

S. C. FIDDYMENT.
 CONCRETE CONSTRUCTION.
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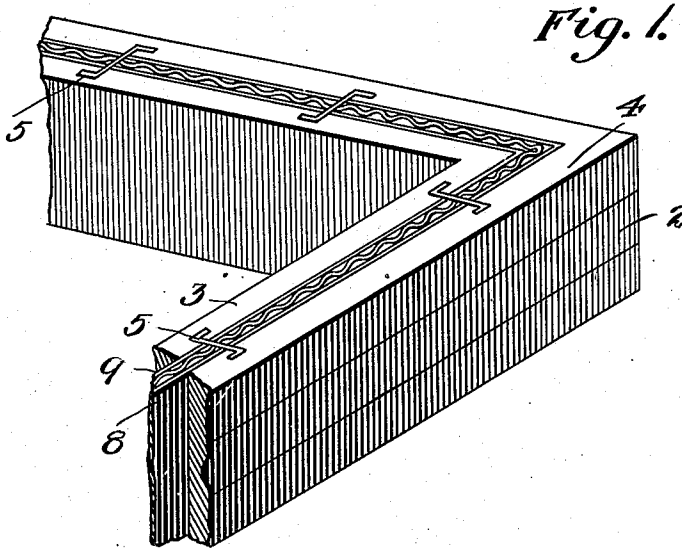


Fig. 2.

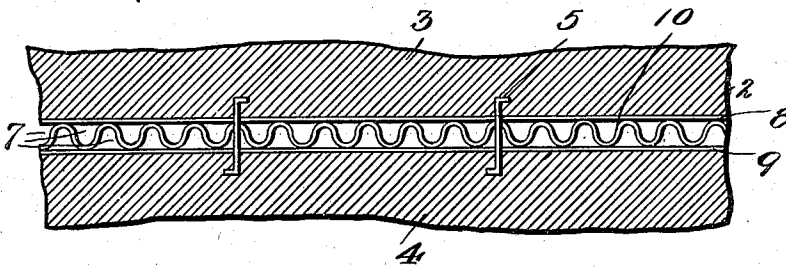
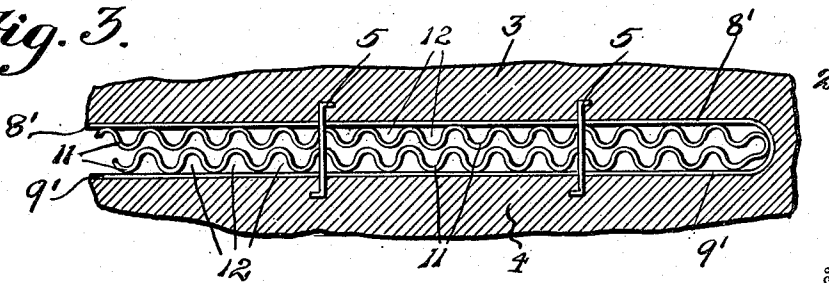


Fig. 3.



Inventor

Samuel C. Fiddymont.

Witnesses

Joe H. Collins
 W. E. Jones.

By Michael J. Stark & Sons,
 Attorney

UNITED STATES PATENT OFFICE.

SAMUEL C. FIDDYMENT, OF LOCKPORT, ILLINOIS.

CONCRETE CONSTRUCTION.

932,692.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, SAMUEL C. FIDDYMENT, a citizen of the United States, and a resident of Lockport, in the county of Will and State of Illinois, have invented certain new and useful Improvements in Concrete Construction; and I do hereby declare that the following description of my said invention, taken in connection with the accompanying sheet of drawings, forms a full, clear, and exact specification, which will enable others skilled in the arts to which it appertains to make and use the same.

This invention has general reference to improvements in concrete construction; and its object is to make buildings constructed of concrete water, and damp-proof.

To attain this object, my invention consists in the novel and peculiar combination of parts and details of construction as hereinafter first fully set forth and described, and then pointed out in the claims.

In the drawings already referred to, which serve to illustrate this invention more fully, Figure 1 is a perspective view of a fragment of a building constructed in accordance with my invention. Fig. 2 is a sectional plan of a concrete wall, showing the application of the water, and damp-proofing material therein. Fig. 3 is a plan of the water, and damp-proofing material formed with a plurality of corrugated sheets.

