

(No Model.)

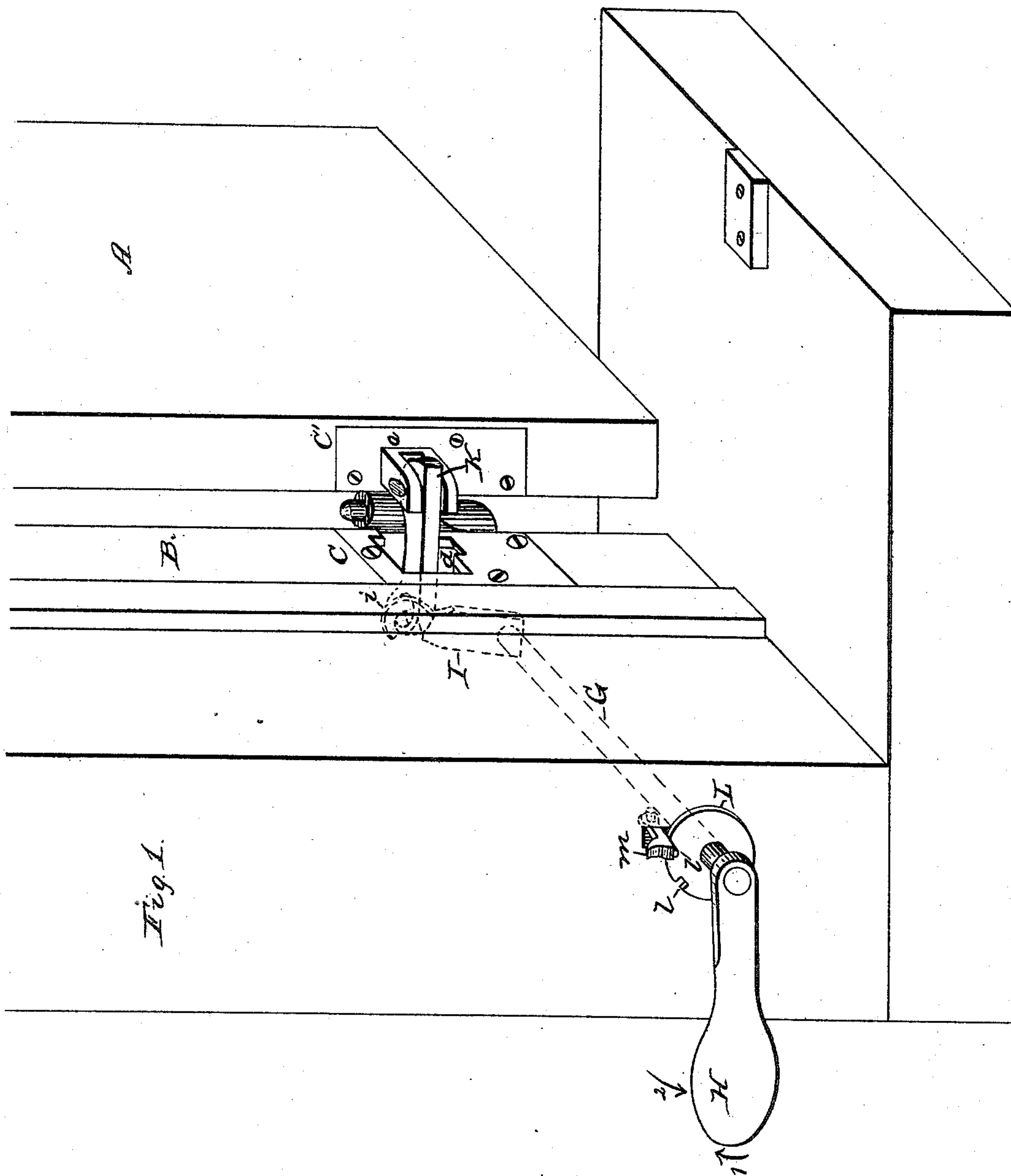
2 Sheets—Sheet 1.

J. B. ARMSTRONG.

SHUTTER WORKER.

No. 330,085.

Patented Nov. 10, 1885.



WITNESSES

O. H. Hale,
Wm. H. Bates

John B. Armstrong,

INVENTOR,

by W. B. Hale,

his Attorney

(No Model.)

2 Sheets—Sheet 2.

J. B. ARMSTRONG.

SHUTTER WORKER.

No. 330,085.

Patented Nov. 10, 1885.

Fig. 2.

