

(No Model.)

W. H. WRIGHT.
Hinged Gate Wheel.

No. 238,542.

Patented March 8, 1881.

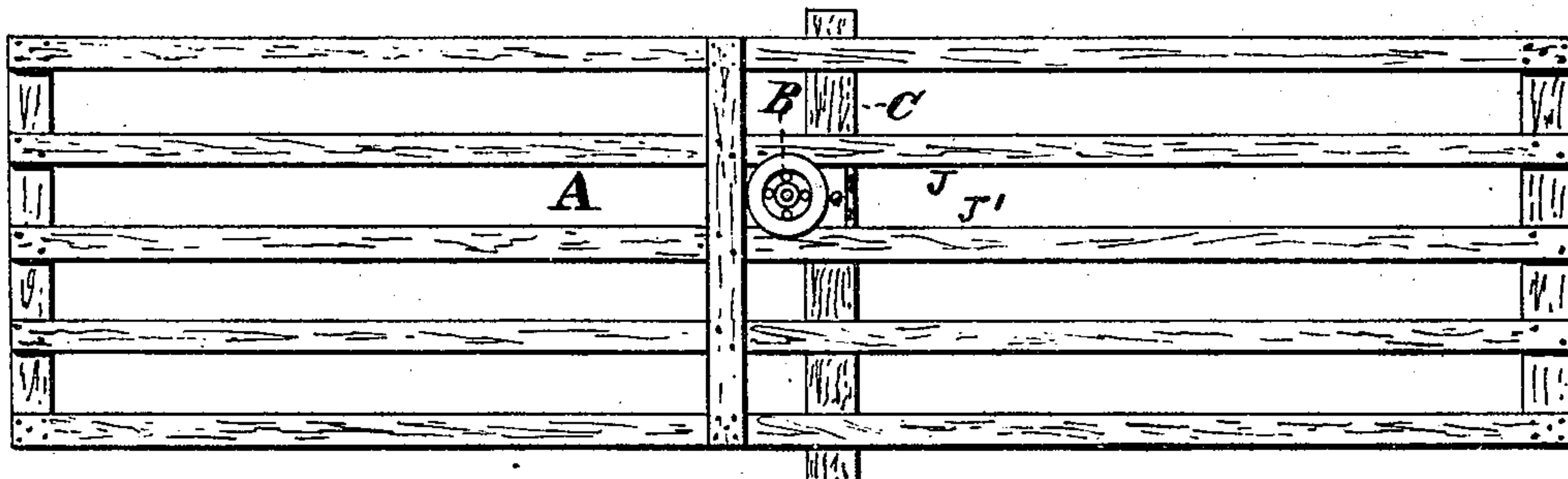


FIG. 1.

