

(No Model.)

J. B. WILSON.
UMBRELLA RUNNER.

No. 273,331.

Patented Mar. 6, 1883.

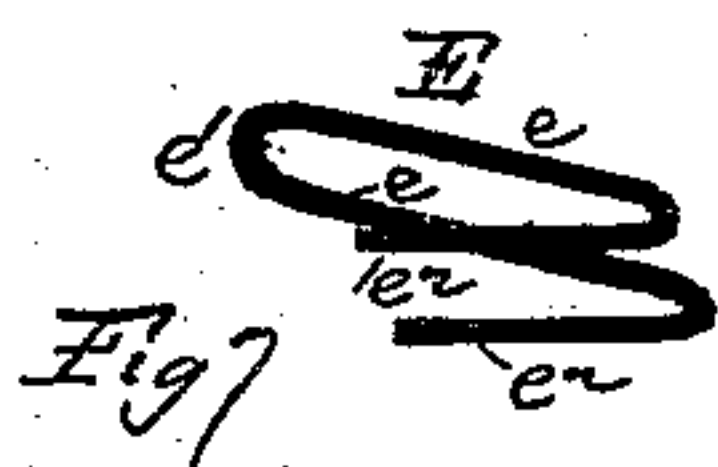
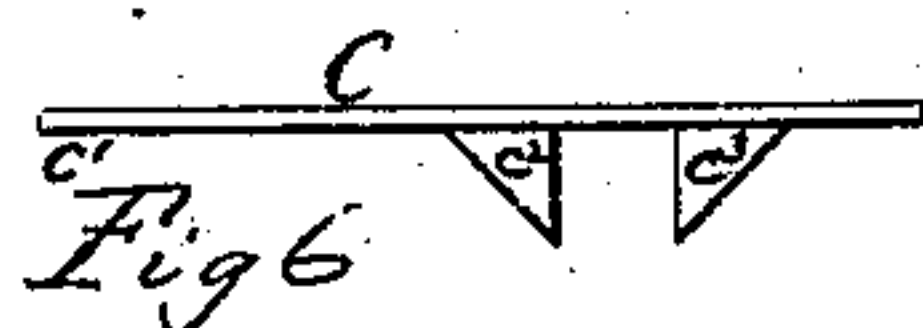
