

E. H. McCLOUD.
FLEXIBLE FIRE RESISTING SHUTTER AND SLAT THEREFOR.
APPLICATION FILED JAN. 31, 1908.

1,015,332.

Patented Jan. 23, 1912.

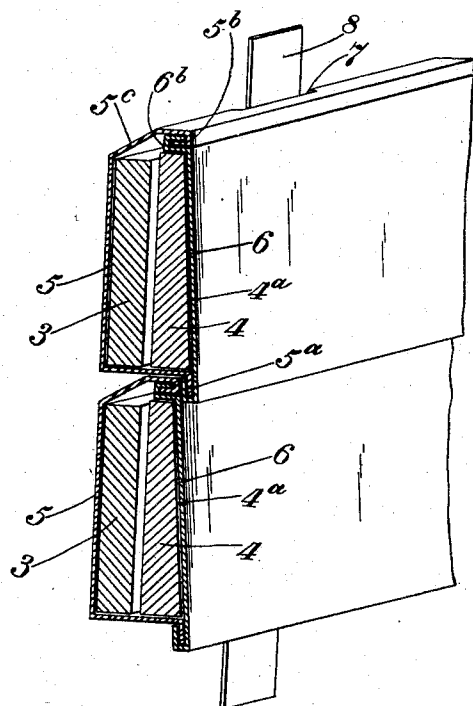


Fig. 1.

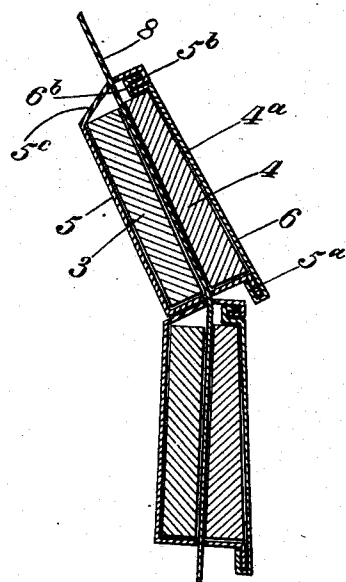


Fig. 2.

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UNITED STATES PATENT OFFICE.

EDWARD H. McCLOUD, OF COLUMBUS, OHIO.

FLEXIBLE FIRE-RESISTING SHUTTER AND SLAT THEREFOR.

1,015,332.

Specification of Letters Patent.

Patented Jan. 23, 1912.

Application filed January 31, 1908. Serial No. 413,518.

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 Shutter and Slat Therefor, of which the following is a specification.

The 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.

The invention is embodied in the construction herein shown and described and then pointed out in the appended claim, 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 tapes; 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 is of trapezoidal form or it has one inclined or beveled outer side, as seen at 4^a. The two strips extend parallelly 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 the strip 5 is a trough-like structure; that is, it is bent to extend entirely across one side and the opposite edge of the core. This construction facilitates the assembling and manufacture of the slats. That portion of the strip which is bent across the lower edge of the core has its edge again bent to form a longitudinal flange to stand in a downward direction, as seen at 5^a, and that portion of the strip 5 that is bent across the upper edge of the core is bent in the form of a hook in cross section as seen at 5^b. The lower edge of the strip 6 is bent upward and around the edge or tongue 5^a, and the upper edge of the strip 6 is bent in the form of a hook, as seen at 6^b, to engage the hook 5^b of the strip 5. There is thus formed at the outer lower corner of the slat a lip that projects below the

upper edge of the slat joined to it next below, said lip adapted effectually to shed water and also to close the space between the slats, especially when they are in vertical alinement with each other. The engaged edges at 5^b and 6^b form a joint connecting the two strips at the upper edge of the slat, effectually inclosing the core at that edge. Where the sheet metal of the strip 5 extends over the upper edge of the core strip 3 it stands in an inclined position, or so as to present at that corner of the slat a beveled effect, as seen at 5°. In the present instance it will be observed that the bent edges of the strip 5 cross the space between the two core strips 3 and 4, and said bent edges are provided with slots like that indicated at 7 alining vertically with each other and with the space between said core strips.

The character 8 designates the tape, of which there are preferably two or more, and upon which the slats are strung to form the shutter or curtain. The tape is passed through the slot 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 metal sheathing can, independently of the tape, expand and contract when subjected to variations in heat.

The inclined edge 5° is, of course, diagonally opposite the water-shedding lip, and said inclined edge permits the tilting of one slat with reference to the adjacent slat and the flexing of the connecting tape 8, thereby permitting the shutter or curtain to be wound up on a roller.

The exposed or weather side of the shutter or curtain is, of course, ordinarily that containing the metal-sheathing strip 6, because of the water-shedding character of that side. The slanting or beveled character of the side 4^a provides room for the downward projection of the water-shedding lip and the proper vertical alinement of the slats in the curtain or shutter when suspended.

In another application pending concurrently herewith I show and claim a modification of this species of slat.

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

A shutter or curtain constructed of slats consisting of a core of wood or other heat-retarding material, a metal sheathing for said core composed of two strips 5 and 6,

one strip, 5, bent longitudinally to form a
trough like structure to inclose one side and
the two edges of the core, said strip pro-
vided at the edge of its upper margin with
5 a seaming member and at the edge of its
lower margin with a downwardly bent lon-
gitudinal flange 5^a, and the other strip, 6,
provided at its upper edge with a longitudi-
nal seaming member for connection with the
10 seaming member at the upper portion of the
first mentioned strip and with a hook like

member bent around and upward against
the flange 5^a to form a lip to close the hori-
zontal space between the slat and that next
below, and flexible means passed through 15
the upper and lower edges of the slats and
connecting them substantially as described.

EDWARD H. McCLOUD.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."