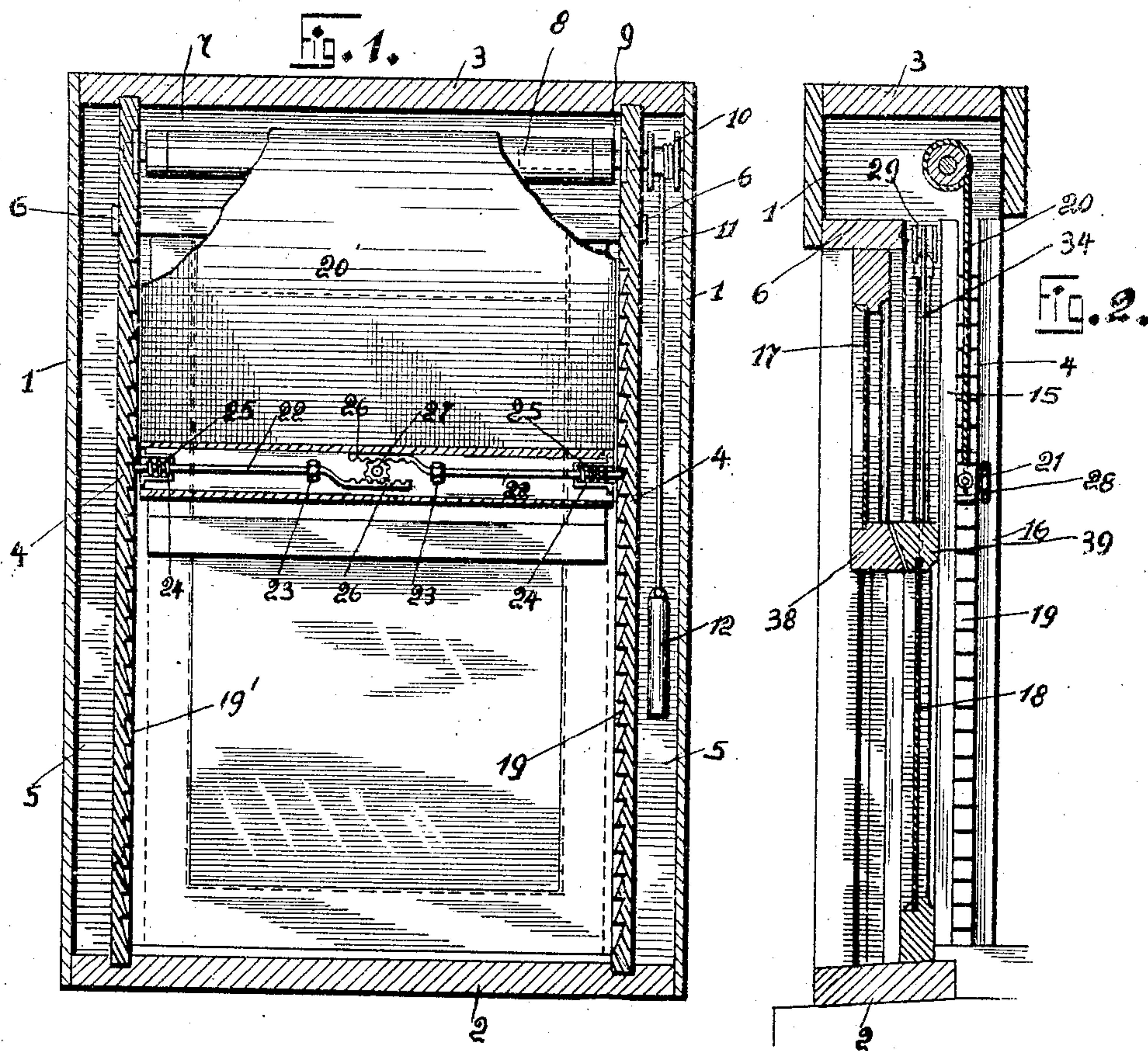


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W. J. HEIM.
WINDOW.

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Witnesses:
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UNITED STATES PATENT OFFICE.