Like parts are designated by corresponding symbols of reference in all the figures.

In the drawings, the reference numeral 2 designates the walls of a concrete structure, my invention, it being understood, being applicable to any concrete building, dwelling-house, barn, and the like. These walls are built up in the usual manner, either solid, or from properly-shaped blocks, and each wall is composed of two parts, an inner wall 3, and an outer wall 4, these walls being tied together in any desired manner, anchors 5, however being preferred, since they do not interfere with my invention. Between these walls I locate water, and damp-proof sheetings 8 and 9, which may consist of a building-paper made waterproof in any desired manner, such as being impregnated with tar, or other well-known and approved substance, the anchors 5 being passed through these sheetings, as shown in the drawings. In applying this sheeting, I shall overlap the ends and sides of the various individual

sheets so that a continuous sheeting is produced which will effectually prevent moisture from penetrating the various walls from the outside of the building.

It will be observed that sheets 8 and 9 about the inner faces of the walls 3 and 4 respectively and between same in engagement therewith is arranged a corrugated sheet 10, which forms dead air spaces 7. As depicted in Fig. 3, I employ a pair of corrugated sheets 11, arranged to have a slight space between their adjacent inner faces whereby a continuous tortuous air passage is formed, the sheets 11 having their outer faces secured to the adjacent inner face of the sheets 8' and 9', whereby individual vertical air passages 12 are formed between the sheets 8' and 9' and 11.

In cases where basements, sub-basements or other underground structures, tunnels, and conduits are subject to inundation by water entering from the outside of the structure, I may, as a further precaution, and additional means, for preventing the entrance of such extraneous moisture, fill the interstices or spaces 7 with tar, pitch, asphalt, or compositions of these substances or compounds of the same, as the building progresses so that when the structure is completed there is, in the individual walls, an absolutely waterproof lining or wall integrally embedded therein.

I have heretofore specifically mentioned corrugated packing board as the preferred material used in the construction of the water, and damp-proof walls of a concrete building, but I desire it to be understood that other materials may be employed, such as felt, sheet-asbestos &c., and in fact iron, steel or other metal may be employed without departing from my invention. I will also state that instead of using a board saturated or impregnated with a substance which will make the same waterproof, I may employ a material that needs no water-proofing, since the dead-air spaces in the walls form, of themselves, a damp-proof medium that will prevent dampness from passing from the outer wall to the inner wall of a building.

I will here state that paper &c., boards such as heretofore set forth may consist of single sheets or may be built up of several thicknesses or layers cemented together or not, at the option of the party desiring to

use this sheeting and depending upon the conditions under which the same is to be employed, so that the sheeting illustrated in the drawings may consist each of one or
5 more layers in order to secure the desired results. It will be further observed that this sheeting is comparatively cheap and that a building of water, and damp-proof construction as described, can be erected at
10 less cost than any other damp, and waterproof construction with which I am acquainted.

Having thus fully described my invention, I claim as new and desire to secure to me
15 by Letters Patent of the United States—

1. In a concrete structure in combination with an inner wall and an outer wall arranged in spaced relation, a sheet of waterproof material abutting the inner faces of
20 each of said walls, a corrugated sheet of waterproof material interposed in the space between said sheets of waterproof material and having its corrugated parts secured to said sheets, and transverse anchors which ex-

tend through all three of the sheets and
25 into each of said walls.

2. In a concrete structure in combination with an inner wall and an outer wall arranged in spaced relation, a sheet of waterproof material abutting the inner faces of
30 each of said walls, and a pair of corrugated sheets of waterproof material arranged to have a slight space between their adjacent inner faces whereby a continuous tortuous,
35 air passage is formed, said sheets of corrugated material having their outer faces secured to the adjacent inner face of said first named sheets of material whereby individual
40 vertical air passages are formed between said corrugated sheets and the first named sheets.

In testimony that I claim the foregoing as my invention I have hereunto set my hand in the presence of two subscribing witnesses.

SAMUEL C. FIDDYMENT.

Attest:

MICHAEL J. STARK,
A. G. PETERSON.