

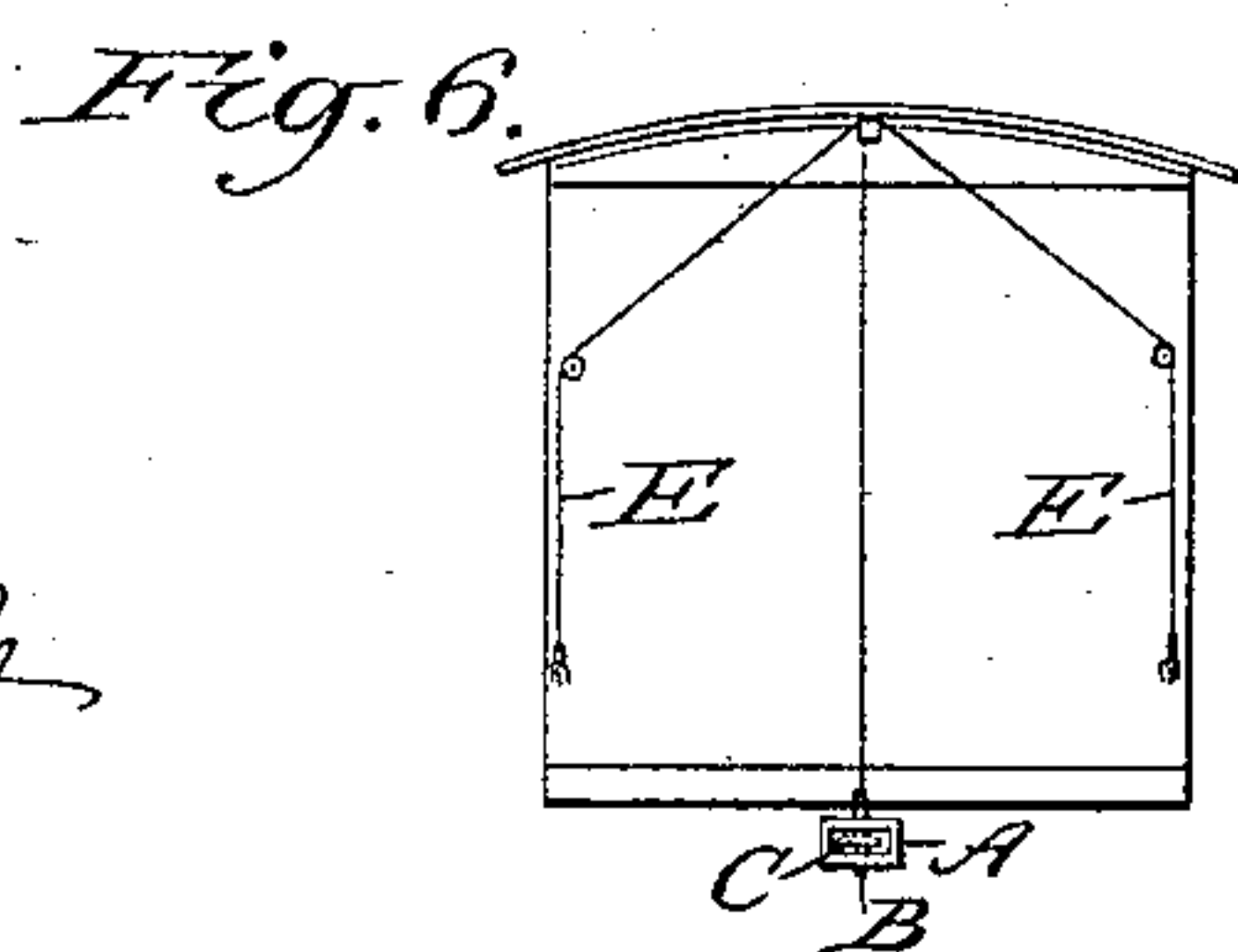