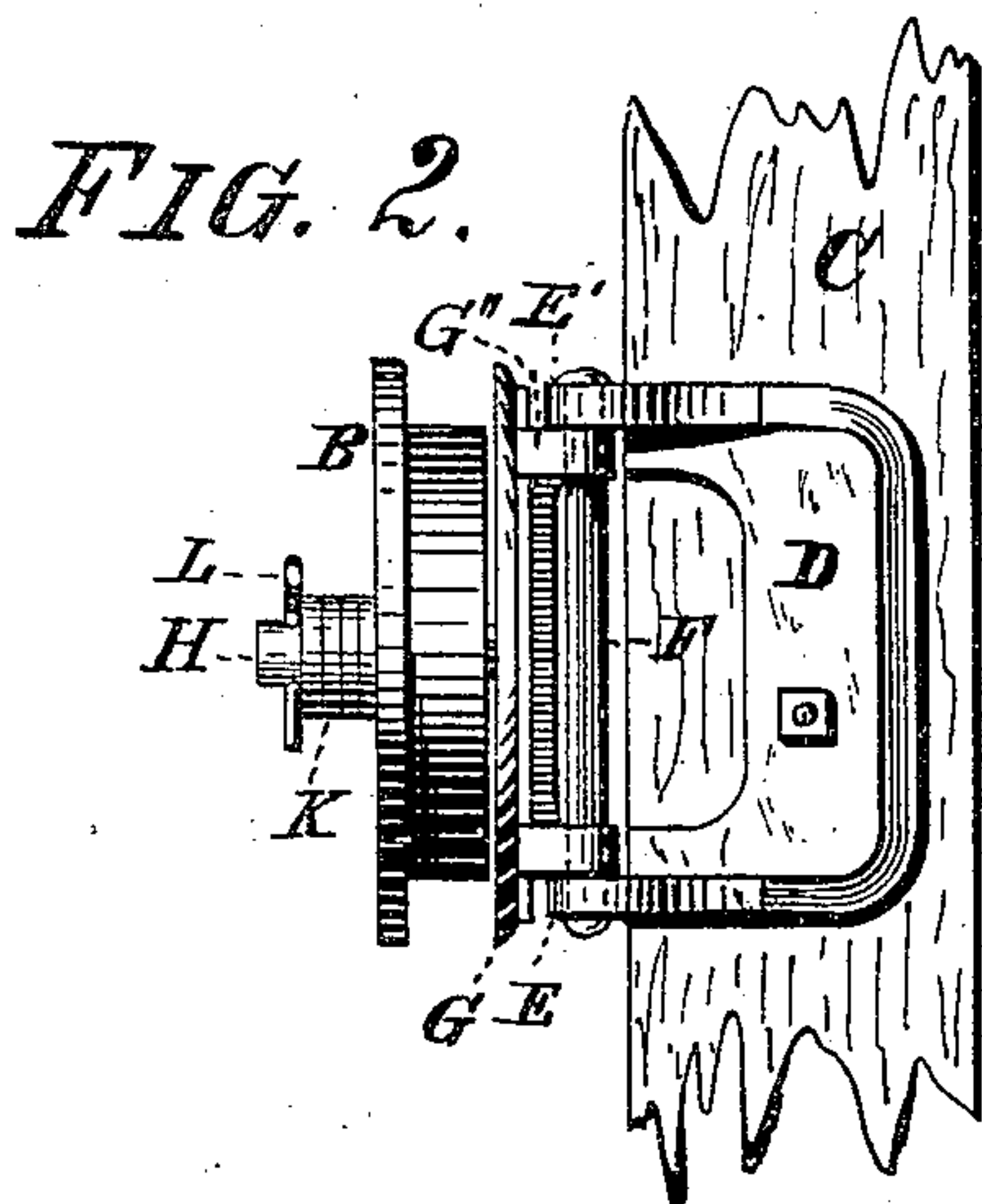


FIG. 3.

