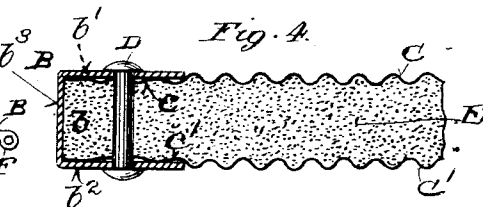
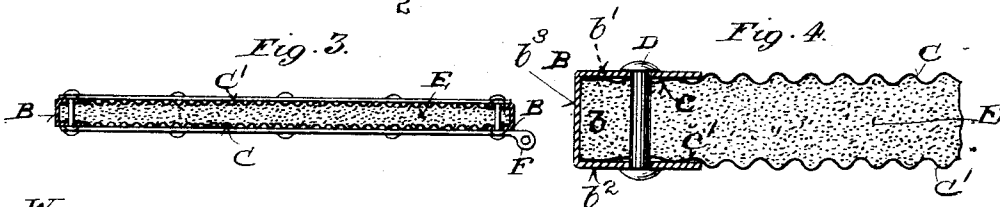
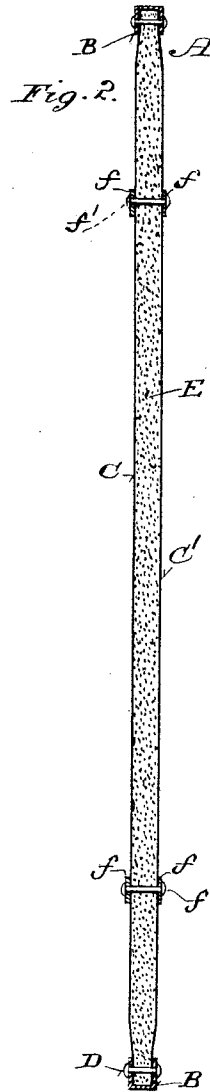
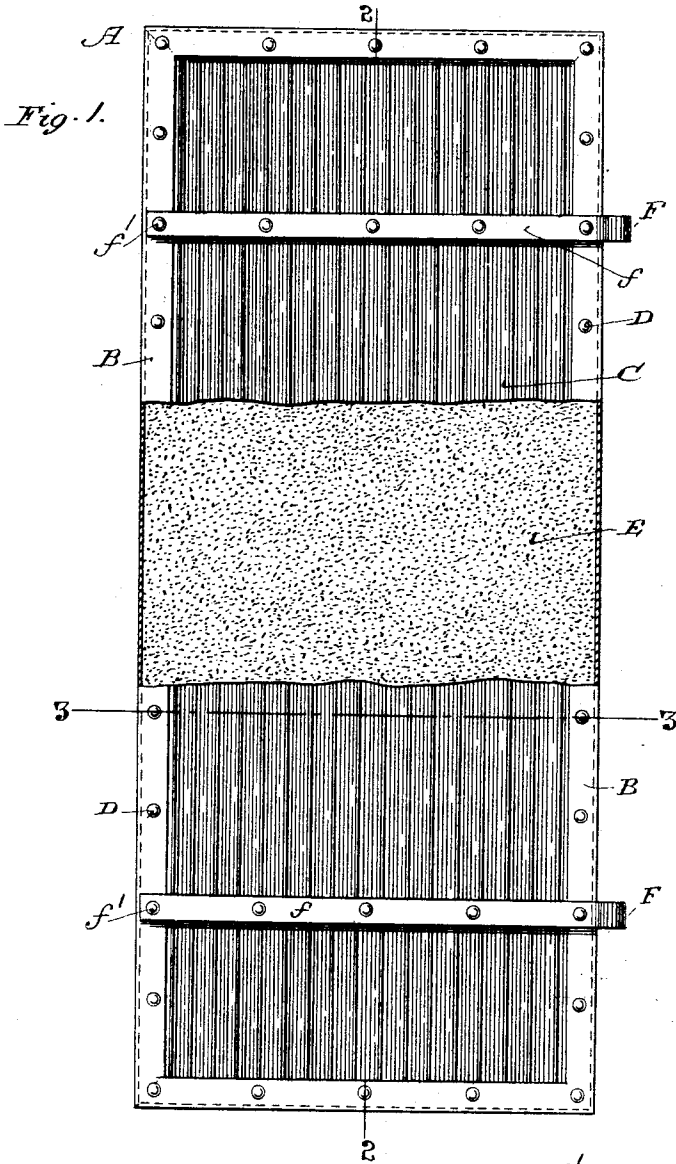


(No Model.)

