

No. 641,686.

Patented Jan. 23, 1900.

R. H. FORSCHNER.

SPRING BALANCE.

(Application filed Aug. 17, 1899.)

(No Model.)

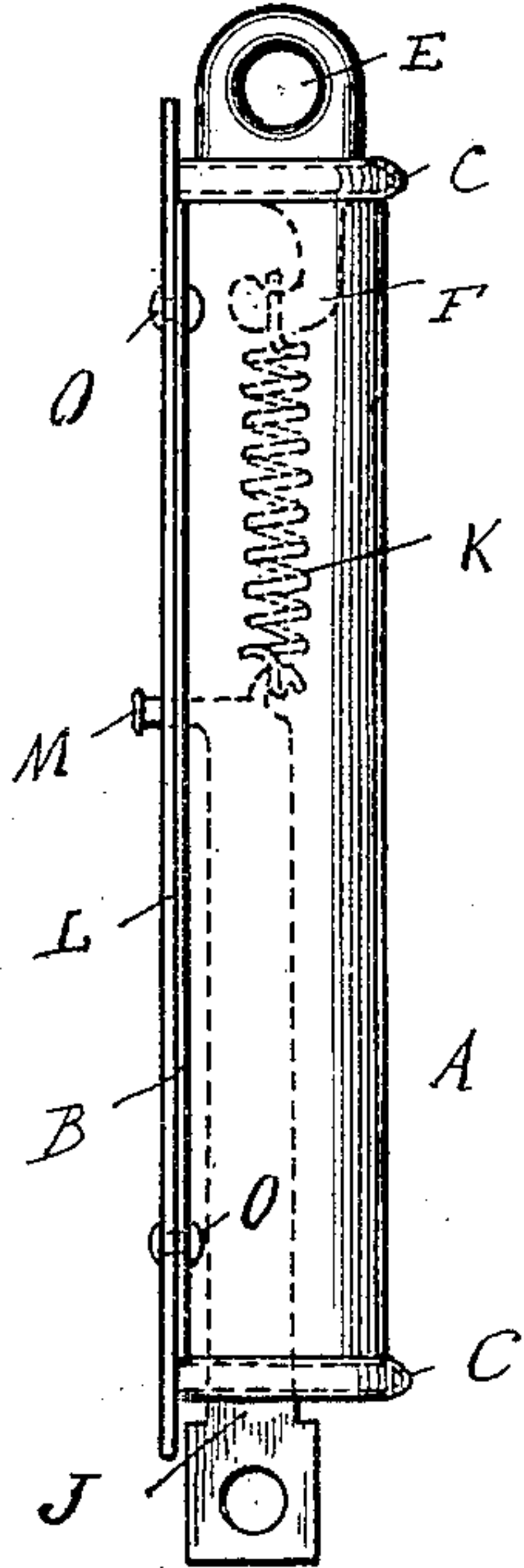


Fig. 1.

