

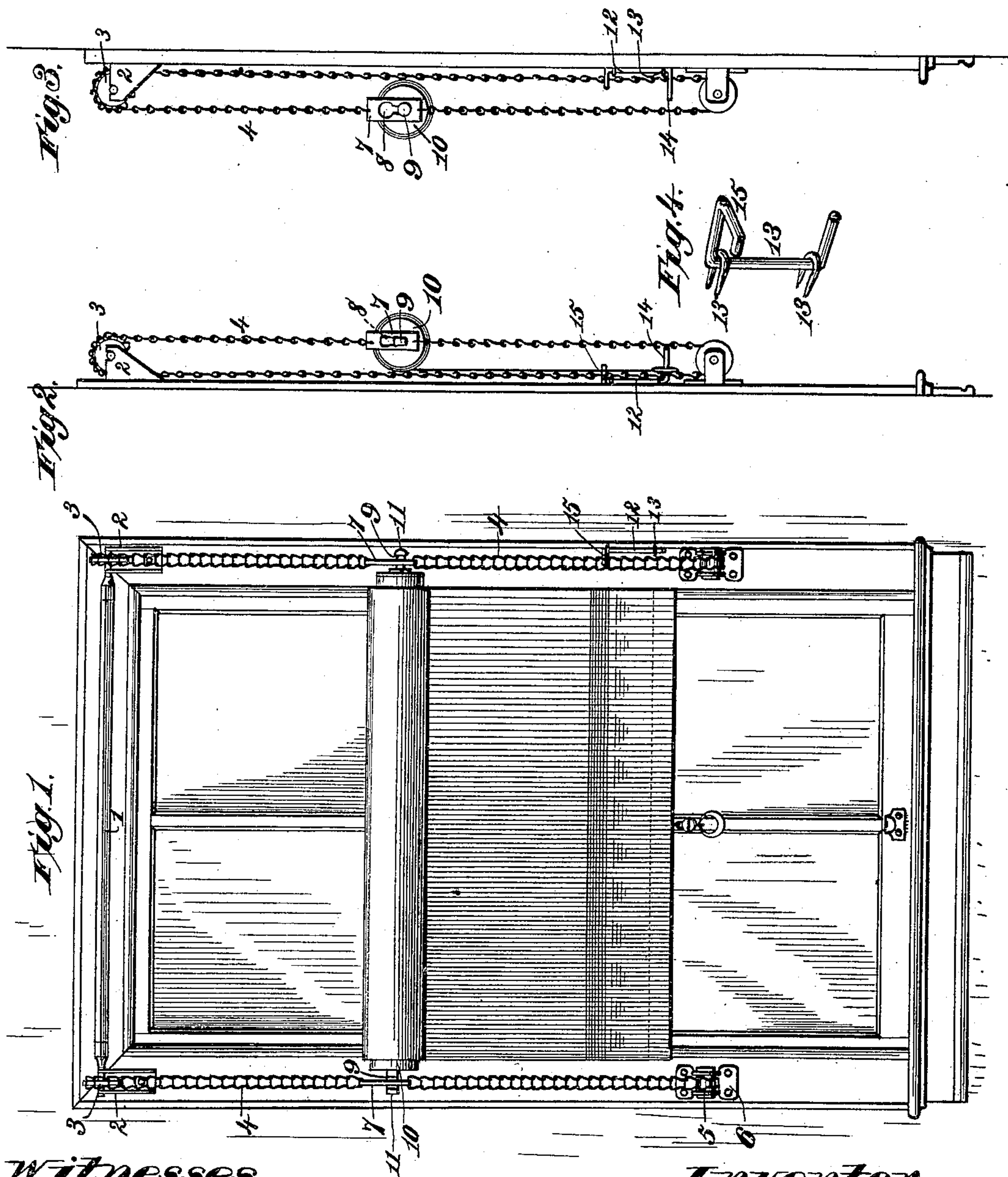
(No Model.)

O. F. MITCHELL.

CURTAIN FIXTURE.

No. 356,369.

Patented Jan. 18, 1887.



Witnesses.
Robert Everett,
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Atty.

UNITED STATES PATENT OFFICE.

OLIVER F. MITCHELL, OF MERRILL, WISCONSIN, ASSIGNOR OF TWO-THIRDS
TO THOMAS B. GALLIGHER AND WILLIAM H. SWINEHART, BOTH OF
SAME PLACE.

CURTAIN-FIXTURE.