W. J. GIESSLER.
FIREPROOF DOOR OR SHUTTER.

No. 530,410.

Patented Dec. 4, 1894.



WITNESSES

Edward W. Furell
A. Bonville

INVENTOR

William J. Giessler
by *Connelly*
his atty

UNITED STATES PATENT OFFICE.

WILLIAM J. GIESSLER, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF TO
ALEXANDER KILPATRICK AND FRANK J. HUNLETH, OF SAME PLACE.

FIREPROOF DOOR OR SHUTTER.

SPECIFICATION forming part of Letters Patent No. 530,410, dated December 4, 1894.

Application filed December 11, 1893. Serial No. 493,388. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. GIESSLER, of St. Louis, Missouri, have made a new and useful Improvement in Fireproof Doors or Shutters, of which the following is a full, clear, and exact description.

The improved door or shutter under consideration is especially adapted to doorways in party walls and other openings in fire walls and also to window openings. Its lightness as well as its fire proof quality is a feature of the construction. It in size and shape suitably conforms to the opening it is designed to cover or close, and it is of any desired thickness, and it consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings Figure 1 is a side elevation of the door or shutter, a portion of the casing being broken away to exhibit the filling; Fig. 2, a vertical section on the line 2—2 of Fig 1; Fig. 3, a horizontal section on the line 3—3 of Fig. 1; and Fig. 4 a detail, upon an enlarged scale, and being a section of the marginal portion of the door or shutter.

The same letters of reference denote the same parts.

A represents the door or shutter. Its casing consists mainly, in the present instance, of a border B, of U-shaped or channel steel bent or otherwise made to form a grooved frame of the proper size and shape, and two sides in the form of the metallic sheets, C and C', which are inserted in the frame B and at their edges secured thereto, and preferably as follows: The marginal portions of the sheets project into the groove *b* in the frame the marginal portion *c* of the sheet C being laid against the flange *b'* of the frame, the marginal portion *c'* of the other sheet C', being laid against the flange *b²* of the frame, and the rivets D being passed through the frame-flanges and sheet-portions, substantially as shown. The filling E, of mineral

wool at any proper step in the making of the door or shutter, is inserted in the casing, and it is preferably stuffed sufficiently thereinto to brace the marginal portions of the sheets closely against the frame-flanges, and to become packed against the portion *b³* of the frame, and thereby made to thoroughly close the joints between the sheets and the frame, substantially as indicated in the drawings. To complete the construction any desired form of hanger and fastening may be applied to it; also, any auxiliary means, not shown, may be employed to more effectually tie and brace the component parts of the door or shutter.

In the present illustration the strap *f* of the hangers F which extends across the door or shutter and is riveted thereto at various points by the rivets *f'*, serves to brace the sheets. The sheets C, C', are preferably corrugated, and they are sufficiently thin, substantially as shown, to enable, in case of fire inside, a perforation to be readily made in the door or shutter through which the nozzle of the hose-pipe can be entered, and water introduced, without having to open the entire door or shutter a procedure occasionally desirable.

I claim—

In a fire proof door or shutter, the combination with the U-shaped frame, the corrugated sheets having their marginal portions secured thereto and the filling of mineral wool or other analogous fire proof material, of the hangers consisting of metal straps applied to both sides of the shutter, secured together and to the marginal frame and having an eye at one end of the latter, substantially as described.

Witness my hand this 4th day of December, 1893.

WILLIAM J. GIESSLER.

Witnesses:

C. D. MOODY,
A. BONVILLE.