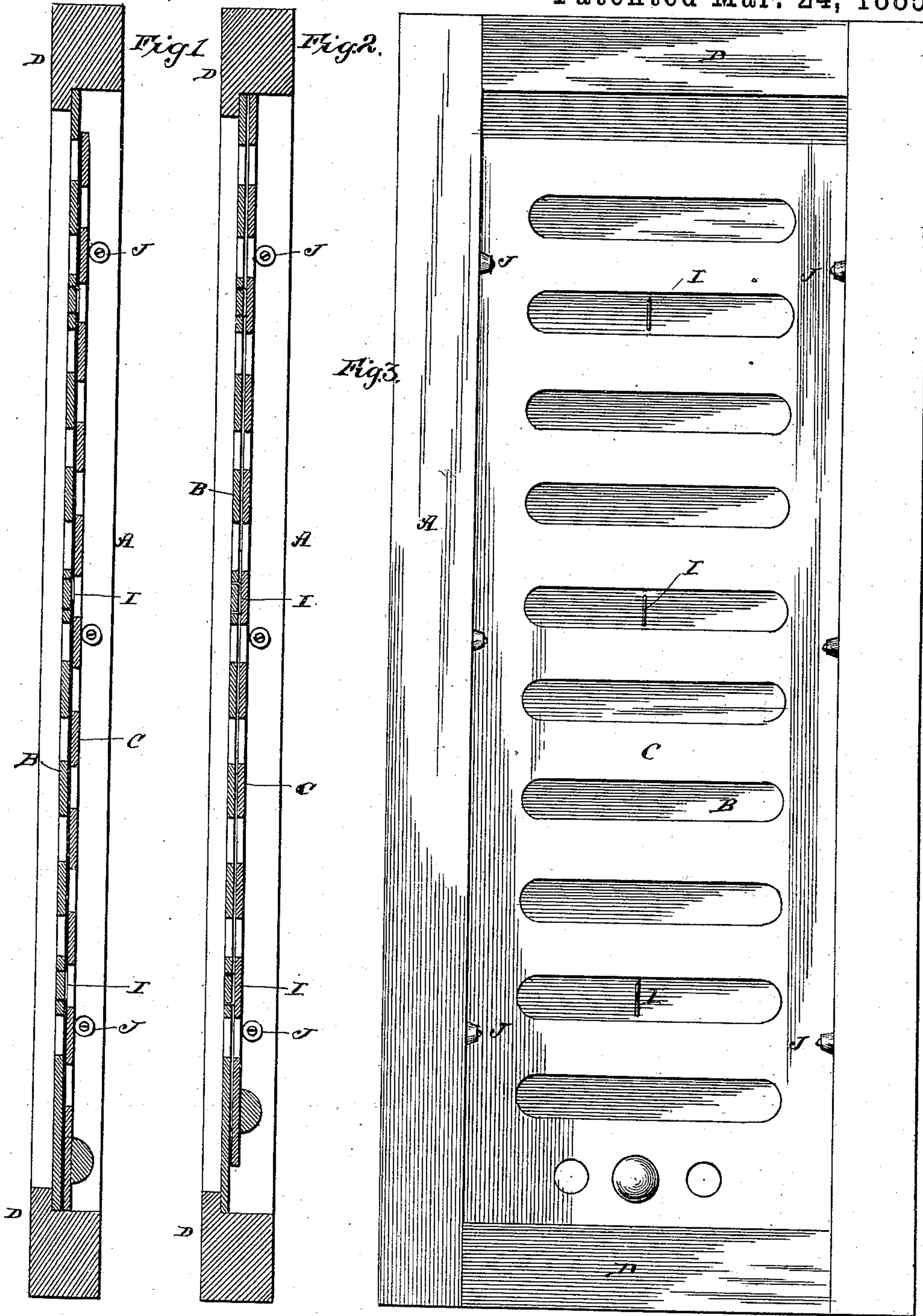


(No Model.)

F. D. PARADISE.  
WINDOW SHUTTER.

No. 314,393.

Patented Mar. 24, 1885.



WITNESSES:

*Wm. S. Dietrich*  
*Jos. A. Teyan*

INVENTOR.

*F. D. Paradise*  
per *J. A. Lehmann*  
ATTORNEY



# UNITED STATES PATENT OFFICE.

FRANK D. PARADISE, OF MEMPHIS, TENNESSEE.

## WINDOW-SHUTTER.

SPECIFICATION forming part of Letters Patent No. 314,393, dated March 24, 1885.

Application filed December 31, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK D. PARADISE, of Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Window-Shutters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in window-shutters; and it consists in, first, a window-shutter having a recess to receive the stationary and movable panels in combination with the two panels and suitable rollers or other equivalent devices for holding the panels in place; second, the combination of the two panels with suitable devices which are applied between them for the purpose of holding the movable panel in position when raised upward, as will be more fully described hereinafter.

The object of my invention is to substitute perforated panels for the slats which are usually employed in shutters, and to provide both a means for holding the panels in place in the frame and to hold the movable panel in any position into which it may be moved in regard to the openings in the stationary panel.

Figures 1 and 2 are vertical sections of a shutter embodying my invention, the movable panel being shown in different positions. Fig. 3 is a front view of the same.

A represents the frame of the shutter, which has a suitable recess formed in its inner side, and in which recess the stationary perforated panel B and the sliding panel C are placed. The flange D on the shutter serves to keep the panels in place on one side and the conical friction-rollers J on the other. There may be any desired number of these rollers, each one of which is journaled on a screw, so as to be readily removable, and each roller bears against the edge of the movable panel, as shown. These rollers are made conical, so that they will exert less frictional contact against the panel, and so they will not injure the paint or varnish on the panel as the panel is moved up and down. To the stationary panel, on its

inner side, and between the openings, are secured in any suitable manner a number of ribs, I, which in this case are formed of bent pieces of wire or double-pointed tacks, as shown. These ribs serve to force the two panels apart at their centers just enough to cause the panels to bind against the friction-rollers and the flange, and thus serve to keep the movable panel in any position into which it may be adjusted. When the movable panel is raised upward, its openings register with the openings through the stationary panel, and then a person can see freely through, and when the panel is drawn downward its openings come just opposite the solid portions of the stationary shutter, and thus shut out all light far more fully than can be done where the ordinary slats are used. After the movable panel has been moved down below the openings in the stationary panel the ribs are not in contact with the movable panel, and hence do not affect it in any way. By removing the screws upon which the rollers J are placed the two panels can be readily removed from the frame, and a mosquito or wire netting can be placed in the frame outside of the two panels, and thus serve to keep out insects during the summer months. During the cold months this netting or guard can be removed. The perforated panels, as above described, can be placed in both frames of the shutter; or one shutter may be solid and only one provided with the perforated panels.

Instead of the conical friction-rollers here shown, small brackets made of wood or metal may be used to keep the panels in place; but the rollers are preferable.

If thought desirable to keep the two panels from chafing together as the movable one is moved up and down, ribs or devices of any kind may be placed between them, so as to keep them out of contact.

I am aware that a shutter composed of a stationary slotted panel and a sliding slotted panel is not new, and this I disclaim.

Having thus described my invention, I claim—

1. In a shutter, the combination of the two panels, the shutter-frame provided with a flange, and the friction-rollers, substantially as shown.

2. In a shutter, the combination of the stationary panel, the movable one, the shutter-frame, and the conical friction-rollers, substantially as described.

5 3. In a shutter, the combination of the two panels with the ribs secured to one of them, substantially as set forth.

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

FRANK D. PARADISE.

Witnesses:

M. B. TREGERANT,  
N. F. CARVER.