SPECIFICATION forming part of Letters Patent No. 356,369, dated January 18, 1887.

Application filed July 19, 1886. Serial No. 208,443. (No model.)

To all whom it may concern:

Be it known that I, OLIVER F. MITCHELL, a citizen of the United States, residing at Merrill, in the county of Lincoln and State of Wisconsin, have invented new and useful Improvements in Curtain-Fixtures, of which the following is a specification.

This invention has for its object to provide novel, simple, and efficient means for supporting and adjusting a window shade or curtain to any desired part of a window, for the purpose of excluding the rays of the sun from any part of the window, admitting light and ventilation either at the upper or the lower end of the window, or at both ends, without liability of injury to the curtain from wind.

The object of my invention I accomplish by the construction and combination of devices hereinafter described and claimed, reference being had to the accompanying drawings, illustrating my invention, in which—

Figure 1 is a front elevation of a window-frame having a shade or curtain roller supported and adjustable according to my invention; Fig. 2, an elevation, looking at one end of the shade-roller; Fig. 3, a similar view, looking at the opposite end of the shade-roller; Fig. 4, a detail perspective view of the pivoted swinging catch and its bearings.

In said drawings, the numeral 1 indicates a shaft journaled at its ends in brackets or bearings 2 at the top of the window-frame, and carrying two attached sprocket-wheels, 3, which, as here shown, are located, respectively, between the side arms of the brackets or bearings. This shaft may be square, round, or of other shape in cross-section, and the brackets or bearings therefor may be of any suitable construction. An endless chain, 4, passes around and engages each one of the sprocket-wheels, and such chains pass around pulleys 5, journaled in bearings 6 at or adjacent to the bottom of the window-frame, at the opposite sides thereof, so that a person drawing on one chain correspondingly moves the other chain through the medium of the sprocket-wheels and shaft.

In place of one or more of the links comprising each chain, I introduce a plate, 7, hav-

ing an orifice, 8, larger at the top than at the bottom, such plates forming the bearings for the journals 9 of the shade-roller 10. I prefer to employ a spring shade-roller of any well-known type, and in order to retain the journals thereof in their bearings and prevent the chains from spreading in a direction away from each other, I provide the ends of the journals 9 with heads 11, which can be introduced through the enlarged ends of the orifices and then moved down into the contracted parts thereof; but, obviously, I may employ shade-rollers other than what are known as "spring-rollers." The shade-roller, being supported by the chains, as described, and carrying the shade or curtain, can be adjusted to any desired part of the window for excluding the rays of the sun from any part thereof, or for admitting light and ventilation either at the top or the bottom of the window, or at both ends.

To adjust the shade-roller to the desired position, one of the chains is grasped and drawn in the proper direction; when the other chain will be moved in unison therewith by the sprocket-wheels and shafts, as before stated, and after the roller is brought to the proper position the shade or curtain can be raised or lowered by the rotation of the roller.

To lock the chains, and thereby hold the shade-roller in its adjusted position, I provide a locking-catch, consisting, as here shown, of a vertical rod, 12, mounted in bearings 13, and provided at one end with a handle, 14, and at the other end with a lateral hook, 15, in such manner that by axially turning the rod the hooked end thereof engages or disengages one of the chain-links.

To prevent lateral displacement of the chains on the sprocket-wheels, it may be found desirable to provide the latter with side flanges to embrace the chains; but I do not regard the same as essential.

I am aware that a single endless chain has been employed to wind and unwind the shade from a shade-roller journaled in brackets at the top of a window-frame; and I am also aware that a shade-roller has been mounted at its ends in plates secured to two endless cords

passing, respectively, over smooth grooved pulleys on the ends of a shaft at the top of a window-frame.

Having thus described my invention, what I claim is—

1. The combination, in a curtain-fixture, of a shaft having at each end a sprocket-wheel, an endless chain engaging each wheel, a shade-roller having its ends supported by the chain-links, and a pivoted springing catch for engaging one of the chains, and through the sprocket-wheels and their shaft holding both chains stationary, substantially as described.

2. The combination, in a curtain-fixture, of a shaft having a sprocket-wheel at each end, an endless chain engaging each wheel, a shade-roller having its ends supported by the chain-links, and a rotating rod having a hook for engaging one of the chain-links, substantially as described.

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

OLIVER F. MITCHELL.

Witnesses:

JNO. R. BABCOCK,
HENRY C. HETZEL.