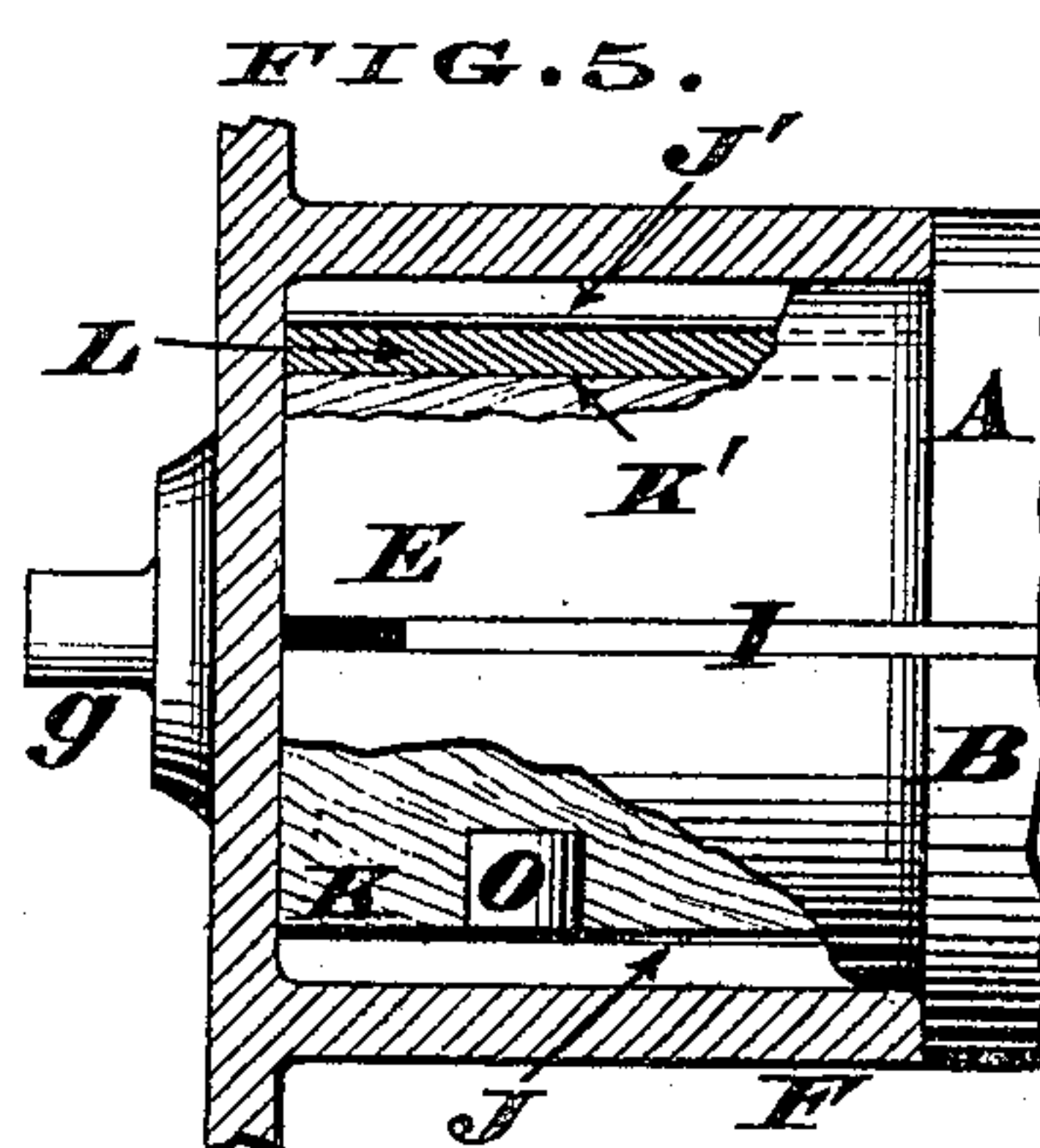
