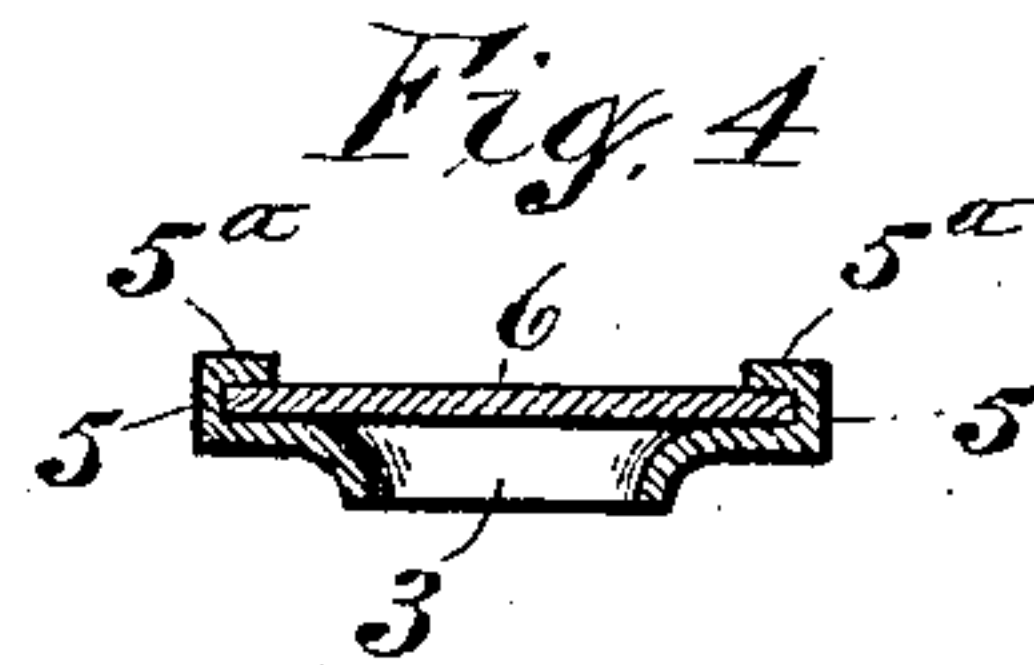