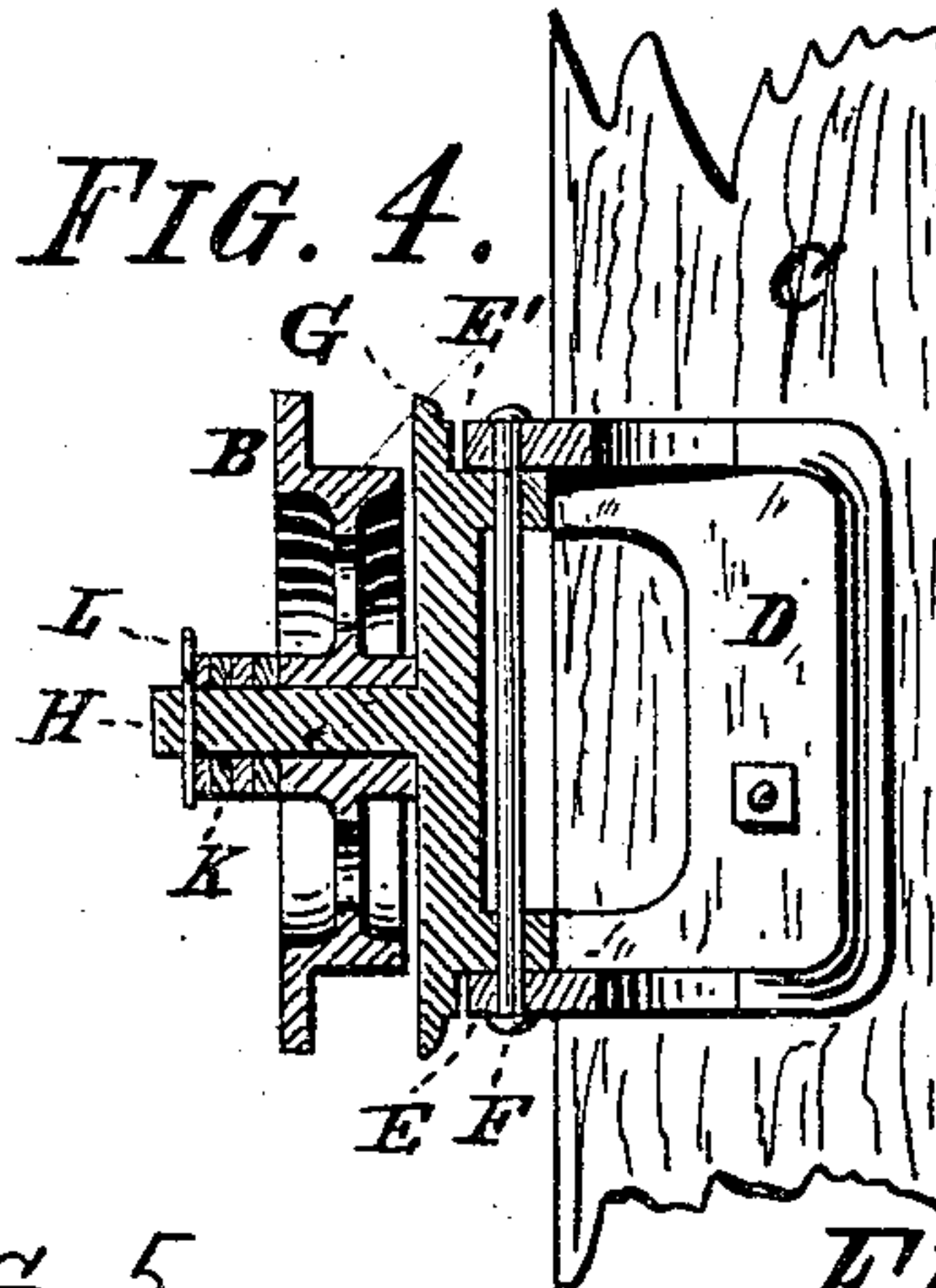