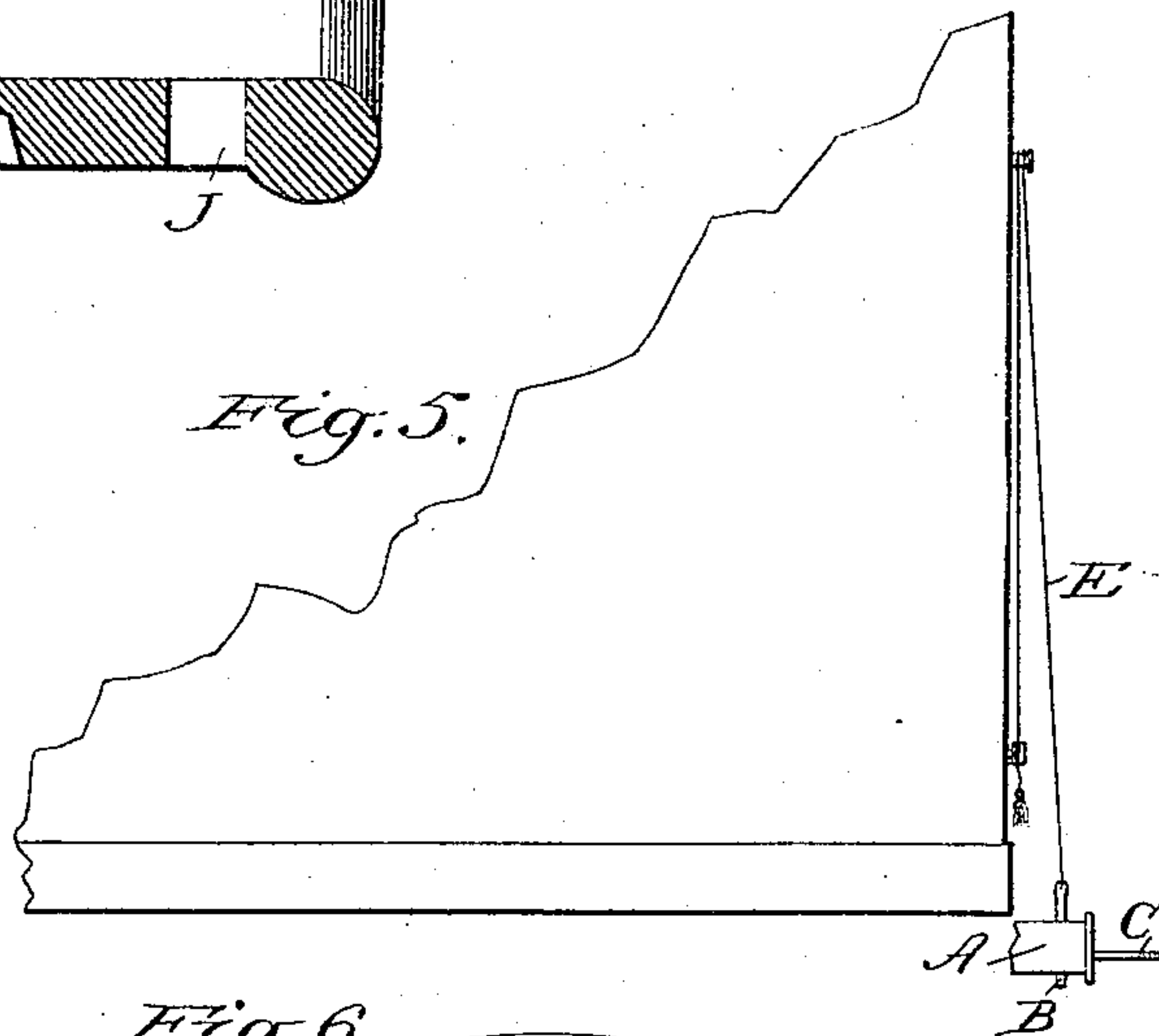