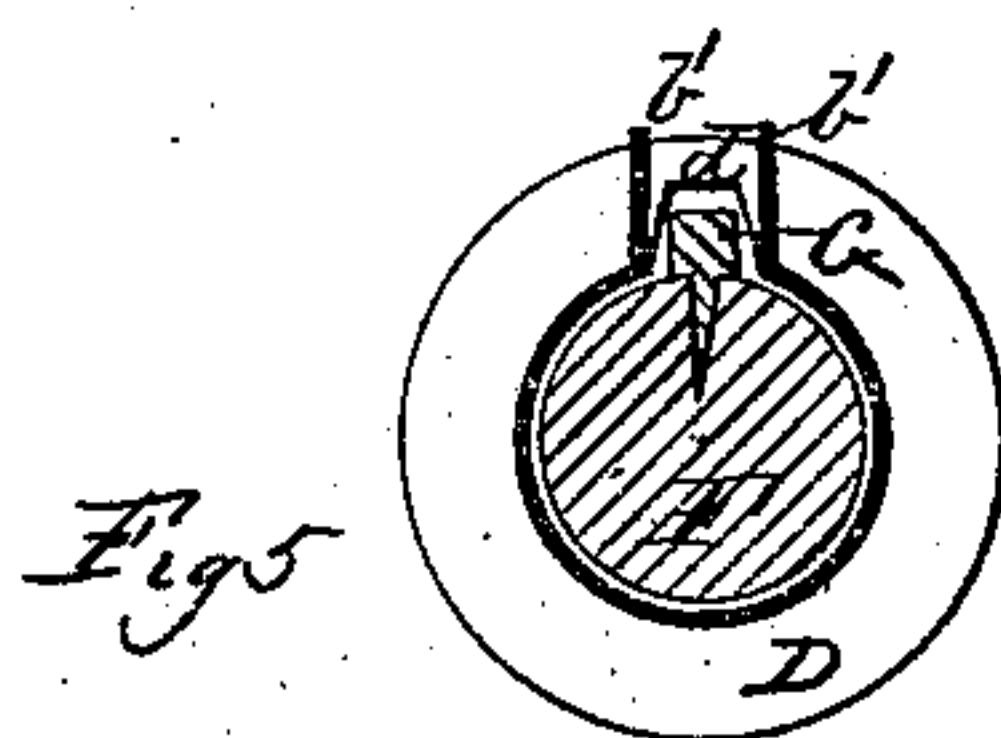
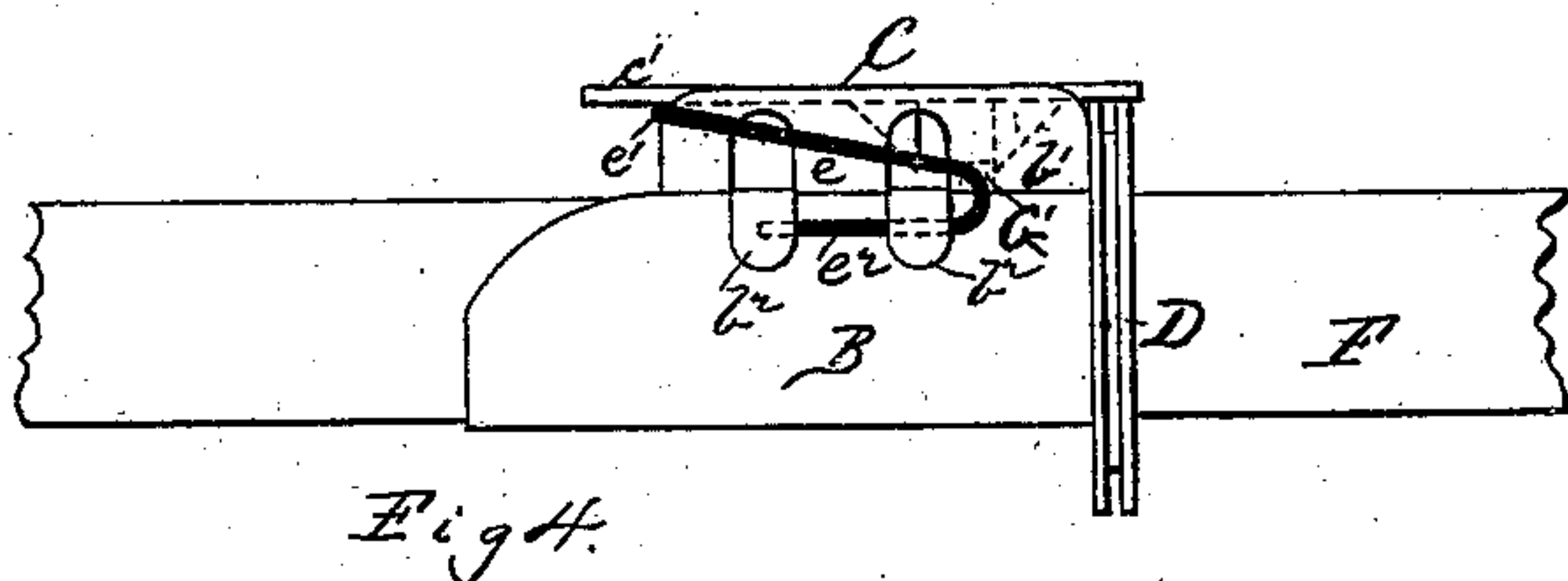
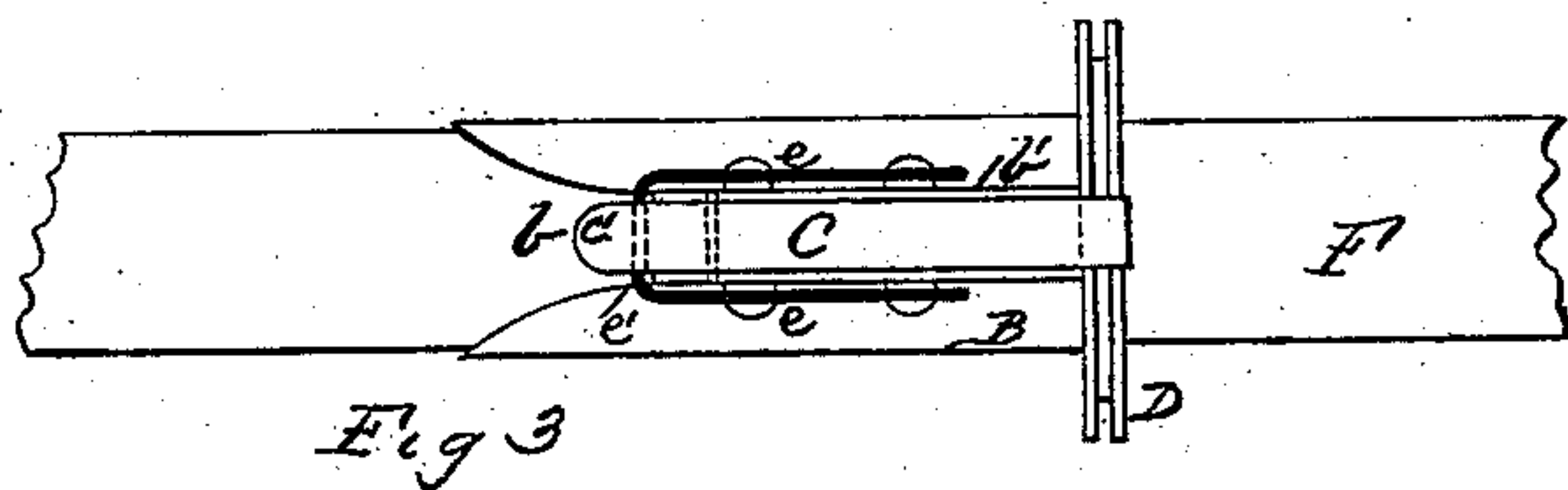
