(No Model.)

J. W. BRAINARD & A. D. SWAN.

WINDOW BLIND.

No. 367,358. Patented Aug. 2, 1887.

Fig. 1.

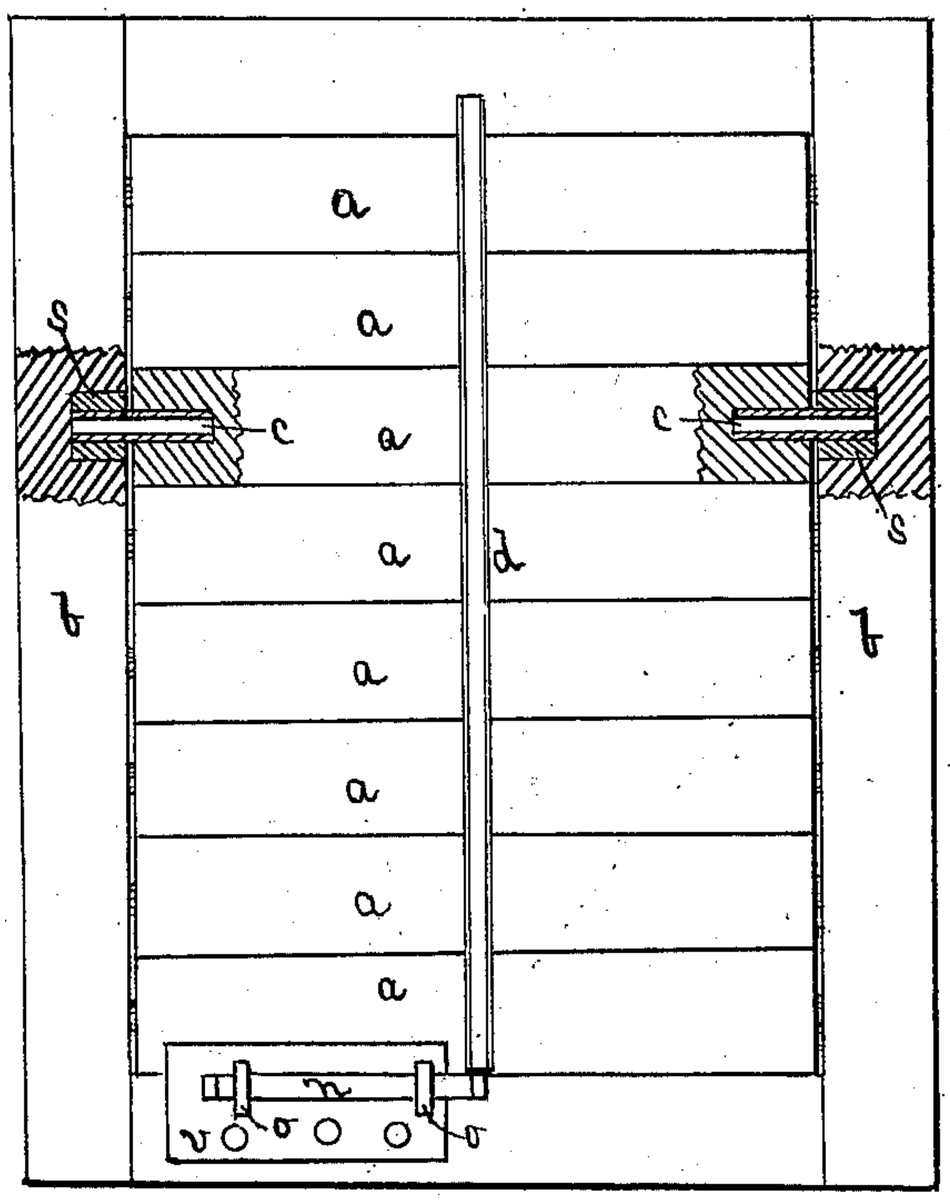
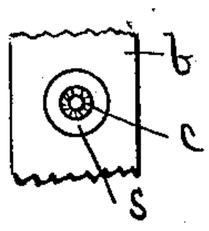


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOSEPH W. BRAINARD AND ALANSON D. SWAN, OF KENT, ASSIGNORS, BY MESNE ASSIGNMENTS, TO THE ELECTRIC BLIND SLAT COMPANY, OF RAVENNA, OHIO.

WINDOW-BLIND.

SPECIFICATION forming part of Letters Patent No. 367,358, dated August 2, 1887.

Application filed August 12, 1886. Serial No. 210,706. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH W. BRAINARD and ALANSON D. SWAN, citizens of the United States, residing at Kent, in the county of Portage and State of Ohio, have invented a new and useful Improvement in Window-Blinds, of which the following is a specification.

In the drawings forming a part of this specification, Figure 1 represents a window-blind with parts broken away at the connection of a slat with the stiles; and Fig. 2 is a cross section of a slat-tenon, showing the inner side of a part of a stile.

The slats *a* are formed or provided at their ends with tenons consisting of thin metallic tubes *c*. These tubes, being formed of thin sheet metal, may be driven into the ends of the slats without splitting the latter. The stiles *b* are formed with cylindrical holes to receive short rubber tubes *s*, in which the slat-tenons *c* are tightly inserted in order that the compression of the rubber tube on the tenon *c* may hold the slats in any position to which they may be turned. Rubber tubes *s* should be either glued in the holes in which they are placed in the stiles or tightly fitted therein so as not to turn with the tenons *c*. They may be used in connection with any ordinary slat-tenon; but we prefer metallic tenons to wooden ones in order to lessen the wear from friction.

The series of slats *a* is operated by rod *d*, hinged to each slat in the ordinary way, and therefore it is not necessary that rubber tubes *c* should be applied to both ends of the slats nor to all the slats for the purpose of holding them in any position to which they may be turned; but it is desirable to apply the rubber tubes at both ends of each slat to prevent the slats becoming loose in the stiles and rattling in the wind, and also to prevent paint, varnish, and other obstructing substances from having access to the tenon and its bearing.

When window-blinds are constructed in the ordinary way without an elastic bearing tightly fitting the slat-tenons, unless very great care is taken in painting and varnishing them the paint and varnish will enter between the tenon and its bearing, and when dry will stick them together so firmly that the slats cannot be turned by any ordinary means.

In Fig. 1 rod *d* is shown as lifted and the slats *a* thereby closed. The rod is held in that position by sliding stop *n*. We prefer to form it with outwardly-bent ends, the end under the rod projecting far enough to prevent rod *d* from being forced down to open the slats. The other end of stop *n* may be grasped to slide it backward and forward. In the drawings it is shown as connected by staples *o* to a plate, *v*, attached to the lower part of the window-frame, but the plate may be dispensed with and the stop directly connected with the window-frame.

We claim as our invention—

A window-blind slat formed with a tenon, in combination with a stile formed with a hole provided with a rubber tube to receive said tenon, substantially as described.

JOSEPH W. BRAINARD.
ALANSON D. SWAN.

Witnesses:
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