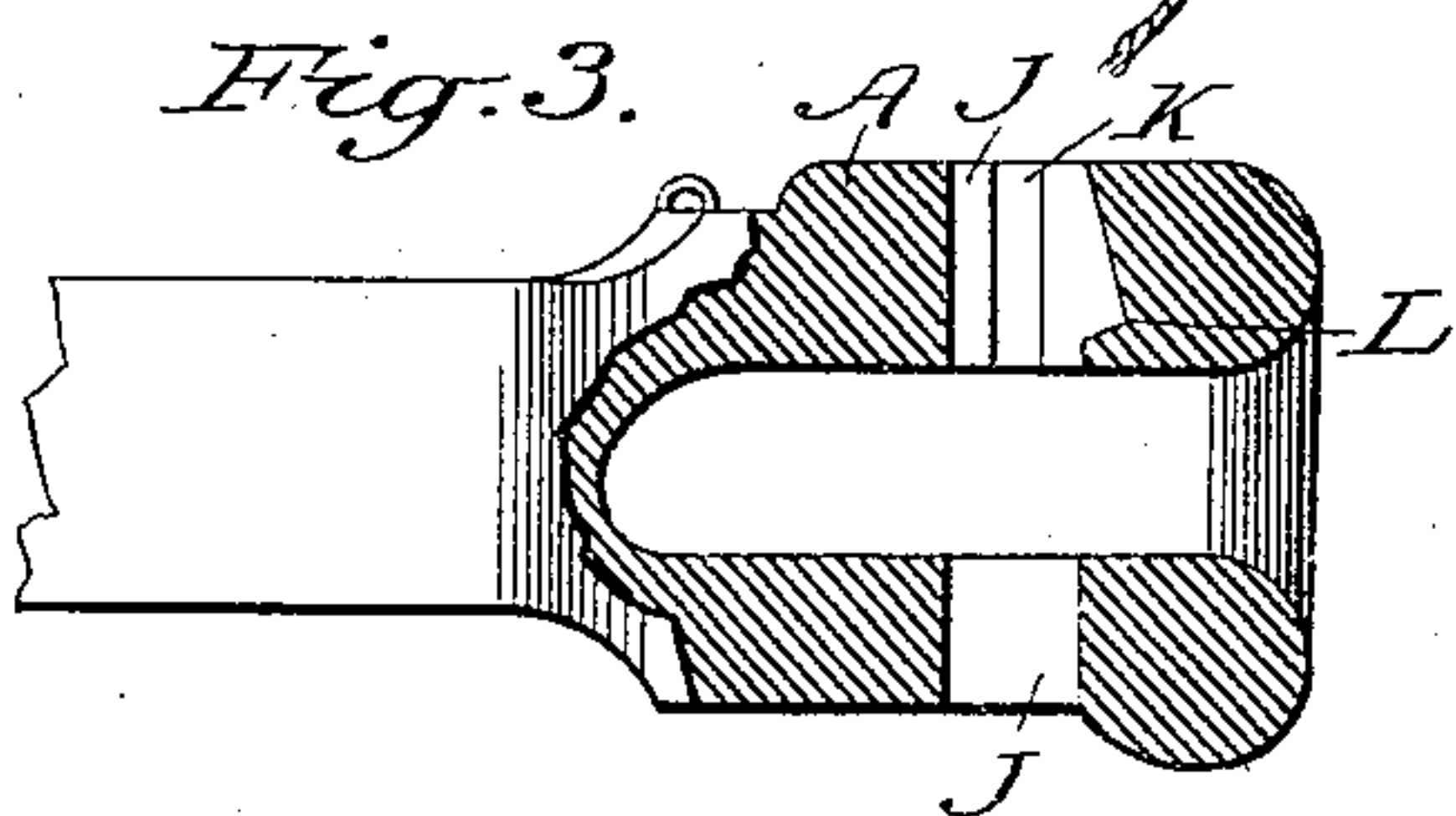
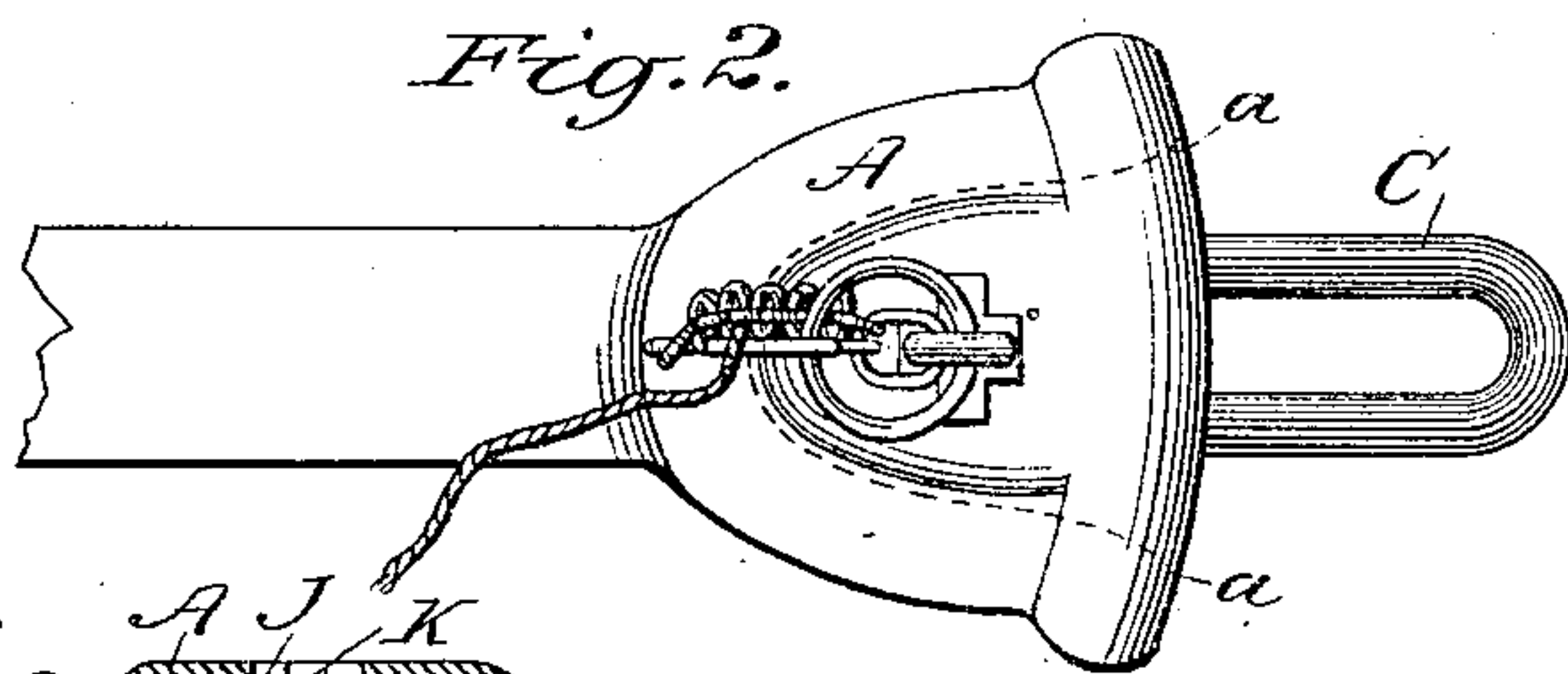