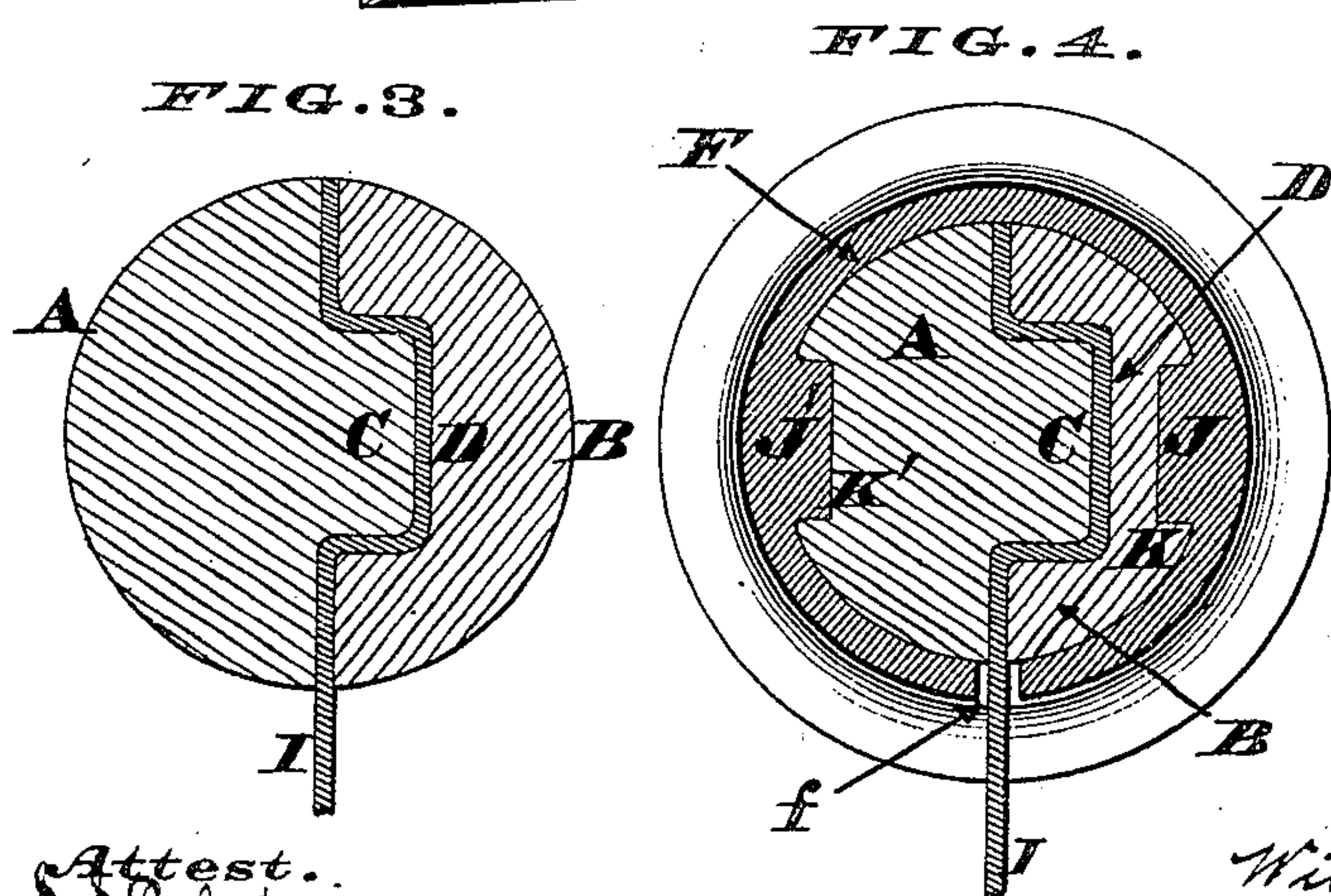
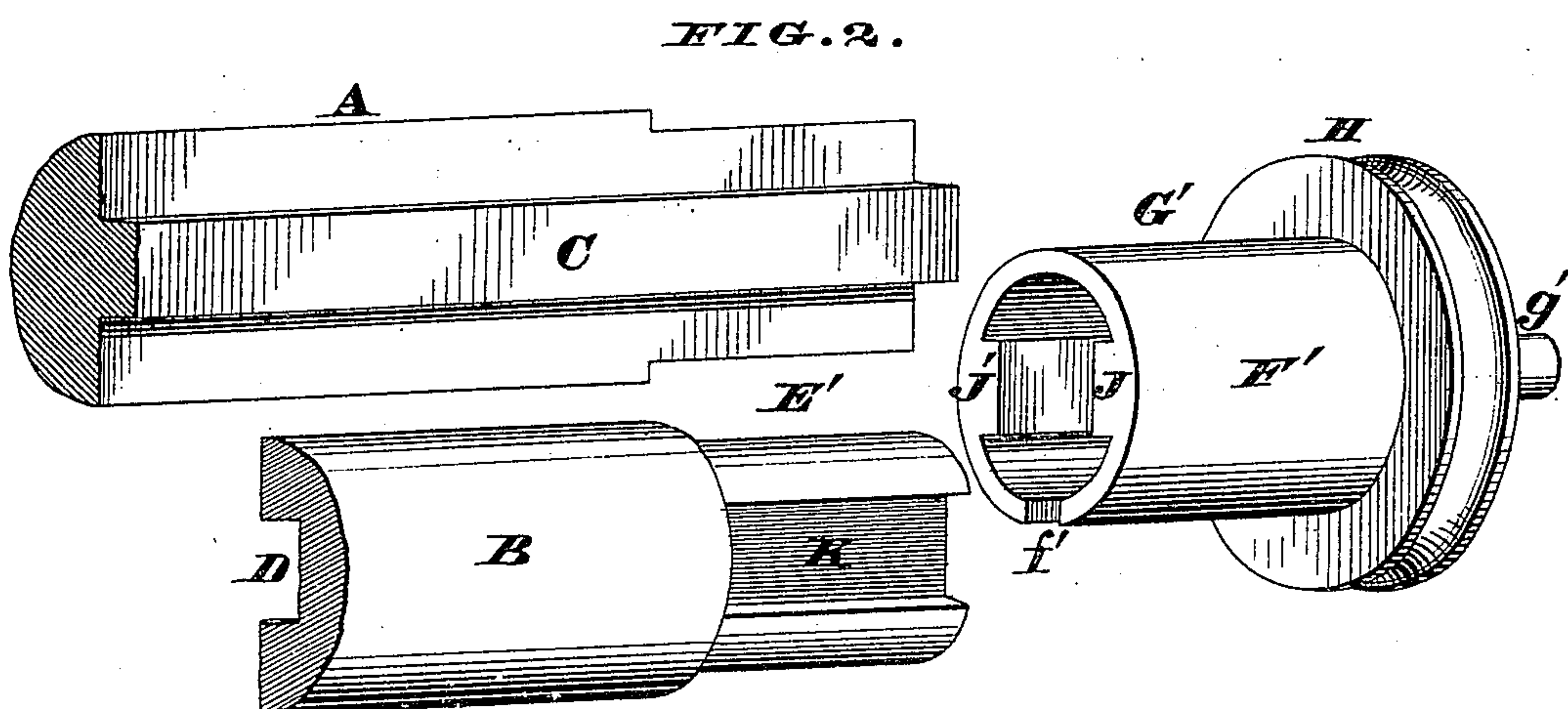