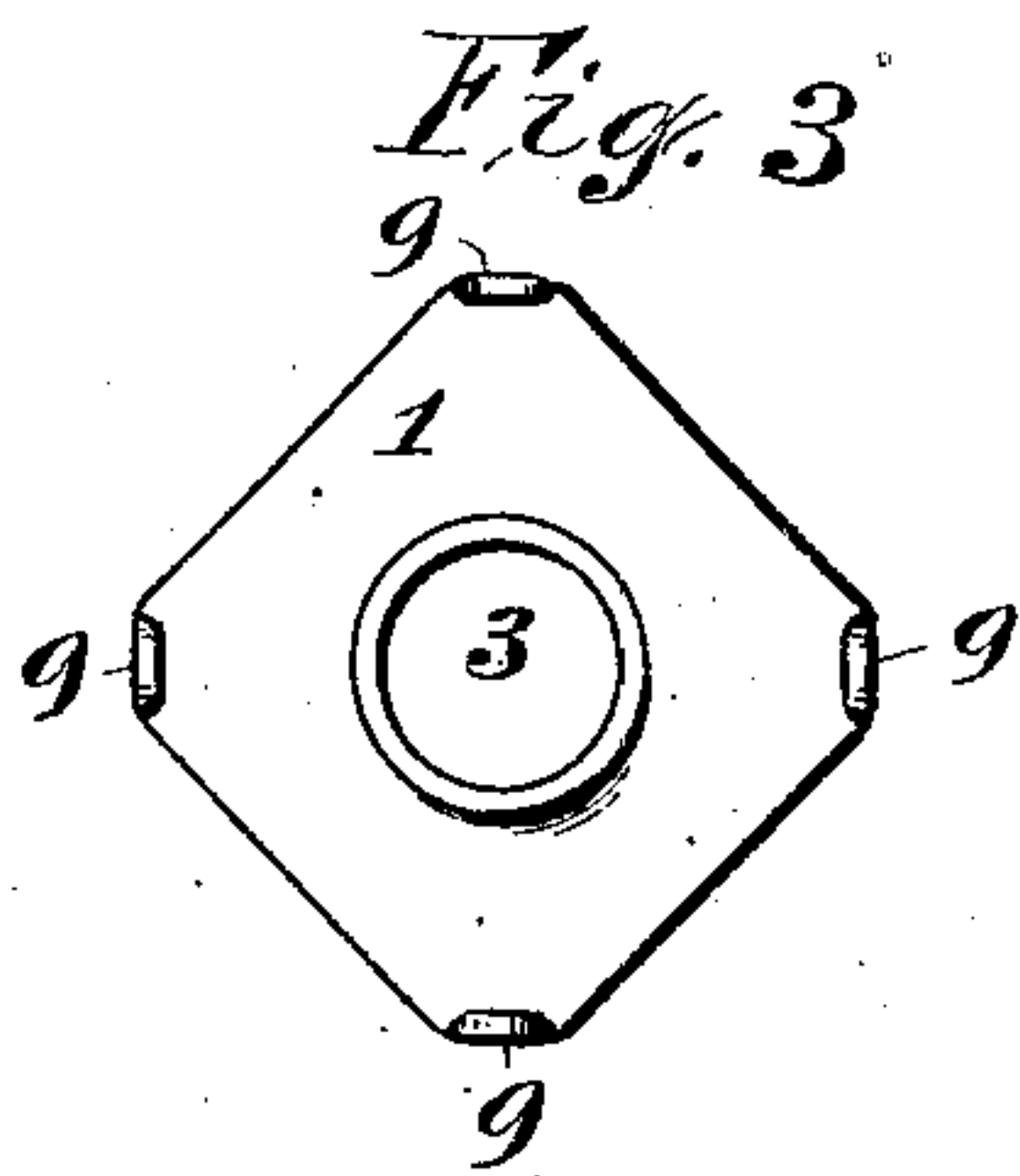
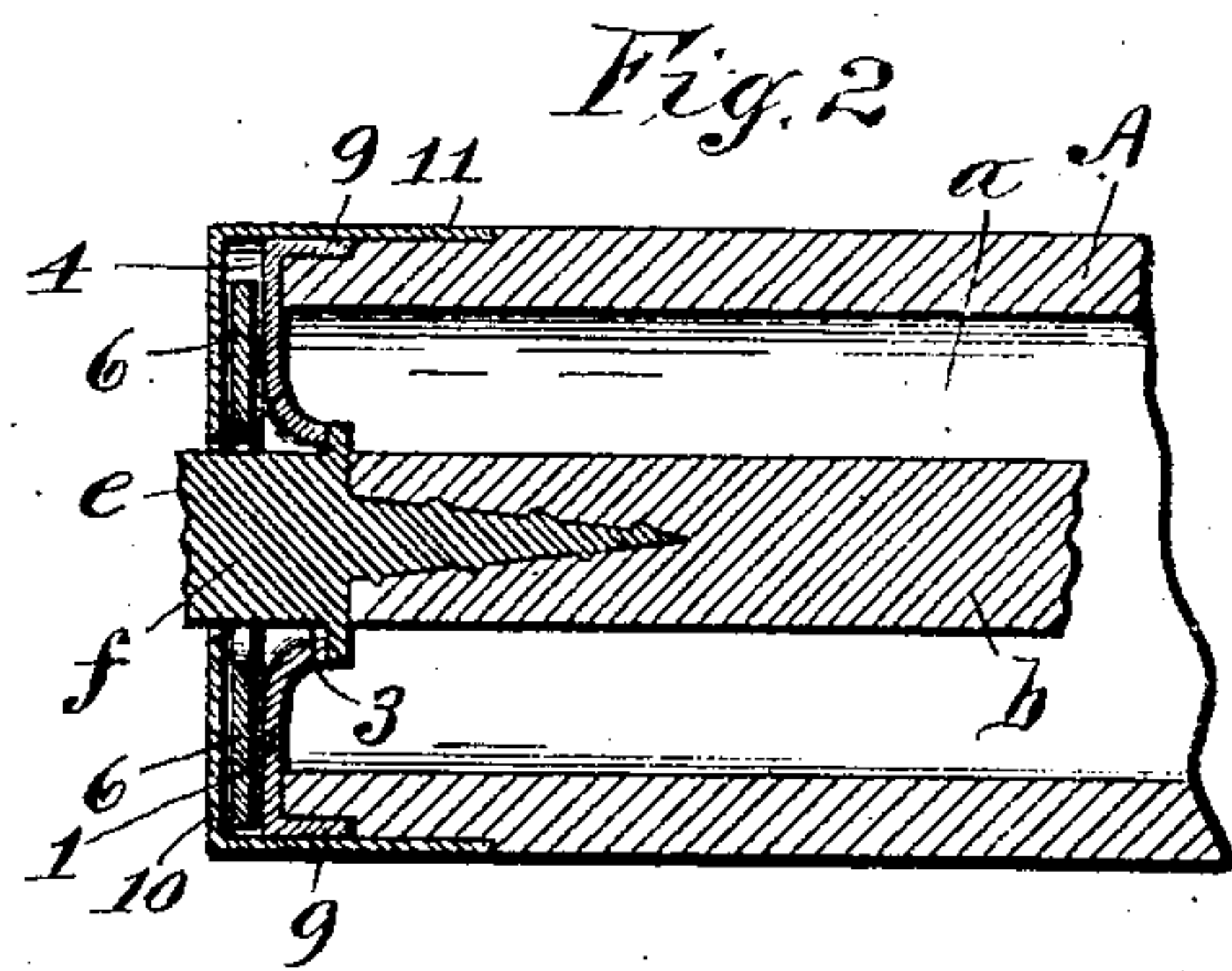
