

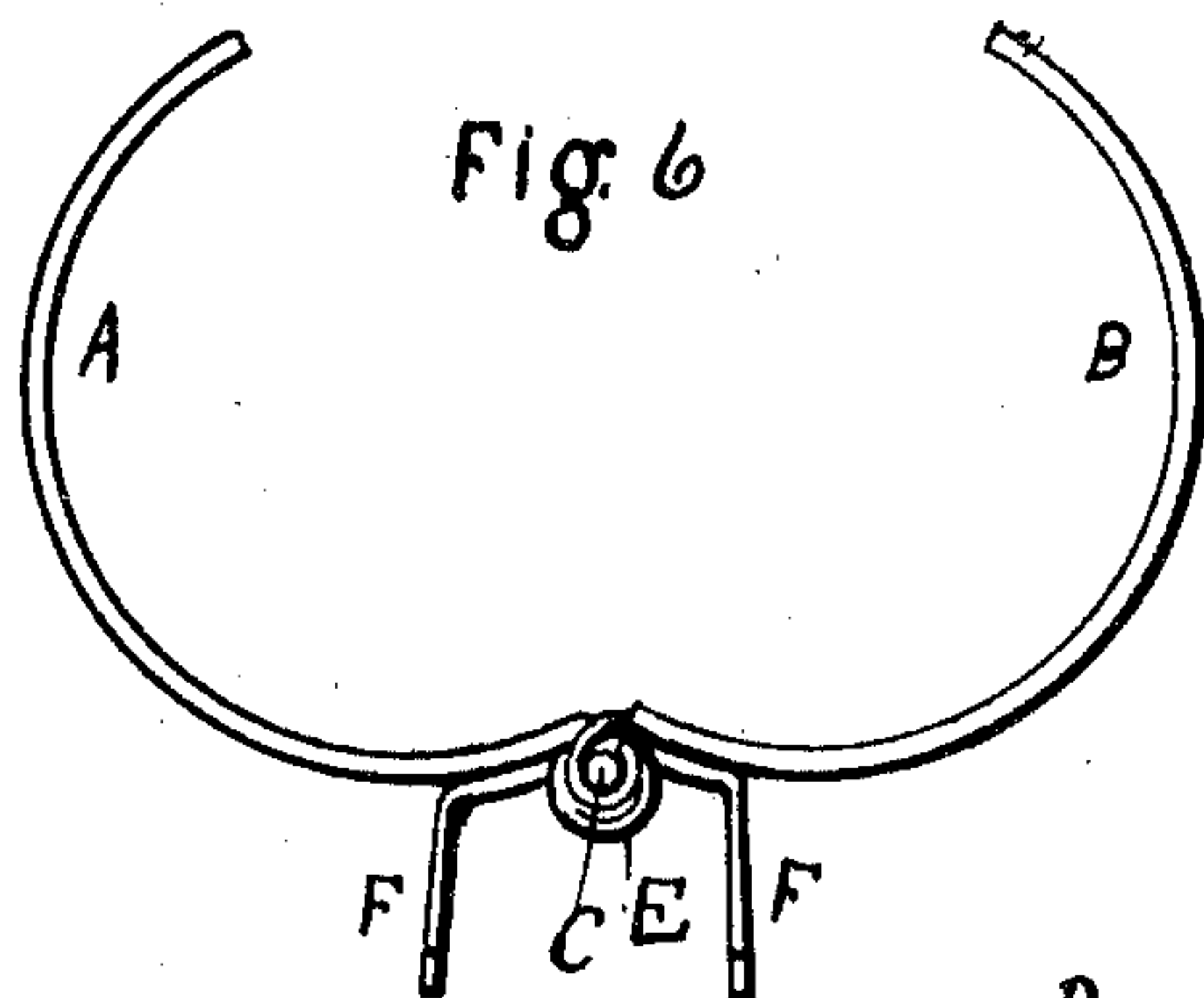