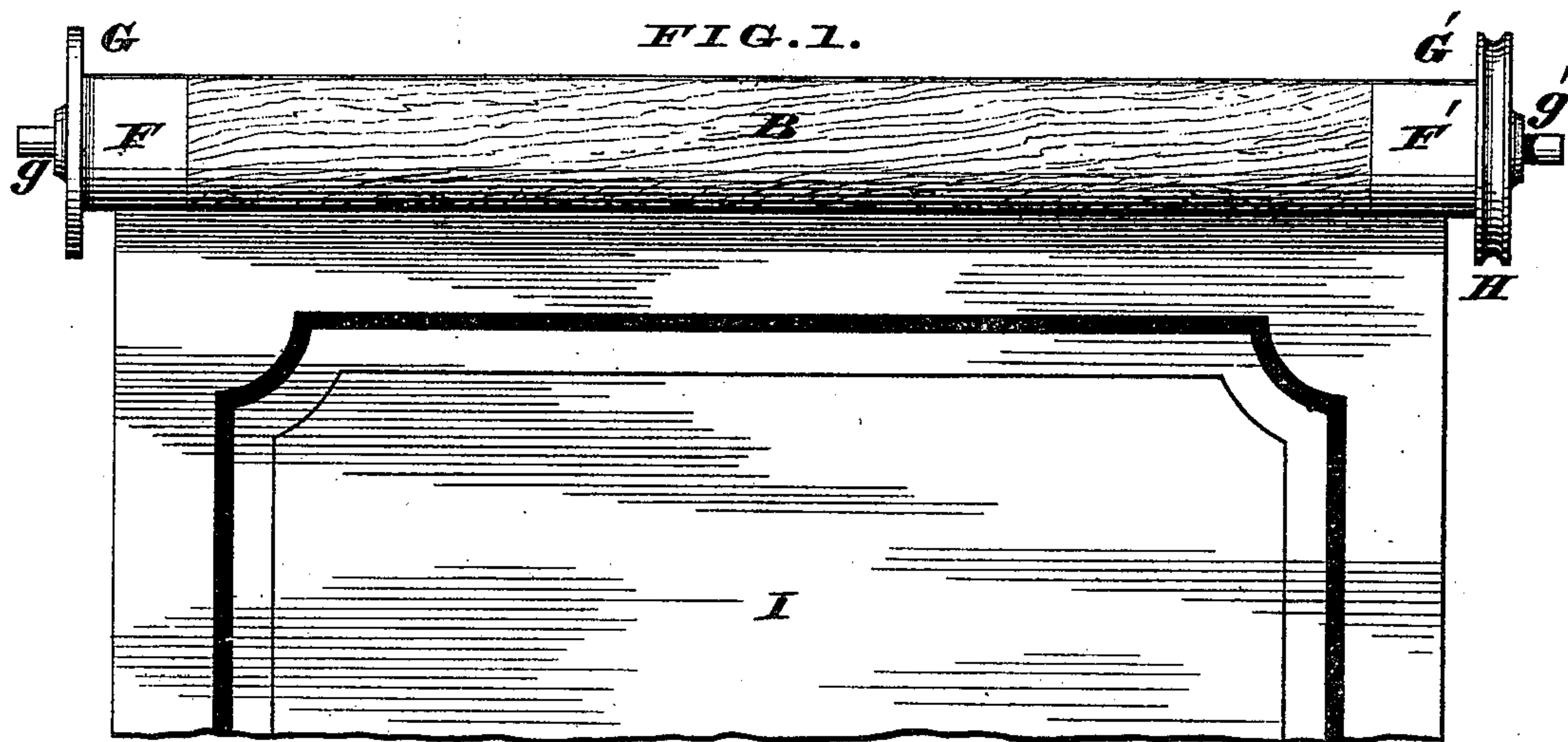


