

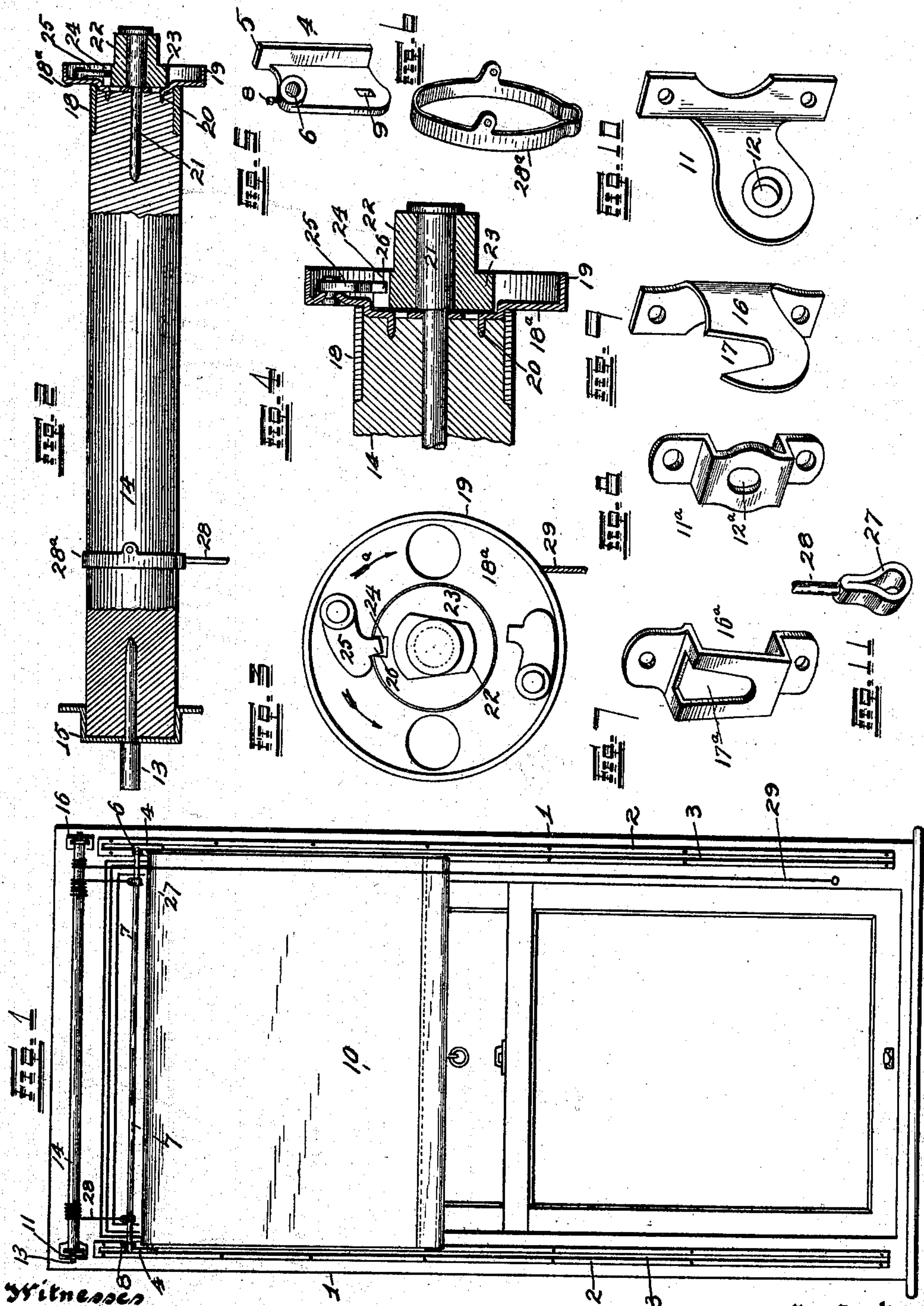
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Patented Aug. 20, 1901.

H. M. STURGIS.
AUTOMATIC DROP FIXTURE FOR SHADES.

(Application filed Apr. 30, 1900.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

HERBERT MARSHALL STURGIS, OF KANSAS CITY, MISSOURI.

AUTOMATIC DROP-FIXTURE FOR SHADES.

SPECIFICATION forming part of Letters Patent No. 681,005, dated August 20, 1901.

Application filed April 30, 1900. Serial No. 14,952. (No model.)

To all whom it may concern:

Be it known that I, HERBERT MARSHALL STURGIS, of Kansas City, Jackson county, State of Missouri, have invented certain new and useful Improvements in Automatic Drop-Fixtures, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

10 This invention relates to automatic drop-fixtures; and it consists of the novel construction, combination, and arrangement of parts, hereinafter shown, described, and claimed.

15 Figure 1 is a front elevation of a window, showing my improved automatic drop-fixture in use. Fig. 2 is a side elevation of a rod made use of in carrying out my invention. Fig. 3 is an end view of the same. Fig. 4 is a sectional view of one end of the rod and 20 showing the arrangement of the different parts. Fig. 5 is a perspective view of a sliding bracket, the function of which is to uphold one end of the shade-roller. Fig. 6 is a view in perspective of a ring made use of in my invention and which is mounted around the adjusting-rod. Figs. 7 and 8 are perspec- 25 tive views showing the brackets which I employ to uphold the adjusting-rod within the window-frame. Figs. 9 and 10 show the brackets which sustain the adjusting-rod in front of the window-frame. Fig. 11 is a perspec- 30 tive view of a clip which constitutes a part of my invention.

