(No Model.)

W. W. CLAY.

DEVICE FOR PREVENTING DRAFTS BENEATH FLOORS.

No. 332,491. Patented Dec. 15, 1885.

Fig 1.

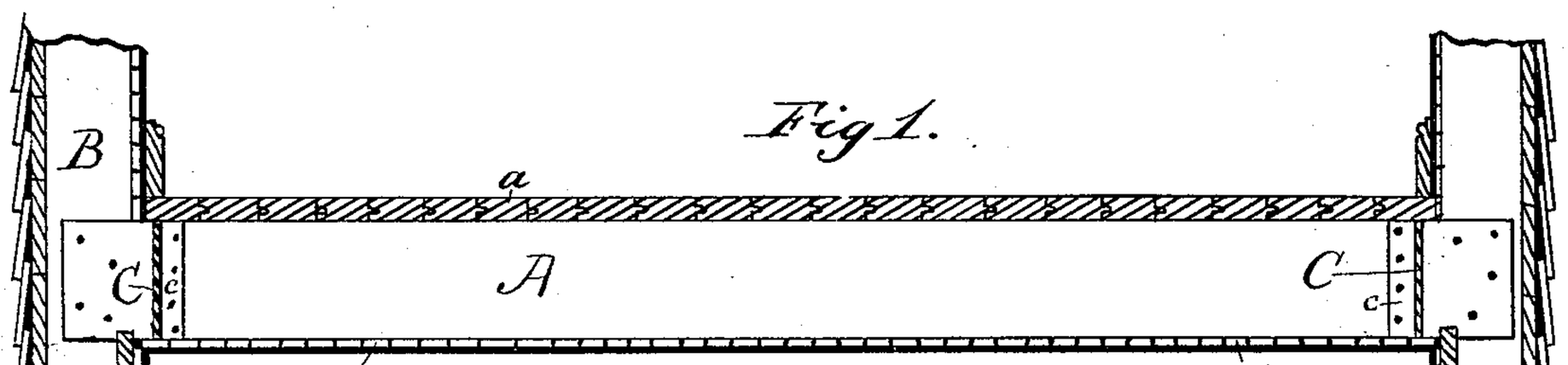


Fig 2.

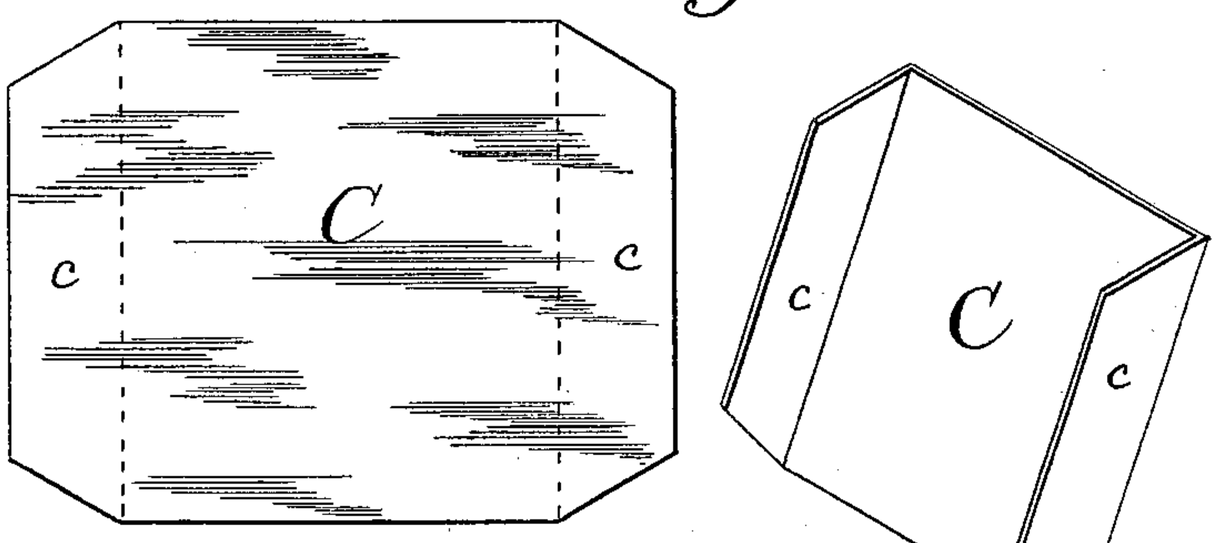


Fig 3.