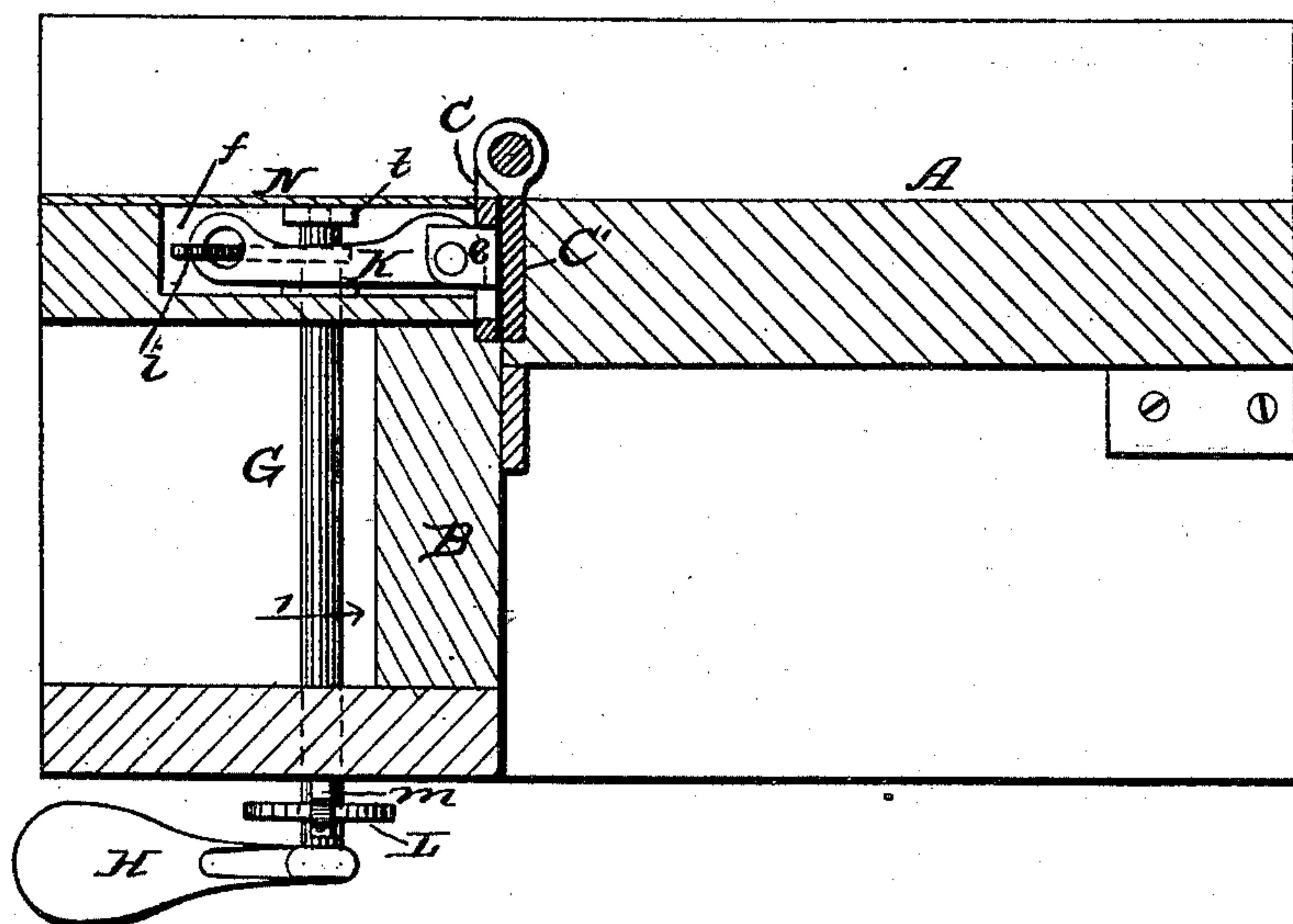
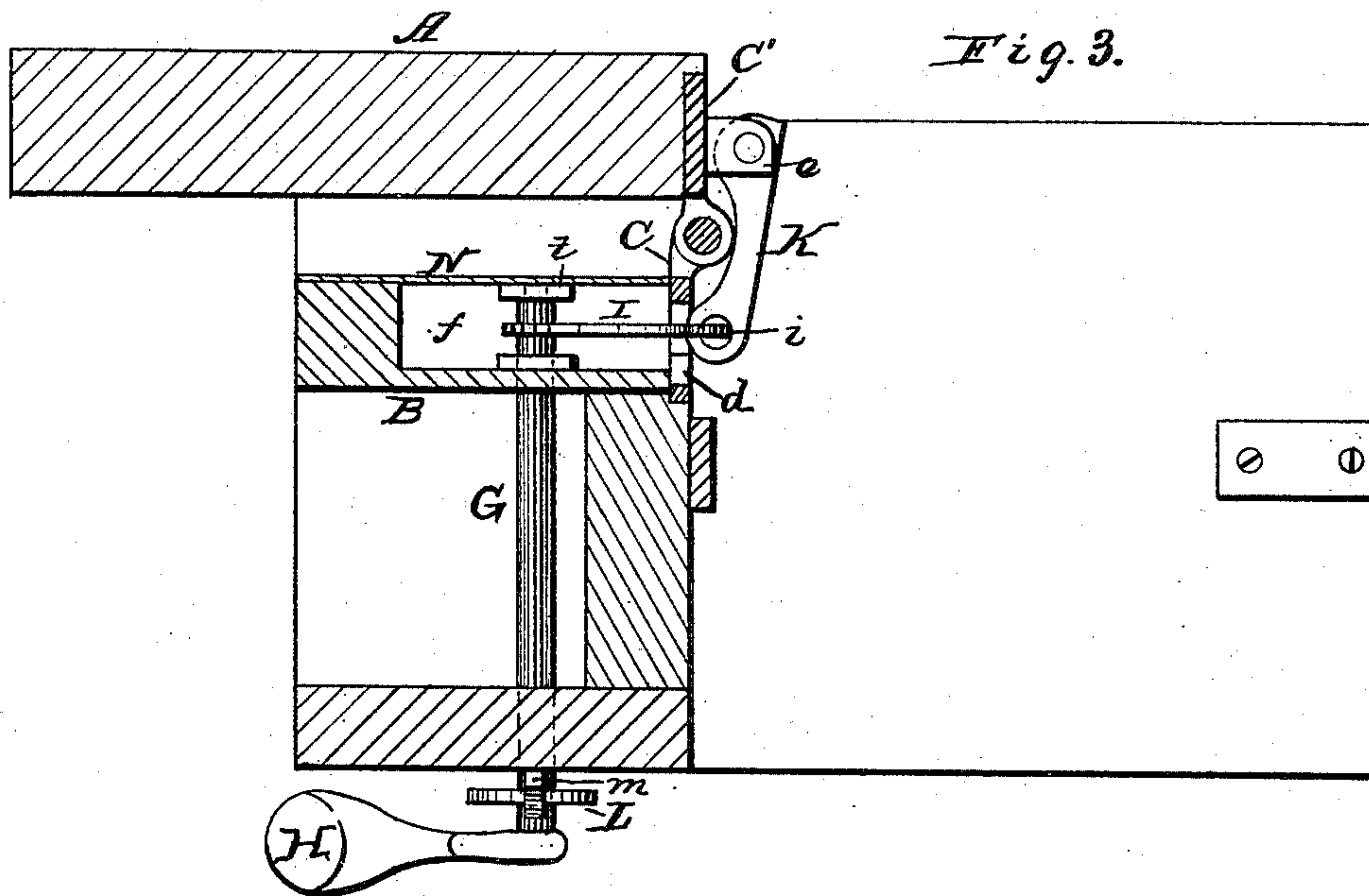