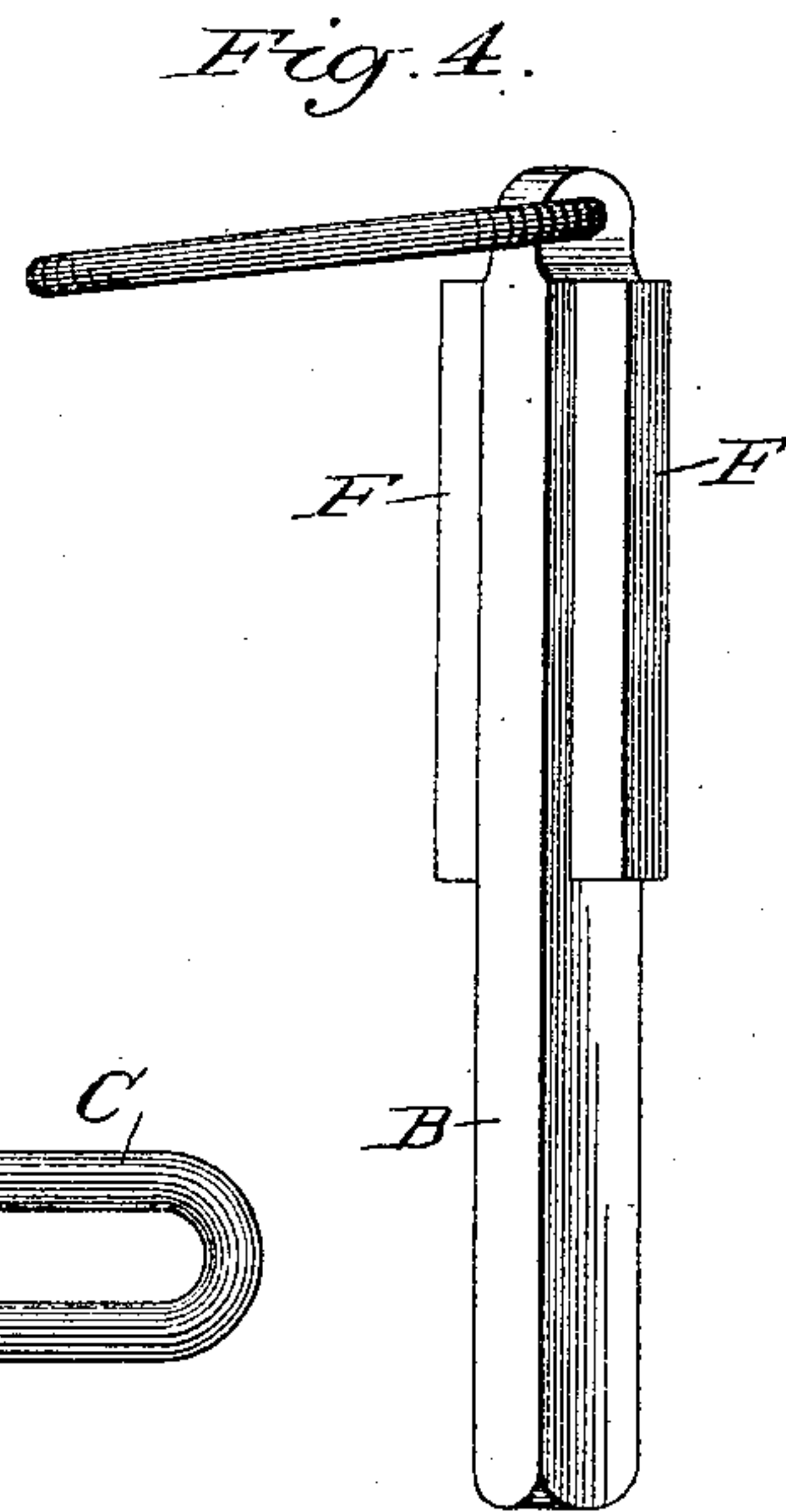