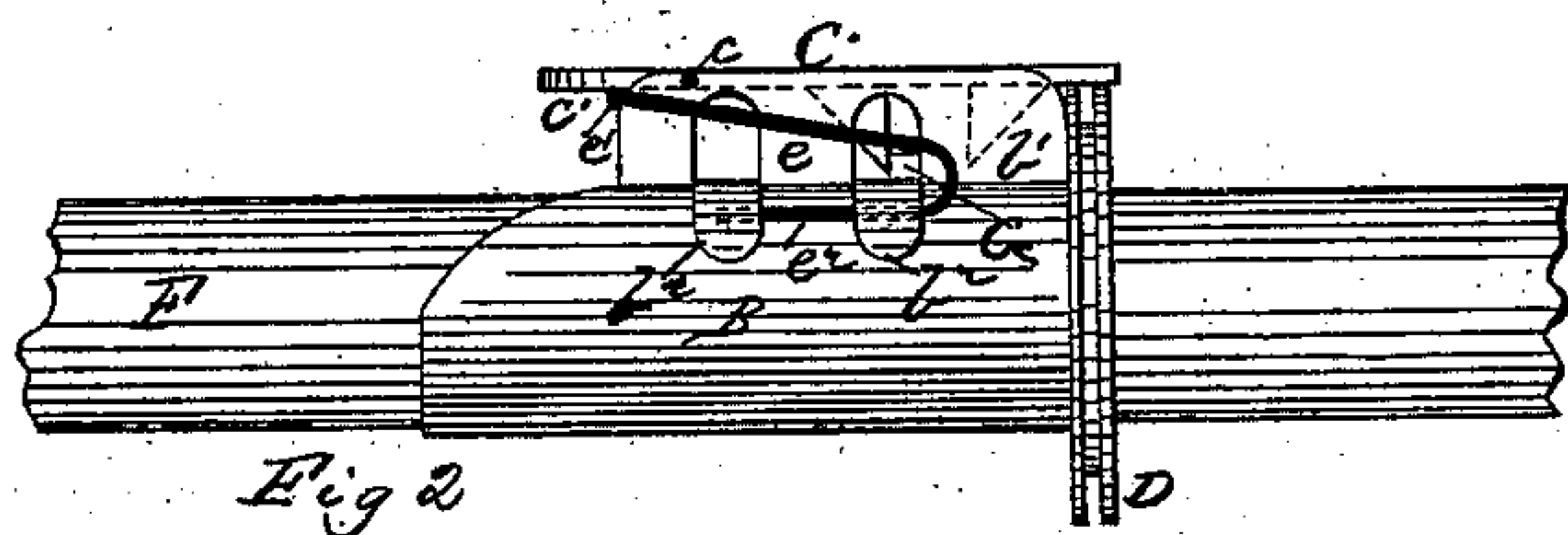
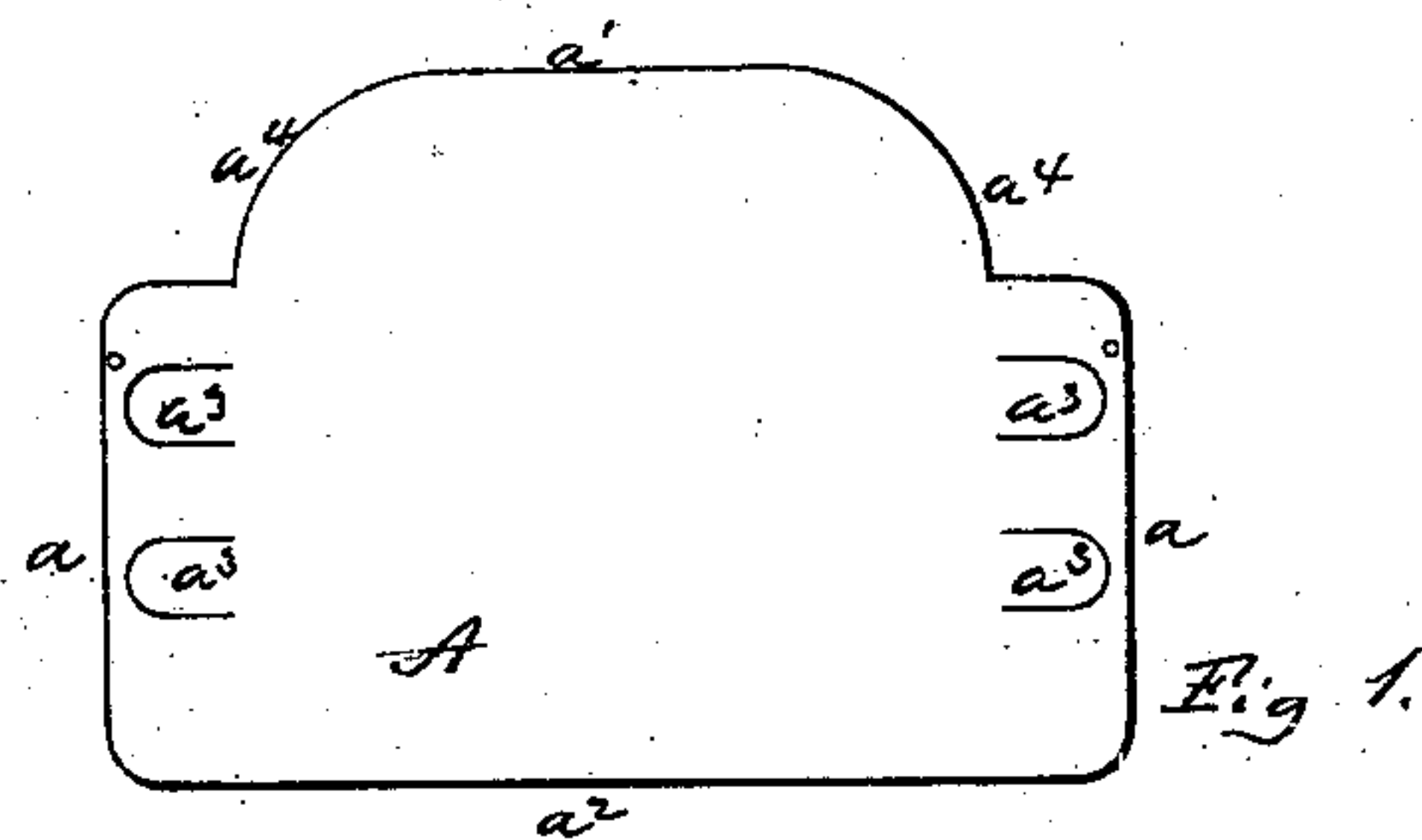


