

(No Model.)

W. D. STILLMAN.

UMBRELLA SUPPORT.

No. 369,971.

Patented Sept. 13, 1887.

Fig. 1.

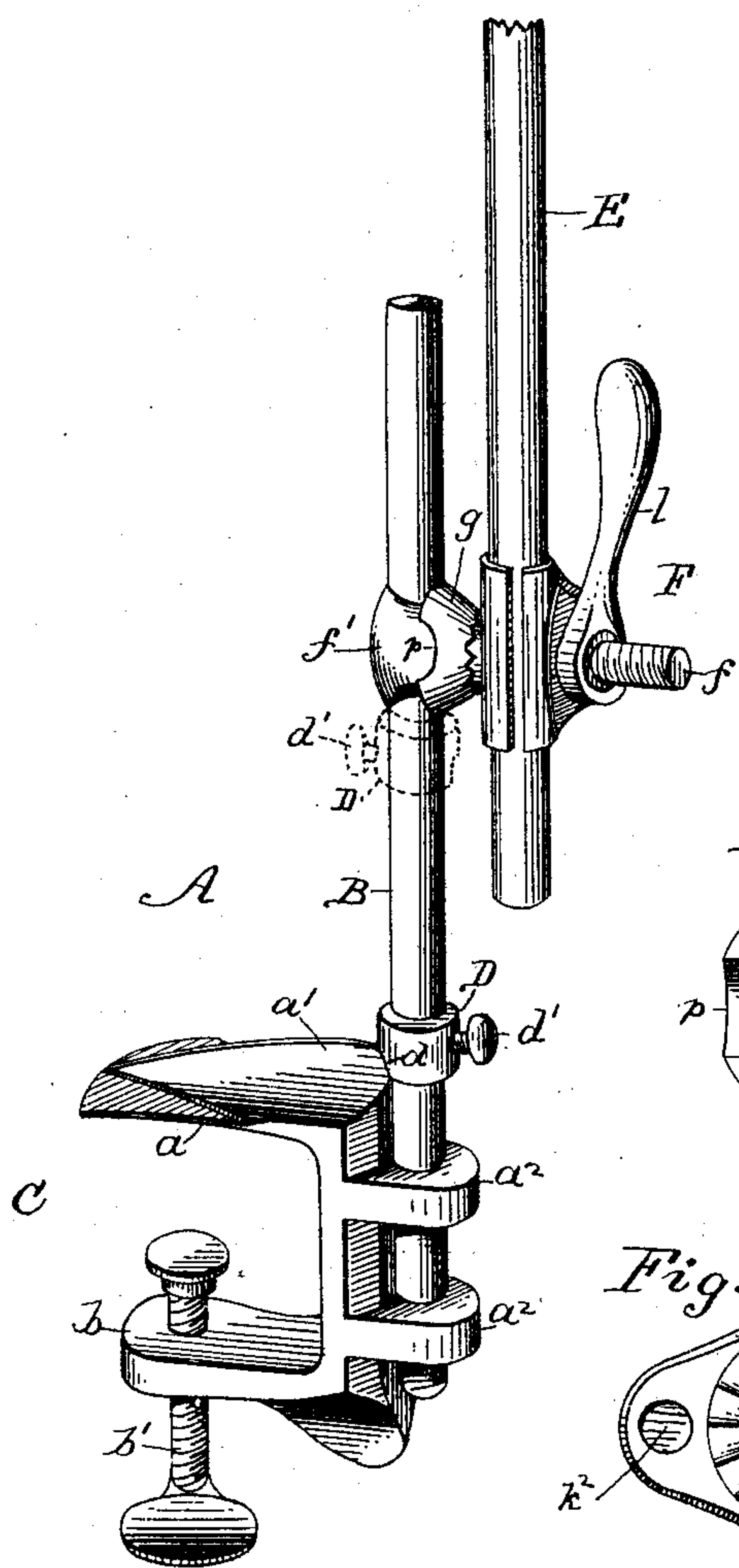


Fig. 2.

