No. 675,953. Patented June 11, 1901.

# W. R. KINNEAR.

## FIREPROOF BLIND.

(Application filed Oct. 20, 1900.)

(No Model.) 2 Sheets—Sheet 1.

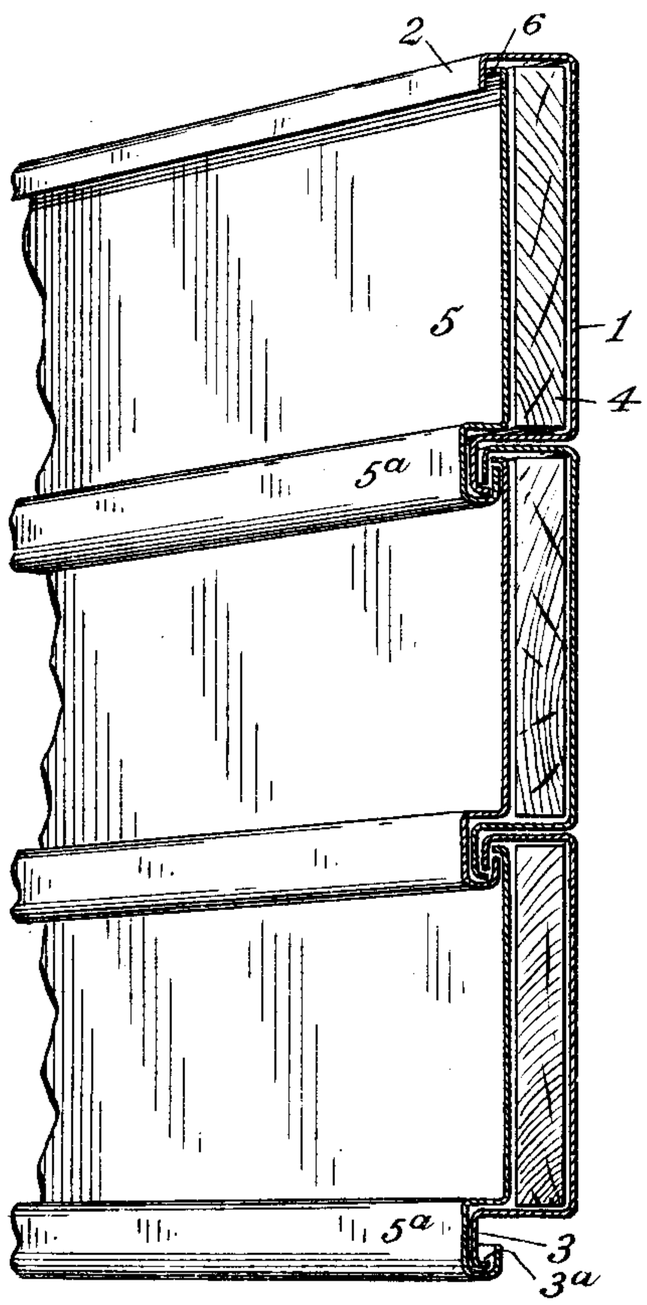


Fig. 1

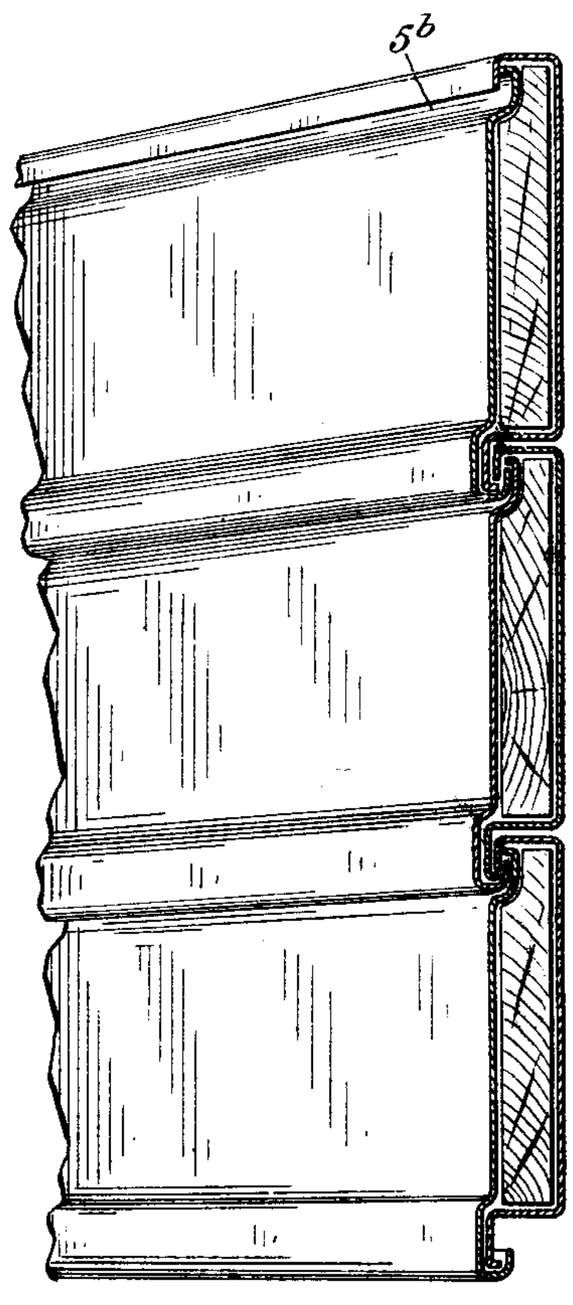


Fig. 2.

Witnesses
