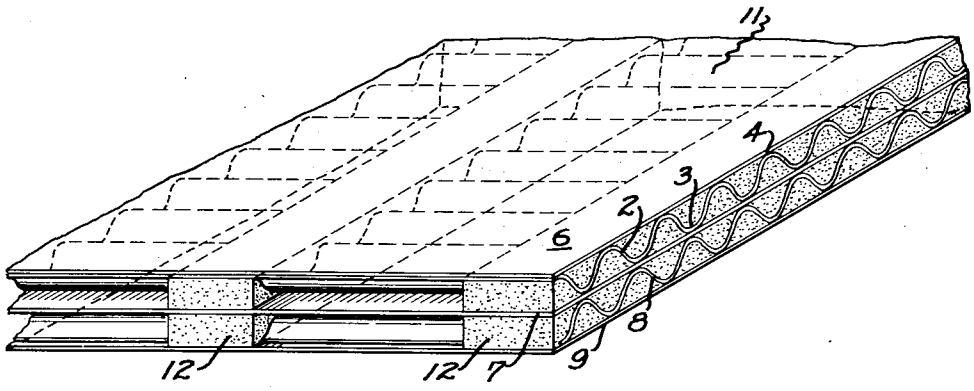
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D. FINLEY

INSULATING BOARD

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INVENTOR
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UNITED STATES PATENT OFFICE.

DOZIER FINLEY, OF BERKELEY, CALIFORNIA, ASSIGNOR TO THE PARAFFINE COMPANIES, INC., OF SAN FRANCISCO, CALIFORNIA, A CORPORATION OF DELAWARE.

INSULATING BOARD.

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My invention relates to an insulating board of corrugated paper, and the broad object of the invention is to provide a board of the character described with dead air spaces or pockets.

Another object of the invention is to provide a board of the character described with a filler to prevent the circulation of air along the furrows of the corrugated sheet.

Another object of the invention is to provide a board of the character described with a series of spaced bands of filler to provide air pockets in the spaces between the bands.

Another object of the invention is to provide a rigid board of the character described and comprising adjacent corrugated sheets which serve to reinforce each other.

Other objects of the invention together with the foregoing will be set forth in the following description of my preferred embodiment of means for practicing the invention, and which is illustrated in the drawings accompanying and forming part of the specification. It is to be understood that I do not limit myself to the showing made by the said description and drawings, as I may adopt variations of my preferred form within the scope of my invention as set forth in the claims.

Referring to the drawings:

The figure is a perspective view of the preferred embodiment of my board, in which two sheets of corrugated paper are shown adjacent to each other.

In terms of broad inclusion, my invention comprises a sheet of corrugated paper, on each side of which is adhesively fastened a layer of plane paper. A number of dead air pockets is provided for by means of a series of spaced bands of filler between the layers and across the furrows of the corrugated sheet; thereby trapping and preventing the circulation of air therethrough.

In greater detail, the insulating board of my invention comprises a sheet of corrugated paper 2 having the furrows 3 and ridges 4. On the sides of the paper 2, are adhesively fastened layers of plane paper 6 and 7. A side of a second sheet of corrugated paper 8 is adhesively fastened to one of the layers of plane paper, so as to be adjacent to the first sheet; while a layer of plane paper 9 is adhesively fastened on the other side. In order to provide for a rigid structure, the corrugated sheets are placed adjacent to each other with the respective furrows and ridges in direct alinement.

Means are provided for maintaining a plurality of dead air spaces or pockets 11 in the insulating board. Between the layers of paper on the sides of the corrugated sheets and across the furrows is a series of spaced bands 12 of filling material. A band is preferably provided for along each edge of the sheet, while as many bands may be placed between the edge bands as the conditions demand. It is thus seen that by placing the filler across the furrows, air cannot circulate along them and dead air pockets are hence formed in the spaces 11 between the bands.

The filler may be of any insulating material such as a set cementitious product, as lime or cement mix, a mixture of sawdust and water glass, or infusorial earth and a binding medium such as water glass. However, it is preferred to use plaster of Paris, or a mixture of plaster of Paris and sawdust, due to the quick setting properties of the mix, when water is added to the hemihydrate of calcium sulphate.

Although in the preferred embodiment of my invention, I have disclosed the use of two sheets of corrugated paper adjacent to each other to form a single board, it is apparent that the spirit of the invention can be carried out by the use of only one sheet.

The sheets of plane paper may be omitted if the corrugated sheet with its spaced bands of filler across the furrows is snugly fitted within a double wall structure such as a container having spaced walls, for the wall surface adjacent the sheet will provide the necessary means for insuring the formation of dead air pockets. In this case, the corrugated sheet may be made of corrugated tin, or any other sheet metal or sheet material as well as of paper or paper board.

I claim:

1. An insulating board comprising a sheet of corrugated paper, a layer of plane paper on each side of the corrugated paper, and a filler between said layers and across the furrows of the corrugated sheet.

2. An insulating board comprising a sheet of corrugated paper, a layer of plane paper on each side of the corrugated paper, and

a filler comprising plaster of Paris between said layers and across the furrows of the corrugated sheet.

3. An insulating board comprising a sheet of corrugated paper, a layer of plane paper on each side of the corrugated paper, and a filler comprising hydrated plaster of Paris and sawdust between said layers and across the furrows of the corrugated sheet.

4. An insulating board comprising a sheet of corrugated paper, a layer of plane paper on each side of the corrugated paper, and a series of spaced bands of filler between said layers and across the furrows of the corrugated sheet.

5. An insulating board comprising corrugated sheets of paper adjacent side to side and with the respective furrows and ridges of the sheets in direct alinement, a layer of plane paper on each side of the sheets, and a filler between said layers and across the furrows of the corrugated sheets.

6. An insulating board comprising corrugated sheets of paper adjacent side to side and with the respective furrows and ridges of the sheets in direct alinement, a layer of plane paper on each side of the sheets, and a series of spaced bands of filler between said layers and across the furrows of the corrugated sheets.

7. An insulating board comprising a corrugated sheet of material, and spaced bands of filler across its furrows.

8. An insulating board comprising a corrugated sheet of material, spaced bands of filler across its furrows, and means adjacent a side of said sheet for forming dead air pockets in said furrows.

9. An insulating board comprising a sheet of corrugated paper, a layer of plane paper on a side of the corrugated paper, and spaced bands of filler across the furrows and between the layer of plane paper and the corrugated sheet.

In testimony whereof, I have hereunto set my hand.

DOZIER FINLEY.