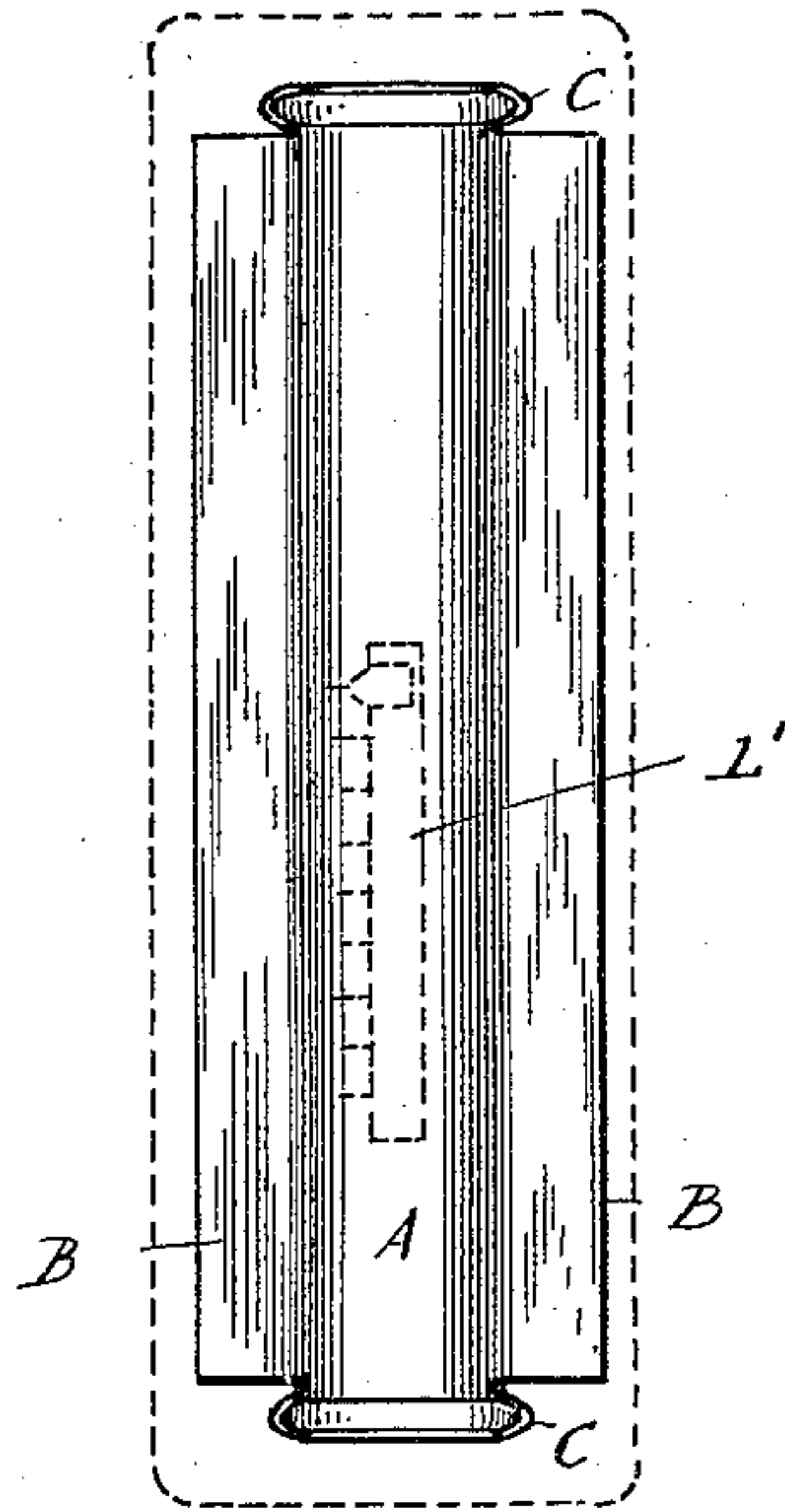


Fig. 2.

