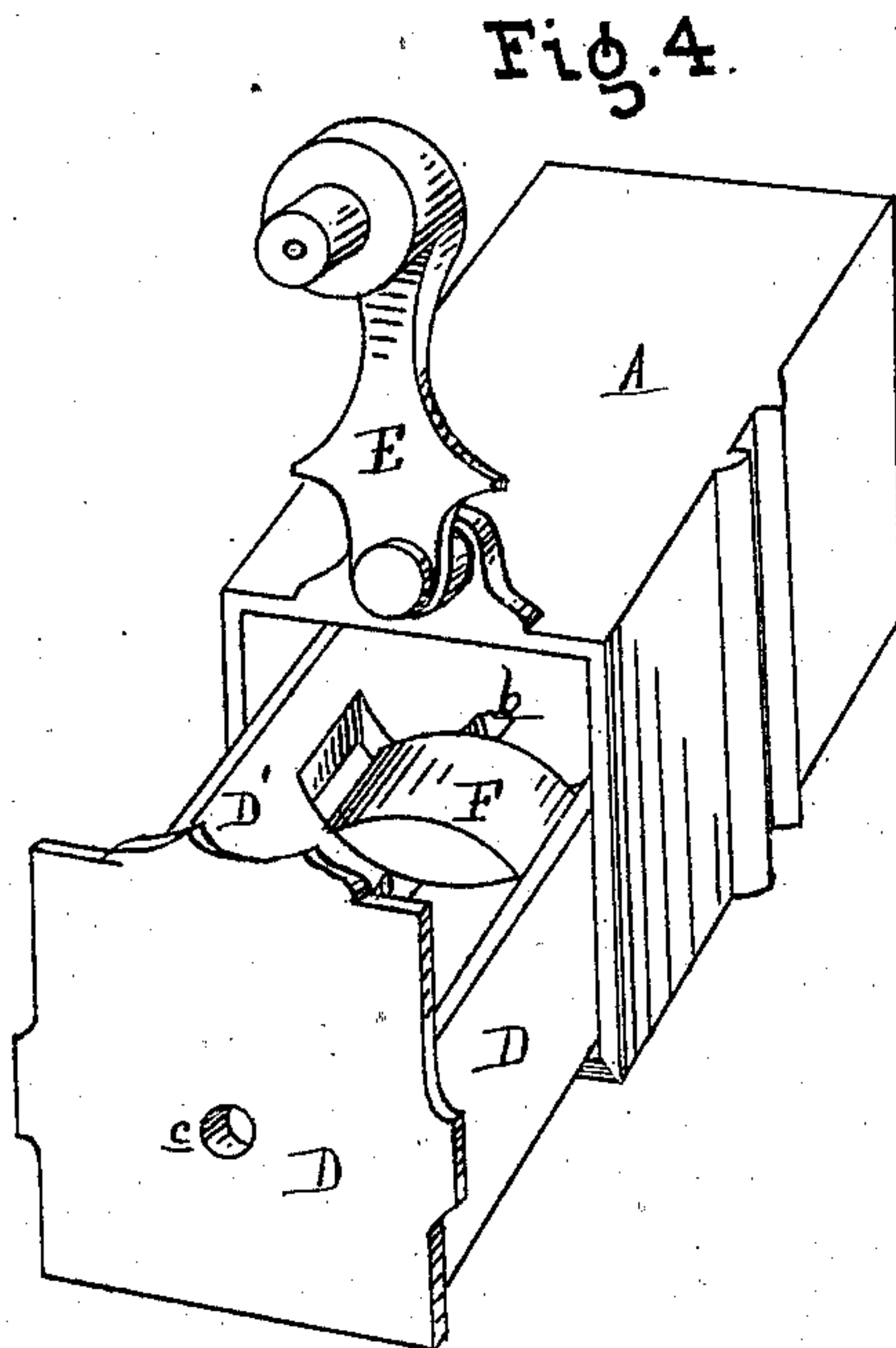