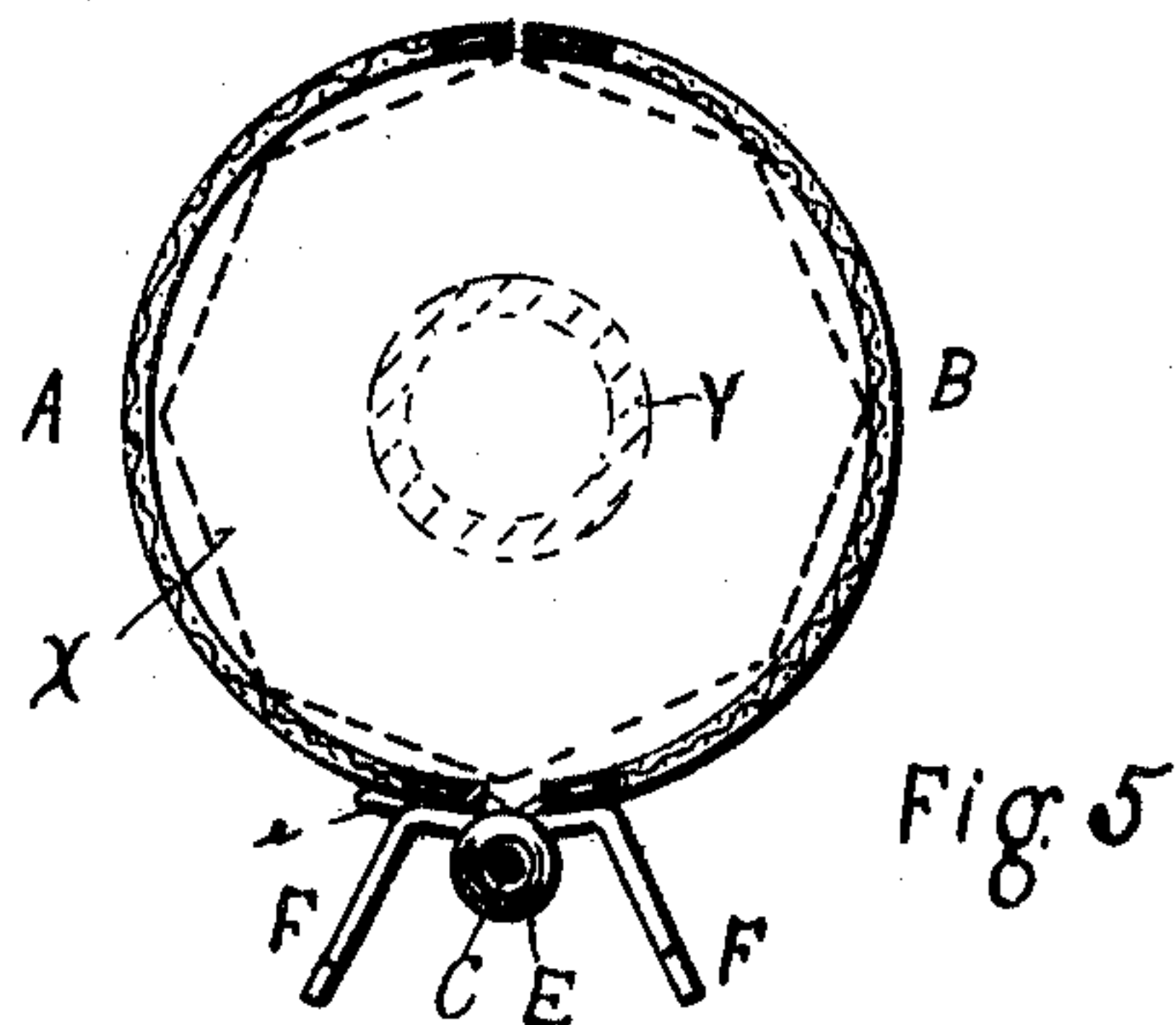