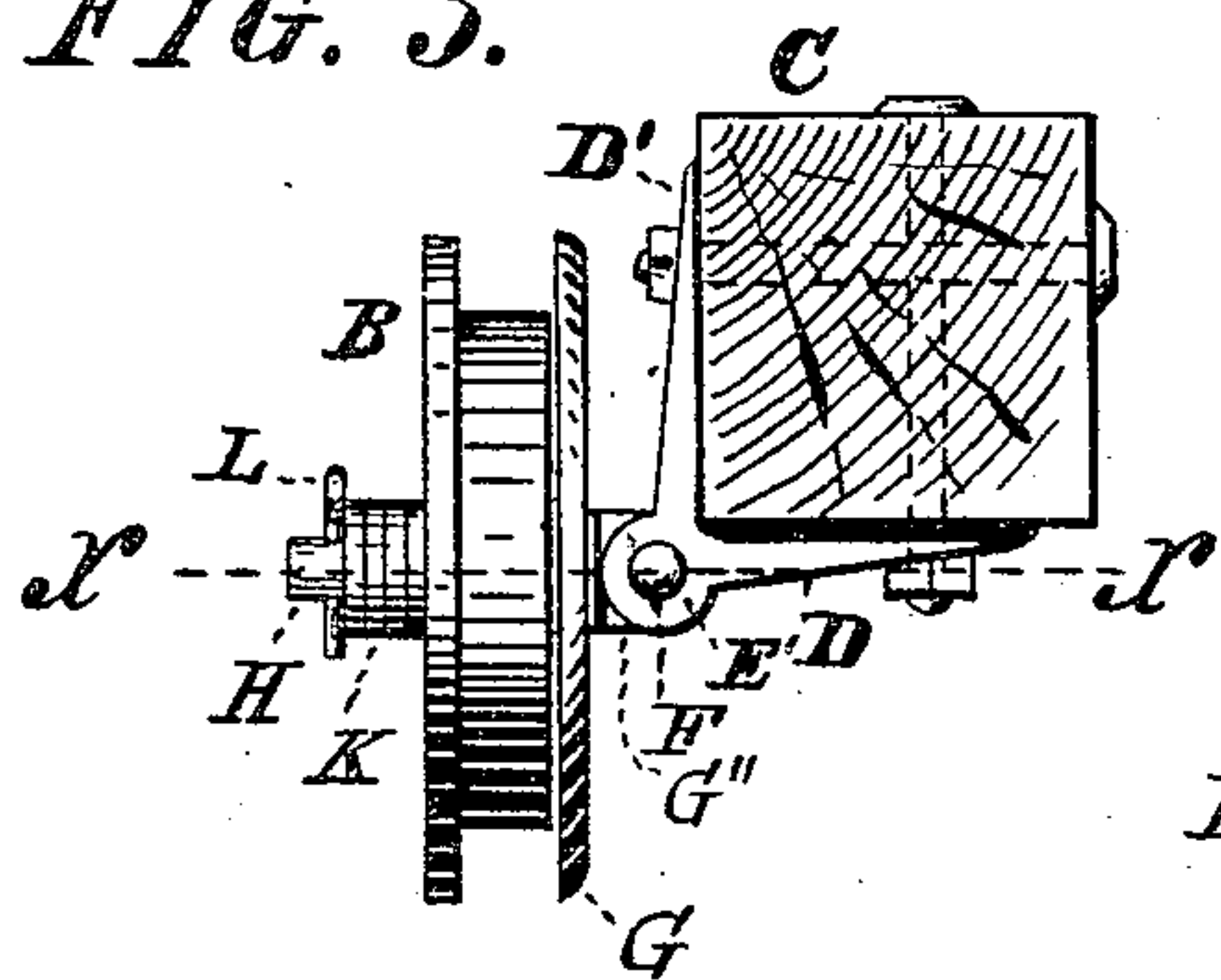


