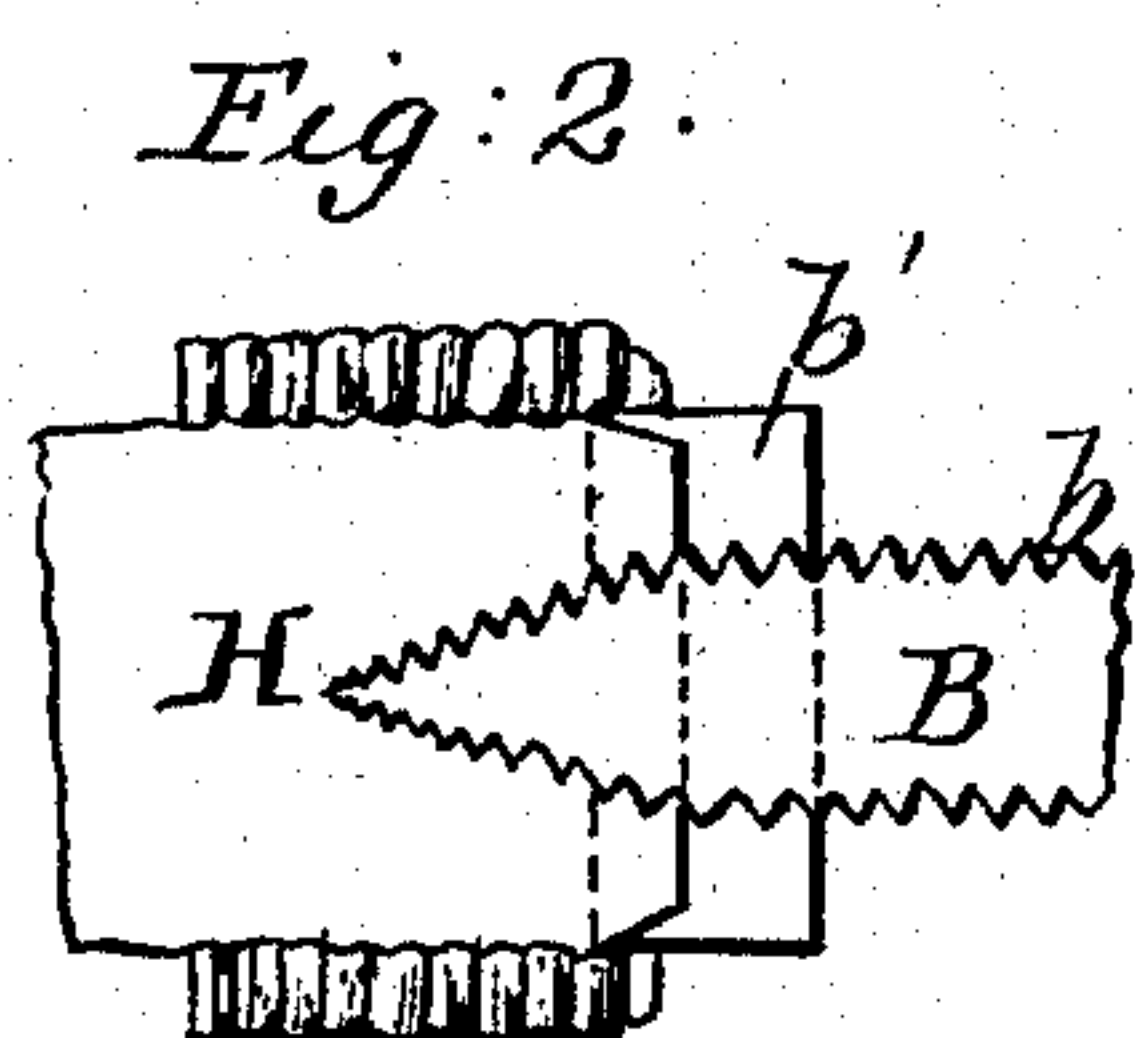
