

(No Model.)

E. F. HERRINGTON.

OIL HOLE COVER.

No. 345,136.

Patented July 6, 1886.

Fig. 1.

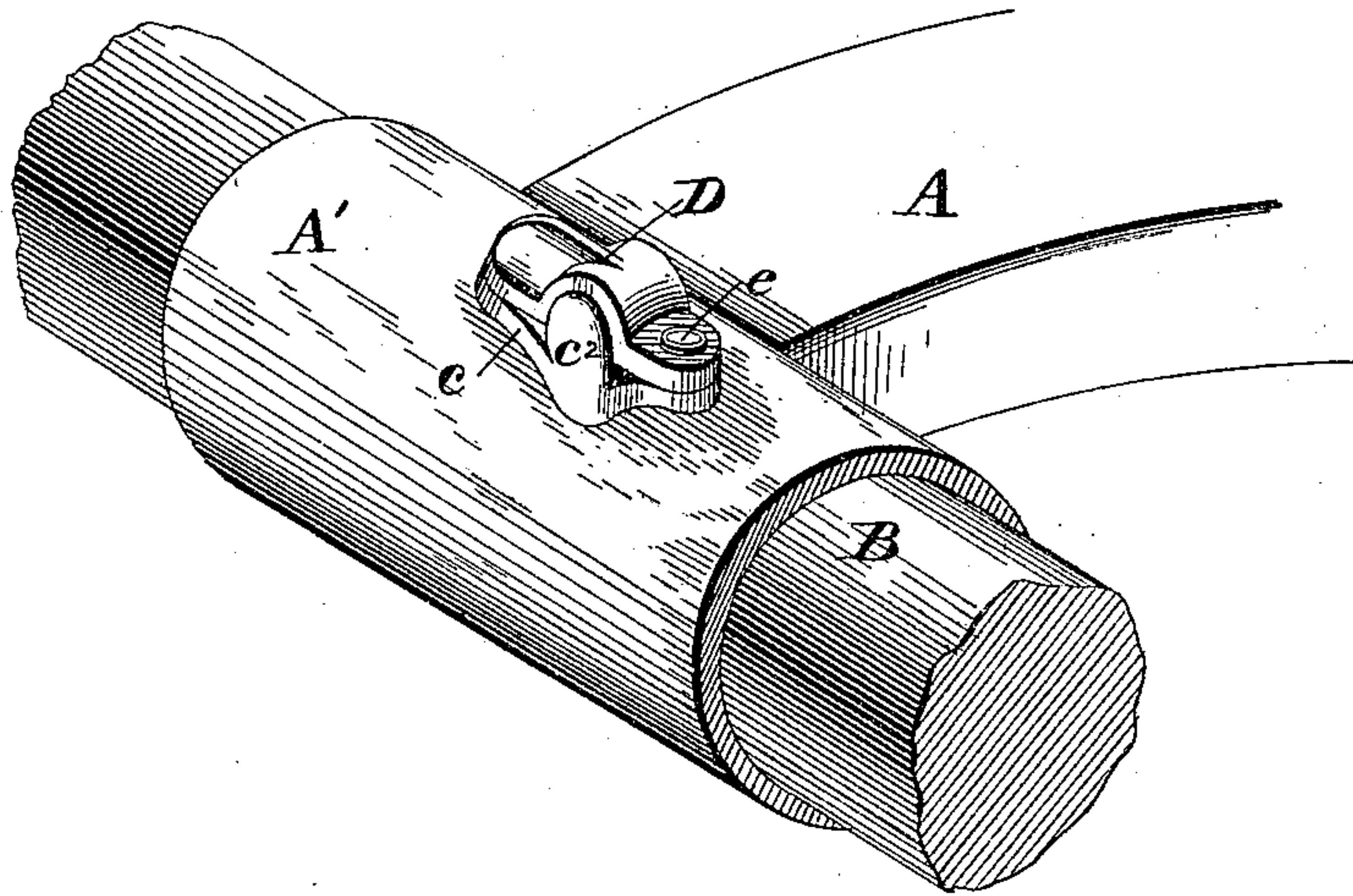


Fig. 2.

