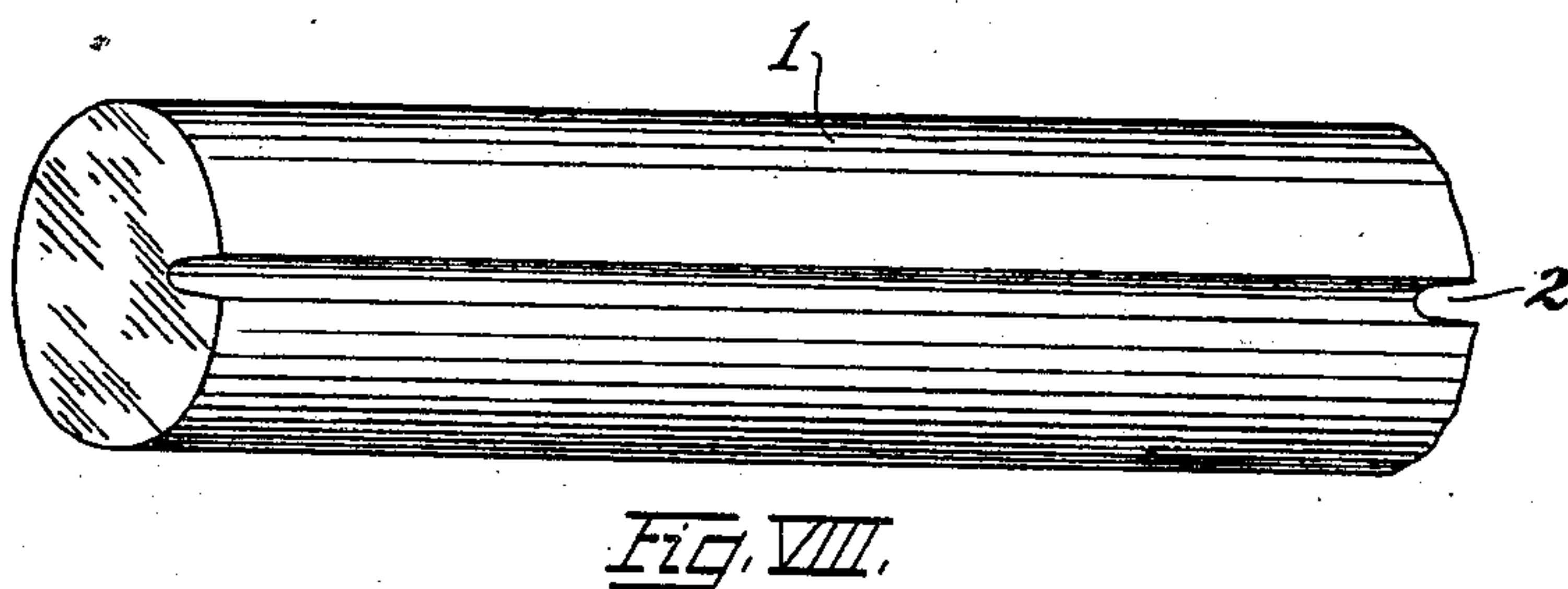
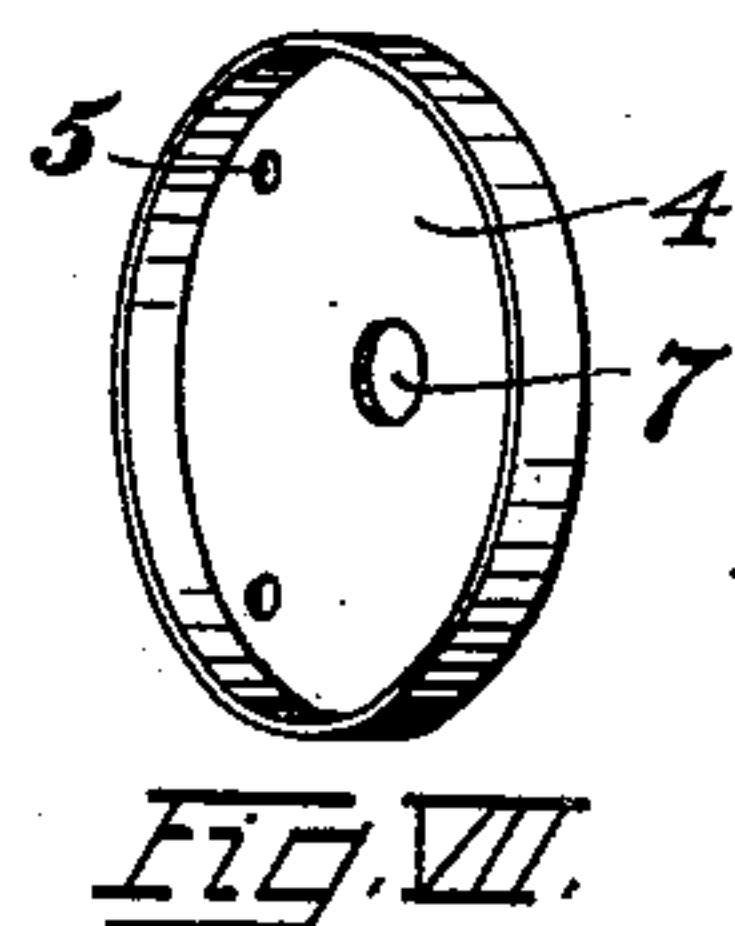