FIG. 4.

FIG. 5.

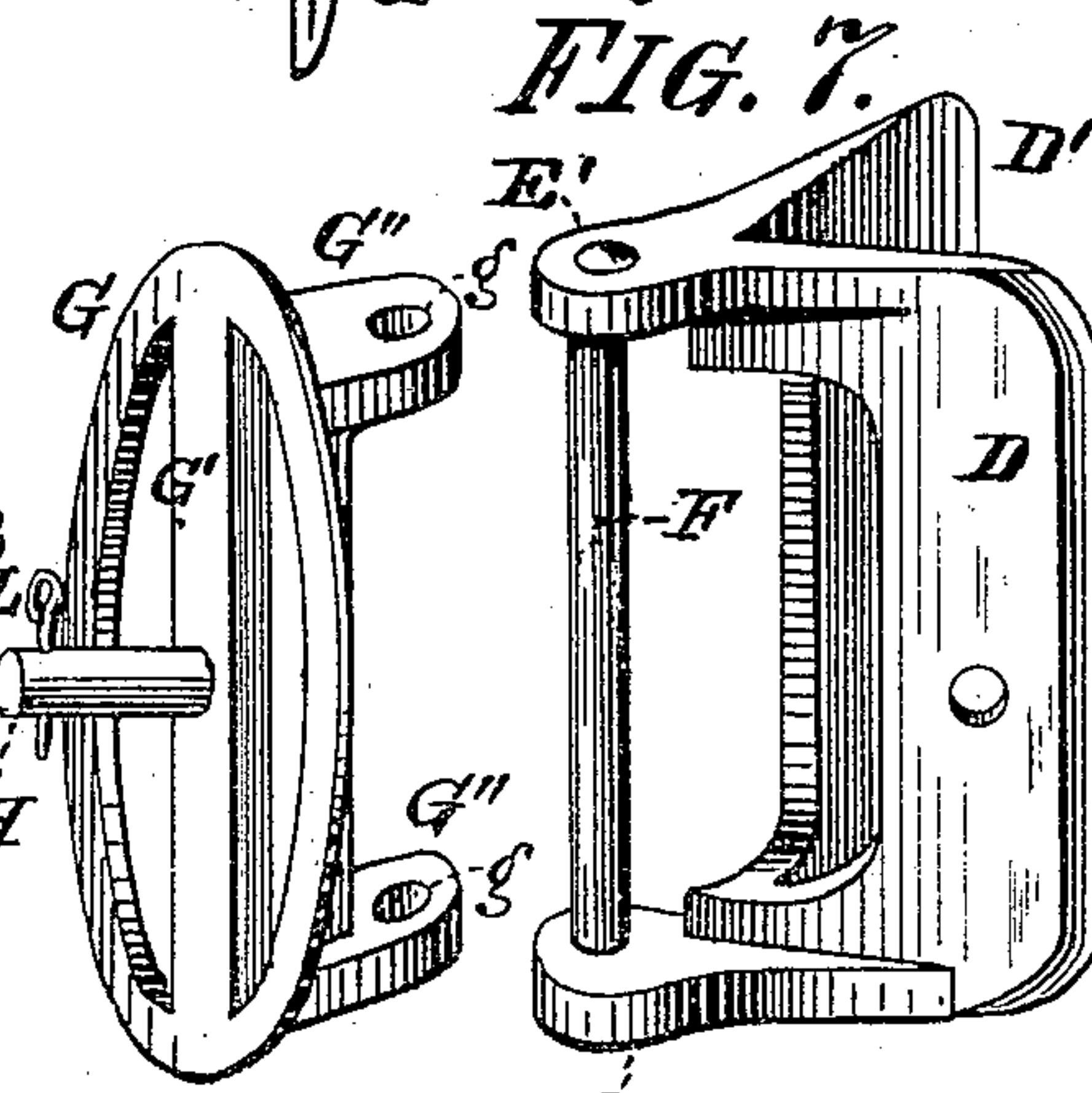