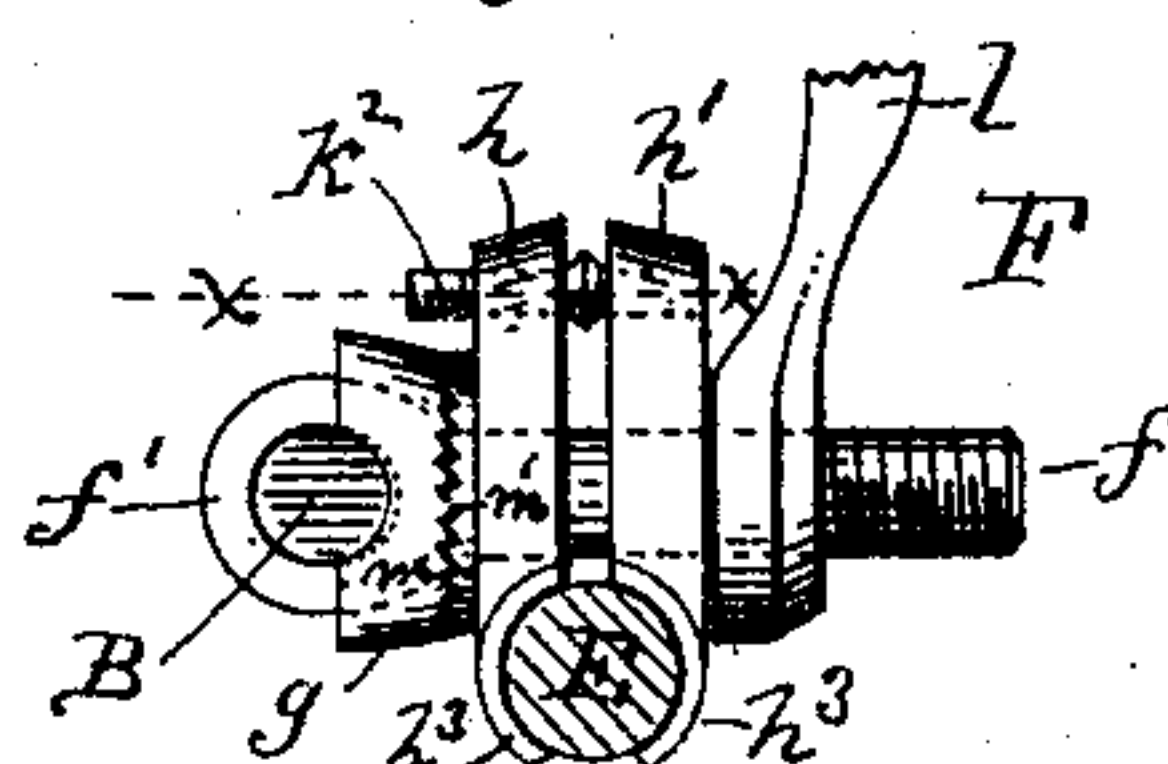


Fig. 3.

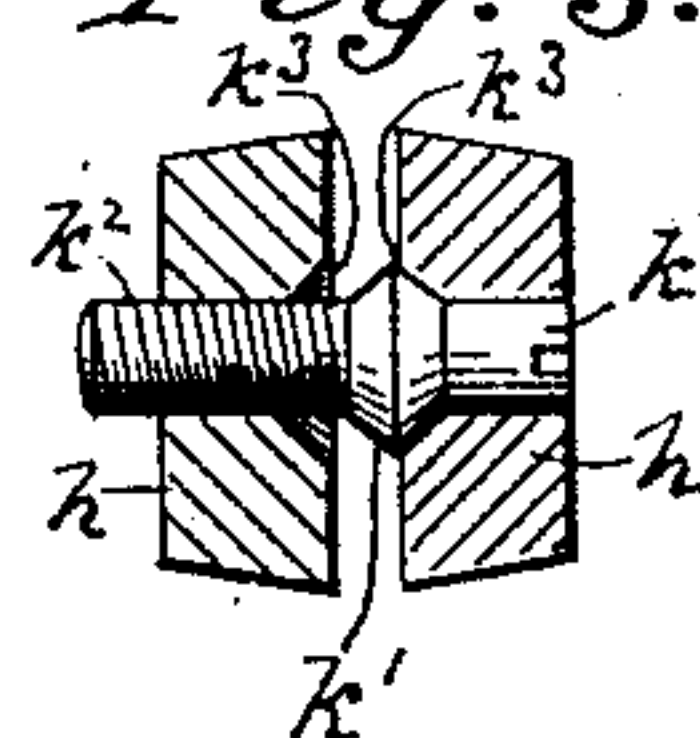


Fig. 4.

