

J. P. Boyd.

Window Blind.

N^o 108,557.

Patented Oct. 26, 1870.

Fig. 1.

Fig. 2.

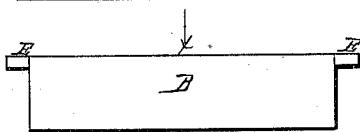
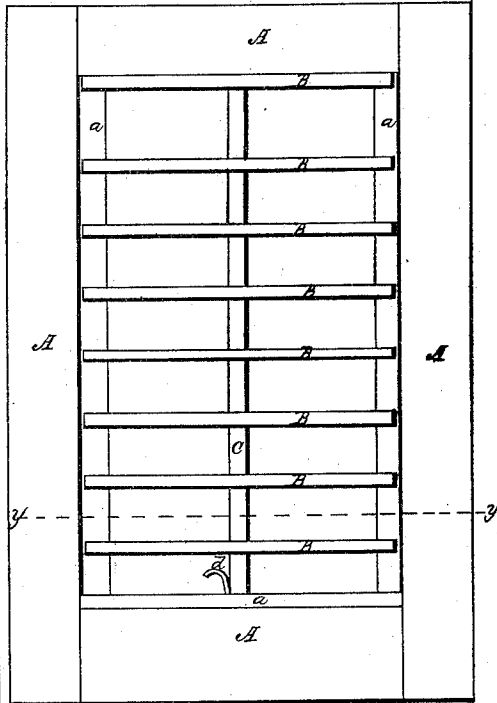
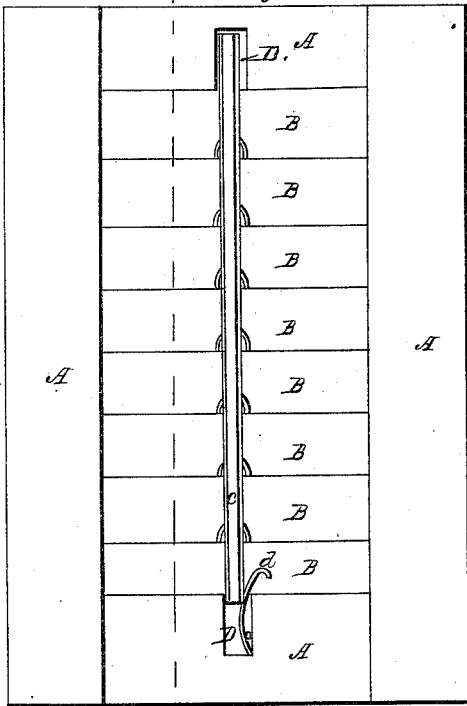


Fig. 3.

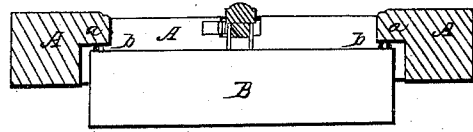


Fig. 4.

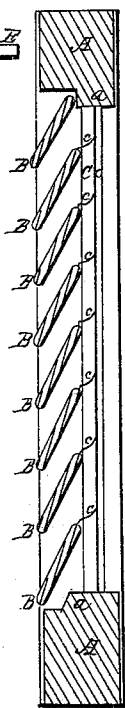


Fig. 5.

Witnesses:
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JAMES P. BOYD, OF LA PORTE, INDIANA, ASSIGNOR TO HIMSELF AND
AARON H. MILLER, OF SAME PLACE.

Letters Patent No. 108,557, dated October 25, 1870.

IMPROVEMENT IN WINDOW-BLINDS.

The Schedule referred to in these Letters Patent and making part of the same.

I, JAMES P. BOYD, of La Porte, in the county of La Porte and State of Indiana, have invented certain Improvements in Window-Blinds, of which the following is a specification.

The first part of my invention relates to a novel method of hinging or pivoting the slats of a window-blind to the frame.

Slats of window-blinds are commonly hung to the frame by a tenon or trunnion at the center of each end of the slat, projecting into holes the frame; the slats are connected by a feathering-rod, and are all opened and closed at one movement.

This feathering-rod, being attached to the edge of the slats, moves out as the slats are opened, and projects from the face of the blind, and in folding or opening the blind is often in the way.

