

(No Model.)

F. A. HETHERINGTON.
CAMERA.

No. 460,099.

Patented Sept. 22, 1891.

Fig. 1.

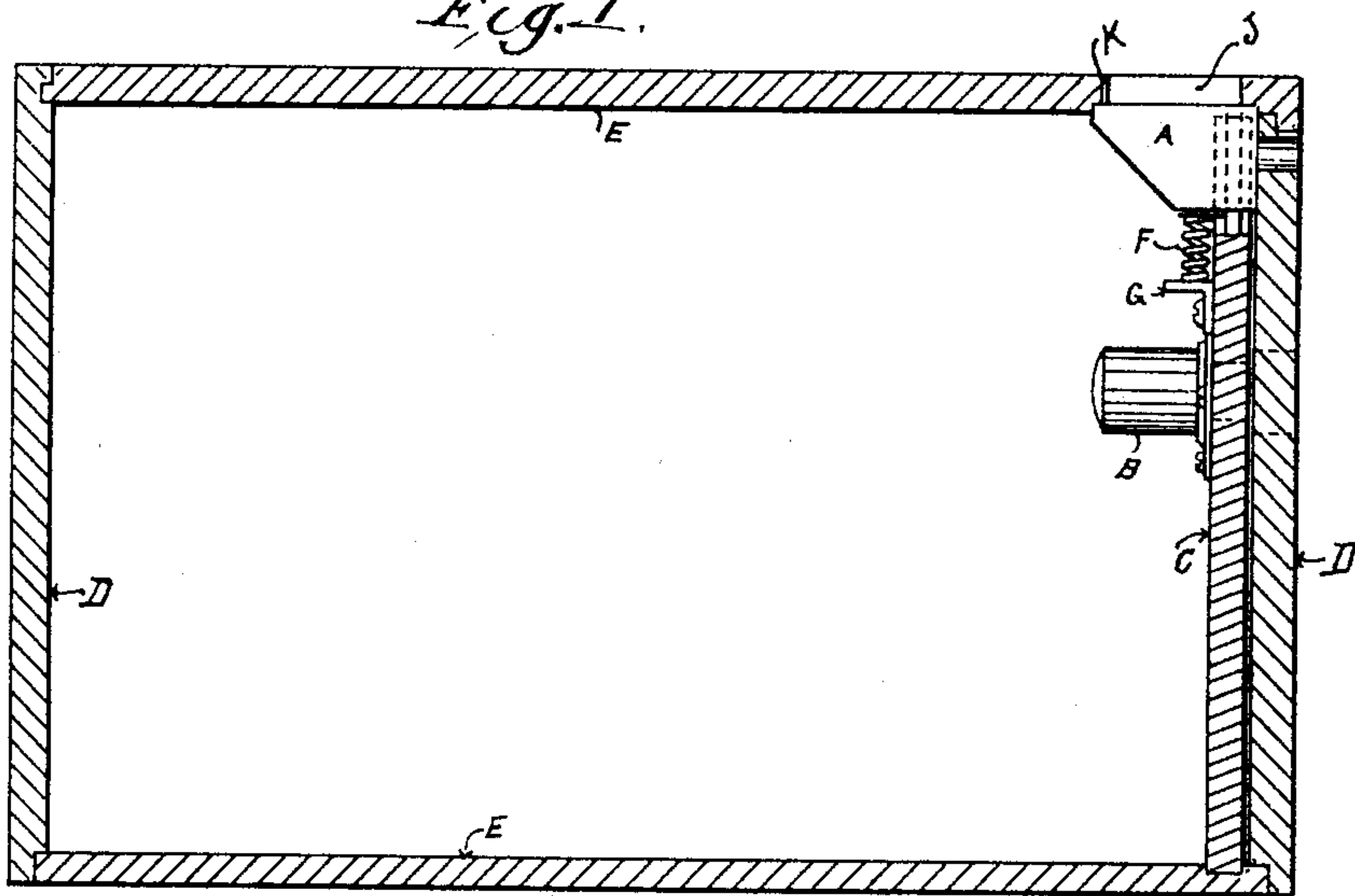


FIG. 2.