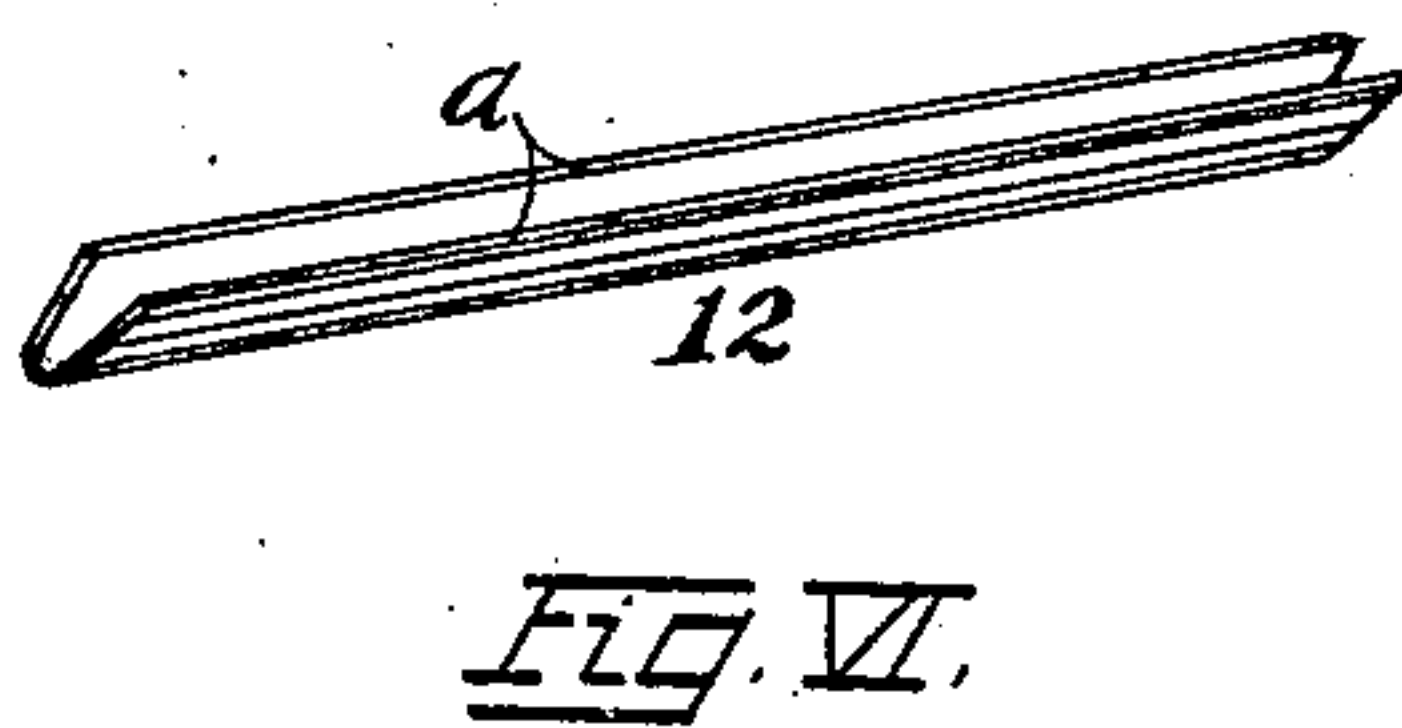