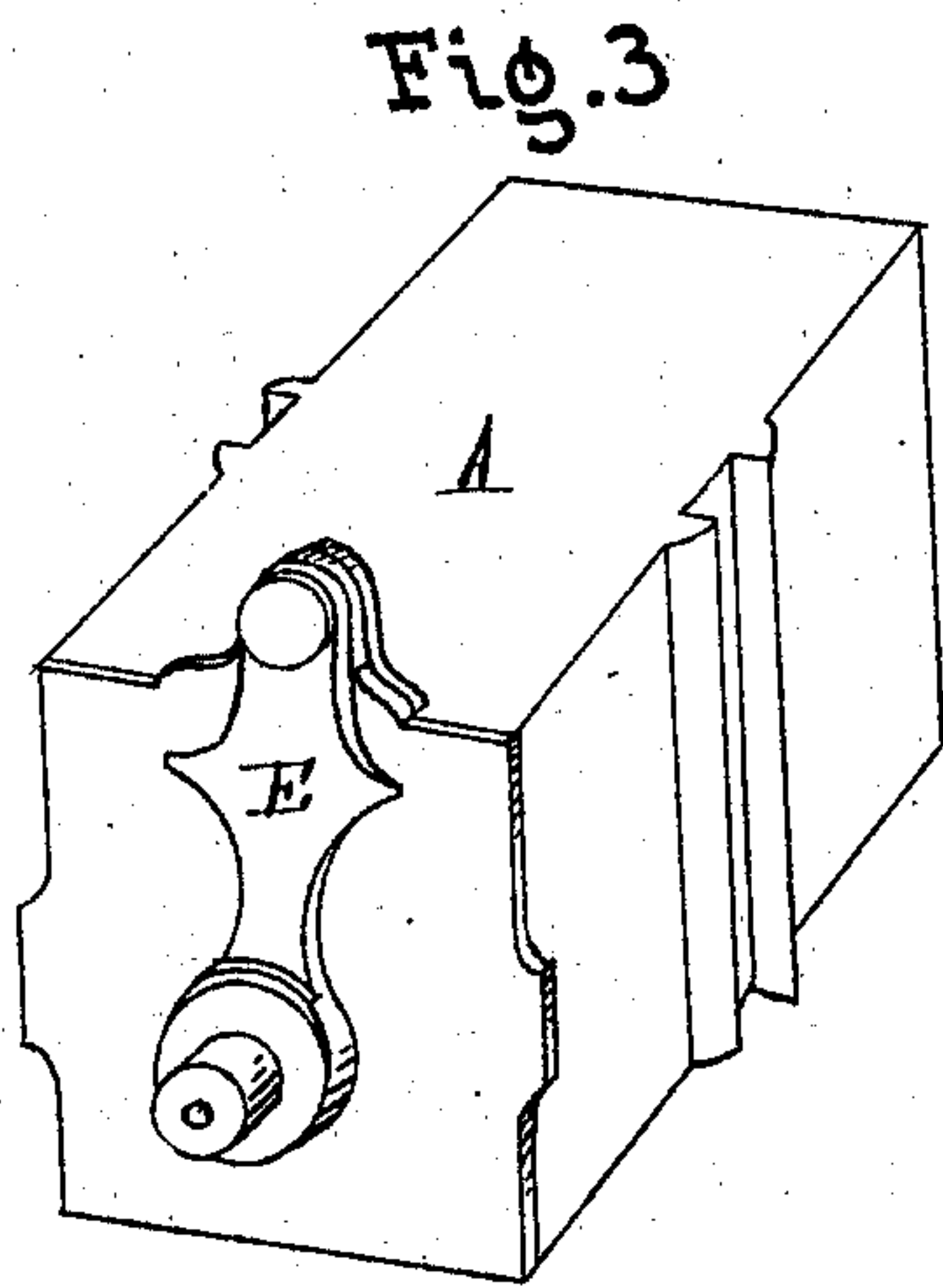
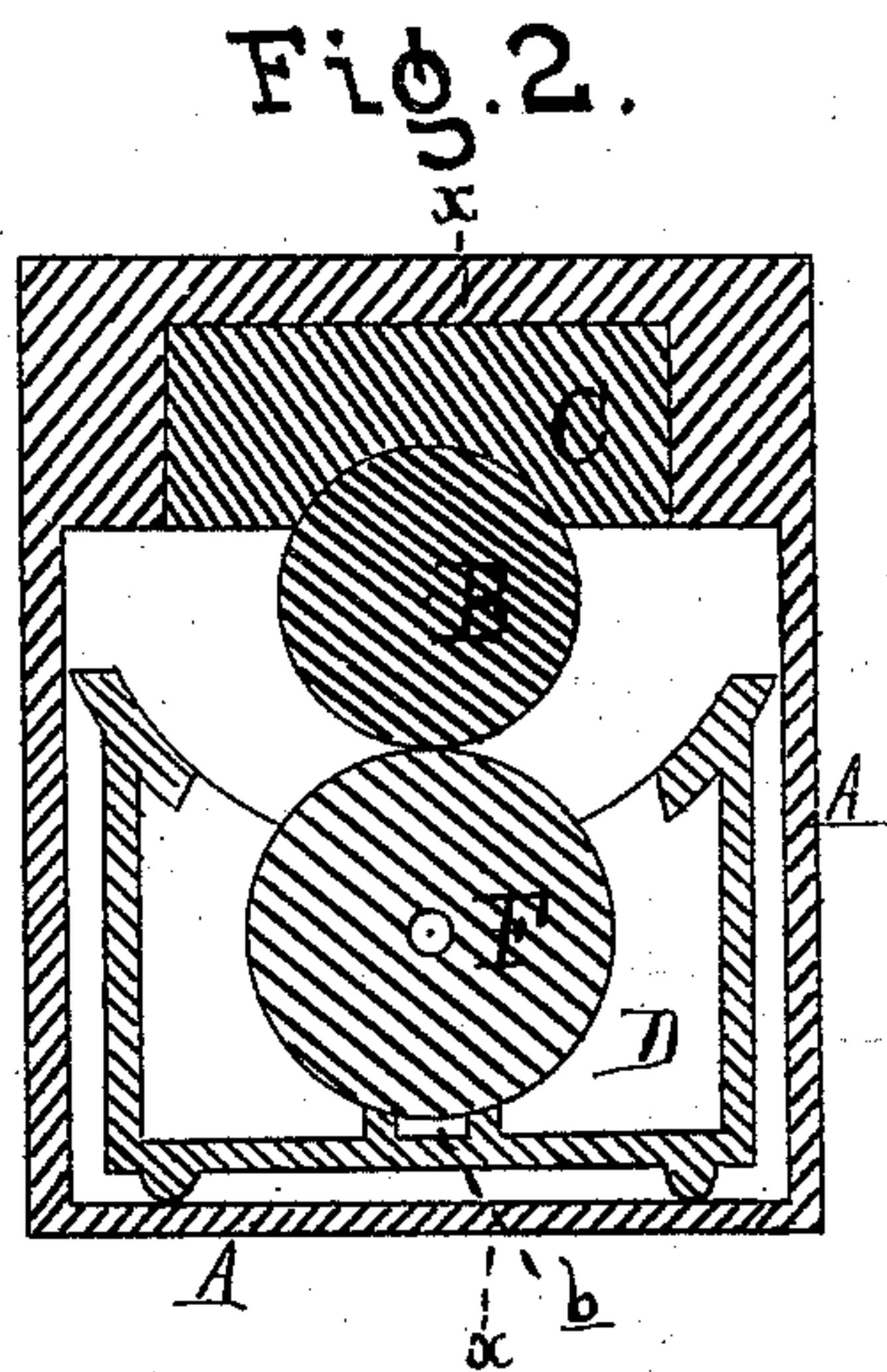