The nature of the first part of my invention consists in hinging or pivoting the slats at the edge of the ends instead of the middle of the ends, and in attaching the feathering-rod to that edge of the slat from which said slat is hinged or pivoted. Said feathering-rod is connected to the slats so as to lift them open by a nearly perpendicular motion of the rod, which rod does not project but very little when the slats are open, there being so little projection that blinds made in this manner may be put upon windows not intended to carry blinds, and, consequently, made shallow, all of which will be more fully hereafter described.

It further consists in hinging the slat to the frame at the edge by means of two interlocked staples, driving the one into the slat and the other into the frame, the inner edges of said frame being countersunk with a rabbet-ledge to receive the slats, the object being to provide a hinge which will not become clogged up with dirt, or filled with paint in painting the blinds, so as to become immovable.

The ordinary tenon or trunnion-pivot is very apt to become fixed and immovable from the above causes, or from shrinking of the wood.

The slats being hinged to the ledge, all light is excluded when the blind is closed.

In the ordinary blind it is impossible to make the ends of the slats so close but that the light will penetrate at the joining.

The ordinary blind has its slats hinged at the frame without a ledge or rebate to cover the ends of the slats.

The second part of my invention relates to a method of fixing the slats at any required position, open or closed, by means of an attachment to the feathering-rod, more fully hereafter described.

The slats in ordinary blinds are liable to become loose upon their pivots through many causes, so that

the slats are often moved by the mere weight of the feathering-rod, or are blown open and shut by the wind.

Description of the Accompanying Drawing.

Figure 1 is an inside or front view of my invention, slats closed.

Figure 2 is an outside or rear view of the same, slats open.

Figure 3 is a vertical section of fig. 1 on line *x x*.

Figure 4 is a transverse section of fig. 2 on line *y y*.

Figure 5 is a detached view of slat with trunnions or tenons at the edge of each end.

General Description.

A is the frame of the blind, constructed as in ordinary blinds, except that it is provided upon the outside face, at the inner edge, with a rabbet or ledge, *a*, lower than the general surface of the frame.

B are the slats hinged to the ledge *a* by the interlocked staples *b*, fig. 4, of which one is driven into the edge of the slat, and the other into the ledge *a*.

Said slats when closed come within the surface of the frame.

C C' is the feathering-rod attached to the slats by the curved staples *c*, said rod being constructed in two parts or strips.

The staples *c* surround the strip C', and are supported in certain notches cut therein.

The strip C' is then fastened to C, and serves to hold the staples in the notches.

D D' are recesses cut in the top and bottom pieces of the frame to receive the feathering-rod.

The lower recess D' is furnished with a spring, *d*, which presses against the feathering-rod and holds it at any required elevation.

When the slats are open, the spring being pressed upon will allow them to close by their own weight.

The pressure of this spring is at no time so great as to cause a difficulty in moving the feathering-rod easily up or down, it being the aim to have at all times about the same amount of resistance as exists in an ordinary blind when properly constructed, and not worn loose, clogged up, shrunk, or out of order.

I do not limit myself to the use of this spring.

It is obvious many similar contrivances may be applied to a feathering-rod which has a motion so nearly perpendicular as it does in my invention, to accomplish the same result.

The spring may be furnished with teeth to catch into notches in the feathering rod, which thus makes a lock for the slats so that they cannot be opened from the outside; or a rack may be attached to the side of said rod, communicating with a cog-wheel, the

shaft of which may project through the sash of the window into the room, so that the slats may be opened without raising the window.

The feathering-rod may be applied in this manner to slats pivoted on trunnions or tenons placed at the edge of the ends, as is shown at fig. 5, if it is desired to use that method of swinging or hinging the slats.

In fig. 5, E represents the trunnions or tenons made to fit into holes bored into the inner edge of the frame A in front of the rebate.

It will be obvious that the feathering-rod may be placed upon the outside of the slats, and the blind will exclude the light as well, and operate for some purposes better than the other arrangement.

I claim as my invention—

1. The slats of the window-blind, hung by hinges at the edge to a rebate in the blind-frame, substantially as and for the purpose specified.

2. The feathering-rod C C', connected to the slats B by the curved staples c, and working in the recesses D D', when combined and operating with the spring d, or its equivalent, substantially as and for the purpose specified and shown.

3. The combination of the slats B, feathering-rod C C', with the frame A and spring d, or its equivalent, substantially as and for the purpose specified.

JAMES P. BOYD.

Witnesses:

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