Fig. 8

WITNESSES:

Will H. Powell.

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UNITED STATES PATENT OFFICE.

JAMES BERNARD WILSON, OF PHILADELPHIA, PENNSYLVANIA.

UMBRELLA-RUNNER.

SPECIFICATION forming part of Letters Patent No. 273,331, dated March 6, 1883.

Application filed June 9, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES BERNARD WILSON, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Umbrella-Runners; and I do hereby declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying drawings, where—

Figure 1 is a plan of the slide-blank. Fig. 2 is a side elevation of stick (partly broken away) with my improved runner applied. Fig. 3 is a top view of same. Fig. 4 is a side elevation. Fig. 5 is a transverse section through stick below notch. Fig. 6 is a side elevation of lever; Fig. 7, a perspective of spring, and Fig. 8 a like view of catch-pin.

My invention has relation to umbrella-runners of that class in which a locking-lever is employed.

My improvements have for their special object to simplify the construction, reduce the expense, and increase the efficiency of the device.

My improvements consist in the peculiar construction and combinations of parts hereinafter referred to, having reference, principally, to the following points: first, to constructing the sleeve from a plate having lugs or projections on two of its edges, said plate being folded or bent to form a slotted tube, with the lugs thrown out to form bearings for the locking-lever; second, to the retracting-spring for the lever, which is made of a piece of wire bent into the peculiar form hereinafter set forth; third, to the combination, with the sleeve, of the spring fastened to said sleeve by means of lugs or lips struck up from the latter and bent over or clamped on the ends of said spring; fourth, to the combination, with the umbrella sleeve or slide and notch, of a lever having two heads or catches on the upper side of the fulcrum of said lever and between said fulcrum and notch.

Referring to the accompanying drawings, A represents a plate of metal, of the shape substantially as shown, its two sides, a , being of less length or extent than a line parallel therewith through the middle of the plate, extending from the side a' to the opposite side, a^2 .

Said plate is bent or folded to form a tube, B, having a slot, b , extending the complete length. Said slot is formed by bending the plate so that the edges a do not meet, but are slightly apart and parallel. The metal adjacent to said edges is struck up or thrown out, so as to form flanges b' , which are radial, or nearly so, to the tube. These flanges form supports for the locking-lever and its retracting-spring, as hereinafter fully described.

