June 24, 1930. H. J. BURT, JR 1,767,168

BUILDING MATERIAL

Filed March 9, 1929

Fig. 1

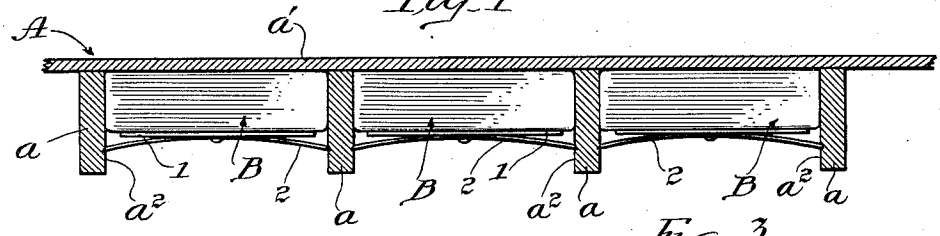


Fig. 3

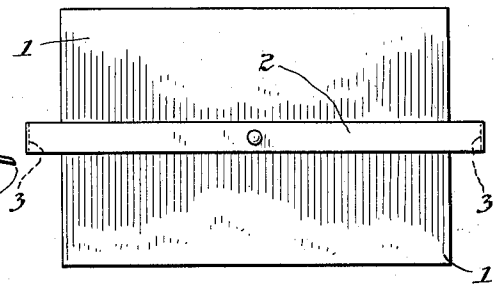


Fig. 2



Fig. 5

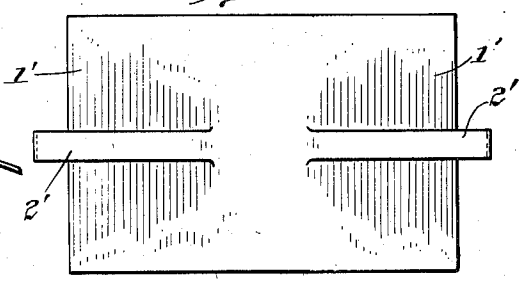


Fig. 4

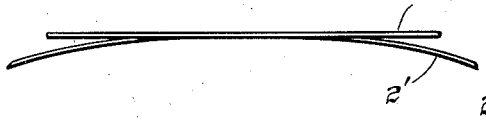


Fig. 7

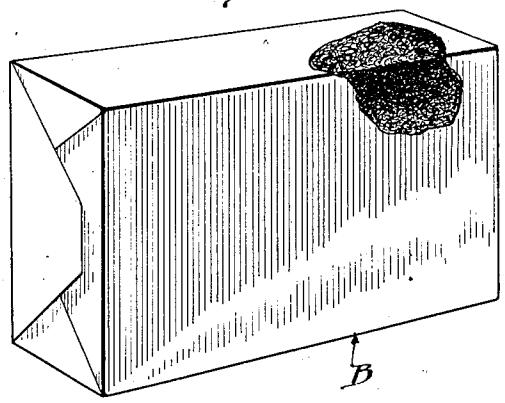
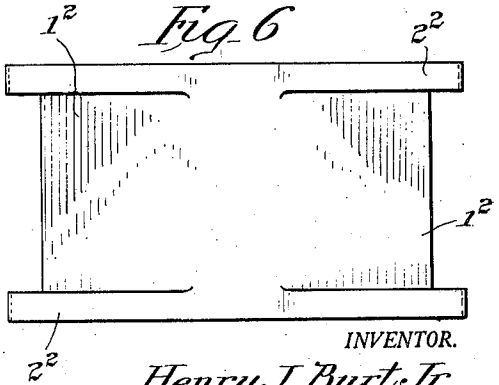


Fig. 6



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BY

ATTORNEY.

Patented June 24, 1930

1,767,168

UNITED STATES PATENT OFFICE

HENRY J. BURT, JR., OF WHEATON, ILLINOIS

BUILDING MATERIAL

Application filed March 9, 1929. Serial No. 345,849.

This invention relates to building material designed and adapted for filling the wall spaces of frame buildings to provide insulation against thermal changes and sound, and to prevent the spread of combustion.

The object of the present invention is to provide simple and inexpensive means for securing such insulating filling material—preferably in the form of unit packages—in the spaces of buildings, which usually are left open at one side, as the spaces between the joists of porches and also, sometimes, between roof joists.

What I now consider a preferable form of insulating material for the particular purpose specified is that which forms the subject matter of an application for U. S. Letters Patent filed by me on or about November 5, 1928, and numbered serially 317,293. I do not, however, desire to limit myself to this or any particular kind or form of insulating filling material, and said insulating filling material of my said prior application may, therefore, exemplify any desired or approved form of insulating filling material.

