

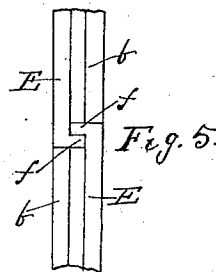
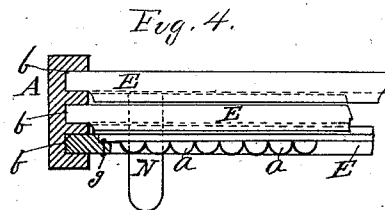
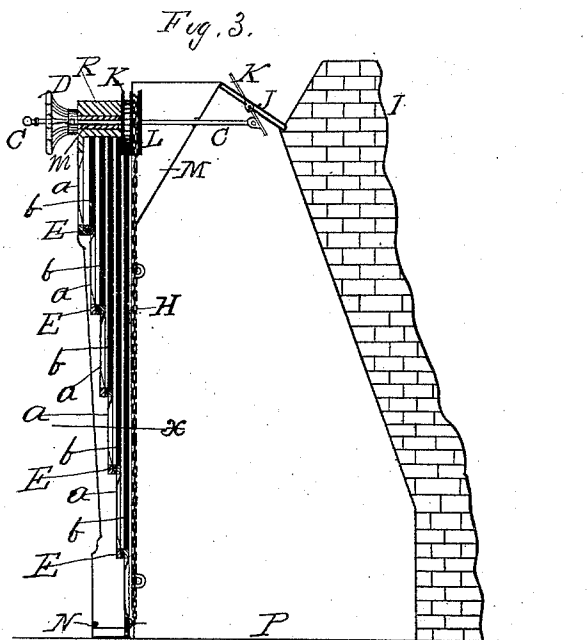
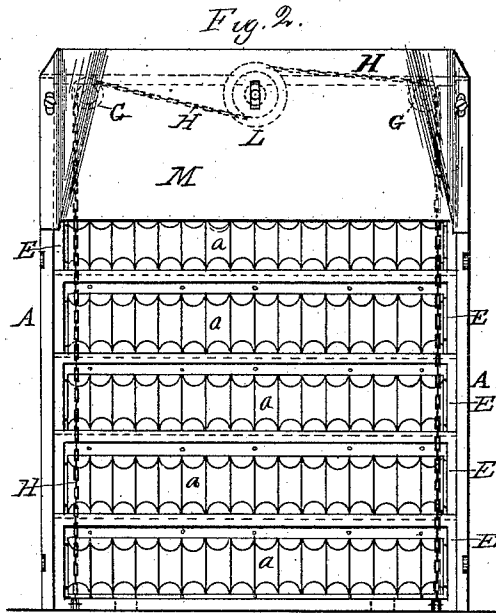
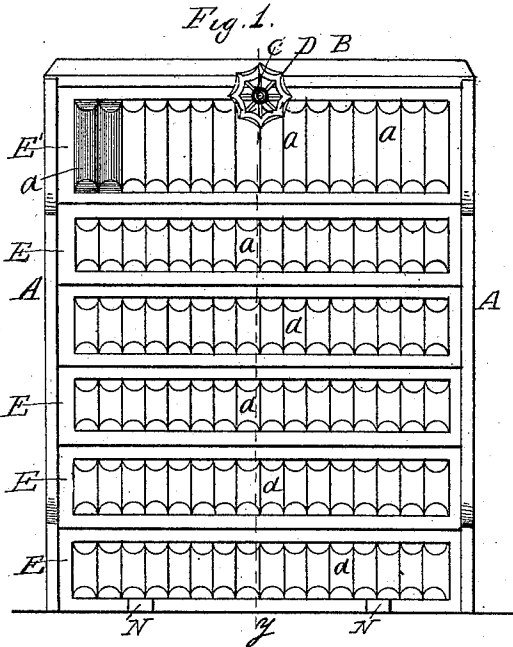
(No Model.)

J. WISDOM.

SECTIONAL FIRE BOARD AND DAMPER CONNECTION FOR FIRE PLACES.

No. 463,208.

Patented Nov. 17, 1891.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN WISDOM, OF CHICAGO, ILLINOIS.

SECTIONAL FIRE-BOARD AND DAMPER CONNECTION FOR FIRE-PLACES.

SPECIFICATION forming part of Letters Patent No. 463,208, dated November 17, 1891.

Application filed May 16, 1890. Renewed July 3, 1891. Serial No. 398,420. (No model.)