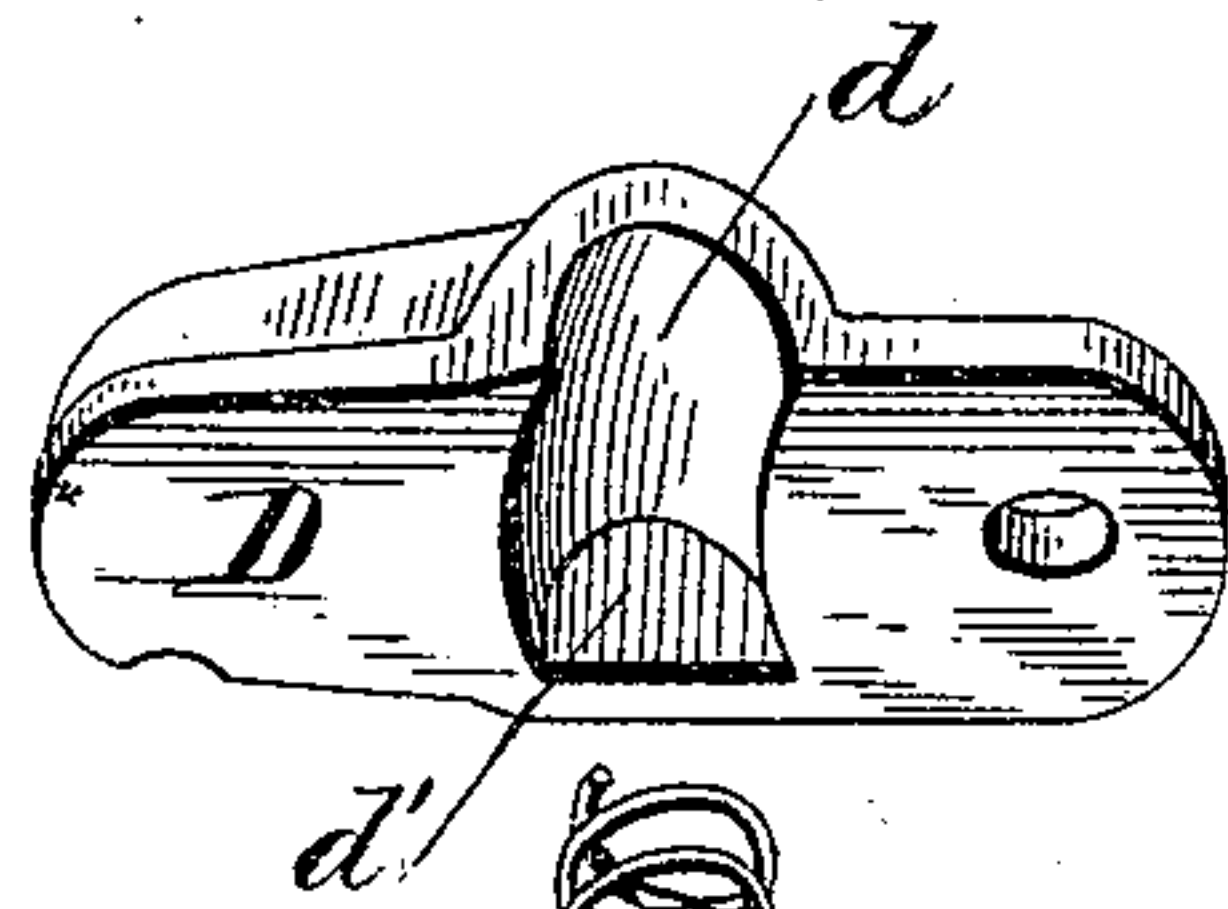
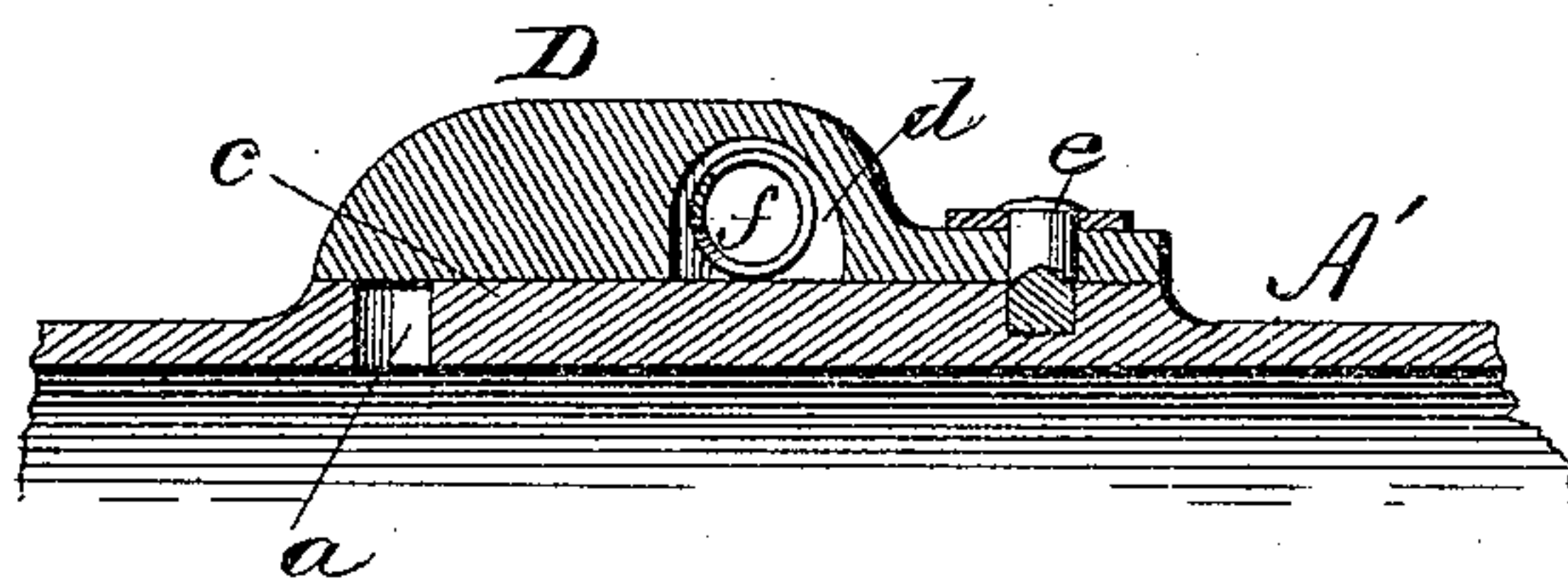