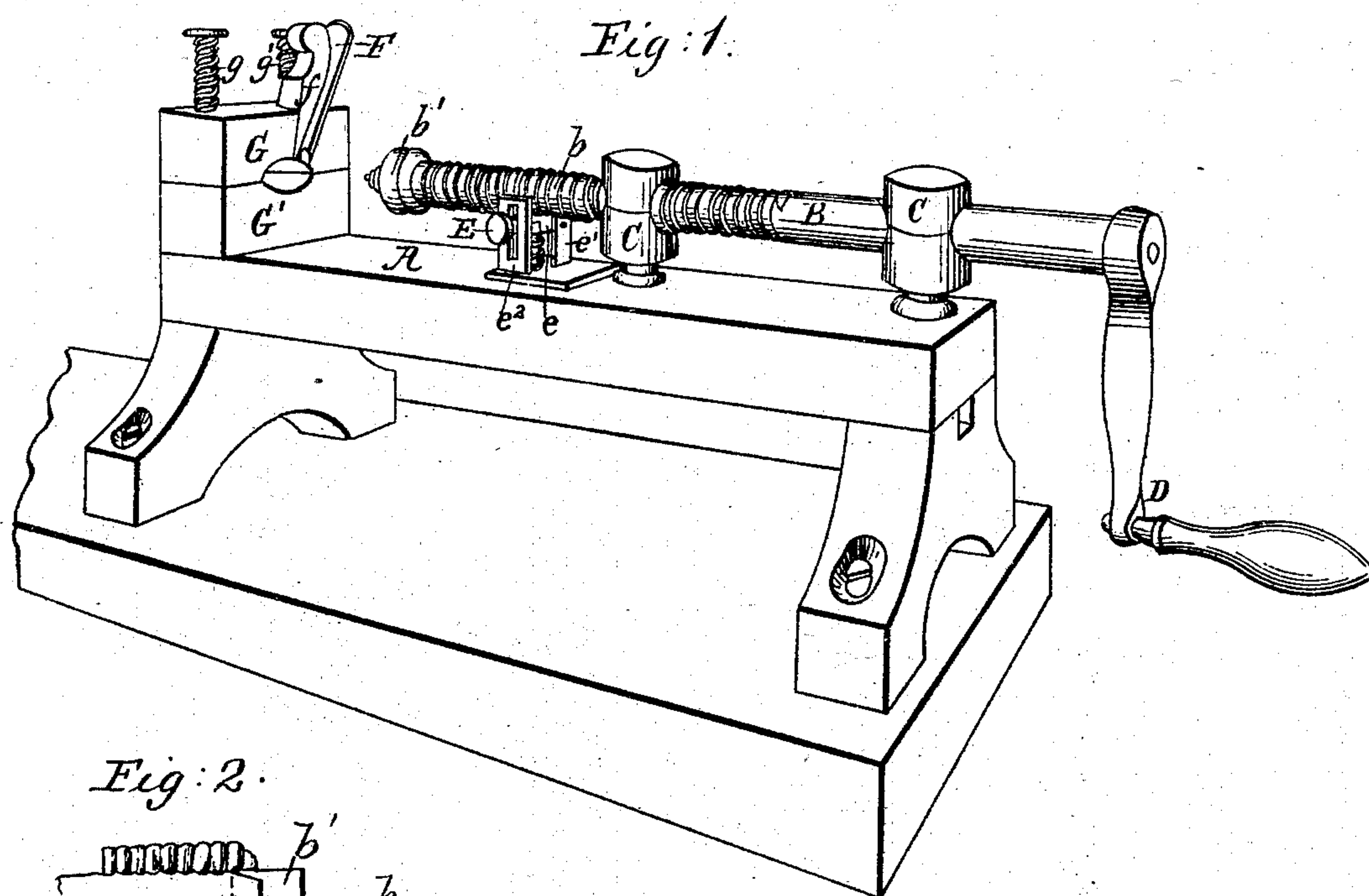