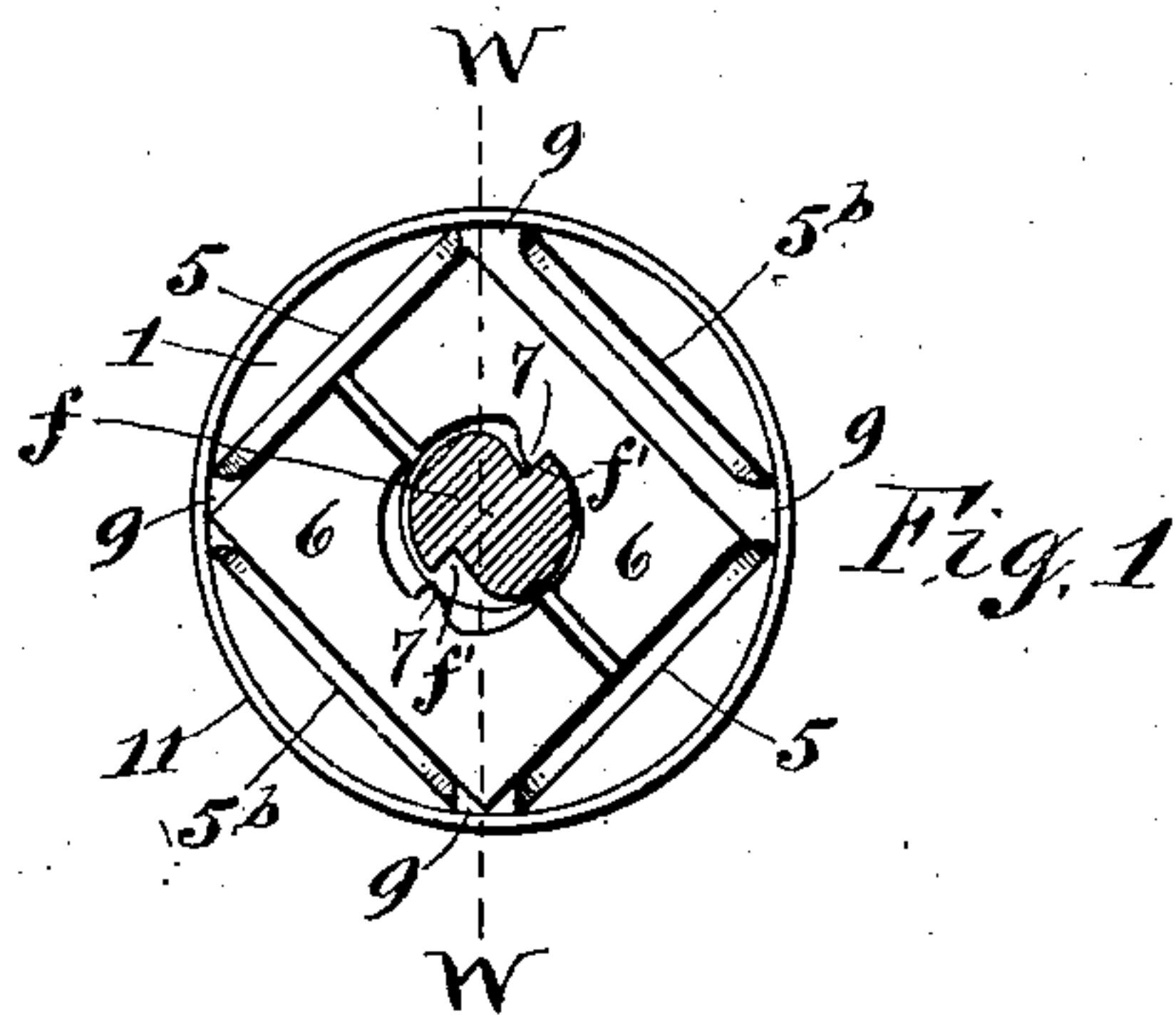