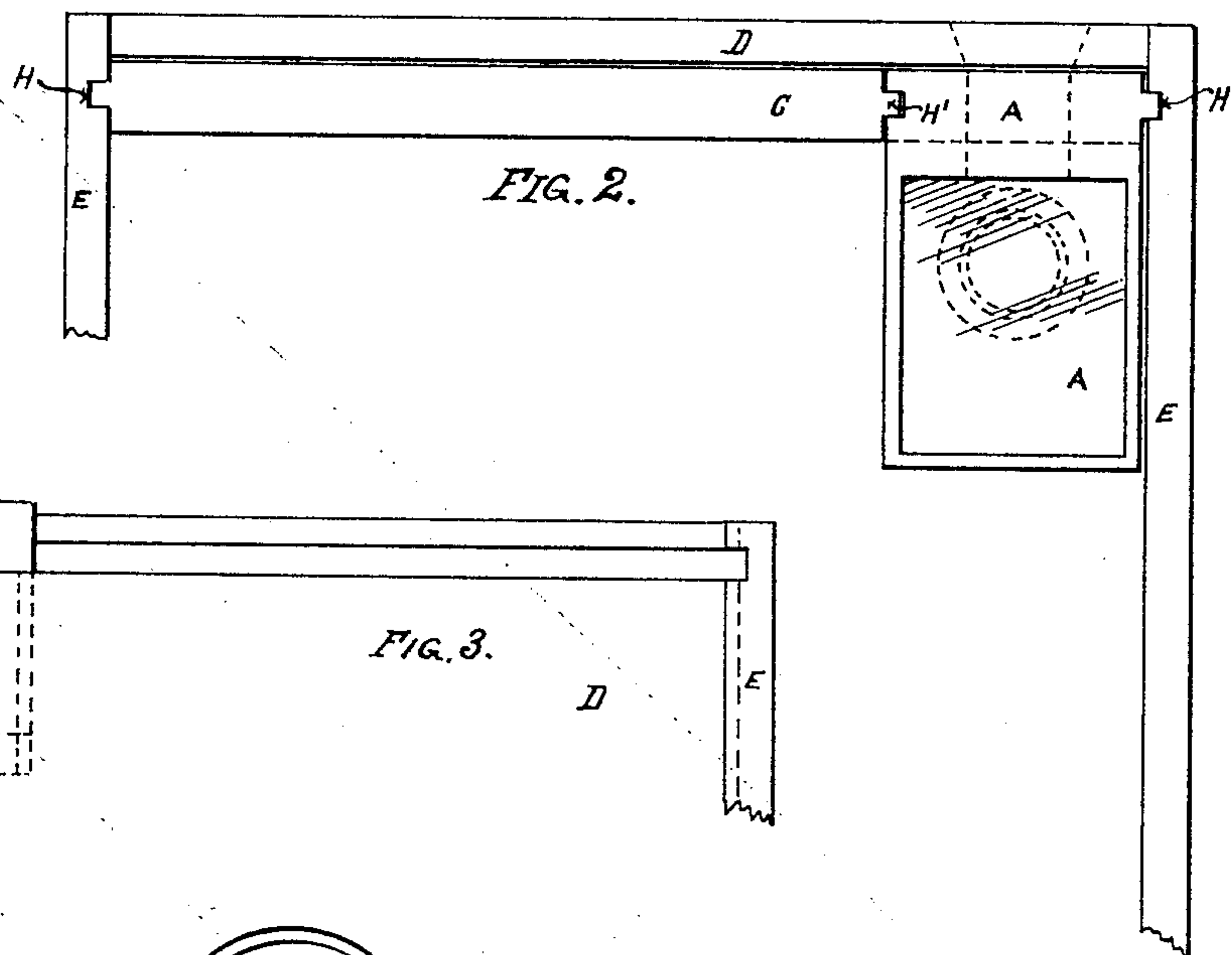