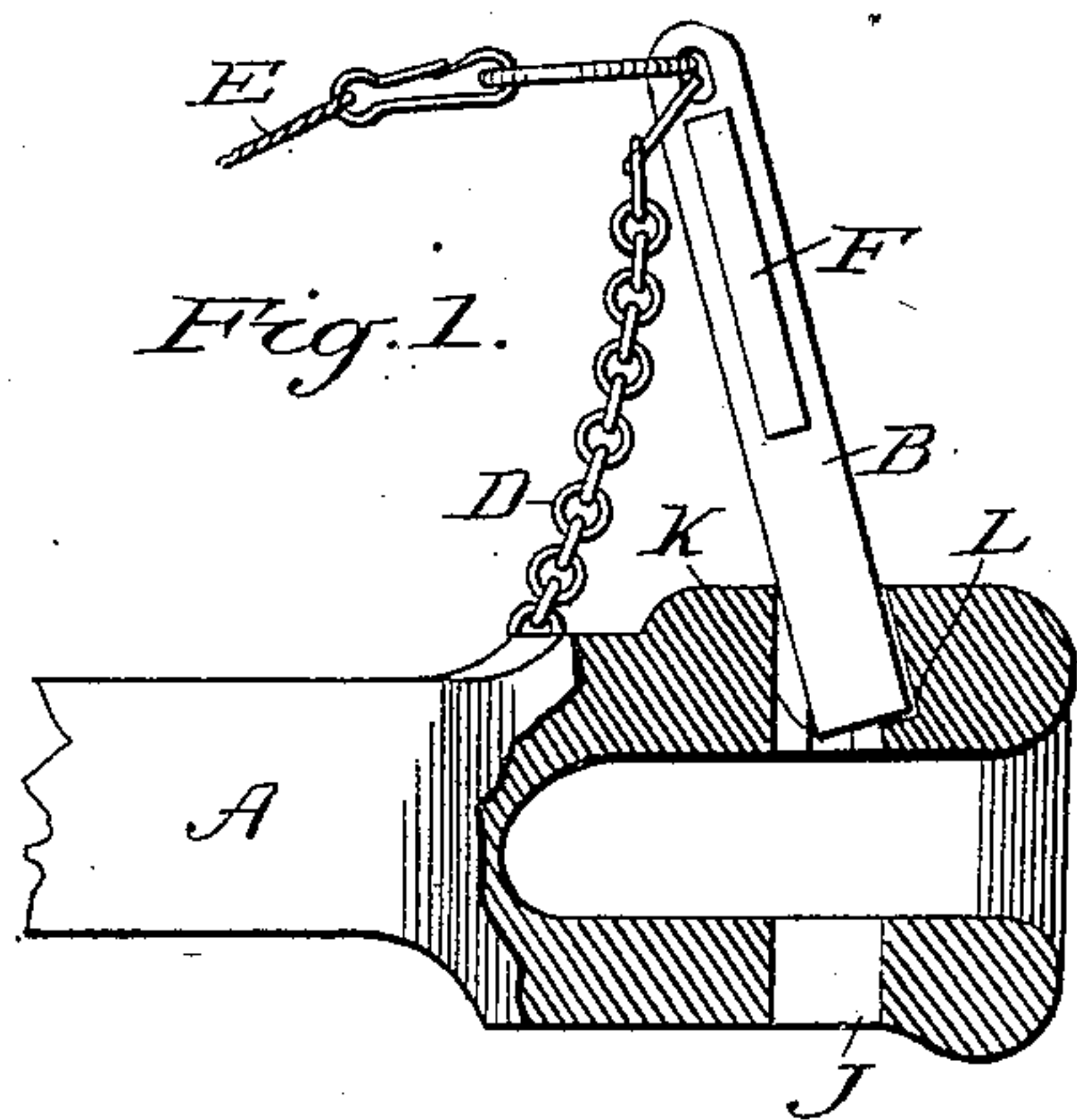
(No Model.)