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## FIREPROOF BLIND.

(Application filed Oct. 20, 1900.)

(No Model.) 2 Sheets—Sheet 2.

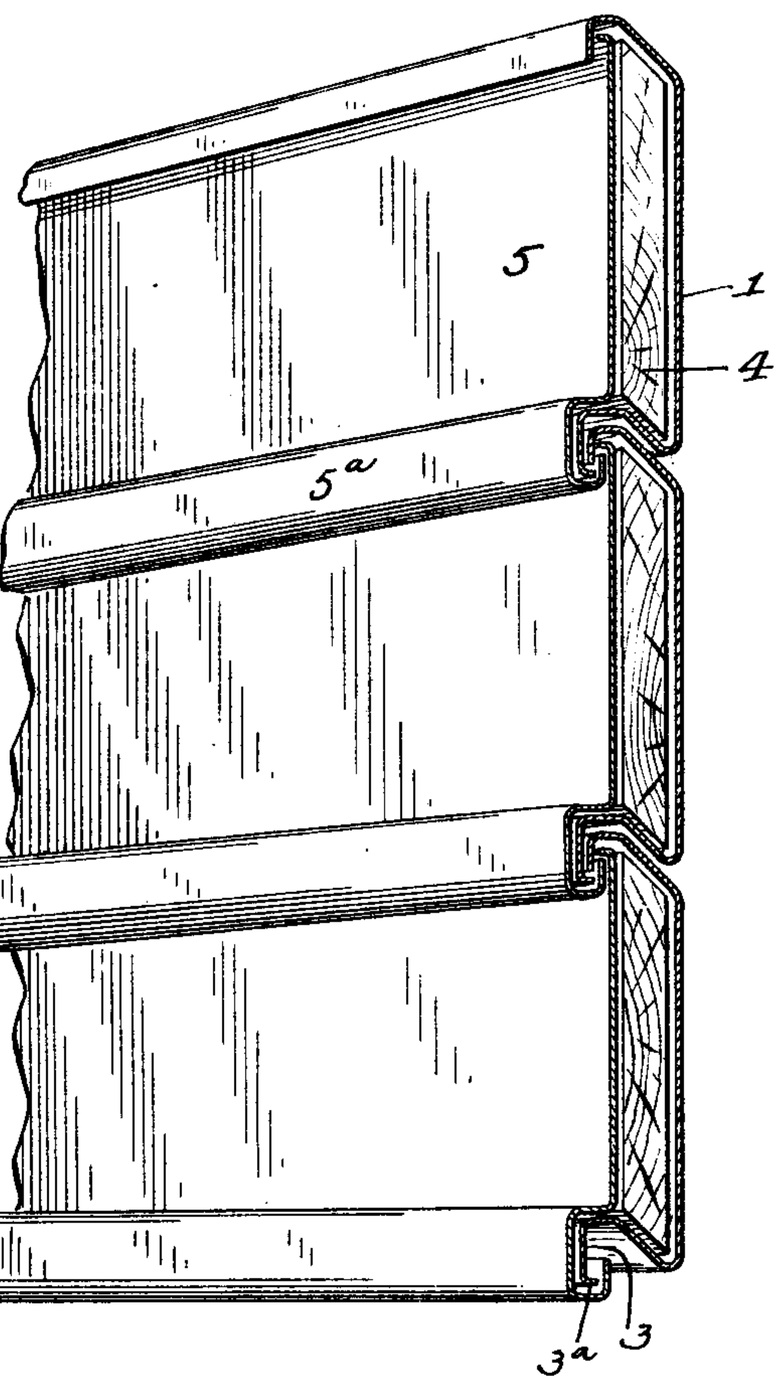


Fig. 3

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# UNITED STATES PATENT OFFICE.