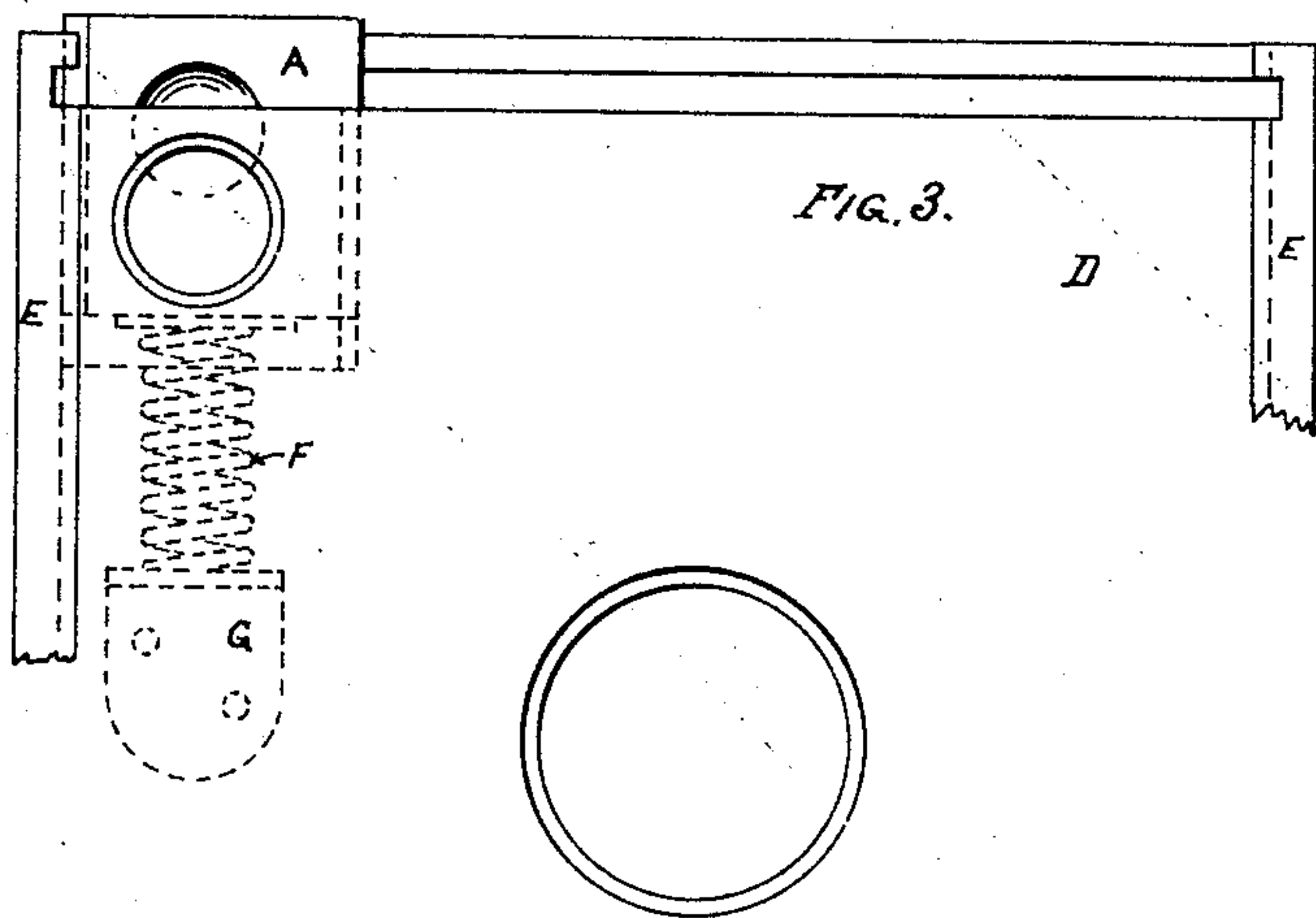