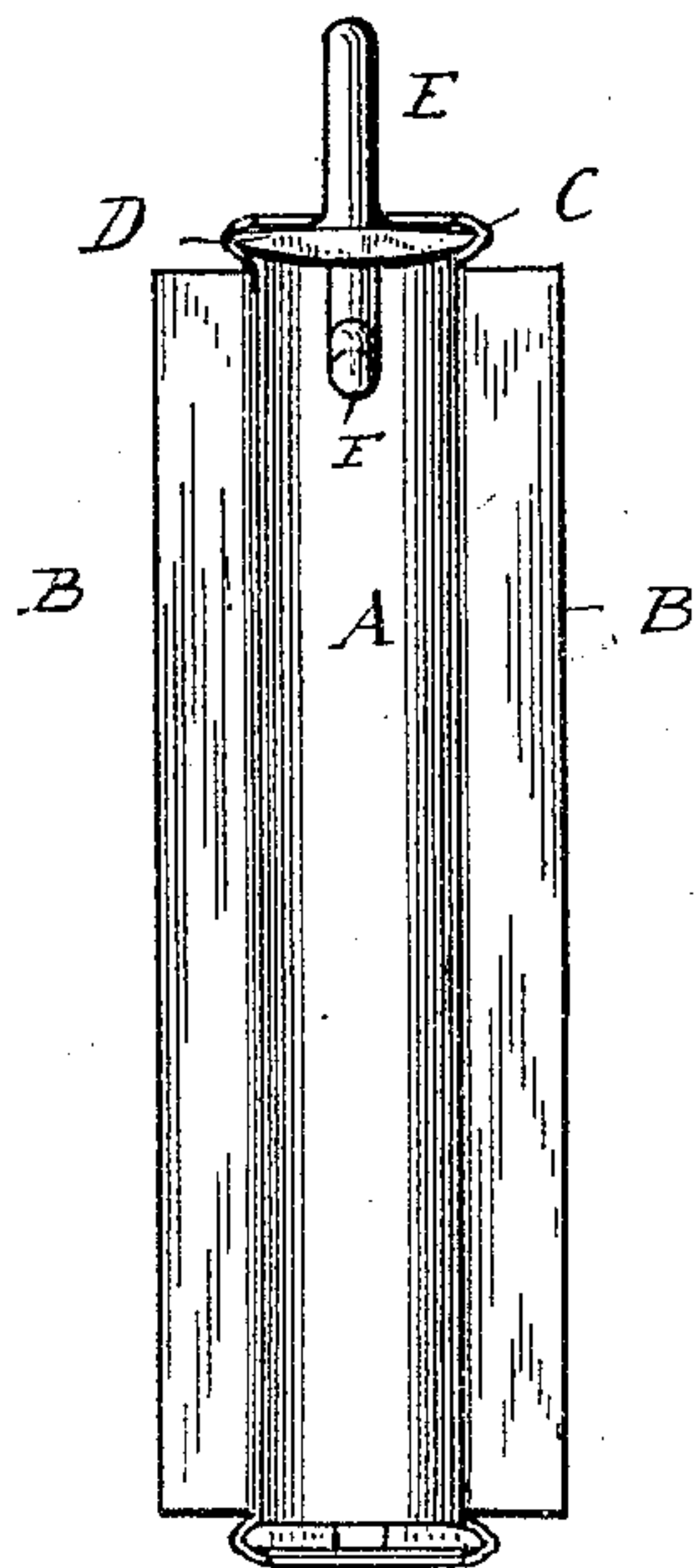


Fig. 3.

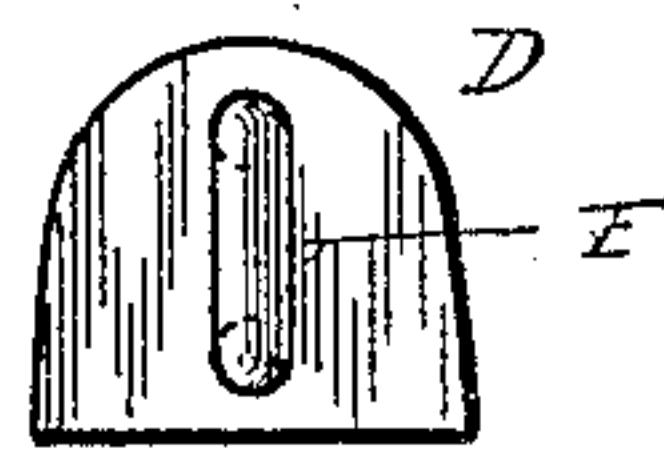


Fig. 4.

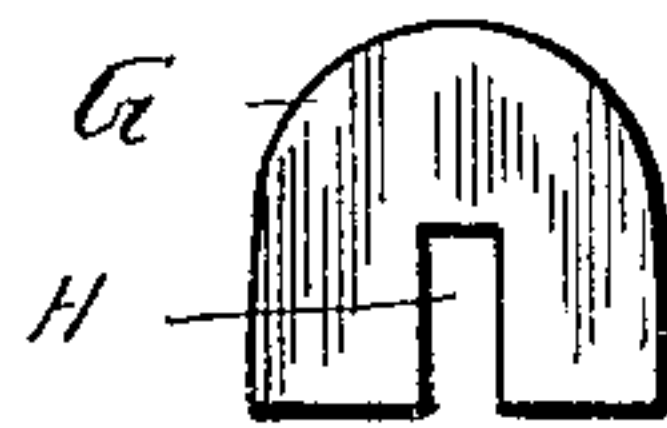


Fig. 5.