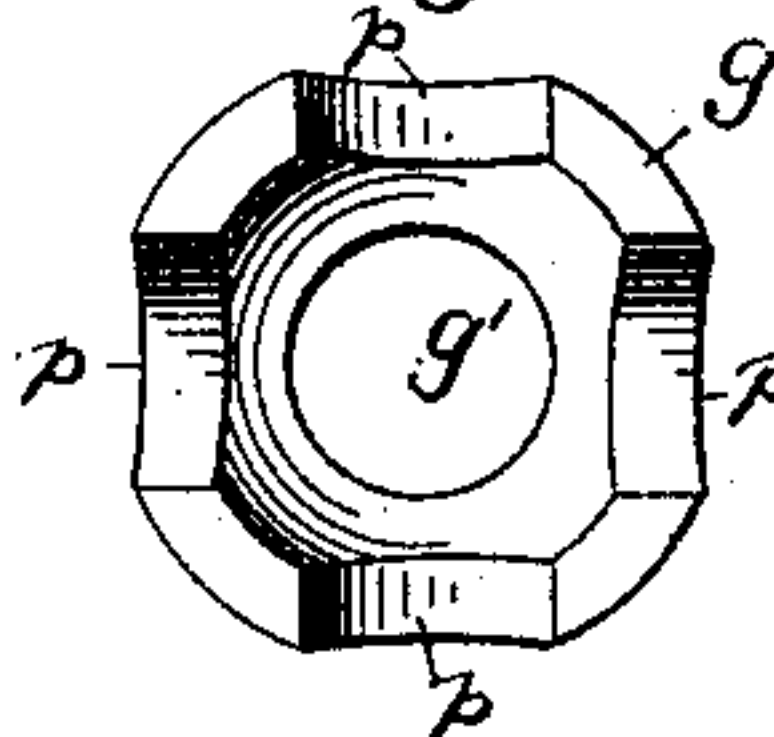


Fig. 5.