FIG. 3.



WITNESSES:

Harman F. Smith.
Carl C. Kummer, Jr.

INVENTOR

Fredrick A. Hetherington.

UNITED STATES PATENT OFFICE.

FREDERICK A. HETHERINGTON, OF INDIANAPOLIS, INDIANA.

CAMERA.

SPECIFICATION forming part of Letters Patent No. 460,099, dated September 22, 1891.

Application filed March 21, 1891. Serial No. 385,907. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK A. HETHERINGTON, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Improvement in Photographic Cameras, of which the following is a specification.

My invention relates to improvements in that class of cameras known commonly as "hand" or "detective" cameras; and its object is to provide an efficient means of securing a light-tight joint around a detachable view-finder and at the same time provide a means of securely locking the cover of the camera-box. I attain this object by the device illustrated in the accompanying drawings, in which—

Figure 1 is a reduced view of a hand-camera box, showing the near side of the box removed and the view-finder in the position it assumes when the cover or lid is in place. Fig. 2 is a full-sized view of a portion of the front end of the box as seen from the top with lid or cover removed and shows the view-finder in position. Fig. 3 is a view of a portion of the front end of a box, showing the cover or lid removed and the view-finder in the position it assumes when the lid is removed.

Similar letters refer to similar parts in the several views.

E E are the sides of the box or body of the camera, and D D are its ends.

C is a detachable front board or false end, which fits into the box inside of the end proper, and it slides into position and is held there by means of rabbeted grooves in the sides, as shown at H H, Fig. 2.

A is a view-finder of the ordinary type constructed with lens, inclined mirror, and ground glass inclosed in a suitable outer casing.

F is an open spiral spring attached to the body of the view-finder upon the under side.

G is an angle-plate or step-piece attached to the front board C in such position as to form a support for the bottom end of the spiral spring F.

B is the main lens-tube of the camera attached to the front board, and openings are cut through the front board and also the end

of the camera-box for the access of light. An opening is also provided in the end of the box in such position that it will coincide with the lens of the view-finder when the cover is in the box.

The top of the camera-box is a sliding lid or cover, and an opening is cut through it, as shown at J, Fig. 1. This opening is located exactly over the ground glass of the view-finder, but is somewhat less in area. Around the under side edges of this opening is cut a rabbeted recess, as shown at K, Fig. 1. This under side recess is of such dimensions that the top of the view-finder, glass, casing, and all will fit neatly into it.

The spring F is of such length that when the view-finder is not held down by the cover it will project the view-finder somewhat above the plane of the under side of the lid or cover; but if the view-finder be pressed downward below the plane in which the under side of the cover slides the cover may be entered into the rabbeted grooves in which it slides and then pushed into place, thus closing the box. As the cover is sliding into place the view-finder is kept depressed by reason of the cover holding it down; but as soon as the cover has slid entirely into place the view-finder springs up into the recessed place around the opening J, and as it entirely fills the recess a juncture is formed with the cover, which is practically light-tight, while at the same time the lid or cover is locked into place and cannot be withdrawn without first pressing down upon the view-finder until it disengages with the cover or lid.

In the device as shown in the accompanying drawings the view-finder A is mounted in a cut-out place in the front board C, being set into rabbeted grooves, as shown at H H', Fig. 2. It is free to slide up and down in these grooves to a limited extent.

Having thus described my invention, I claim and desire to protect by Letters Patent—

1. In a photographic camera, the combination, with the camera box or body having a sliding lid or cover, of a view-finder arranged to engage with the lid or cover so that by entering into a depression in the lid or cover a light-tight joint is formed and at the same

time the lid or cover is locked into place, substantially as described, and in the manner set forth.

2. In a photographic camera, a view-finder
5 having a spring in connection or contact therewith, so arranged that it may be depressed from without the body of the camera, in com-

bination with a sliding lid or cover having a recess or detent, substantially as described, and for the purposes set forth.

FREDERICK A. HETHERINGTON.

Witnesses:

HERMAN F. GOETZER,
CARL C. KOERNER, Jr.