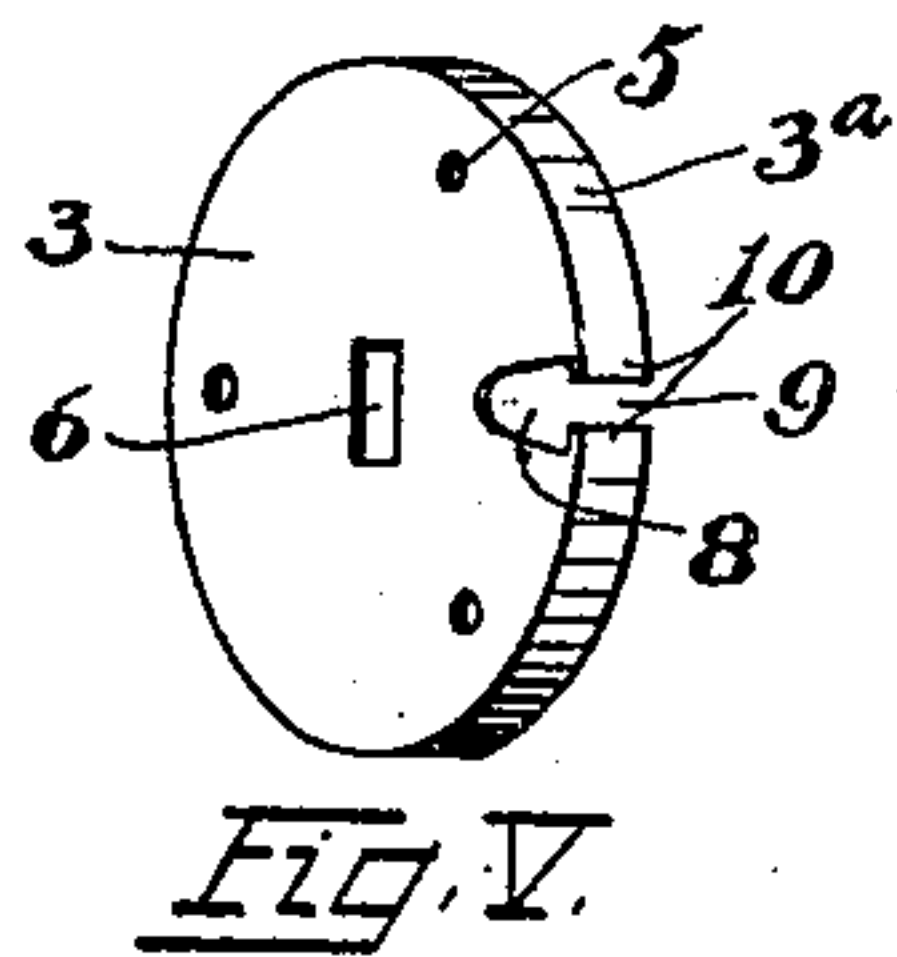
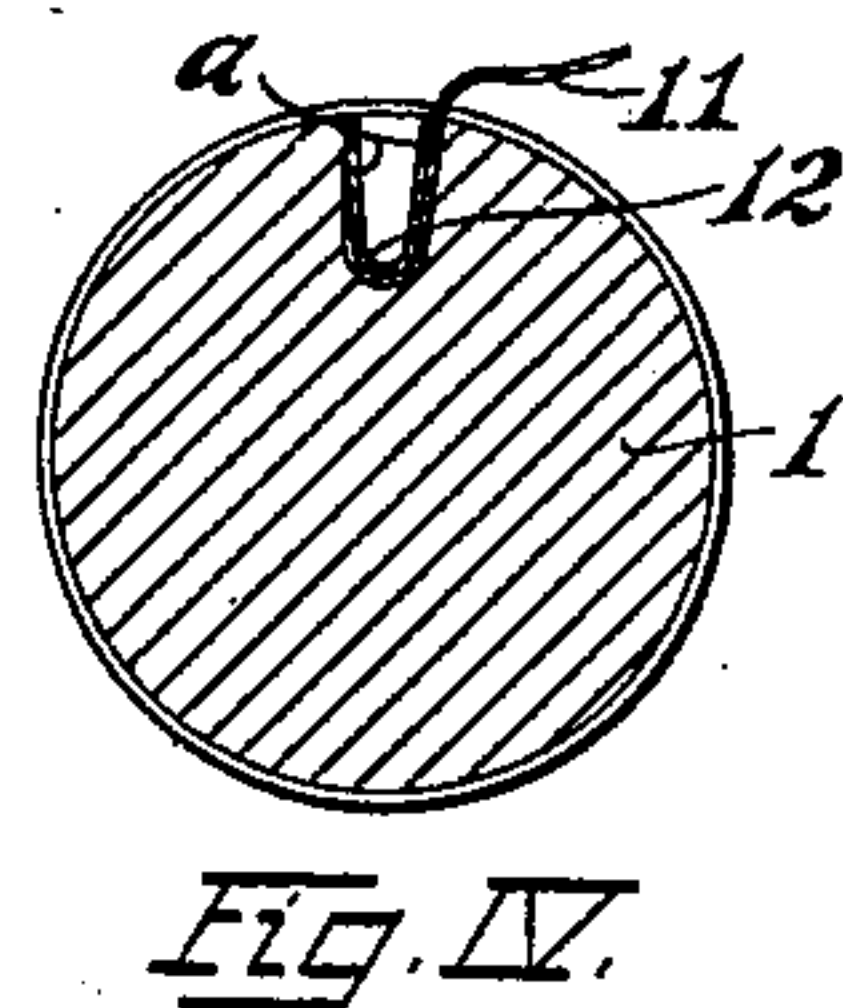