To all whom it may concern:

Be it known that I, JOHN WISDOM, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Sectional Fire-Boards and Damper Connections for Fire-Places, of which the following is a specification, reference being had to the annexed drawings, in which—

10 Figure 1 is an exterior view of a fire-board and damper connection constructed on my improved plan. Fig. 2 is an inside elevation of the fire-board and the means for operating the sections of the same. Fig. 3 is a vertical
15 cross-section of Fig. 2 on line *y*. Fig. 4 is an enlarged cross-section on line *x*, Fig. 3, of one of the side frames having guides for the sectional fire-board to run in, enlarged. Fig. 5 is a detail showing how the sectional fire-board
20 connects, enlarged.

This invention relates to improvements in adjustable sectional fire-boards for fire-places, the means for operating them, and supporting the rod for operating the damper.

25 In this invention I do not set forth that sectional fire-boards are new, for I have an application, Serial No. 342,372, now pending in the Patent Office, which shows a sectional board adjusted in the frame by friction-springs. In
30 this application the several sections of the board are operated by a drum and chains. The latter are attached to the lower section, which, when elevated, raises the other sections one at a time. The shaft of the drum is hollow,
35 and through it the rod for operating the damper is placed, and on the front end thereof the wheel for turning the drum is attached. To prevent warping by heat, the sections consist of cast-metal frames paneled in with sheet
40 metal, struck up in relief figures or corrugated to stiffen them, whereby expansion is substantially equal in the respective parts of each frame and panel-section, as the whole is hereinafter fully shown and described.

45 A A represent guide-frames to the device, and B is the top portion connecting the frames. In the inner sides of the frames are formed, respectively, as many vertical grooves as there are sectional fire-boards, the grooves
50 extending down only so far as each section is to run, as shown at Fig. 3. Above the fire-boards is affixed to the side supports and top

portion a metal frame E', the stiles and rails of which are to be about one inch wide and three-sixteenths of an inch in thickness. One
55 angle of the inside of each frame is rabbeted out to receive the edges of the corrugated panels shown at 4, and the panels are held to the frame by rivets *g*, Fig. 4, or other well-known suitable means which will make the
60 joints smoke-tight. The frames of the sections E are all formed in the same manner and are filled with like corrugated panels, and a flange *f* is formed to project in on the lower
65 portion of the lower rail of each frame, except the bottom one, and a reverse like counterpart flange is formed on the top portion of the top rail to each frame E to lap onto the
70 flange of the frame below, so that when the sections are lowered down smoke-tight connections will be formed between them.

The means for elevating the sectional fire-boards consist of a double-grooved drum L, chains H H, respectively attached to said
75 grooved portions, running over pulleys G G, and attached to the lower portion of the lower frame E. The pulleys G are pivoted to the inside of frame E', and the double-grooved
80 drum L is provided with a hollow hub *m*, which has a suitable bearing in an enlarged portion R on the top rail of frame E', and on the outer end of the hub is placed a several-sided wheel D, by which the drum L is to be
85 turned to elevate the sectional fire-boards. Secured to the lower edge of the lower frame E are two or more lifters N, which project out far enough in front to catch under each frame
90 E and elevate one at a time as the drum is turned. The sections are held in any desired position by the friction of the operative parts
95 by reason of drum L being closely set to support R by the wheel D on the other side thereof.

The purpose of making the hub *m* hollow is to provide a convenient central support for the rod C C, which passes through it and
100 through the smoke-deflector M and is jointed to a damper K, which is pivoted to a frame J, set in the throat of the fire-place in the ordinary manner of now securing dampers. In practice the damper K, by means of rods C C, is generally to be opened as the fire-board is raised; but in some places the damper should be kept open till the fire is well started. The frame supporting the devices is made to fit

closely the opening in the fire-place, and is held in place by metal keys, bolts, or wedges, as is now the custom.

I claim as new and desire to secure by Letters Patent—

1. In sectional fire-boards for fire-places, a stationary section below the breast thereof, and movable sections below composed of cast-metal frames and filled with corrugated sheet-metal panels and provided with overlapping meeting portions, in combination with grooved side guides and with lifters at the bottom of the lower section E for elevating the sections, a double-grooved drum with two chains attached thereto and running over guide-pul-

leys and attached to the lower section, and a wheel on the hub of the double-flanged drum for winding the chain up, as and for the purpose specified.

2. The double-grooved drum located centrally at the top portion of the stationary section and having a hollow hub extending through said section, in combination with a damper-rod extending through the hub, and a damper placed in the throat of the fire-place, as specified.

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