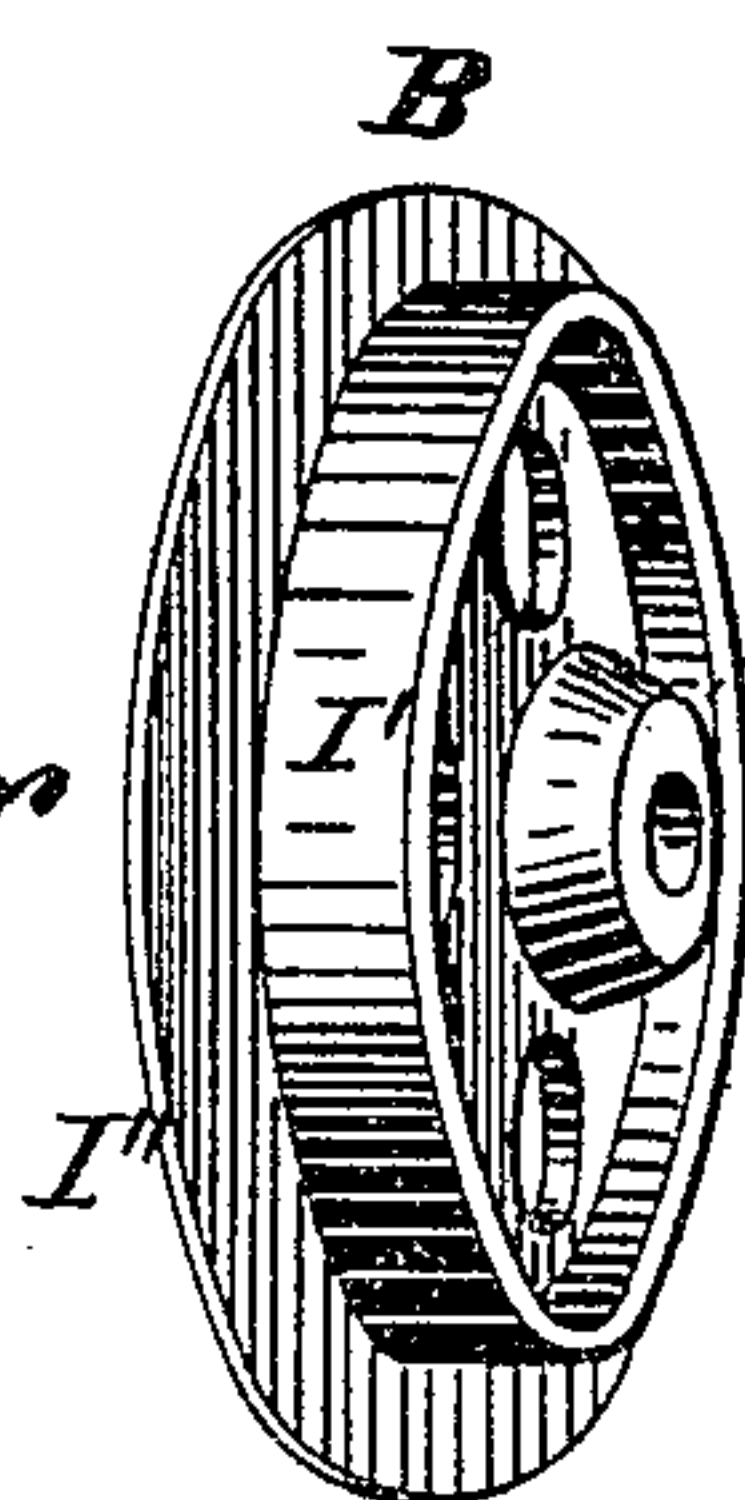
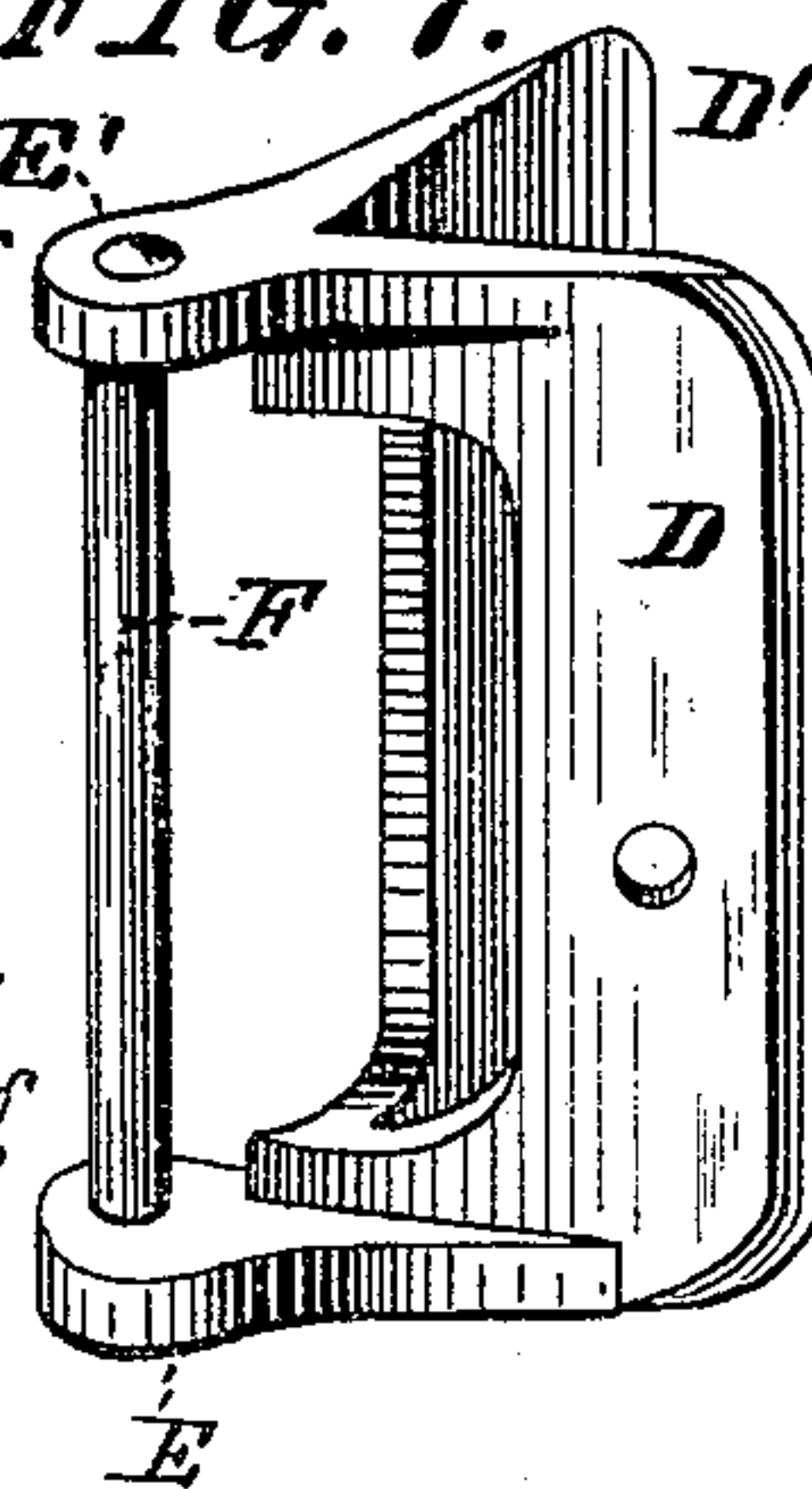