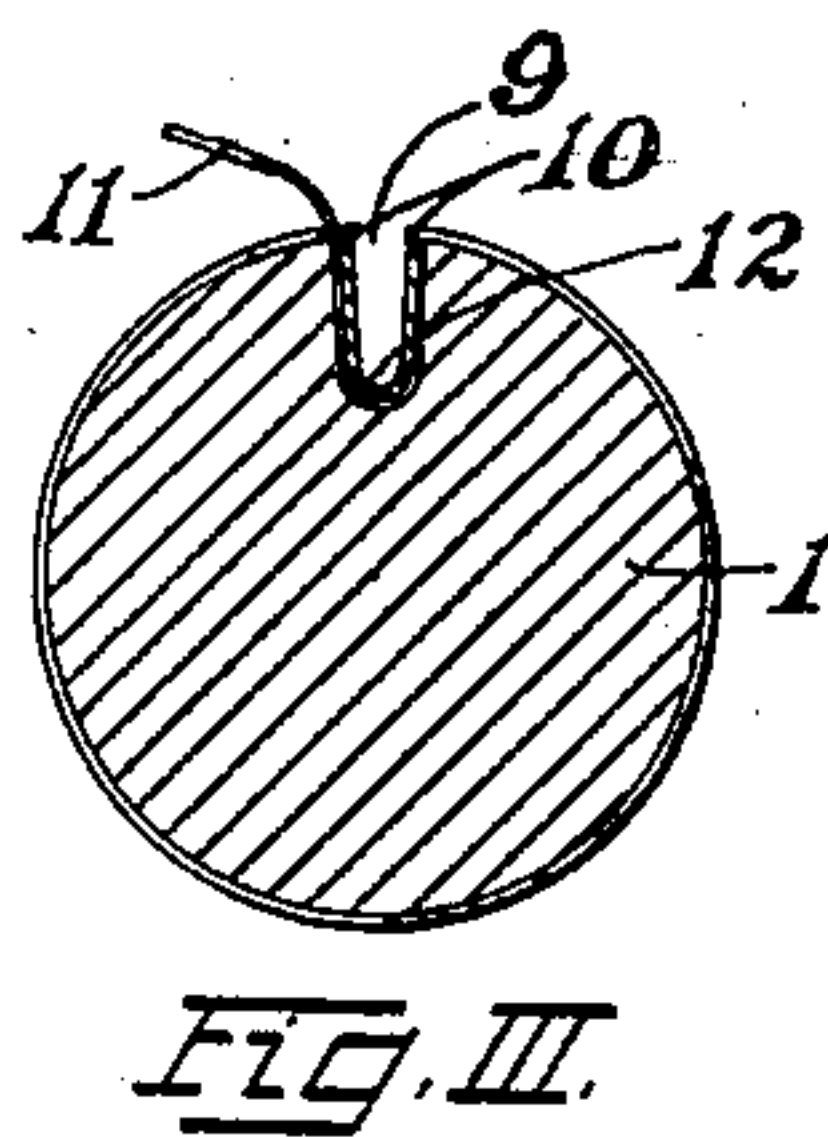