F. WOODWARD.

CAR COUPLING.

No. 284,789.

Patented Sept. 11, 1883.



Witnesses.

Knott Simpson
Chas. R. Wright

Inventor.

Ferdinand Woodward
per *John H. Redstone*

UNITED STATES PATENT OFFICE.

FERDINAND WOODWARD, OF SACRAMENTO, CALIFORNIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 284,789, dated September 11, 1883.

Application filed June 13, 1882. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND WOODWARD, a citizen of the United States, residing at Sacramento, in the county of Sacramento and State of California, have invented certain new and useful Improvements in Car-Couplings, of which the following is a specification.

My invention relates to that class of car-couplings in which the common link and draw-head are employed in coupling up railroad-trains, and where the coupling-pin may be operated from the side or top of the car, also to couple automatically as the cars come together.

My invention consists in the construction of the coupling-pin and draw-head, by which the coupling-pin B and link C are held in position to be operated by the action of the cars as they come together, as will be more readily understood by reference to the accompanying drawings.

Figure 1 is a side elevation, showing a portion of the draw-head cut longitudinally and vertically through the center to show the interior of the same and the position of the coupling-pin when it is withdrawn to uncouple the car or draw out the link. Fig. 2 is a plan view of the same when the pin is dropped in position to hold the link in coupling the cars. Fig. 3 is a side elevation of the draw-head similar to Fig. 1, with the pin removed to show the form of the key-seat and the rest-notch which holds the pin up when it is withdrawn. Fig. 4 is a perspective view of the coupling-pin. Fig. 5 shows a broken corner of a box-car to show the position of the cord by which the coupling-pin may be operated from the side or top of the car; Fig. 6, an end view of box-car.

A represents the draw-head; B, the coupling-pin; C, the coupling-link; D, the coupling-pin stop-chain; E, the coupling-pin cord by which the coupling-pin is operated; F, the guide and rest wings of the coupling-pin; J, the coupling-pin mortise; K, the wing-guide slots to receive the guide-wings F and guide the same; L, the rest-notch which holds the pin in position.

The following is the operation of the same: The draw-head A being coupled together by the link C being held at the proper point by the weight of the pin B and wings F, the pin B being drawn up by the cord E, and the guide and rest wings F drawn out of the guide-slots K until the link-chain D is straightened, when the top of the pin is drawn back by the weight of the chain D, and the lower end thrown forward into the rest-notch L, where it rests as the cord is released and the car is uncoupled. It is now in position for recoupling, and as the car comes up and the link C passes into the draw-head at the same time, the bumpers come together and the jolt of the concussion throws the top of the pin forward, and the lower end slips out of the notch L and the pin drops down through the mortise J, the guide and rest wings F dropping upon the link, causing the pin to rest in position to hold the link perfectly in position in the draw-head and projecting horizontally in the direction to enter the draw-head of the car to which it is being coupled.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The draw-head A, having the pin-mortise J, and wing-slot K, and rest-notch L, to operate in connection with the coupling-pin B, with guide-wings F and stop-chain D, with or without the operating-cord E, substantially as and for the purposes set forth.

FERDINAND WOODWARD.

Witnesses:

ALBION C. SWEETSER,
ROB H. HAWLEY.