Fig. 3.



WITNESSES
P. H. Hale,
Wm. H. Bates

John B. Armstrong,
INVENTOR,

W. B. Hale,

Attorney

UNITED STATES PATENT OFFICE.

JOHN B. ARMSTRONG, OF AUGUSTA, GEORGIA, ASSIGNOR OF ONE-HALF TO
FRANK E. BEANE AND RUFUS CARTER & CO., ALL OF SAME PLACE.

SHUTTER-WORKER.

SPECIFICATION forming part of Letters Patent No. 330,085, dated November 10, 1885.

Application filed May 2, 1885. Serial No. 164,208. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. ARMSTRONG, a citizen of the United States, residing at Augusta, in the county of Richmond and State of Georgia, have invented certain new and useful Improvements in Shutter-Workers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

15 This invention relates to shutter-workers of that class which are operated by turning a handle within the room.

The object of the improvement is to provide a shutter-worker which may be efficiently and reliably operated with but little effort, and which is concealed and protected when the shutter is closed; also, to construct a shutter-worker with but few parts substantially made and connected so that it will not be liable to get out of order, and may be readily repaired in case of accident.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a window-shutter and casing having my improved shutter-worker applied thereto. Fig. 2 is a horizontal section on the line *xx*, Fig. 1, and showing the shutter-worker in position to hold the shutter closed. Fig. 3 is a similar section with the devices arranged for holding the shutter open.