To effect the object of the invention as it relates to means for securing the insulating filling material in the open-sided spaces to be filled, said means comprises what may be called a follower plate made of suitable sheet metal, preferably galvanized sheet steel, said plates being shorter than the width of the spaces to be filled and slightly narrower than the insulating units with which they are designed for use; said securing means also comprising springs applied to the outer sides of said plates, the ends of which project at both ends of said follower so that the "overall" length of the springs applied to each plate will be somewhat greater than the width of the spaces to be filled, whereby, when inserted cross-wise of said spaces, a bow or bend will be imparted to said springs, which will cause the ends thereof to grip the joists which define the spaces to be filled.

My invention also comprises the various other features and details of construction hereinafter described and claimed.

In the accompanying drawing, in which my invention is fully illustrated,

Figure 1 is a sectional view of a porch or like structure having open-sided spaces defined by the joists thereof, which contain insulating filling material secured therein by means embodying my invention and improvements;

Figure 2 is a separate edgewise view of the follower plate and securing spring therefor, shown in Figure 1, and which I now consider embodies the invention in its preferable form;

Figure 3 is a bottom plan view thereof;

Figure 4 is a view similar to Figure 2, illustrating a follower plate and securing spring embodying my invention and improvements in slightly modified form;

Figure 5 is a bottom plan view thereof;

Figure 6 is a bottom plan view substantially similar to Figure 5, showing a further slight modification of the invention; and

Figure 7 is an isometric view of a unit package of insulating filling material such as is shown in Fig. 1.

Describing the invention with particular reference to the drawings and referring in the first instance to Figures 1 to 3 and 7, A, Fig. 1, designates, as a whole, a portion of what we may assume is the floor of an enclosed porch, consisting of joists a which support the floor a' and which define spaces a^2 at the under side of the porch floor, the bottom sides of which are open.

Contained in the spaces a^2 are unit packages B of insulating material, what I now consider to be a preferable form of package being that which forms the subject-matter of my said prior application, Serial Number 317,293, to which reference is here made for a description of said insulating package in detail. I desire it understood, however, that I do not limit myself to the use of the unit package of my said prior application and which is herein shown as exemplifying any desired form of insulating unit suitable for the purpose.

In accordance with my invention, said insulating units B are secured in the spaces a^2 by what may be designated follower plates 1,

which are slightly shorter than the width of the spaces a^2 and the width of which is preferably somewhat less than that of the insulating unit B, though this dimension admits of considerable variation. In use, an insulating unit B having been inserted into a space a^2, a follower plate 1 is placed against the exposed side thereof and pressed inwardly with sufficient force to subject said insulating unit to a pressure to cause it to conform to and fill the cross-section of said space which it occupies. Said follower plate and insulating unit B are adapted to be secured in position by means of a spring 2 applied to said follower plate, the ends of which project beyond the ends of said follower plate and are adapted to grip the sides of the joists. Said springs 2 are preferably leaf springs and for economy are made separate from the follower plates 1 and are secured thereto by rivets or other suitable means.

Also, said springs are of such over-all length that they will be flexed or bowed when they are inserted into the spaces a^2, thus causing their ends to react against the joists a. As shown, also, the ends of said springs are chisel-shaped, as shown at 3, which will cause them to grip the joists a with force corresponding to the pressure due to compression of the insulating units.

In making an installation, insulating units B will be inserted into the spaces so that they will contact with each other until all such spaces have been filled.

Instead of making the springs 2 as separate parts, as shown in Figs. 1 to 3, and heretofore described, my invention contemplates making the follower plates and springs integral with each other. This can be effected in a simple manner by first stamping, from suitable resilient sheet metal, blanks shaped and proportioned to form both said follower plates and springs and then slitting said blanks on proper lines to form the springs.

This modification is shown in Figs. 4 to 6, Figs. 5 and 6 being substantially identical with each other except that, as shown in Fig. 5, only a single spring is applied to the follower plate, whereas in Fig. 6 two springs are applied to the follower plate.

Describing the modification shown in Figs. 4 and 5, $1'$ is the follower plate and $2'$ the springs, while in the modification shown in Fig. 6, 1^2 is the follower plate and 2^2 the duplicate springs applied thereto.

I claim:

1. An insulating unit for the purpose specified and means for securing it within an open-sided space consisting of a follower plate adapted to be inserted into said space outside of said insulating unit and providing means for subjecting the same to pressure, and a spring applied to the outer side of said follower plate, said spring being longer than the width of said space and in use being inserted crosswise thereof, whereby, when said spring is applied to said follower plate, it will be flexed and when released its ends will grip the side walls of said space.

2. An insulating unit and securing means therefor as specified in claim 1, in which the follower plate and the spring applied thereto are initially separate from each other and are secured together to form a unitary structure.

3. An insulating unit and securing means therefor as specified in claim 1, in which the ends of the spring applied to the follower plate are chisel-shaped.

4. An insulating unit and securing means therefor as specified in claim 1, in which the insulating unit is compressible and resilient.

In witness that I claim the foregoing as my invention, I affix my signature this 5th day of March, 1929.

HENRY J. BURT, JR.