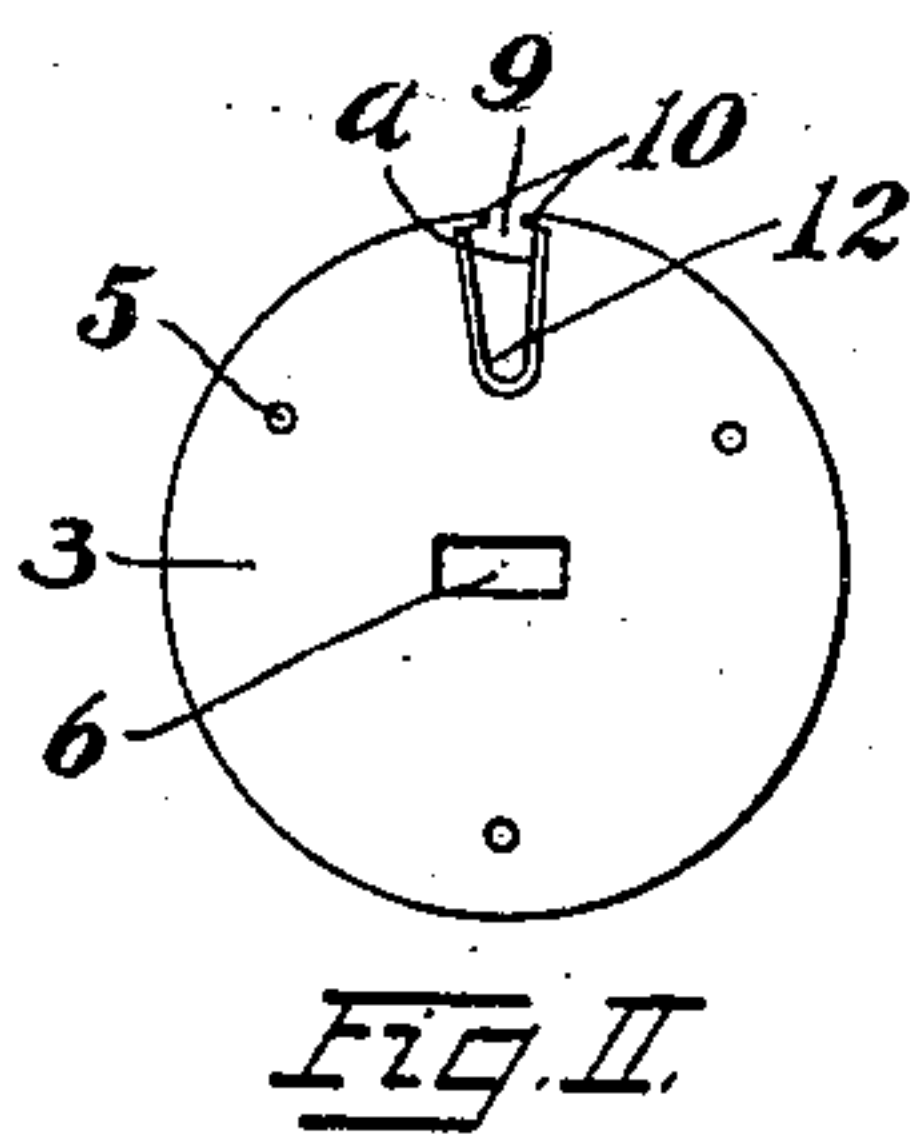
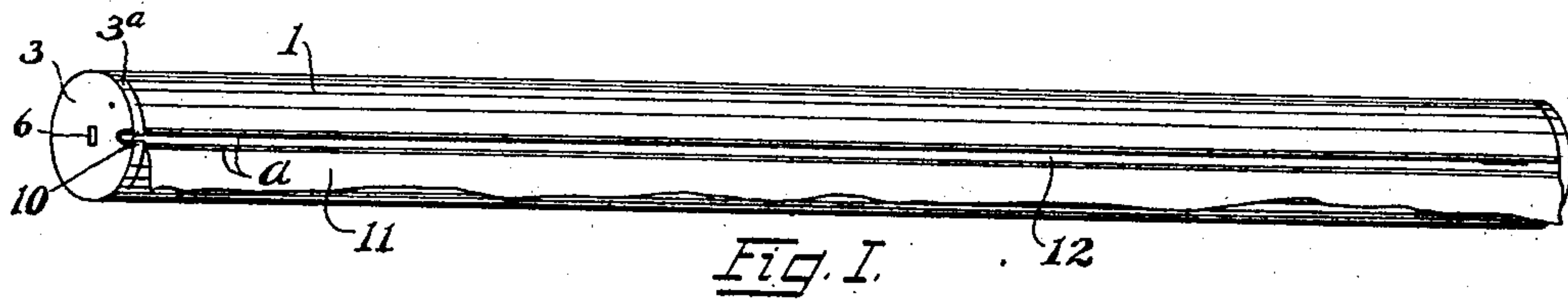