FIG. 6.

FIG. 7.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM H. WRIGHT, OF ROCHESTER, NEW YORK.

HINGED GATE-WHEEL.

SPECIFICATION forming part of Letters Patent No. 238,542, dated March 8, 1881.

Application filed September 7, 1880. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. WRIGHT, of Rochester, in the county of Monroe and State of New York, have invented certain new and
5 useful Improvements on a Hinged Gate-Wheel; and I do hereby declare that the following description of my said invention, taken in connection with the accompanying sheet of drawings, forms a full, clear, and exact specification,
10 which will enable others skilled in the art to which it appertains to make and use the same.

This invention has general reference to hinged gate-wheels; and it consists, essentially, in the novel and peculiar combination
15 of parts and details of construction, as herein-after first fully set forth and described, and then pointed out in the claims.

The object of my present invention is the production of a farm-gate hinge-wheel that shall
20 be simple in construction, perfect in its operation, and permit of the gate being completely made before hanging, and allow of its removal without necessitating the removal of a single part of the gate-panel.

Heretofore gate-wheels have been made with double flanges. In this construction the wheel
25 cannot be inserted between two adjacent gate-rails or removed therefrom without first removing one of said rails, thus involving some trouble and inconveniences.

To avoid this objection I construct my hinged wheel as shown in the accompanying drawings, already referred to, in which—

Figure 1 is a front elevation of a gate, showing the position of the parts. Fig. 2 is an elevation of part of the center post, showing the hinged wheel in position. Fig. 3 is a plan. Fig. 4 is a vertical sectional elevation in line *x x* of Fig. 3. Fig. 5 is a perspective view of the wheel
40 detached. Fig. 6 is a similar view of the disk, and Fig. 7 a like view of the clamping-plates with the hinge-pivot.