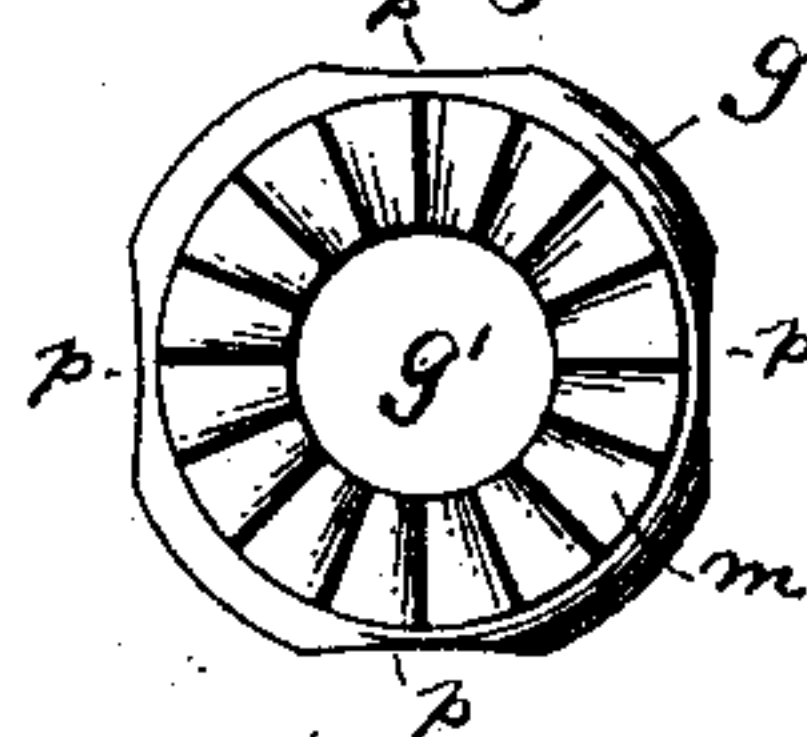


Fig. 4. B

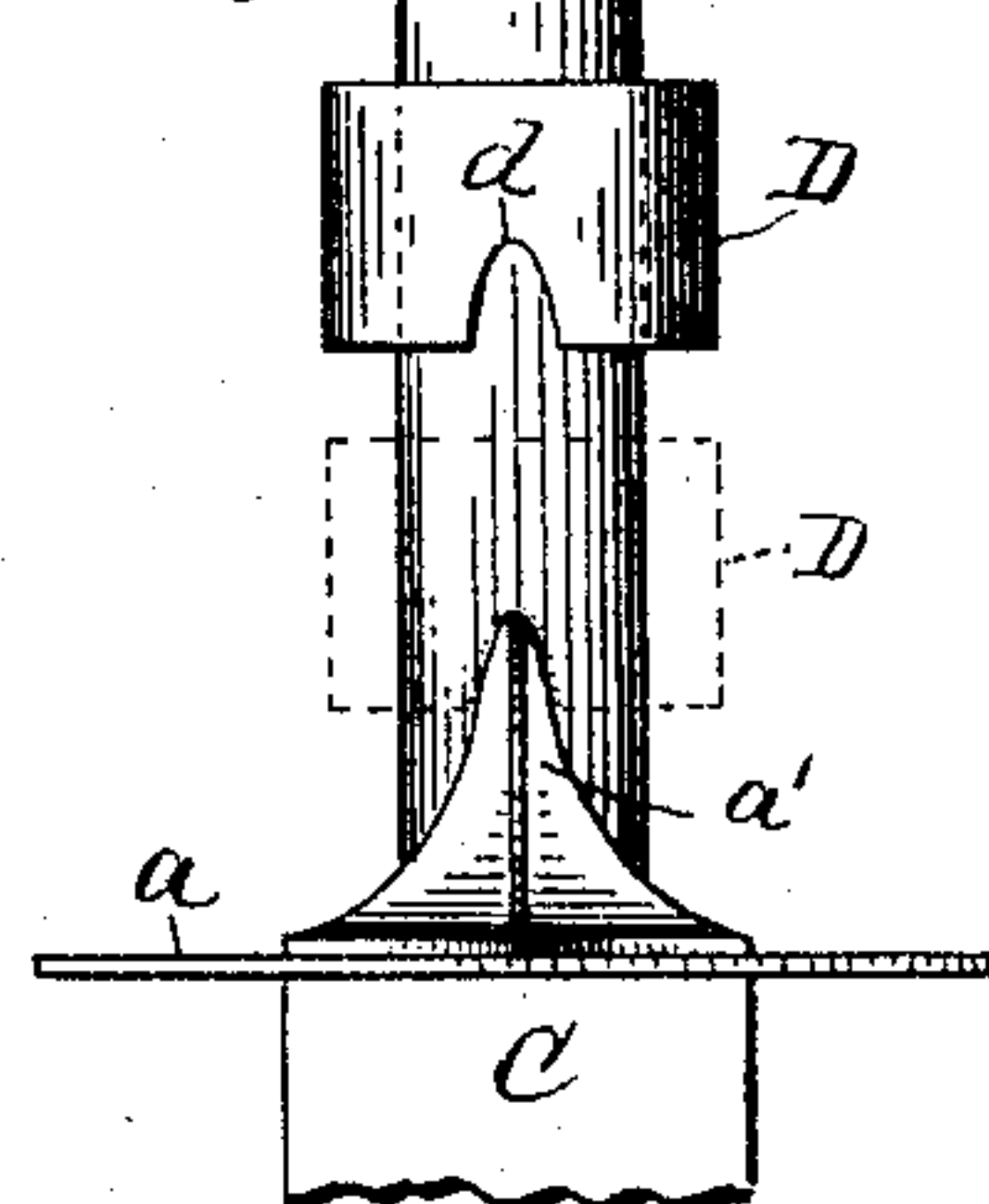
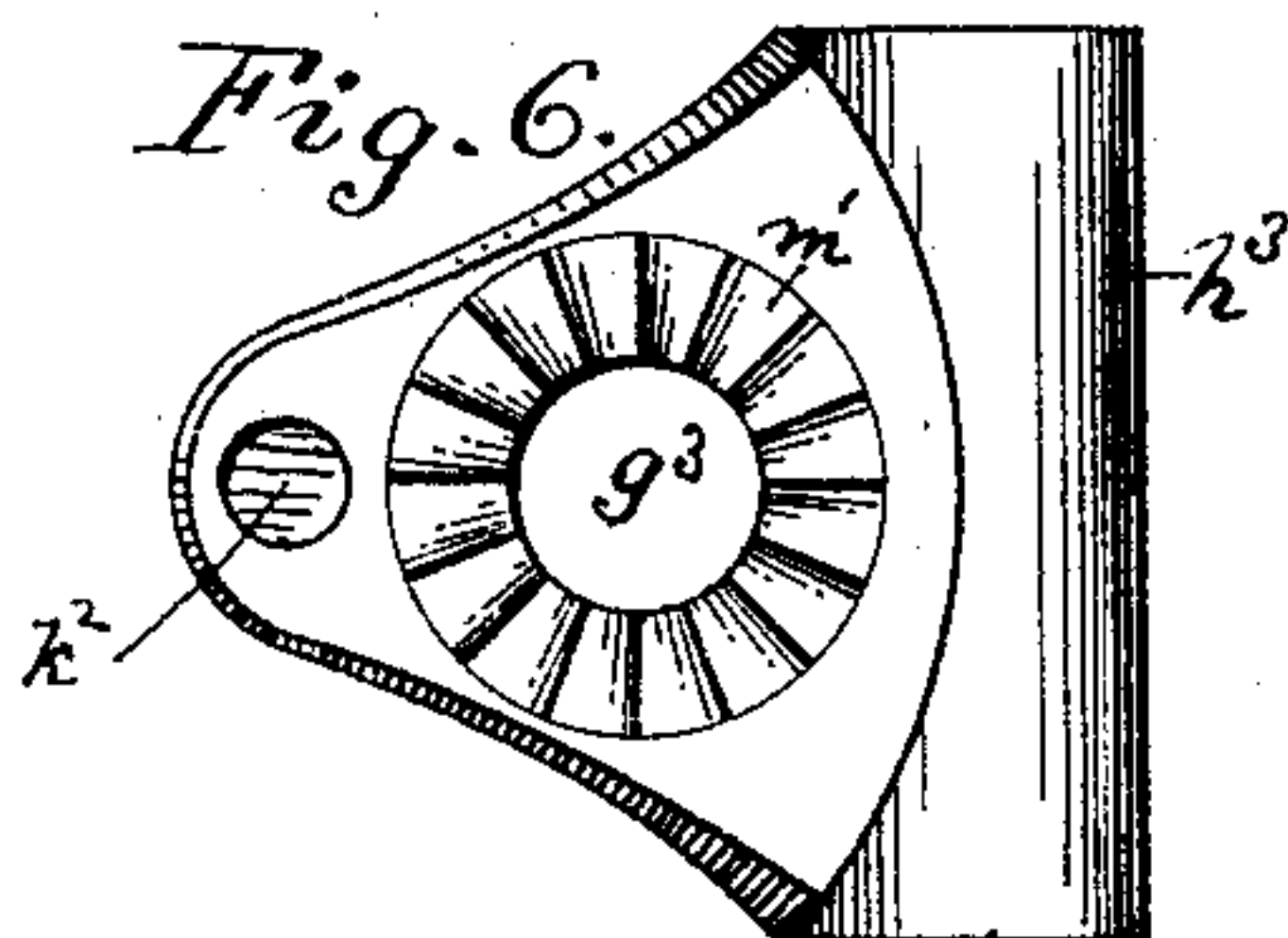