(No Model.)

W. F. EDWARDS.
WINDOW SHADE ROLLER.

No. 271,438.

Patented Jan. 30, 1883.



Attest.
John C. Schlichter

Inventor.
William F. Edwards
by James H. Layman
Att'y.

UNITED STATES PATENT OFFICE.

WILLIAM F. EDWARDS, OF CINCINNATI, OHIO.

WINDOW-SHADE ROLLER.

SPECIFICATION forming part of Letters Patent No. 271,438, dated January 30, 1883.

Application filed October 10, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. EDWARDS, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Window-Shades, of which the following is a specification, reference being had therein to the accompanying drawings.

The object of my invention is to furnish a roller to which a window-shade can be readily and securely attached without employing tacks, screws, or other similar retaining devices. This result is accomplished by making the roller of two longitudinal sections or segments, of which members one is provided with a spline, ridge, or tongue adapted to enter a groove in the other section, so as to clamp or confine the upper margin of the shade securely within said roller. These segmental and longitudinally tongued-and-grooved members are locked together, so as to form a cylindrical roller, by means of sleeves projecting laterally from customary heads or mountings, said heads being provided with journals that turn in brackets attached to the window-frame. Furthermore, these sleeves have inwardly-projecting tongues, adapted to engage with external grooves at the opposite ends of the segmental sections in order that all the members of the roller may turn together, as hereinafter more fully described, and pointed out in the claims.