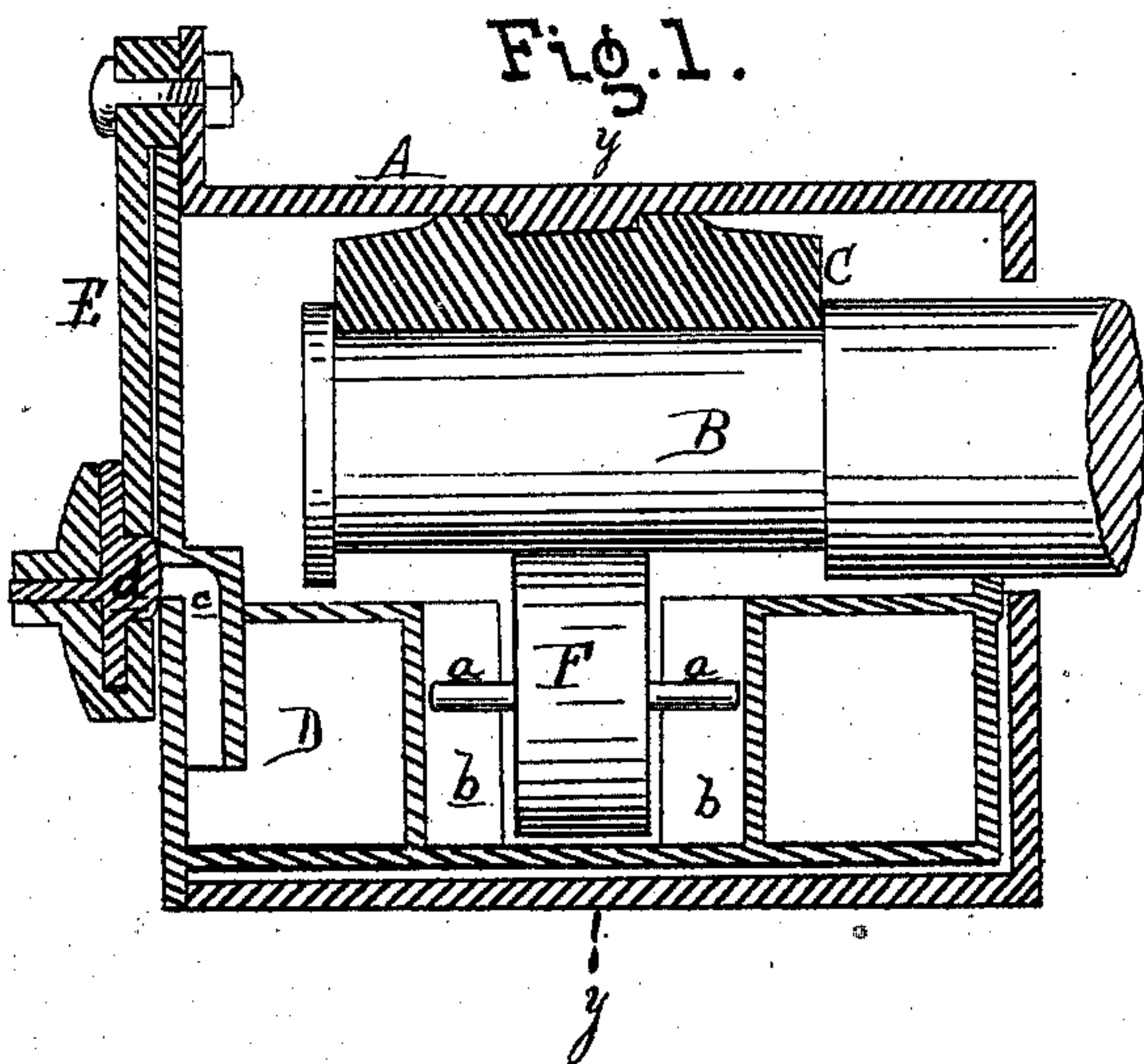