J. V. WASHBURNE.
SHADE ROLLER ATTACHMENT.
APPLICATION FILED SEPT. 4, 1907.

912,636.

Patented Feb. 16, 1909.



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UNITED STATES PATENT OFFICE.

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SHADE-ROLLER ATTACHMENT.

No. 912,636.

Specification of Letters Patent.

Patented Feb. 16, 1909.

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To all whom it may concern:

Be it known that I, JAMES V. WASHBURN, a citizen of the United States, and resident of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Shade-Roller Attachments, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention is designed to be applied to the class of shade-rollers which are actuated to automatically wind up the shade by means of a spiral spring surrounding a stationary spindle and connecting said spindle to the roller.

The object of this invention is to furnish to the trade a shade-roller attachment which shall be composed of a minimum number of separately formed parts, of simple construction which are very conveniently and compactly assembled and readily secured to the roller equipped with the stationary spindle. And to that end the invention consists in the improved construction and combination of the component parts of the shade-roller attachment hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a face view of my improved means for supporting the catch-plates of the shade-roller; Fig. 2 is a longitudinal section on the line —W—W—; Fig. 3 is an inner face view of the catch-plate supporting disk; and, Fig. 4 is a transverse section of a modified form of said disk.

—A— represents the spring-actuated shade-roller which is formed hollow as shown at —a—, and has arranged in it the spindle —b—, which, by means of a suitable spring connecting it to the roller, causes the said roller to wind up the shade in the usual manner.

—e— denotes the so-called spear which is attached to the end of the spindle —b— and is formed with a hub —f— provided with notches —f¹—f¹— and terminated in a flattened portion engaging the adjacent supporting bracket of the roller in the well known manner.