WITNESSES:

F. Stallman
M. Smillie

INVENTOR

R. H. Forschner

BY *Osmond Turner*

his ATTORNEY

UNITED STATES PATENT OFFICE.

RICHARD H. FORSCHNER, OF NEW YORK, N. Y.

SPRING-BALANCE.

SPECIFICATION forming part of Letters Patent No. 641,686, dated January 23, 1900.

Application filed August 17, 1899. Serial No. 727,509. (No model.)

To all whom it may concern:

Be it known that I, RICHARD H. FORSCHNER, a citizen of the United States, and a resident of No. 171 East Seventy-first street, in the city of New York, borough of Manhattan, in the county of New York and State of New York, have invented certain new and useful Improvements in Spring-Balances, of which the following is a specification.

10 This invention relates to improvements in spring-balances; and the object of my invention is to provide a new and improved casing for the spring mechanism, which casing is simple in construction, strong and durable, 15 and composed of few parts.

In the accompanying drawings, forming a part of this specification, and in which like letters of reference indicate like parts in all the figures, Figure 1 is a vertical side view 20 of my improved spring-balance. Fig. 2 is a face view of the shell. Fig. 3 is a similar view with the top and bottom filling-pieces in place. Fig. 4 is a plan view of the top filling-piece. Fig. 5 is a plan view of the bot- 25 tom filling-piece.

The casing for the spring-balance is composed of a shell A, stamped up in sheet metal, U-shaped in cross-section, and having side flanges B. The shell is provided at each end 30 with an external hollow bead C, forming an interior groove along the edge of the U-shaped part of the shell. In the upper end of the U-shaped part a filling-piece D is placed, which is U-shaped and has its edge 35 shaped to fit in the groove formed by the hollow bead C, the rear straight edge of this filling-piece D being flush with the flanges B. The filling-piece D is provided on its top with an eye E, made integral therewith, and on 40 its under side it is provided with a hook F, also made integral therewith. A U-shaped filling-piece G is placed into the bottom hollow bead C and is provided with a slot H, through which the tang J can pass, which is 45 shown in dotted lines in the drawings. The spiral spring K, also shown in dotted lines, is secured to the upper end of the tang, and the upper end of the spring is provided with a hook or eye, which engages the hook F. The 50 face-plate L, having a longitudinal slot L', through which the pointer M of the tang-

plates passes, rests on the flanges B and against the straight edges of the top filling-piece D and bottom filling-piece G and holds them in place, and the said face-plate is se- 55 cured to the shell by rivets O, which pass through the face-plate L and flanges B of the shell.

Having described my invention, what I claim as new, and desire to secure by Letters 60 Patent, is—

1. In a spring-balance, the combination with a face-plate, of a U-shaped shell, provided at each end with a hollow bead forming an interior groove, filling-pieces placed in the ends 65 of the shell, the edges of the filling-pieces resting in the grooves, the face-plate being secured on the shell whereby the shell and face-plate are held together and the filling-pieces are held in the shell without the use of 70 any further attaching device, substantially as herein shown and described.

2. In a spring-balance, the combination with a face-plate, of a shell secured on the back of the same and provided at the top edge with 75 an interior groove, a filling-piece placed in the upper end of the shell, the edges of the filling-piece resting in the groove, which filling-piece is provided on its upper surface with an eye, and on its under surface with a hook, 80 both made integral with the filling-piece, substantially as herein shown and described.

3. In a spring-balance, the combination with a face-plate, of a shell secured on the back of the same and U-shaped in section and pro- 85 vided with interior grooves at its ends, a filling-piece placed in the groove at the upper end of the shell and having an eye on its upper surface and a hook on its under surface both made integral with the filling-piece and 90 a filling-piece placed in the groove at the bottom of the shell and having a slot for the tang, substantially as herein shown and described.

Signed at New York city, in the county of 95 New York and State of New York, this 14th day of July, 1899.

RICHARD H. FORSCHNER.

Witnesses:

JOHN NEUSTADT,
FRED OCHS.