Fig. 6.



Witnesses
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UMBRELLA-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 369,971, dated September 13, 1887.

Application filed May 21, 1887. Serial No. 238,959. (No model.)

To all whom it may concern:

Be it known that I, WILLETT D. STILLMAN, a citizen of the United States, residing at Madison, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Umbrella-Supports; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to umbrella-supporters which are temporarily attached to chairs or other seats, and which allow the umbrella to be adjusted to any desired height or to any desired angle of inclination.

The object of my invention is to furnish a device that will allow the umbrella to be adjusted as desired more perfectly and conveniently than has heretofore been done; and it consists in the novel construction and combination of certain mechanical devices, as hereinafter described.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of an umbrella-supporter. Fig. 2 is a top view of the upper clamping device. Fig. 3 is a section on line *x x* of Fig. 2. Figs. 4, 5, 6, and 7 are detail views.

Similar letters refer to the same parts in all the views.

A is the standard, consisting of the following parts: an ordinary clamp, C, provided with two fixed jaws, *a* and *b*, the latter provided with the usual binding-screw, *b'*, the former having a vertical strengthening-rib, *a'*, adapted to give, in combination with collar D and rod B, certain novel results, which will be hereinafter more particularly described. Rod B passes through two lugs, *a*², at the back of clamp C, and is screwed into the lower lug.