In the annexed drawings, Figure 1 is an elevation showing a window-shade completely uncoiled from my improved roller. Fig. 2 is an enlarged perspective view, showing the component members of the roller detached from each other. Fig. 3 is a transverse section taken at the mid-length of the roller. Fig. 4 is a transverse section taken through one of the sleeves. Fig. 5 is a horizontal section through one of the heads.

The two sections or members A B are of such segmental shape as to form a true cylindrical roller when brought together, and are preferably composed of wood. Of these two sections the one, A, has a longitudinal rib, spline, or tongue, C, running its entire length, said tongue being adapted to enter a suitable groove, D, in the opposing face of the other member, B. Furthermore, the ends of the sectional roller are reduced in diameter, so as to

form spindles E E', that fit snugly within the sleeves F F' of the customary heads or mountings, G G', the head G' having a pulley, H, around which passes the cord wherewith the shade I is raised and lowered.

Projecting outwardly from heads G G' are journals g g', that revolve in ordinary brackets secured to the window-frame.

Projecting inwardly from the sleeves F F' are tongues J J', that enter longitudinal grooves K K' in the spindles E E' of the roller. The sleeves F F' are slotted, respectively at f f', to allow the insertion of the shade in the spindle ends E E' of the sectional roller.

The shade or curtain I is mounted by simply applying its upper margin to either of the sections A or B, and then bringing together said sections, so as to clamp the shade between them, as seen in Fig. 3. The heads G G' are then slipped onto the spindles E E', which act causes the tongues J J' of the former to engage with the grooves K K' of the latter, as represented in Figs. 4 and 5. Furthermore, this application of the heads to the roller causes the margins or edges of the shade to enter the slots f f' of the sleeves F F'. From this description it is evident the shade is securely clamped within the sectional roller, and the latter is bound together by the cylindrical sleeves. Consequently when the roller is journaled in the brackets and the endless cord passed around pulley H any motion imparted to said pulley will be communicated to the members F' A B F, because they are all united together by the system of tongues and grooves previously described.

As the shade is attached without employing either tacks or screws, it is apparent that an old curtain can be removed from the roller and a new one applied thereto in a few minutes, and without being compelled to call in a shade-mounter to do the work. Furthermore, the absence of nails from the heads G G' is another advantage due to my construction, as the nails are liable to work loose and come in contact with the brackets, thereby locking the roller and preventing the shade being either raised or lowered.

In some cases but a single rib, as J', may be used for keying the sleeves to the spindles; or both of the ribs may be dispensed with and

the roller be fastened to said sleeves F F' with transverse screws or nails. Again, an elastic washer, as seen at L in Fig. 5, may be inserted lengthwise between the tongue J' and groove K', so as to compensate for different thicknesses of material of which the shade is made; or the same result may be accomplished by inserting a small elastic plug, O, in a suitable recess or pocket in either section of the roller.

10 I claim as my invention—

1. A shade-roller consisting of the sections A B, provided respectively with a longitudinal tongue, C, and groove D, the ends of said sections being grooved externally at K K' to admit ribs J J', projecting inwardly from sleeves F F' of heads G G', as and for the purpose herein described.

2. The combination of roller sections A C B

D, sleeves F F', heads G G', ribs J J', grooves K K', shade I, and slots f f', for the purpose described. 20

3. The combination, in a sectional shade-roller, of the following parts: an elastic packing, L, interposed between the rib J' of sleeve F and the groove K', for the purpose specified. 25

4. As a new article of manufacture, the shade head or mounting G', having a journal, g', on one side, and a slotted and ribbed sleeve, F' f' J J' on its other side, as herein described and illustrated. 30

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM F. EDWARDS.

Witnesses:

JAMES H. LAYMAN,
SAML. S. CARPENTER.