Jan. 25, 1927. 1,615,801

A. ELMENDORF

HEAT INSULATING CONSTRUCTION MATERIAL

Filed Feb. 4, 1921

Fig. 1.

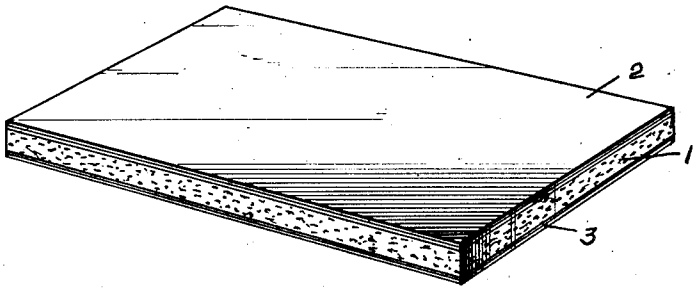


Fig. 2.

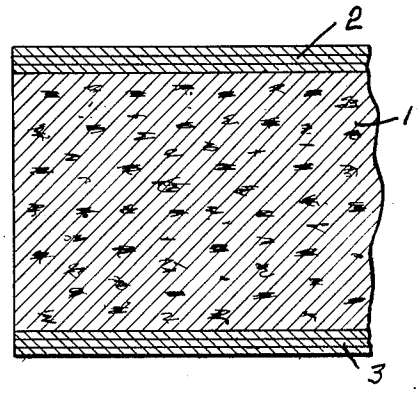
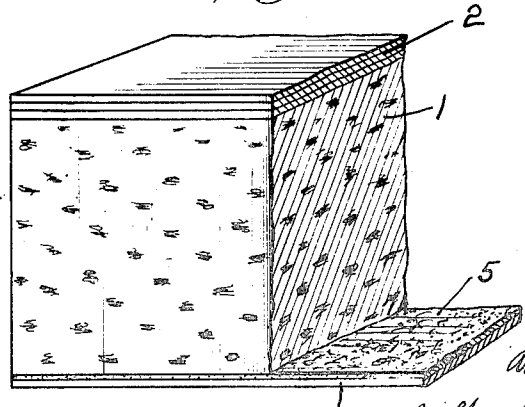


Fig. 3.



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UNITED STATES PATENT OFFICE.

ARMIN ELMENDORF, OF CHICAGO, ILLINOIS, ASSIGNOR TO HASKELITE MANUFACTURING CORPORATION, A CORPORATION OF NEW YORK.

HEAT-INSULATING CONSTRUCTION MATERIAL.

Application filed February 4, 1921. Serial No. 442,406.

My invention has for its object to produce a simple, strong and durable material particularly adapted for use in walls for refrigerators, refrigerator cars, or elsewhere where heat insulating properties are desirable.

A further object of the present invention is to produce a simple and novel heat insulating material, a single thickness of which may be substituted for built-up walls of many layers for the purpose of securing heat insulating characteristics.

The various features of novelty whereby my invention is characterized will hereinafter be pointed out with particularity in the claims; but, for a full understanding of my invention and of its objects and advantages, reference may be had to the following detailed description taken in connection with the accompanying drawing, wherein:

Figure 1 is a perspective view of a sheet of my improved material;

Fig. 2 is a cross section, on an enlarged scale, through a fragment of such material; and

Fig. 3 is a perspective view of a fragment of a modified form of the material.

In accordance with my invention I take a thick sheet, 1, of a good heat insulating material, preferably cork board which is not only a good heat insulator but is likewise resilient and elastic, and sheath or cover this sheet on both of its broad faces with suitable wearing material. In the arrangement shown in Figs. 1 and 2, the sheathing on both faces consists of multiple-ply wood veneer, as indicated at 2 and 3, the layers of which are preferably secured together with a waterproof blood glue and each of the sheathing layers being glued to the core layer of heat insulating material. All of the glued joints could be made in a press at the same time, but a much heavier pressure is required to glue together the layers of wood than is needed to glue the wood to the yieldable cork board, and therefore I prefer to make the ply-wood in the usual way and then glue it to the core.

The surface layers of the finished product may be made out of wood of any desired kind, so as to permit the material to fit in with any desired scheme of woodwork and present any desired surface characteristics obtainable with the use of wood. In some cases, refrigerators for example, it may be desirable to have at least one of the faces of the sheet finished in metal. A construction of this kind is shown in Fig. 3 in which the core member, 1, is covered on one side with a sheet of ply-wood, 2, while on the other face is a sheet of metal, 4. The metal may be glued directly to the core. I have found it to be apparently advantageous, however, to interpose between the metal and the core a layer of fabric, 5, the fabric being glued both to the core and to the metal and, particularly where the fabric is Canton flannel or similar material, serving to make an extremely effective union between the insulating core and the metal.

While I have illustrated and described a few preferred forms of my invention, I do not desire to be limited to the exact structural details thus illustrated and described; but intend to cover all forms and arrangements which come within the terms employed in the definitions of my invention constituting the appended claim.

I claim:

A material comprising a thick stiff self-supporting sheet of cork board and comparatively thin layers of sheathing material glued to and extending over only the broad faces thereof, at least one of said layers being metal.

In testimony whereof, I sign this specification.

ARMIN ELMENDORF.

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