My present invention consists in the improved construction and combination of the component parts of the roller-controlling devices which are as follows, to wit:

—1— represents a disk which is formed from sheet metal and secured stationary directly on the end of the roller —A— as

hereinafter described and is provided with a central aperture —3— for receiving through it the flattened end portion —g— and the notched part of the hub —f— of the spear —e—. The outer face of said disk is formed with a flat bed —4— on which are seated the slidable catch-plates —6— each of which is formed with a tooth —7— which is shaped to engage one at a time the notches —f¹— in the hub —f— of the spear —e—.

To guide the catch-plates in their movements to and from the spear and to enable said plates to more effectually resist the strain received from the spear when interlocked therewith, I form the disk —1— with elongated guides adjacent to the side edges of the catch-plates and with stops for limiting the movement of said plates from their engagement with the spear —e—. Said guides and stops consist of flanges —5—5— and —5^b—5^b— which consist of marginal portions of the disk bent at right angles from the face thereof and forming the boundaries of the disk and the four walls of the square or rectangular bed —4—. To retain the catch-plates on said bed I form the two guide flanges —5—5— with lips —5^a— projecting inwardly from said flanges as shown in Fig. 4.

To cause the disk to obtain a firm and secure grip on the roller so as to effectually prevent said disk from turning and slipping circumferentially on the roller, I provide the edges of said disk with calks —9—9— projecting from the inner side of the disk, preferably at the ends of the flanges —5—5^b— and piercing the face of the roller, as shown in Fig. 2. I form the said calks from the marginal portions between the ends of the flanges —5— and —5^b— which intermediate marginal portions I bend at right angles from the plane of the disk and in opposite directions from the said flanges as shown in Fig. 5. It will be observed that the disk —1— with its flanges —5— and —5^b— and calks —9—9— is readily stamped from a thin sheet of metal and is simple and inexpensive to manufacture.

The pierced portion of the roller is reinforced by means of a ferrule —11— which firmly embraces said portion of the roller and extends beyond the same to grip the body of the roller as shown in Fig. 2.

The outer end of said ferrule is extended and formed with a cap —10— to shield the disk —1— and catch-plates —6—.

It will be observed that the component parts of the shade-roller attachment herein described and shown are simple and inexpensive in construction, adapted to be stamped out of sheet metal, and very conveniently and quickly assembled.

What I claim as my invention is:

1. As an improved article of manufacture, the within described catch-plate supporting-disk composed of sheet metal and having the guide-flanges formed of marginal portions of the disk bent up at right angles from the plane thereof and constituting part of the boundary of the disk as set forth.
2. As an improved article of manufacture the catch-plate supporting disk having the flat supporting-bed consisting of the main portion of the disk, and the guide walls formed from the two opposite margins of the disk turned up at right angles from the plane thereof and the edges of said margins bent toward each other, all struck up in one piece of sheet metal.
3. As an improved article of manufacture, the catch-plate supporting disk, having the supporting-bed consisting of the main portion of the disk, the guide-walls formed from the two opposite margins of the disk turned up at right angles from the plane thereof, and attaching calks consisting of marginal portions of the disk projecting from the disk in opposite directions from the aforesaid walls, all struck up in one piece of sheet metal.
4. As an improved article of manufacture, the catch-plate supporting disk having the

supporting bed consisting of the main portion of the disk, the guide-walls formed from the entire two opposite margins of the disk turned up at right angles from the plane thereof, and the edges of said margins bent toward each other, and attaching calks consisting of marginal portions of the disk bent to project from the disk in the opposite directions from the aforesaid walls, all struck up in one piece of sheet metal as set forth.

5. As an improved article of manufacture, the within described catch-plate supporting disk having parallel guide flanges and transverse stop flanges at the ends of the parallel flanges, all formed from integral marginal portions of the disk and bent to project from one side thereof and calks formed from intermediate marginal portions of the disk bent to project from the opposite side thereof.

6. As an improved article of manufacture, the within described catch-plate supporting disk having parallel guide flanges, inwardly projecting lips on the edges of said flanges, and transverse stop flanges at the ends of said parallel flanges all formed from integral marginal portions of the disk and bent to project from one side thereof, and calks formed from intermediate marginal portions of the disk bent to project from the opposite side thereof.

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