D is a collar adapted to slide freely up or down rod B, and is provided with a slot, *d*, adapted to pass over and embrace the inner end of rib *a'*, as shown in Figs. 1 and 7 in full and dotted lines, respectively.

d' is a set-screw to secure collar D on rod B at any desired place.

F is the upper clamping device. It consists

of the following parts: a supporting-bolt, *f*, screw-threaded at one end and provided with a perforated globular head, *f'*, which slides freely upon rod B, and a conical washer, *g*, of novel construction, its inner surface being of semi-globular form adapted to fit loosely over the back portion of head *f'*, as shown in Figs. 2 and 4. On the front face of this washer *g* are four nearly semicircular recesses, *p*, which are in pairs and diametrically opposite each other, as clearly shown in Fig. 4, to fit snugly, not tight, against rod B, and on its inner face are teeth *m*, which engage with teeth *m'* on the outside of the inner clamping-jaw, *h*.

g' is a central perforation in washer *g* to allow it to slide freely upon bolt *f*.

h h' are two clamping-jaws perforated at *g'*, Fig. 6, also to slide freely upon bolt *f*.

*h*³ *h*³ are semicircular tubular parts of jaws *h h'*, within which is secured the umbrella-staff E.

k is an adjusting-screw to adapt the tubular parts of the jaws of clamp F to different sizes of umbrella-staffs. Screw *k* is provided with a double conical head, *k'*, nearly midway of its length, and screw-threaded at its longer end, *k*², as seen in Fig. 3. The jaws *h h'* are perforated near one end for the reception of this adjusting-screw *k*, jaw *h* being screw-threaded for the reception of the screw-threaded end *k*². The inner faces of both jaws *h h'* are countersunk, as at *k*³, for the reception of head *k'* of screw *k*, as shown in said Fig. 3.

l is a screw-lever upon the screw-threaded end of the supporting-bolt *f*, as shown.

The operation of my device is as follows: To adjust the height of the upper clamping device, F, I loosen thumb-screw *d'* of collar D and slide said collar to the required height on rod B, as shown in dotted lines in Fig. 1 and in full lines in Fig. 7, and secure it there temporarily. Collar D in this position forms a rest for the upper clamping device, F, and the umbrella, as shown in Fig. 1. The screw-lever *l* may now be loosened, so as to allow supporting-screw *f* to be rotated to any position required. To change the inclination of staff E from the perpendicular to any angle, I turn lever *l* backward sufficiently to permit teeth *m* and *m'* to become disengaged. Then jaws *h h'*, with staff E, may be revolved on screw *f* to the desired angle. To admit a larger staff

E, unscrew the adjusting-screw *k* until the larger staff can be admitted. The double conical head *k'* forms an abutment to keep the jaws *h h'* as wide opened as may be desired.

5 It will be seen from the above that the conical washer *g*, provided with its four semicircular recesses, *p*, on its outer and radial teeth *m* on its inner face, in combination with teeth *m'* of jaw *h*, possesses the triple function of, 10 first, permitting motion of staff E from the vertical position to any required angle; second, of rotary horizontal motion, and, third, of firmly holding the umbrella in the position placed by tightening up lever *l*. After the 15 umbrella has been secured in the desired position collar D is released from its temporary position (shown in dotted lines in Fig. 1) and secured in its usual normal position near the lower end of rod B, with its slot *d* in en- 20 gagement with rib *a'*. In this position it prevents rod B from being unscrewed, thus answering the purpose of a binding-nut on the lower end of rod B, simplifying and reducing the cost of my device.

25 Having thus described my invention, what I claim is—

1. In an umbrella-supporting device, the adjusting-screw *k*, provided with a double conical head, *k'*, about midway of its length, and screw-threaded at one end, in combina- 30 tion with clamping-jaws *h h'*, as herein shown and set forth.

2. The collar D, provided with a set-screw, *d'*, and a slot, *d*, in combination with rod B and rib *a'* of clamp C, as and for the purposes 35 herein shown and described.

3. In an umbrella-supporter, the conical washer *g*, having semicircular recesses *p* in its outer end, and radial teeth *m* on its inner end, in combination with rod B and jaw *h*, pro- 40 vided with teeth *m*, as herein set forth.

4. The combination of the umbrella-staff, holding-jaws *h h'*, adjusting-screw *k*, supporting-screw *f*, washer *g*, and screw-lever *l*, with rod B of standard A, as herein set forth. 45

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

WILLETT D. STILLMAN.

Witnesses:

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