Referring to the drawings, 1 denotes the 35 window-frame, upon each side of which is secured a vertical guide-strip 2, the said strips being provided with slots 3, in which operate the sliding brackets 4. Each of the said brackets is provided with an integral portion 40 5, which operates under one side of the strip 2 in which said bracket is carried, thereby preventing the said bracket from becoming in any manner displaced from the vertical path in which it operates. Each of the said 45 brackets is provided at its upper end with a bearing 6, in which bearings is carried a horizontal rod 7, the said rod being rigidly held in the desired adjustment by means of set-screws 8. Near the lower edge of one of the 50 said brackets is a rectangular aperture 9, in which the pin at the spring end of the shade-roller projects, and the opposite bracket is

provided with an annular aperture in which the pin at the opposite end of the said roller is held. By this means the said shade-roller 55 may be rotated in either direction, and the window-shade 10 carried thereby can be raised or lowered by manipulating the said roller in the usual manner. Secured to the upper end of the window-frame is a pair of brackets, the construction of which is shown in 60 Figs. 9 and 10. The bracket 11 is secured to the left-hand side of the window-frame and is provided with an aperture 12, in which the pin 13, secured to the end of the roller 14, is 65 carried, the said pin being free to rotate therein. Upon the end of the roller 14 is secured a metallic cap 15, the purpose of which is to prevent injury to the said roller. The bracket 16 is secured to the right-hand side of the 70 window-frame and is in horizontal alinement with the bracket 11. The said bracket is provided near its forward end with a notch 17, the same being narrower at its lower extremity. Over the right-hand end of the 75 roller 14 is secured a metallic ring or ferrule 18, and secured to the end of the said roller is a plate 18^a, having integral therewith an annular flange 19, and projecting from the said plate are a plurality of tangs 20, the 80 same being forced into the end of the roller, thereby holding the said plate rigidly in position thereon. Rotatably carried on an axial pin 21 is a sleeve 22, the said pin 21 being 85 driven into the end of the roller 14, as shown in Fig. 2. The outer extremity of the sleeve 22 is approximately oval and corresponds in shape to the notch 17, in which the said sleeve rests. The purpose of thus shaping these 90 parts is to provide a grip the power of which is increased in proportion to the increase of weight sustained by the roller 14. The inner portion 23 of the sleeve is annular and is larger than the portion above described and is provided with a notch 24. I secure pawls 25 to 95 the plate 18^a, said pawls being provided with the integral lugs 26, the purpose of which is to engage in the notch 24. By this means the roller is held in any desired adjustment, the sleeve 22 being non-rotatably held in the notch 100 17 and the pawls preventing the roller from rotating.

Upon the rod 7, near each end thereof, is secured a clip 27, and connected to each of

the said clips is a cord 28, the opposite ends of said cords being tied to enlargements of the rings 28^a, mounted around the roller 14, and wound around the said roller in such manner as that their unwinding will cause the roller to rotate in the direction indicated by the arrow in Fig. 3. The rings 28^a are held rigid with the roller 14 by tacks or other suitable fastening devices. This, as may be seen by referring to the drawings, causes the pawl 25 to engage all the more firmly in the notch 24, thereby preventing the curtain-roller from being moved vertically. To move the said roller vertically, it will be necessary to remove the pawls 25 from the notch 24. This is done by means of a cord 29, wound around the roller 14 in a direction opposite from the cords 28. By pulling the cord downwardly the roller 14 will be rotated in the direction indicated by the arrow marked *a* in Fig. 3, and the rear sides of the lug 26 being sloping they will be drawn out of the slot 24. Then the cord 29 is allowed to move through the fingers, and the weight of the curtain-roller will rotate the roller 14, the pawls 25 not having sufficient time to engage in the notch 24 owing to the rapidity with which the roller 14 is rotated. When it is desired to stop the roller 14, it is only necessary to engage the cord 29 and allow the pawl 25 to engage in the notch 24.

In Figs. 7 and 8 are shown modified forms of the brackets shown in Figs. 9 and 10 and which are to be used when it is desired to hold the roller 14 within the window-frame, in these figures the bracket 11^a corresponding to

bracket 11 and the aperture 12^a to aperture 12. The bracket 16^a corresponds to bracket 16 and the notch 17^a to slot 17.

A device constructed in accordance with the above principles is applicable for window-shades, for hanging and adjusting maps, charts, screens, awnings, flags, works of art, &c., and may be used as a display-rack for displaying different kinds of merchandise. In these and other respects the device possesses superior advantages.

I claim—

In a window-shade adjuster, the combination of a roller supported above the window and having two rings 28^a fixed thereon, a string for rotating said roller, pawls for holding the roller when not being rotated by the string, a cord 28 connected to each of said rings 28^a, the two cords being of equal length a vertical guide-strip secured to each side of the window-frame and extending the whole length of the same and having a slot therein, brackets 4 operating in said slots, a rod 7 removably carried by said brackets and having two clips 27 fixed thereon in vertical alinement with the rings 28^a, the lower ends of the cords 28 being connected to the said clips, and a shade-roller supported by the said brackets 4 below the rod 7.

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

HERBERT MARSHALL STURGIS.

Witnesses:

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