The lever is shown at C, having its fulcrum at c , said fulcrum consisting of a pin having bearings in the flanges b' , as shown. Said lever is formed with a thumb-piece, c' , at one end and two heads or catches, c^2 c^3 , respectively, both of said heads being on the same side of the fulcrum of the lever. The runner has a notch, D, and the lever is arranged so that both its heads shall be below this notch, or on the same side of the latter.

E represents a retracting-spring of approximately U form, having two sides, e , and a cross-piece, e' , uniting said sides. The sides e are preferably formed with return-pieces e^2 , made by bending said sides backwardly at or about their middles. The ends or sides of the spring E are secured to the slide B, the cross-piece e' passing under the lever C, just back of or below the fulcrum, the tendency and operation of the spring being to throw the opposite end of the lever, or that carrying the heads c^2 c^3 , down or inwardly toward the stick F, inside of the runner. To fasten the spring in place, the slide is provided with lugs or lips b^2 , formed by cutting U-shaped slits in the plate A, as shown at a^3 , and striking up or pushing out the metal to produce projecting lugs, which are bent over upon the sides e , or their return-bends e^2 , clamping the same firmly in position, as shown. By this method of fastening the expense of soldering or of riveting is avoided, while increased security is obtained.

G G' represent catch-pins in the stick—one near the handle of the latter, the other near the opposite end of the stick. These pins consist of shanks g , with triangular heads g' , of approximately V shape, as shown. When the umbrella is closed the pin G enters the slot b and is engaged by the head c^2 of the lever C. To facilitate the entrance of the pin to said slot the latter is flared, as shown, this shape being produced by round-

ing the corners of plate A, as shown at $a^4 a^4$. When the umbrella is opened the pin G' enters the slot b and engages with the head c^3 of lever C. An opening, d , is made in the notch D for the passage of the pin, and to facilitate entrance to this notch the latter is made flaring. The notch-opening is of course in alignment with the slot b in the tube B, and with the lever C, located over said slot. To prevent the lever from bearing on the stick and scratching the latter when the runner is moved up and down, said lever projects sufficiently forward to have its free end rest upon the notch D.

To operate the runner, the lever is depressed by pressure on the thumb-piece, lifting the opposite end of said lever off the notch and raising the head, then in engagement with the catch-pin, above said pin. The runner is then moved up or down, accordingly as it is desired to open or close the umbrella. The locking of the lever on the catch-pins is effected automatically by the entrance of the pins (one at a time of course) to the slot b and the engagement thereof with the lever.

It will be noted that the manipulation of the runner is similar to that of a common runner—that is to say, there is a depression by the thumb, then a sliding movement of the runner and an automatic locking.

What I claim as my invention is—

1. An umbrella-slide having a longitudinal slot, b , extending its entire length, the metal adjacent to the edges of the slide being bent radially outward, whereby bearings or supports are afforded for a locking-lever, said supports being integral with said slide, substantially as set forth.

2. The combination, with an umbrella slide and notch, of a lever having two catches or heads, said lever being fulcrumed on said slide, and having both its heads between its fulcrum and the notch, substantially as shown and described.

3. The combination, with an umbrella slide and notch, of a lever having two catches or heads on the same side of its fulcrum, said lever having a support on said notch, and said heads being located between the notch and lever-fulcrum, substantially as shown and set forth.

4. The combination, with the slide B and lever C, of the spring E, of U-shaped or approximate form, having its sides attached to the slide, its cross-piece passing beneath the lever, substantially as shown and described.

5. The combination, with an umbrella-slide, B, and a lever, C, carried thereon, of a spring, E, secured to said slide by lugs or lips struck up from the metal of said slide, substantially as shown and set forth.

6. The combination of sleeve B, having radial flanges $b' b'$, locking-lever C, having two heads or catches, $c^2 c^3$, spring E, secured under or in lips or struck-up portions of said sleeve, notch D, having flaring opening d , and catch-pins $G G'$, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of June, 1882.

JAMES BERNARD WILSON.

Witnesses:

ANDREW ZANE, Jr.,
WILL H. POWELL.