WILLIAM RAYMOND KINNEAR, OF COLUMBUS, OHIO.

## FIREPROOF BLIND.

SPECIFICATION forming part of Letters Patent No. 675,953, dated June 11, 1901.

Application filed October 20, 1900. Serial No. 33,744. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM RAYMOND KINNEAR, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Fireproof Blinds; 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 appertains to make and use the same.

The object of this invention is to provide an improved slat particularly useful in constructing fire-resisting curtains.

The invention resides in a slat of sheet metal bent so as to form a cavity for the reception of a fire-resisting material and to provide interlocking tongues and grooves of peculiar construction whereby the slats can be hingedly connected.

In the accompanying drawings, Figure 1 is an oblique perspective view of a fraction of a curtain or blind composed of such slats, the ends being in section. Fig. 2 is a similar view of a modified form of the same thing, and Fig. 3 is a similar view of a modification.

Referring to Fig. 1, the character 1 denotes the outer piece or part of the sheet metal, which is bent to form a pocket or trough, and a downwardly-turned tongue 2 at its upper edge and a downwardly-turned tongue 3 at its lower edge. 4 denotes the filling, preferably of wood, that is fitted closely in said pocket or trough formed by the piece 1. Upon the inner side of the filling is laid or folded the inner piece of sheet metal 5. This inner piece 5 has at its upper end an inwardly-bent portion 6, that stands between the tongue 2 of the outer piece and the filling and serves to brace said tongue and hold the inner piece of metal against the filling 4. The lower edge of the inner piece of sheet metal 5 is bent down and around the tongue 3 to form a hook or groove $5^a$, and the tongue 3 can have its lower edge bent, as shown at $3^a$, to stand across the bottom of the groove to hold the tongue permanently in position with respect to said hook or groove. When the several slats are thus formed, they can be united by sliding them together longitudinally, the tongue on the upper edge of one slat entering the groove on the lower edge of another. A joint thus formed permits the slats to be moved with a hinge-like movement with respect to each other, and the curtain can be wound compactly on a roller.

In Fig. 2 the construction is like that shown in Fig. 1, except that the upper edge of the inner piece 5 of the sheet metal is bent toward the pocket, as shown at $5^b$, and the shape of the filling modified accordingly. By this construction the thickness of the curtain is diminished at the joints between the slats and the bulk of the curtain when rolled reduced. It will be entirely practicable to make the metal covering in each slat of one piece of metal, but I now think not so economically as here proposed.

The construction shown in Fig. 3 is the same as that shown in Fig. 1, except that the filling and covering therefor have beveled or inclined edges, so that in practice the extreme lower edge of one slat shall lap or project down below the extreme upper edge of the next slat below. This form possesses the advantage of affording a practically continuous filling throughout the length of the curtain, as well as a more perfect water-shed. The same results can be secured by making in rabbet form the contiguous edges of the slats; but I think the form shown in this view more economical.

It is understood, of course, that in the views shown the hinge-joints are on the inner side of the slat and that the other side is the exposed side or that ordinarily facing the street.

When covering a door or window opening, a curtain formed as herein described possesses not only the advantage of affording great resistance to the access of fire and heat, and of the latter either by radiation or conduction, but also of being compactible into small space when not in use.

It is hardly necessary to add that any suitable means can be provided to secure the sheet-metal covering to the slat. This can be done by riveting the metal to the filling or by indenting the metal into the filling. These indentations on the outside of the slat can appear as ornamentation, adding greatly to the attractiveness of the curtain.

What I claim, and desire to secure by Letters Patent, is—

1. A slat for fire-resisting curtains, blinds

or the like, composed of an outer piece of sheet metal forming a pocket with downwardly-turned tongues at its upper and lower edges, an inner piece fitting within and against the tongue at the upper edge of the outer piece and formed with a hook at its lower edge extending around the tongue at the lower edge of the outer piece, substantially as described.

2. A slat for fire-resisting curtains, blinds or the like, composed of an outer piece of sheet metal forming a pocket with downwardly-turned tongues at its upper and lower edges, an inner piece fitting within and against the tongue at the upper edge of the outer piece and formed with a hook at its lower edge extending around the tongue at the lower edge of the outer piece, said outer piece being also formed on its lower edge at the outer side to overlap and project below the upper edge of a similar outer piece, substantially as described.

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

WILLIAM RAYMOND KINNEAR.

Witnesses:

E. S. CAMPBELL,

GEORGE M. FINCKEL.