35 The letter A indicates the shutter, and B the casing. C and C' are the respective wings or stationary and swinging portions of a hinge connected together by an eye and pintle in the usual manner, the wing C being attached to the window-casing and the wing C' to the shutter. The wing C is provided with an opening, *d*, and the wing C' or swinging portion of the hinge is provided with a bifurcated lug, *e*, which will pass through the opening in the wing C when the hinge is closed. The window-casing is mortised or cut away behind the wing C, as shown at *f* in Figs. 2 and 3, forming a chamber, into which projects one end of a rod, G, arranged horizontally through the casing and

having its other end projecting in front of the casing—that is, within the room—and provided with a handle, H, by which it may be turned in its bearings, which are formed in the casing. That end of the rod G which projects into the chamber of the casing is provided with a radial arm, I, having on its outer end a hook, *i*, which engages with an eye formed in one end of a link, K, the other end of which is pivoted in the bifurcated lug *e* of the hinge-wing C'. Supposing now the shutter to be closed, as shown in Fig. 2, if the rod G by means of its handle is turned to the right or in the direction of the arrow No. 1, the arm I will act on the link K to throw the shutter open, as shown in Fig. 3, or partially open, as shown in Fig. 1, as may be desired, and by turning the handle in the direction indicated by the arrow No. 2 the shutter will be closed or partially closed to any desired extent. On the inner portion of the rod G is fixed a disk, L, having notches in its periphery, as shown at *l*, and immediately over this disk a small latch, *m*, is pivoted in a recess in the casing, and arranged to engage the notches in the disk. By means of this latch and notched disk the rod G is locked in suitable positions, and the shutter is thus locked at any position to which it may be adjusted. Of course the disk may be provided with any desired number of notches.

80 The chambered or cut-away portion of the casing is inclosed on its outer side by a plate, N, which is preferably formed integrally with the hinge-wing C, though it may be formed separately, if desired.

85 I may form the mortise or chamber entirely within the wood-work of the casing, thus dispensing with the metal plate N; but I prefer to use said plate, inasmuch as by removing it very convenient access is had to the arm I, and the bearing may also be formed in said plate for the rod G, as shown at *t*.

90 The eye in the link K is made sufficiently large to allow for the movement of the hook *i* when the arm I turns in its arc. This arm, however, makes only about one-fourth of a revolution, and but little play of the hook within the eye is required.

Having thus now fully described my invention and explained the operation thereof, I

wish it to be understood that I do not limit myself to the precise details of construction as shown in my drawings and hereinbefore described, but reserve to myself the right to vary
5 any or all of the parts for the better carrying out of my invention without departing from the true spirit and scope thereof.

It will be observed that in the hinge the stationary and swinging portions are arranged
10 with relation to each other, as the two wings of a butt-hinge which abut against each other when the shutter is closed, and the devices used in combination with the hinge for working the shutter are entirely concealed from the outside
15 and protected by being inclosed, so that they cannot be tampered with or clogged by snow or ice when the shutter is closed at night or for other extended periods when not subject to inspection and occasional cleaning by the
20 occupants of a house.

I am aware that a strap-hinge for attachment to the outer surfaces of the shutter and casing has had a link hinged at one end to a
25 lug projecting outwardly from the shutter-wing and at the other end to a longitudinally-playing rod extending through the casing and an opening in the casing-wing of the hinge, said link lying outside of the casing and shutter and exposed when the shutter is closed.

I lay no claim to shutter-working devices so
30 constructed. The radical difference between such shutter-workers and mine is that when the shutter is closed the old devices, as a result of their construction, are necessarily exposed to view and unprotected, while in my
35 improvement they are inclosed, concealed, and thoroughly protected.

What I claim is—

In a shutter-worker, the hinge having a stationary portion or wing provided with an
40 opening and constructed for attachment to the inner surface of the upright of a window-casing, and a swinging portion arranged to be applied to the back edge of a shutter, in combination with a link pivoted at one end to said
45 swinging portion and arranged to pass through the opening in the stationary portion, a pivoted arm loosely attached to the opposite end of said link, and an operating-rod, substantially as described, for vibrating said pivoted
50 arm.

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

JOHN B. ARMSTRONG.

Witnesses:

WM. H. BATES,
W. B. HALE.