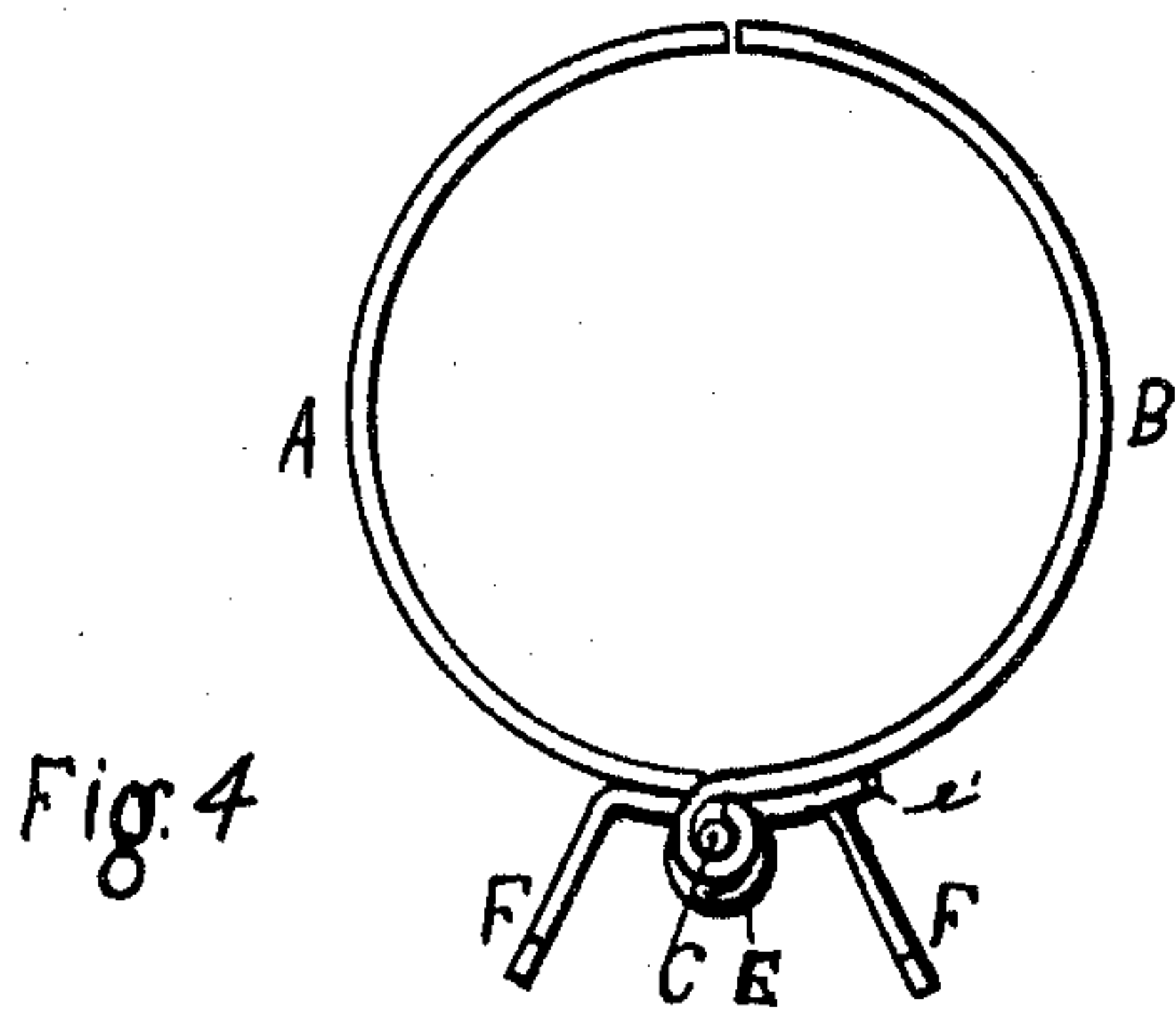