No. 886,400.

PATENTED MAY 5, 1908.

E. E. PALMER.
SHADE ROLLER.

APPLICATION FILED JULY 18, 1907.



Witnesses:
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UNITED STATES PATENT OFFICE.

EDWARD E. PALMER, OF WOOSTER, OHIO.

SHADE-ROLLER.

No. 886,400.

Specification of Letters Patent.

Patented May 5, 1908.

Application filed July 16, 1907. Serial No. 384,107.

To all whom it may concern:

Be it known that I, EDWARD E. PALMER, a citizen of the United States, residing at Wooster, in the county of Wayne and State of Ohio, have invented certain new and useful Improvements in Shade-Rollers, of which the following is a specification.

My invention relates to improvements in shade-rollers, and more particularly, to shade-roller attaching means whereby the curtain or shade, proper, may be readily and conveniently attached and secured to or detached and removed from any ordinary spring-actuated shade-roller, without the use of tacks, nails etc.

The present embodiment of the invention is designed with special reference for use in connection with a shade-roll spring-actuated mechanism constructed substantially as shown and described in my application for Letters Patent filed June 22, 1907, S. No. 380,246, and the primary object of the invention is to provide a generally-improved device of this class which will be exceedingly simple in construction, cheap of manufacture and efficient in use.

Another object is to provide an attaching-device which will not only uniformly bind and secure the upper marginal end of the shade, proper, to the roller, and permit the former to be readily and quickly adjusted with reference to the latter, but will permit the roller to be revolved in either direction, the shade being adapted to be wound about the roller equally as well in one direction as in the other.

With these ends in view, the invention consists in the novel construction, arrangement, and combination of parts, hereinafter described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims.

Referring to the drawings, forming a part of this specification, Figure 1, is a perspective view of the improved shade-roller, with shade or curtain attached. Fig. 2, an end view of the actuating-shaft end of the same, with shade removed. Figs. 3, and 4, are sectional views of the same with shade attached. Fig. 5, a perspective view of an end-cap designed to be mounted on the end of the roller adjacent to the actuating mechanism thereof. Fig. 6, a perspective view of the shade-attaching channel-spring-bar, of substantially U or V-shape in cross section. Fig. 7, a perspective view of the end-cap designed to be mounted

on the pintle end of the shade-roller. Fig. 8, a perspective view of the shade-roller, stripped of its attachments and provided with a longitudinally-extending grooved-recess, of substantially U-shape in cross section, for receiving and containing the shade-attaching channel-spring-bar.