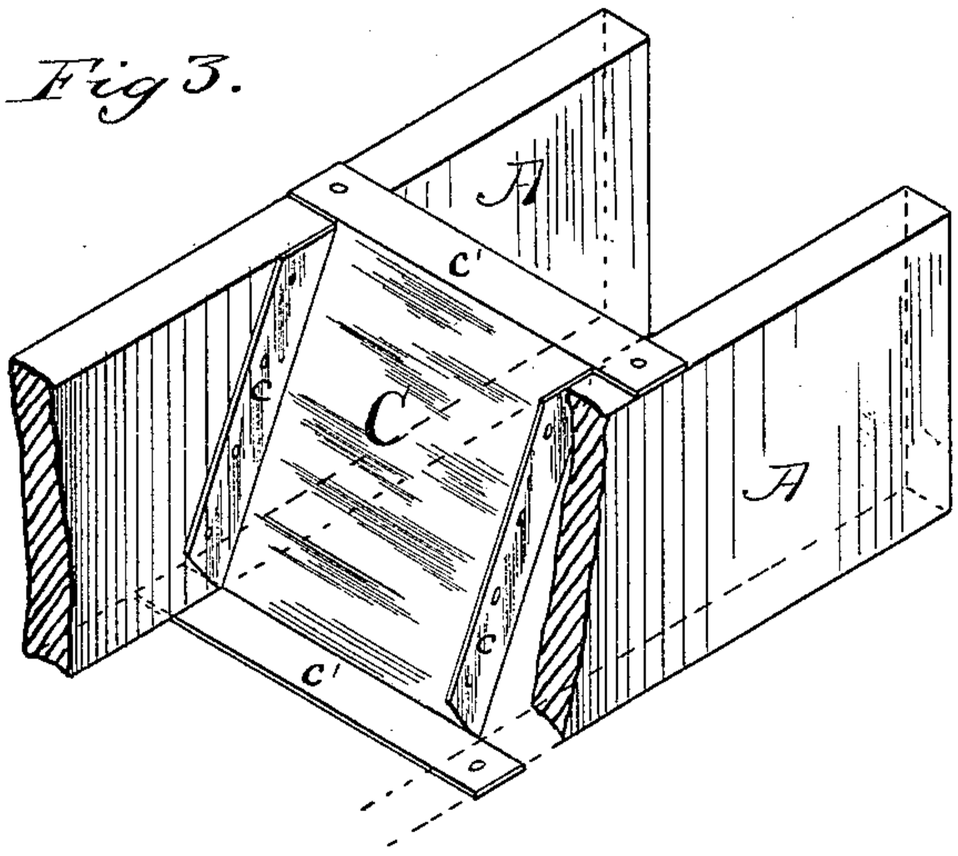
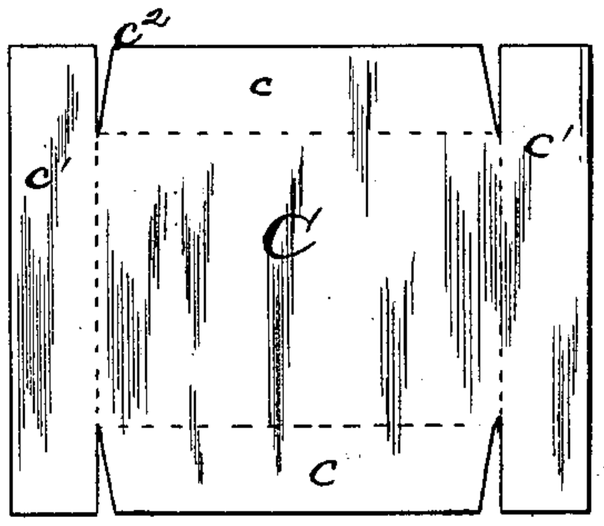


Fig 4.