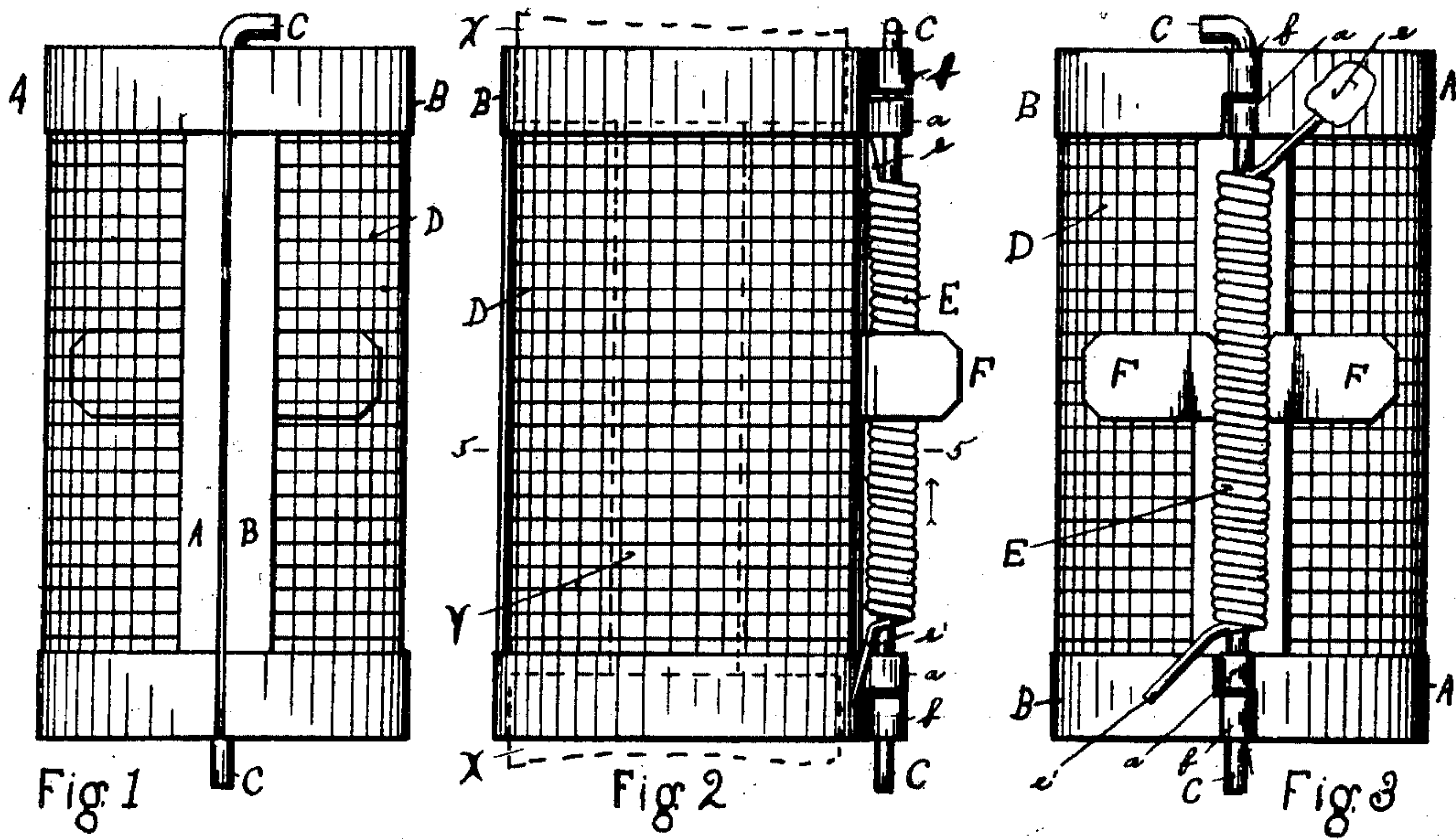
No. 776,331.

