

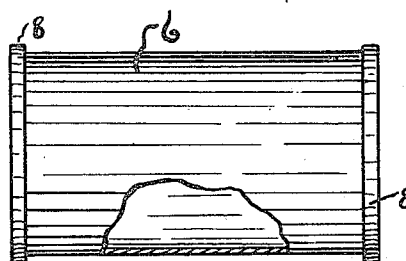
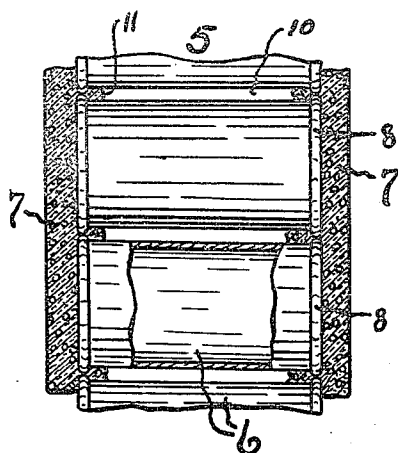
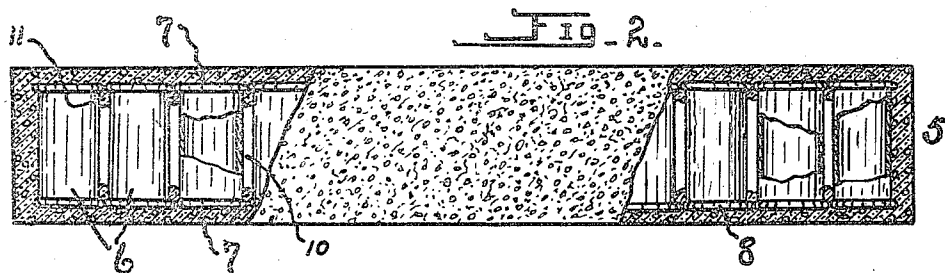
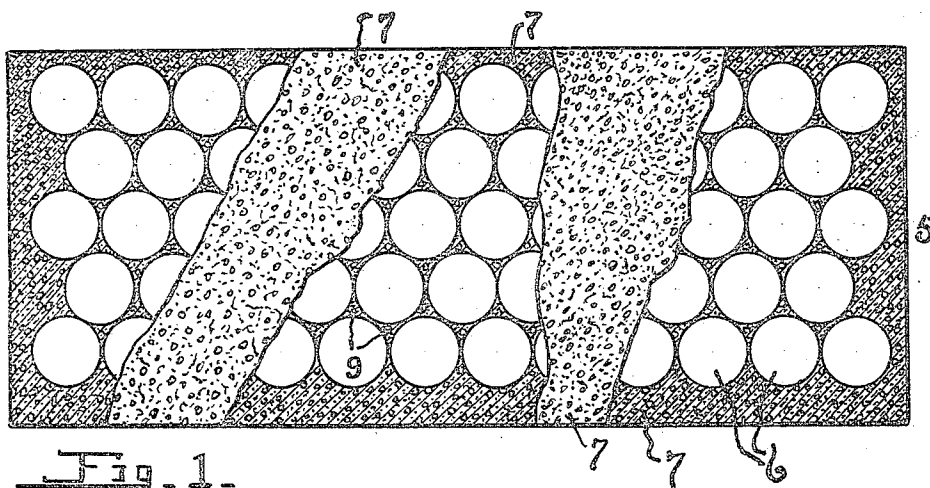
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A. E. OLANDER

WALL CONSTRUCTION

Filed Oct. 31, 1921



Inventor

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By

UNITED STATES PATENT OFFICE.

AXEL E. OLANDER, OF OMAHA, NEBRASKA.

WALL CONSTRUCTION.

Application filed October 31, 1921. Serial No. 511,775.

To all whom it may concern:

Be it known that I, AXEL E. OLANDER, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Wall Construction, of which the following is a specification.

This invention relates to an improvement in wall construction, and has for its object to provide a wall consisting of an outer and inner jacket or secondary wall, said jackets or secondary walls being firmly connected and maintained parallel by use of a plurality of cylindrical receptacles disposed therebetween and arranged side by side, the advantage being that the receptacles operate to confine and prevent circulation of air or the greater part thereof in the space between the walls, and providing a more uniform temperature than ordinary, another advantage being that a lesser quantity of cement, than usual, will be required for the wall.

The invention consists of the novel construction, combination and arrangement of parts as described herein and claimed, and as illustrated in the accompanying drawing, wherein,—

Fig. 1 is a view, partly in section, of the wall in side elevation. Fig. 2 is a plan view of the same, partly in section. Fig. 3 is a view showing a part of a wall in transverse section. Fig. 4 is a side view of a receptacle, partly in section.

Referring now to the drawing, the wall consists of a plurality of cylindrical receptacles 6 disposed in engagement, side by side, layers or jackets of cement or similar adhesive material, while in plastic condition, being applied to the receptacles to form inner and outer walls 7.

The receptacles preferably are constructed of sheet-metal, and ordinary tin cans may be employed to advantage; and it will be seen that when disposed one upon the other, side by side, their flanges 8 will be in engagement, and that areas 9 (Fig. 1), approximately of triangular form will be provided between the flanges, and that similar,

greater areas 10 (Figs. 2, 3,) will also be formed between the adjacent sides of the receptacles.

The use of the invention is of advantage in constructing walls of ships, buildings, culverts, flumes, basement floors of buildings or other floors and various other structures, the operation being that, in forming the jackets or walls 7, the cement is so applied that it fills the areas 9 between the flanges 8 and forms all parts of walls 7 outwardly of the ends of the receptacles, and provides detents or locking elements 11 by filling parts of the triangular areas 10 between the receptacles, adjacent to and inwardly of the flanges 8, and when hardened, the cement operates to bind the walls 7 to the end portions of the receptacles, the latter operating to rigidly connect said walls 7 and maintaining them parallel.

It will be seen that the receptacles 6 will be containers of air having no circulation, the air between the receptacles, in the areas 10, being all that may circulate, this being a desirable feature in maintaining uniformity in temperature. Also, since the receptacles are of cylindrical form and disposed with their flanges in engagement, stresses directed thereto will be resisted to advantage.

I claim as my invention,—

In wall construction, hollow cylindrical bodies provided transversely at their ends with flanges and disposed one upon another with their axes approximately parallel, the flanges of said bodies at each of their ends being disposed in engagement and in vertical alignment, and an adhesive element outwardly of the ends of said bodies and filling the interstices between and adjacent to the inner sides of the flanges providing air spaces between said hollow cylindrical bodies.

In testimony whereof, I have affixed my signature in presence of two witnesses.

AXEL E. OLANDER.

Witnesses:

HIRAM A. STURGES,
ARTHUR H. STURGES.