Fig. 3.

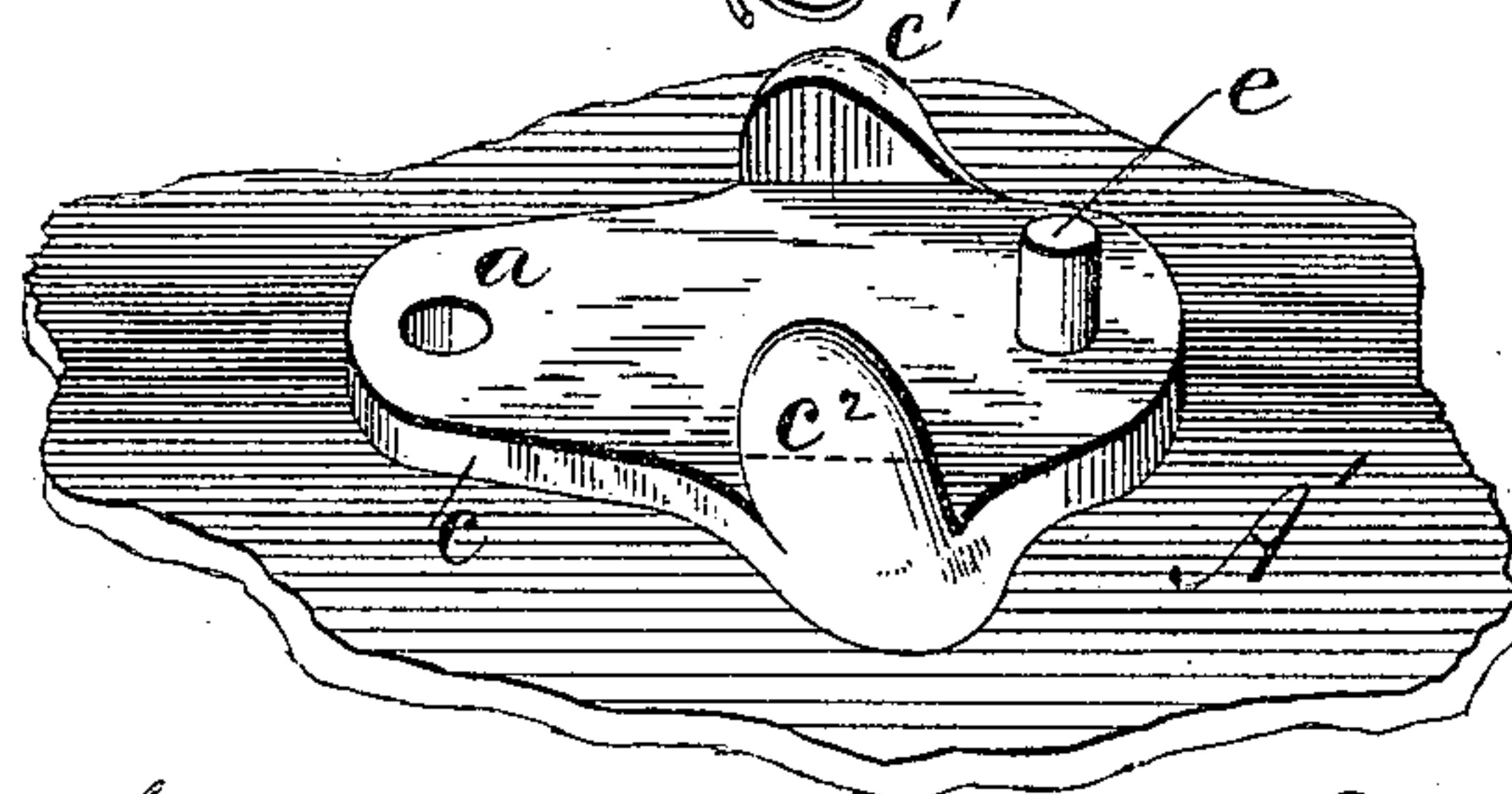
