

E. H. McCLOUD.
FLEXIBLE FIRE RESISTING SHUTTER AND SLAT THEREFOR.
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935,125.

Patented Sept. 28, 1909.

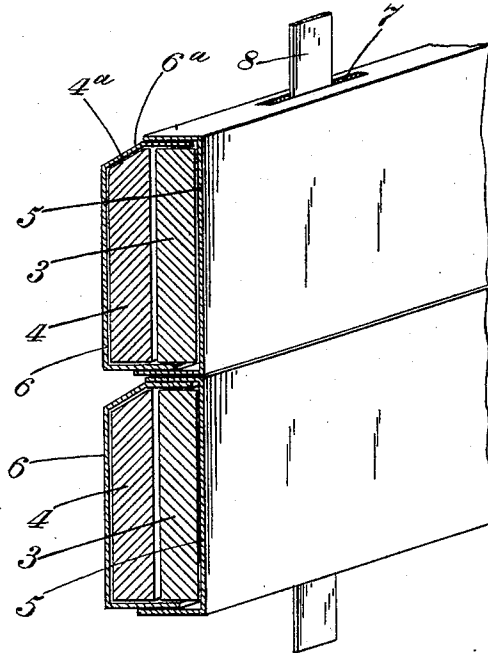


Fig. 1.

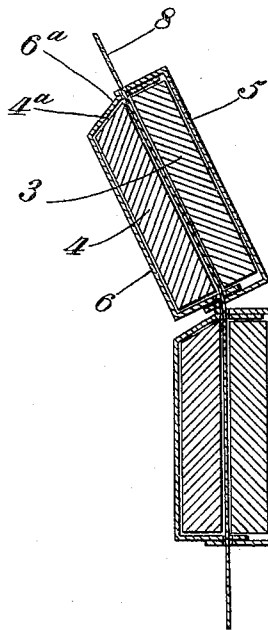


Fig. 2.

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UNITED STATES PATENT OFFICE.

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FLEXIBLE FIRE-RESISTING SHUTTER AND SLAT THEREFOR.

935,125.

Specification of Letters Patent. Patented Sept. 28, 1909.

Application filed January 27, 1908. Serial No. 412,779.

To all whom it may concern:

Be it known that I, EDWARD H. McCLOUD, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Flexible Fire-Resisting Shutters and Slats Therefor, of which the following is a specification.

The chief object of this invention is to provide a simple and economical form of metal-clad or sheathed slat adapted more especially for the construction of flexible fire-resisting curtains or shutters.

The invention is embodied in the construction herein shown and described and then pointed out in the appended claims, the invention not being confined to precisely the details shown.

In the accompanying drawings—Figure 1 is a perspective view showing fractions of two slats from a shutter or curtain, said slats being strung on a portion of a connecting tape; Fig. 2 is a vertical section transversely of the slats and longitudinally of the tape and illustrating how the curtain is flexed for rolling upon a roller.

In the views 3 and 4 designate the parts of a duplex core or filling consisting of two strips of wood or other material preferably of light weight and adapted to retard radiation and conduction of heat. The strip 3 is shown to be rectangular in cross section and the strip 4 of similar form except that one edge is beveled as seen at 4^a. The two strips extend parallel side by side and are inclosed by two sheet-metal strips 5 and 6. These metal strips embrace the opposite sides of the core and are bent over the edges of the core strips 3 and 4, the bent edges of the strip 5 lapping upon the bent edges of the strip 6. Where the sheet metal covers the beveled edge 4^a it hugs that edge so as to present exteriorly an inclined or beveled surface as seen at 6^a. The bent edges of both the strips are shown to cross the plane of the space between the core strips 3 and 4, and both said bent edges at each edge of the slat are provided with slots like that indicated at 7 alining vertically with each other and with the space between said strips 3 and 4. The character 8 designates the tape, there being preferably two or more of them, on which the slats are strung to form the shutter or curtain. The tape is passed through the slots 7 and between the strips 3 and 4 and said slots are preferably of a

length greater than the width or diameter of the tape or stringing device, or so that the sheathing can, independently of the tape, expand and contract when subjected to variation in heat.

The inclined or beveled edge 6^a permits the inclination of the slats with reference to each other and the flexing of the connecting tape so that the curtain can be rolled up on a roller, as amply indicated in Fig. 2. But when the curtain hangs vertically, as seen in Fig. 1, one side of it, usually the outer side, presents a smooth and regular and comparatively tight and closed surface.

What I claim and desire to secure by Letters Patent is:

1. A slat for the construction of a flexible fire-resisting curtain or shutter consisting of a core or filling of wood or other heat-retardant material, and a metallic covering for said core composed of two strips of sheet metal bent to embrace the opposite sides and edges of said core and lap upon each other at the edges of said core, said core being provided with a passage for a flexible slat connecting member and said lapping edges being provided with openings to aline with said passage.

2. A slat for the construction of a flexible fire-resisting curtain or shutter consisting of a duplex core or filling of wood or other heat-retardant material, and a metallic covering for said core composed of two strips of sheet metal bent to embrace the opposite sides and edges of said core and lap upon each other across the space between the parts of the core, said lapping edges being provided with openings alining with each other and with the space between the parts of the duplex core.

3. A flexible fire resisting curtain or shutter constructed mainly of slats each consisting of a core or filling of wood or other heat-retarding material, a metallic covering for said core composed of two strips of sheet metal bent to embrace the opposite sides and edges of said core and lap upon each other at the edge of said core, said core being provided with a passage for a flexible connecting member and said lapping edges being provided with openings to aline with said passage and a flexible slat-connecting member passed through said passages.

4. A slat for the construction of a flexible fire-resisting curtain or shutter consisting of a core or filling of wood or other heat-re-

tarding material, and a sheet metal covering for said core bent to embrace the opposite sides and edges of said core and be lapped along one of the edges of the slat, said core
5 and lapped edges being provided with a passage for a slat-connecting member, said last-named member being adapted, when passed through said passage, to hold the core-covering closed on the core.

10 5. A slat for the construction of fire-resisting shutters or curtains consisting of an inclosing shell of sheet metal having sides and edges, the metal along one of said edges

being lapped, the metal of each edge being provided with a perforation, the perforation 15 at the lapped edge extending through both the lapping portions to provide a passage for a slat connecting member, said last named member being adapted, when passed through said passage, to hold the sides to- 20 gether.

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Witnesses:

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