L. SCHULZE.  
Car-Axle Boxes.

No. 143,592.

Patented Oct. 14, 1873.



Attest  
H. J. Sprague  
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Inventor  
L. Schulze  
per Attorney  
H. J. Sprague

# UNITED STATES PATENT OFFICE.

LOUIS SCHULZE, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN CAR-AXLE BOXES.

Specification forming part of Letters Patent No. **143,592**, dated October 14, 1873; application filed August 2, 1873.

*To all whom it may concern:*

Be it known that I, LOUIS SCHULZE, of Chicago, in the county of Cook and State of Illinois, have invented an Improvement in Axle-Boxes for Railway-Cars, of which the following is a specification:

This invention has for its object to provide an axle-box with a drawer for containing oil for lubricating the journal, and a device for distributing oil to the journal while it is in motion, in lieu of the cotton waste or other fibrous material heretofore used for that purpose, and which is not only expensive, but partially neutralizes the lubricating properties of the oil, and frequently induces the heating of the journal. The invention consists in the construction and arrangement, with relation to the box, of a pendulum-lever, as more fully hereinafter set forth.

Figure 1 is a longitudinal vertical section on *x x* in Fig 2, which is a cross-section of the box on *y y* in Fig. 1. Fig. 3 is a perspective view of the box closed. Fig. 4 is a perspective view, showing the oil-drawer partially drawn out.

In the drawing, A represents an axle-box, open at the outer end. B is the journal of the axle, and C its "brass" or bearing, on which the top of the box rests. D is a drawer, preferably of cast metal, adapted to slide into the box and close its outer end, where it is secured by a pendulum-lever, E, pivoted to a lug at the top of the box, which swings down in front of the drawer. The drawer has a trough-like cover or sunken top, D', to adapt it to slide under the axle, while it will also keep the oil from splashing out. It is also transversely slotted through the middle of the cover to admit a cork wheel, F, mounted on a shaft, *a*, which projects from each side into a vertical guide chamber or groove, *b*, pendent

from the cover at each side of the slot. *c* is a channel or oil-duct cast in the front of the drawer, leading into it below the cover, through which the former can be filled without withdrawing it from the box. *d* is a rubber washer inserted in a recess or cavity formed in the projection at the lower end of the pendulum-lever, and is of such shape as to protrude from an opening in its inner face, so that when the pendulum is dropped the projecting portion of this washer will enter the mouth of the oil-duct *c* and close it against the entrance of dust, while its friction will prevent the vibration of the pendulum. The lower part of the drawer being filled with oil, the cork wheel will float therein, its upper surface being in contact with the under surface of the journal, which will rotate it slowly by friction, and cause it to constantly bring up a film of oil on its periphery, which thus lubricates the journal and bearing so long as the former is in motion.

No waste is required, which is a great saving, besides avoiding the tendency to heat caused by the lint from it getting into the bearing. If the drawer be properly fitted no dust will get into the box, much time is saved in oiling up, there are no bolts or box-covers to be lost, and the condition of the drawer can be seen in a moment by partially drawing it out of the box.

What I claim as my invention, and desire to secure by Letters Patent, is—

The pendulum-lever E, pivoted to the box A, and provided with the inwardly-projecting washer *d*, with relation to the oil-duct *c* of the drawer D, as and for the purpose set forth.

LOUIS SCHULZE.

Witnesses:

WM. H. LOTZ,  
SIEGESMUND ENDER.