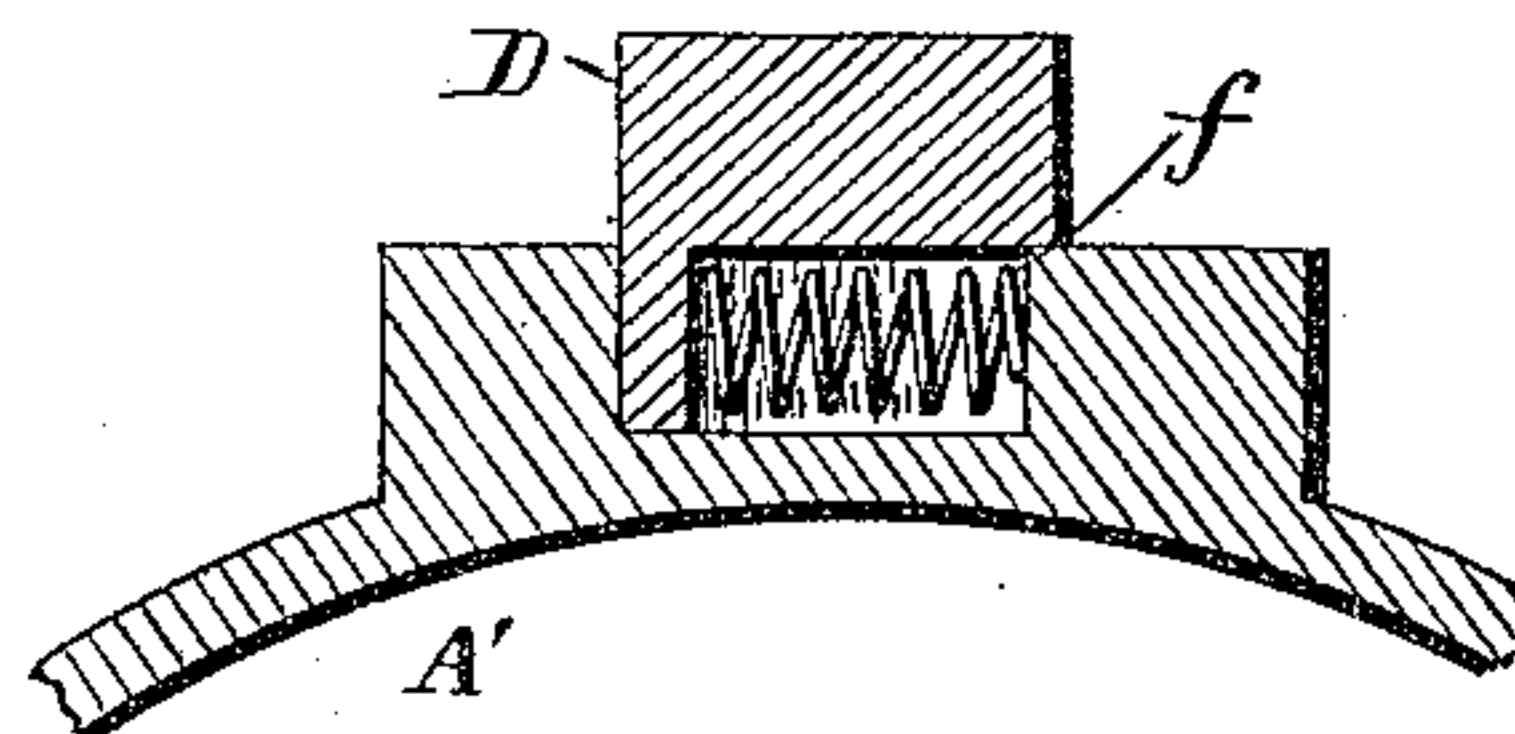