PATENTED NOV. 29, 1904.

E. KERWICK & H. RUPPEL.
LUBRICATOR GUARD.

APPLICATION FILED FEB. 2, 1903.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

EDWARD KERWICK AND HENRY RUPPEL, OF TOPEKA, KANSAS.

LUBRICATOR-GUARD.

SPECIFICATION forming part of Letters Patent No. 776,331, dated November 29, 1904.

Application filed February 2, 1903. Serial No. 141,418. (No model.)

To all whom it may concern:

Be it known that we, EDWARD KERWICK and HENRY RUPPEL, citizens of the United States of America, residing at Topeka, in the county of Shawnee and State of Kansas, have invented new and useful Improvements in Lubricator-Guards, of which the following is a specification.

In locomotive steam-engines the lubricator for furnishing the steam-chest and the valves therein with oil is located in the engineer's cab, the oil being fed into the steam-chest in drops caused by the pressure of the steam in the lubricator-cup forcing the oil through a minute opening or nipple. This opening or nipple is inclosed in a glass tube, so that it may be constantly watched by the engineer. The cup is also usually provided with an oil-gage similar in construction to the ordinary water-gage of steam-boilers. These glass tubes are frequently broken under the pressure of the steam, the engineer and firemen being often injured by the flying particles.

The present invention is a guard to prevent the broken pieces of glass from flying about, the further objects being that it may not interfere with the view of the tube, and that it may be readily applied or removed, and that it may be constructed economically.

The invention consists of the novel combination, arrangement, and disposition of the parts, as herein described and claimed and as shown in the accompanying drawings, forming part of this specification.

Figure 1 is a front view of the guard. Fig. 2 is a side view thereof. Fig. 3 is a rear view. Fig. 4 is an end view. Fig. 5 is a cross-section through the line 5 5, Fig. 2. Fig. 6 is an end view, corresponding to Fig. 4, when the guard is opened in the act of applying it to or removing it from the tube.

Like letters refer to like parts throughout the several views.

The invention consists of the cylindrical screen D, divided longitudinally into two approximately equal segments, each segment being provided with a frame A B and a handle

F F, projecting rearwardly therefrom, the two segments being hinged together on the knuckles *a b a b* and pin C and being normally held in engagement with each other by the coil-spring E, one end, *e*, of which may be soldered to one of the frames, A, while the other end, *e'*, may bear loosely against the other frame, B. The knuckles *a b a b* are made from extensions of the end pieces of the frames A B, respectively. The screen may be made of annealed-steel-wire netting having about eight meshes to the linear inch, and the frame portions may be made of strips of suitable sheet metal bent over upon themselves to form a clasp for the netting. The guard is made of suitable size to encircle the nuts X X, in which the glass tube Y is seated. It is applied by pressing the two handles together, as between the thumb and fingers, so as to spread the members apart. It may be removed in like manner for the purpose of a closer inspection of the tube, for wiping the tube, or for any other purpose.

By fitting the guard to the nuts instead of to the glass tube, and thus spacing the guard apart from the tube, in case of the bursting of the tube the guard does not receive the pressure of the steam and will retain the broken pieces. This has been proven by actual tests. Although specially adapted to lubricators, it is equally adapted to water-gages for steam-boilers.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

A guard for glass tubes comprising two semi-circular sections, each of which is provided at opposite sides with vertical strips, and top and bottom strips, reticulated material secured to the strips of both sections, a single coiled spring extending longitudinally of two of the vertical strips and having reversely-arranged opposite free ends, one of which is secured to an upper strip of one of the sections, and the other loosely mounted on the lower strip of the opposite section, the strips on which the spring is mounted having knuckles,

a rod passing through said knuckles and
through the spring whereby to hinge the
two sections together, means coacting with
the hinges and spring for separating the un-
5 hinged portions of the sections, and said rod
also serving to hold the spring in normal po-
sition when the sections are operated.

In testimony whereof we have signed our
names in the presence of witnesses.

EDWARD KERWICK.
HENRY RUPPEL.

Witnesses:

ERNEST MUELLER,
JOSEPH GROLL.