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UNITED STATES PATENT OFFICE.

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DEVICE FOR PREVENTING DRAFTS BENEATH FLOORS.

SPECIFICATION forming part of Letters Patent No. 332,491, dated December 15, 1885.

Application filed July 16, 1885. Serial No. 171,799. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. CLAY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Devices for Preventing Drafts Underneath the Floors of Buildings, of which the following is such a full, clear, and exact description as will enable others skilled in the art to which it appertains to make and use the same.

In most buildings, and particularly frame ones, to which this invention is more especially adapted, considerable difficulty and inconvenience have been experienced from cold floors. This is greatly due to the fact that in the construction of buildings the space between the joists inclosed by the floor above and the ceiling beneath communicates directly with the air-space between the studding of the walls in frame structures, and in brick buildings between the former and the furring-strips against the outer walls. As few, if any, buildings are air-tight, more or less cold air is constantly fed to these air-chambers and passes into the space between the joists, thus causing cold floors. Various methods have been practiced to overcome this trouble, but all have been more or less ineffectual, because they have been applied to the top or bottom of the joists, as in doubling floors, laying tarred paper beneath the floors, and the like.

The object of my invention is to overcome this objectionable feature in buildings by blocking or cutting off all communication between the air-space under the floors and the cold-air spaces in the outer walls by means of a partition or partitions of card-board or other suitable material, placed between the joists near the ends, so cut and shaped as to fill the space between them, and having proper flanges or flaps, whereby the said partitions may be nailed or otherwise secured to the joists.

My invention will be more fully understood by reference to the accompanying drawings, which form a part of this specification, and in which similar letters of reference indicate like parts.

In said drawings, Figure 1 is a sectional view through the floor of a frame building, showing my improved partition secured to the joists at either end. Fig. 2 shows the partition enlarged. Fig. 3 is a perspective view illustrating the application of a slightly-modified form. Fig. 4 shows the latter spread out.

The letter A represents the joists of a building, *a* the floor above them, and *a'* the ceiling beneath.

B represents the studding of the walls, and C the partition, having flaps or flanges *c*, whereby the partition may be glued, nailed, or otherwise secured to the joists. When thus secured between the joists at or near the ends, as illustrated in Fig. 1, it is impossible for any considerable draft of cold air from the walls to pass to the floor, as the partition cuts it off and forms a dead-air space between each pair of joists.

c' are flaps or flanges, made integral with the partition C, or not, as desired, affording means of securing the partition to the top and bottom edges of the joists. They may be used or not, as desired, and I prefer, in using them, to make them flat, as shown.

I prefer to make the partitions of card-board, on account of cheapness, but other materials may be used without at all departing from the spirit of my invention—such as asbestus, sheet metal, coated wire-netting, and the like. In some cases I line the outer side of the partition with tin or wire-netting, to prevent its destruction by rats and mice. The partitions are made, preferably, of flat material, the corners cut, as at c^2, and scored, as illustrated by the dotted lines, thus requiring the minimum amount of labor to make and fit them, and having but very little waste. They may be put up in packages of two dozen or more, flat, for convenience in shipment.

I sometimes strengthen the partition at the score-marks by gluing thereto a strip of linen or other strengthening material, and also seal the corner made by the cutting at c^2 with cloth or other material.

I find it useful in some cases to employ more than one partition at each end between the joists, as the shortening of the dead-air adds greatly to the desired effect. I also find it useful in some cases to place similar partitions between the upright studding of the outer walls immediately above and below the joists.

In some cases I find it convenient to secure

the upper flange, c', to the under side of the flooring, instead of to the upper edge of the floor-joists. In this case some material may be saved by shaping the flange c' like the side flanges.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

As a new article of manufacture, the partition C, having flaps or flanges c, whereby said partition may be secured between the floor-joints or studding of a building, said partition being also provided with one or both of the flanges c', whereby said partition may be secured to the edges of the joists or studding, substantially as and for the purpose specified.

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