Fig. 4.



WITNESSES

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# UNITED STATES PATENT OFFICE.

EPHRAIM F. HERRINGTON, OF WEST HOOSICK, NEW YORK.

## OIL-HOLE COVER.

SPECIFICATION forming part of Letters Patent No. 345,136, dated July 6, 1886.

Application filed December 11, 1885. Serial No. 185,369. (No model.)

*To all whom it may concern:*

Be it known that I, EPHRAIM F. HERRINGTON, of West Hoosick, county of Rensselaer, and State of New York, have invented a new and useful Improvement in Oil-Hole Covers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

My invention relates to means for protecting journals from dust and dirt, such as would be liable to gain access thereto through the hole or aperture in the bearing through which the journal is lubricated; and it consists in the combination, with the perforated journal box or bearing, of a pivoted or sliding button or cover arranged over the perforation or oil-hole through said bearing, and held to place by means of a spring adapted to permit said cover to be moved to one side for the purpose of oiling the journal, and to automatically retract said cover to position for protecting the journal when released after the journal has been oiled, as hereinafter explained.

The device is especially designed for use on harvesting and other agricultural machines which are exposed to the weather, and are, more than other machines, liable to become obstructed by dust or dirt and other clogging matter; but it may be used on other machinery wherever it is found to be applicable or desirable.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a frame with its sleeve-bearing and a portion of a shaft journaled therein with my improvement applied. Fig. 2 represents a longitudinal section through the upper side of the sleeve-bearing and the pivoted cap or oil-hole cover applied thereto; Fig. 3, a perspective view showing in detail the parts of my improved device, and Fig. 4 a transverse section showing a modification in the arrangement of certain parts.