Similar characters of reference designate like parts throughout all the figures of the drawings.

The improved device comprises the usual roller 1, provided with a longitudinally-extending grooved-recess or kerf 2, of substantially U-shape in cross section, formed in its periphery and; preferably, extending throughout the entire length thereof.

Flanged end-caps 3, and 4, are designed to take over the ends of the rollers and be secured thereto by means of the usual retaining-nails or tacks (not shown) passing through openings 5, of the cap bodies and into the respective ends of said roller. The end-cap 3, mounted upon the end of the roller, adjacent to the roller-actuating mechanism, is provided with a central opening 6, to receive the actuating-shaft (not shown) and the end-cap 4, mounted upon the pintle end of the roller, is provided with a central opening 7, to receive the axle-bearing-pin or pintle (not shown). The body portion of the end-cap 3, is provided with a substantially U-shaped recess-opening 8, in its periphery (see Fig. 5), and, preferably, registering and flush with the grooved-recess 2, of the roller, terminating at its upper or outer end in a recess-opening 9, of less width, in the rim or flanged portion 3^a, of the end-cap, thus forming oppositely-disposed retaining-flanges 10. The sides of the grooved-recess 2, and recess-opening 8, preferably extend or flare outwardly as shown, and the upper or attached marginal end 11, of the shade, proper, is designed to be secured to the roller and be properly positioned and adjusted with respect thereto by having one end placed in the grooved-recess 2, and clamped or pinched therein by means of an impinging shade-attaching channel-spring-bar 12, of substantially U or V-shape in cross section, normally resting and seated within the grooved-recess 2. One end of the spring-bar 12, is designed to take under and be retained by the rim or flanged portion of the end-cap 4, the sides "a", or spring-members, of the channel-spring-bar being adapted to be sprung toward each other when pressed into the

grooved-recess 2, the free ends of the spring-members "a", at the other or opposite end of the bar 12, being adapted to snap into engagement or take under the retaining-flanges 5 10, when pressed through the recess-opening 9, of the rim or flanged portion 3^a, of the end-cap 3.

From the foregoing description, taken in connection with the accompanying drawings, 10 the operation and advantages of my invention will be readily understood.

Having thus described my invention, without having attempted to set forth all the forms in which it may be made, or all the 15 modes of its use, I declare that what I claim and desire to secure by Letters Patent, is,—

1. A shade-roller, comprising a roller provided with a longitudinally - extending grooved-recess, flanged end-caps mounted 20 thereon one of said caps being provided with a recess - opening registering with said grooved-recess and overhanging retaining-flanges on its rim or flanged portion, and an approximately U-shaped shade-attaching- 25 spring-bar mounted in said grooved recess one end taking under the flanged portion of one of said caps and the other being engaged by said retaining-flanges.

2. A shade-roller, provided with a grooved-

recess extending throughout its length, 30 flanged end-caps mounted thereon one of said caps having its rim or flanged portion provided with a recess-opening and retaining-flanges overhanging said grooved-recess, and a U-shaped spring-bar mounted in said 35 grooved-recess and having one of its ends normally engaged by said retaining-flanges.

3. A shade-roller, comprising a roller provided with a grooved-recess, flanged end-caps mounted thereon one of which is provided with a recess-opening registering with 40 said grooved-recess and terminating in a smaller recess-opening in the rim portion of the cap, said rim portion being also provided with oppositely - disposed overhanging- 45 flanges above the end of said grooved-recess, and a channel spring-bar mounted in said grooved-recess and having one of its ends secured under the flanged or rim portion of one of said end-caps and the other secured 50 under said retaining-flanges of the rim portion of the other or opposite end-cap.

In testimony whereof I have affixed my signature, in presence of two witnesses.

EDWARD E. PALMER.

Witnesses:

MORTON LEVY,
CLIFFORD L. BELT.