Like parts are designated by corresponding letters of reference in all the figures.

45 A in Fig. 1 represents the gate-panel of a fence, consisting of vertical and horizontal slats or rails, as clearly illustrated. This gate is caused to slide upon a wheel, B, pivoted to a center post, C, by means of a device hereinafter to be referred to, said wheel being pivoted
50 in such manner that its axle is capable of swing-

ing horizontally around a hinge-pin through an angle of over ninety degrees, whereby the gate may be swung through a like distance or angle, and thus opened and closed in the usual
55 manner.

To the center post, C, I fasten a frame consisting, as shown in Fig. 7, of two plates, D D', placed at right angles to each other and joined to lugs E E', having apertures for the passage
60 of a pintle or hinge-bolt, F. Between these lugs E E' is movably secured a circular open disk, G, having centrally a radius-bar, G', provided with a stud, H. On the back of this disk G are two lugs, G'', provided with apertures
65 for the passage of the hinge-bolt F.

Upon the stud H is loosely fitted the wheel B, already mentioned, said wheel having a rim, I', and a flange, I'', said flange being of an external diameter corresponding with that of the
70 disk G, and the rim I' so much smaller as is necessary to securely guide the rails J J' of the gate A between the flange I'' and the disk G. The stud H is made longer than the depth of the hub *b* on the wheel B, so as to permit one
75 or more washers, K, being placed in front of said wheel, the wheel and washers being retained upon said stud by a pin, L.

It will now be observed that, owing to the disk G being pivoted to the device shown in
80 Fig. 7, said disk is rendered capable of swinging horizontally through an angle of more than ninety degrees, and that, as a matter of sequence, the gate A is capable of performing a like function. As already mentioned, this wheel
85 is capable of being placed upon its pivot or stud without removing either one of the rails J, owing to the fact that it has but one flange, so that a gate can be completely made and then hung in place, or at any time removed there-
90 from, without disturbing the rails, which is quite an advantage.

Upon the stud H, I place one or more washers, K, in front of the wheel B. When more than one of these washers are employed I am
95 enabled to apply my wheel to gates having varying thicknesses of rails J J', so that, should said rails exceed the usual thickness of about an inch, I may remove one or more washers from the front and place them on the back of
100 the wheel, close to the disk G, whereby the distance between the flange I'' and the said disk

G is increased in proportion to the number of washers shifted.

I may not always make the wheel adjustable by means of the washers described, and may
5 employ a single washer in front of the wheel only whenever I am certain that the rails J J' are of ordinary thickness.

I am aware of Sharp's patent of June 15, 1880, in which a single flanged wheel is shown to turn
10 upon a pivot having an upwardly-projecting plate serving as a fixed guard for the gate-panel, said plate and pivot being hinged to a bracket on the fence-post. I do not, therefore, claim such a device as my invention.

15 Having thus fully described my invention, I claim as new and desire to secure to me by Letters Patent of the United States—

1. In gate-wheels, the fixed flange for the wheel, said flange consisting of a circular rim,
20 G, having a radial bridge, G', provided on its

back with two perforated lugs, G'', and centrally in its front with a cylindrical projection, H, for the reception of the gate-wheel, said fixed flange being vertically pivoted between two
arms, E E', of a bracket having a pintle, F, the
25 whole being constructed substantially in the manner as and for the purpose described.

2. In gate-wheels, the combination, with a single flanged wheel, of a pivoted disk carrying said wheel upon a stud, H, and the wash-
30 ers K, as described, whereby said washers may be shifted, and thereby the space between the disk G and flange I'' varied, as specified.

In testimony that I claim the foregoing as my invention I have hereto set my hand in the
35 presence of two subscribing witnesses.

W. H. WRIGHT.

Witnesses:

J. L. LUCKEY,

WM. H. FARAGHER.