A represents an arm of the frame of the machine; A', a sleeve-bearing formed thereon, and B a portion of a shaft journaled in said sleeve. At any suitable point for oiling said journal the sleeve is perforated for that purpose, as at *a*, and where the bearing is in the form of a metal sleeve formed on the frame, said sleeve is provided on its outer face surrounding said

perforation with a raised portion, *c'*, flat on its outer face, and forming a raised seat for a slide, D, pivoted near one end on said seat at *e*, as shown. The pivot *d* is located near the end of the seat opposite to that having the perforation *a*, sufficiently far removed from the end of the seat and of the cover D to hold the latter snugly to its seat. At the sides of the seat *c* are formed two upright lugs, *c'* and *c''*, the former serving as a stop for limiting the lateral movement of the cover in one direction, and the latter, *c''*, projecting upward within a recess, *d*, formed in the inner adjacent face of cover D, and serving to guide and steady the lateral movements of the latter. The socket or recess *d* is made by preference in the semi-cylindrical form shown, open on one side or edge of the cover, and curved in the arc of a circle, of which the pivot *e* is the center, and the rib or lug *c''* is similarly formed and curved to form a guide for the cover moving over it. Between the lug *c''* and the end *d'* of the socket or recess *d* in the cap or cover D is arranged a spring, *f*, of spiral or other suitable form, and adapted, when its tension is not overcome, to hold the cap or cover against the lug *c'*, and resting snugly over and covering the oil hole or aperture *a*.

When the journal B needs oiling, the cover D can be readily pushed to one side, overcoming the tension of the spring *f*, and when released after oiling the journal or filling the oil-receptacle the spring serves to retract the cover to its place over the hole *a*, and thereby to effectually prevent the admission thereto of dust, dirt, or other obstructing matter.

Where the cover is applied to cast frames having sleeve journal-bearings formed in it, as explained, I prefer to place a rivet or pin for forming the pivot of the cover in the mold and casting the metal frame around it; but where a wooden frame is employed the seat for the cover may be cast upon the upper perforated portion of the box or bearing, or it may be made separate therefrom and secured in place on the frame by screws or rivets, or in any suitable manner. I prefer to employ the raised seat *c*, and a slide or cover corresponding in size and form to such raised surface, so that any dust or dirt falling on the cover will fall off from or be prevented from



lodging on the seat and getting into the oil hole or receptacle, and so that the lateral movement of the cover will serve to effectually remove any such matter as may accidentally have adhered to the seat.

In Fig. 4 the guiding and spring socket is shown formed in the seat or journal-box, and the guide-spur, fitting and moving in said socket, is formed on the moving cover.

The form of the raised seat and of the sliding cover, as also of the guideway for and of the spring for retracting the cover, may of course be varied without departing from my invention, and a screw may be substituted for the pivotal rivet; but the construction shown and described is preferred.

Having now described my invention, I claim as new—

1. The combination, with the journal box or bearing having the oil hole or receptacle, of a laterally-moving cover for the perforation or receptacle, and a spring for holding said cover in place over the same, substantially as described.

2. The combination of the journal box or bearing provided with the oil hole or recep-

tacle, the laterally-moving cover to said receptacle, a guide or ways in which said cover moves, and the spring for automatically retracting said cover after it has been moved for oiling the journal, substantially as described.

3. The combination, with the journal box or bearing having the oil hole or receptacle, of the seat *c*, provided with the guide *c'*, the cover *D*, pivoted to said seat and adapted to move on said guide, and the spring *f*, interposed between said cover and seat or journal-box for holding the cover in place over the oil-receptacle, substantially as described.

4. The combination, with the journal box or bearing, of the raised and perforated seat, the sliding oil-hole cover mounted and moving in ways on said seat, and the spring interposed between said seat and cover, substantially as and for the purpose described.

In testimony whereof I have hereunto set my hand this 30th day of September, A. D. 1885.

EPHRAIM F. HERRINGTON.

Witnesses:

JAMES C. WILBUR,  
GEO. A. ROSE.