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TO WILLIAM W. LESHER, OF MOSSERVILLE, PENNSYLVANIA.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 786,213, dated March 28, 1905.

Application filed July 18, 1904. Serial No. 217,078.

To all whom it may concern:

Be it known that I, WILLIAM J. HEIM, a citizen of the United States of America, residing at Butler, in the county of Butler and State of Pennsylvania, have invented certain new and useful Improvements in Windows, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has relation to windows, and more particularly to the shades; and the object of this invention is to provide a novel form of window-shade, which is arranged within the frame and may be adjusted to any position desired without interfering with the operation of the sashes carried by the frame.

Briefly described, the parts constituting my invention are constructed and arranged in the following manner: Within the top part of the frame I provide a shade-roller, upon which is secured a shade or screen, and in the jambs of the window I provide racks, in which the locking mechanism carried by the shade or screen is adapted to engage, this locking mechanism being so constructed that the shade or screen may be raised or lowered and locked in any desired position.

All of the above construction will be hereinafter more fully described, and specifically pointed out in the claim.

In the accompanying drawings, Figure 1 is a vertical transverse sectional view of a window-frame, showing my improved shade-curtain mounted therein. Fig. 2 is a vertical sectional view of the window-frame as constructed in accordance with my invention.

To put my invention into practice, I construct a frame which comprises side boards 1 1, a sill 2, and a top board 3. Between the top board and the sill of the frame are mounted jambs 4 4, which form weight-wells 5 5, and between the jambs 4 4, and preferably near the top of the frame, is a horizontal partition 6. This partition forms a compartment 7, and in the compartment is mounted, between the jambs 4 4, a shade-roller 8, the shaft 9 of which protrudes through one of the jambs into the weight-well 5 and carries on its protruding

end a pulley 10, to which is attached a rope 11, carrying a weight 12. Upon each of the jambs 50 is mounted a weather-strip 15, and mounted between the jambs 4 4 are the sashes 17 18. The reference-numerals 19 19' indicate racks, which are formed integral with the jambs 4 4.

Upon the roller 8 is mounted a shade or 55 screen 20, which carries upon its lower end a casing 21, this casing extending the entire width of the shade or screen, and is preferably made rectangular in shape. Within the casing is mounted a locking mechanism, which 60 comprises rods 22 22, these rods being slidably mounted in brackets 23 23, and bushings 24 24, the bushings being carried in each end of the casing, and in these bushings are mounted springs 25 25, one end of the spring being at- 65 tached to the rod, while the other end thereof is attached to the bushing. The ends of the rods, which extend inwardly, pass through brackets 23 23 and are bent out of alinement with the rest of the rod, as clearly illustrated 70 in Fig. 1 of the drawings. On the confronting faces of the ends of these rods 22 22 are formed teeth 26 26, which are adapted to mesh with the pinion or star-wheel 27, that is rotatably mounted within the casing 21, and the 75 shaft of this wheel or pinion extends outwardly upon the one side of the casing and has connected to its end a knob 28. To adjust the curtain, the knob 28 is rotated, imparting a rotary movement to the wheel or pinion, and 80 as this wheel meshes with the teeth carried by the rods 22 22 each rod will be drawn inwardly, compressing the springs 25 25, and when the ends of the rods 22 22 have become disengaged from the racks 19 19' the weight 12, mounted 85 in one of the weight-wells 5, will descend, revolving roller 8 and causing the same to wind the curtain or screen thereon. Upon the knob being released the springs 25 25 expand, forcing the ends of the rods 22 22 into engagement 90 with the rack.

What I claim is—

The combination with a window-frame, of racks provided with inclined ratchet-teeth and carried by the jambs of said frame, a curtain- 95 shade mounted in said frame, means for auto-

5 matically raising said shade, and locking mechanism carried by said shade and adapted to engage said racks, said locking mechanism comprising horizontally-disposed spring-pressed rods having teeth on their inner ends, a pinion engaging said teeth and a knob attached to said pinion.

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

WILLIAM J. HEIM.

Witnesses:

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K. H. BUTLER.