H. WALSH.
Green-Corn Cutter.

No. 15,835.

Patented Sept. 30, 1856.



Witnesses.
Wm. Morison.
Jas. Glendinning.

Inventor.
Henry Walsh.

UNITED STATES PATENT OFFICE.

HENRY WALSH, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO H. WALSH AND M. B. ESPY, OF PHILADELPHIA, PENNSYLVANIA.

MACHINE FOR SEPARATING GREEN CORN FROM THE COB.

Specification of Letters Patent No. 15,835, dated September 30, 1856.

To all whom it may concern:

Be it known that I, HENRY WALSH, of the city of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Machines for Removing Green Corn from the Cob; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, is a perspective view of the improved machine; Fig. 2, a longitudinal sectional representation of the screw and ferrule, applied to the butt end of an ear of corn; Fig. 3, a transverse section of an ear of corn, showing the relative position of the same in respect to the cutter and its self-adjusting holder; and Fig. 4, a transverse section of the screw in connection with the adjustable spring-lever by which its forward longitudinal motion is effected—like letters indicating the same objects in the several figures.

In the machines hitherto used for removing green corn from the cob, no sufficient device is provided for causing the ear to move longitudinally forward against the cutters during its rotary movement; nor for holding the ear securely and firmly upon the end of the rotating shaft while under the operation of the cutters.

To provide for these defects is the principal object effected by my improvement.

Referring to the drawings, A, is the frame of the machine, screwed firmly down upon a table; B, the shaft for holding and rotating the ear of corn, and is held in a horizontal position by means of the two posts (C, C') through which it can be easily moved longitudinally, back and forth, without rotating, and is provided with a crank (D) by which its rotary motion is effected when required. The forward half of the shaft (B) has a screw-thread (b) formed upon it, and there is arranged beneath the same, a lever (E) having its upper edge adapted to fit partly around the shaft and in between any two adjoining parts of the thread, on the underside of the shaft, and held thereat by means of a spiral spring (c) which is kept between the lever and the frame by means of a vertical stem (e) which is jointed to the lever, and works freely up and down in a hole in the frame—the lever

itself being kept in a horizontal position across the shaft, by means of its fulcrum post (e') and guide (e₂), as shown in the drawing, so that when the shaft is rotated the said lever may cause it to move forward toward the cutter (F), and so also that it may be depressed by the handle of the operator, to separate it from the shaft (B), and allow the latter to be drawn directly backward without rotating it.

The inner end of the shaft (B) is pointed and screwed, and has fixed upon it a ferrule (b') (which is about the diameter of a corn-cob) and is made cup-shaped at its outer end so as to produce thereat an annular cutting-edge rim, from within the center of which the pointed screw-end of the shaft (B) projects as shown in Figs. 1 and 2.

The cutter (F) is fixed by means of a key, or otherwise, in a block (G) which is held by bolts and springs (g, g') to a like block (G') so as to allow of its pressing upon, and being raised by, the cob as the latter, in using the machine, is forced between the two blocks by means of the screw shaft (B).

Operation: The shaft (B) being drawn back from the cutter as before described, the ear of corn (H, Fig. 2) is held firmly by the operator in one hand, while with the other applied to the cranks (D) he screws the pointed end of the shaft into the center of the butt end of the cob until the annular edge of the ferrule (b) enters the same to its full depth, as shown in Fig. 2; thus encircling, and preventing the end of the cob from splitting from the pressure of the entering screw, and together, firmly, holding the ear of corn; which, by rotating the shaft, has its cob gradually and easily forced, while rotated, between the blocks (G and G') as the grains of corn are, perfectly and without injury to the same, removed therefrom by the cutter (F). The operator now holds the grainless cob with one hand and gives the shaft two or three turns backward with the other, and thus separates them. He now presses on the lever (E), thus releasing the shaft, which he draws back as before—and repeats the operation just described.

I do not claim anything contained in the machine patented to William B. Coats, May 13th 1856; but

What I claim as my invention and desire

to secure by Letters Patent, in machines for removing green corn from the cob, is,

1. I claim the screw-shaft (B), and spring lever (E), arranged and operating
5 together as described, when the same are used in combination with the stationary block (G'), and the self-adjusting spring block (G) and its cutter (F), the said blocks
10 tated and at the same time gradually and regularly moved forward by the progressive, rotary action of the screw; and so that the said cutter (F) shall also at the same time operate against the lower edges of the

grains of corn in succession, and remove 15 them from the cob in a whole or perfect state, or without crushing or otherwise injuring them, substantially as set forth.

2. I claim the combination of the ferule (b') with the pointed screw-end of the 20 shaft (B); the same being constructed, combined, and operating substantially and for the purpose set forth and described.

HENRY WALSH.

Witnesses:

BEN. MORRISON,
JAS. GLENDIMING.