F. O. EVANS.

STAVE.

APPLICATION FILED OCT. 10, 1919.

1,356,347. Patented Oct. 19, 1920.

FIG. 1

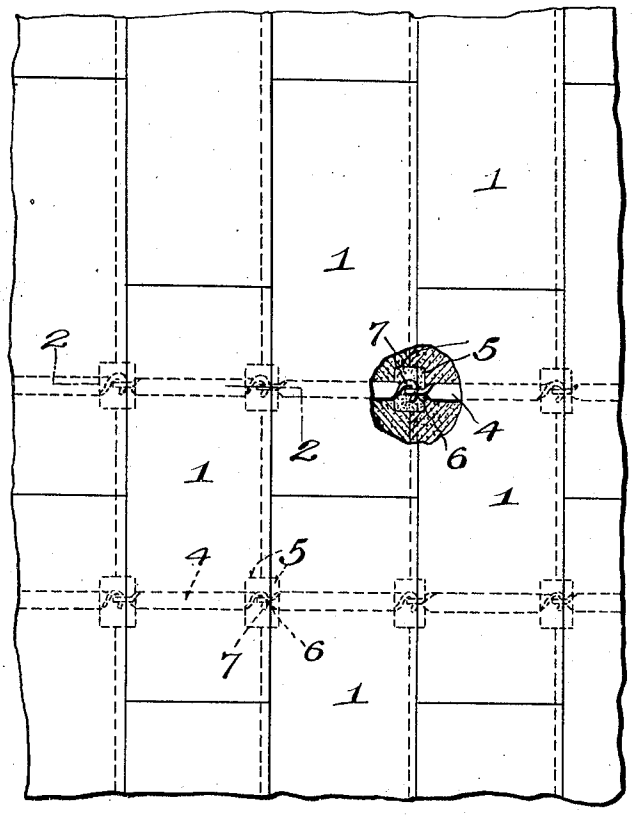


FIG. 2

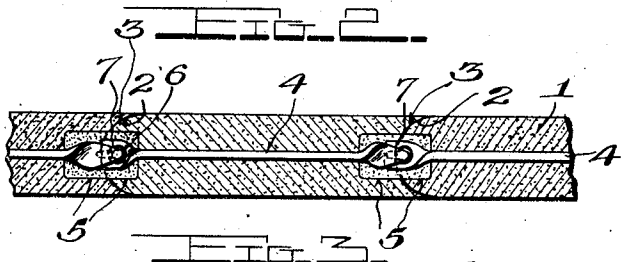
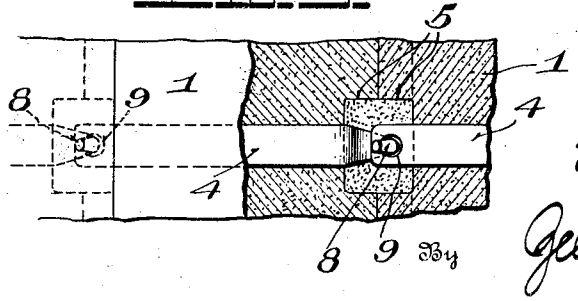


FIG. 3



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STAVE.

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To all whom it may concern:

Be it known that I, FRANK O. EVANS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Staves, of which the following is a specification.

This invention relates to certain new and useful improvements in a stave and more particularly to an improved means for connecting adjoining staves, the principal object residing in the provision of means which will permit of relative angular disposal of the connected staves whereby a wall constructed therefrom may be flexed to assume various shapes.

The invention consists in a stave or block preferably constructed from cement and having one edge transversely convexed and the opposite edge transversely concaved to receive the convex edge of an adjacent stave and thereby permit of pivotal movement between the staves, and a tie link or bar extending through each stave from its concave to its convex edge and terminating in means for pivotal coupling with the tie link of an adjacent stave, such coupling of the links being effective by and during the positioning of the staves.

In the drawings—

Figure 1 is a side elevation of a wall constructed in accordance with the present invention, a portion being removed to show the connection between two tie links;

Fig. 2 is a horizontal section on line 2—2 of Fig. 1; and

Fig. 3 is an enlarged view disclosing the structure in slightly modified form.

The stave or block is preferably cast from cement and comprises a rectangular body 1 having one side edge 2 formed with a transverse convexity and its opposite, paralleling edge 3 with a transverse concavity which defines a lengthwise groove to conformably receive the rounded edge 2 of the next adjacent block 1. This nesting relation between the edges of the staves permits of relative angular adjustment of the staves without separating them at their joints.

A pair of tie links or bars 4 pass through each stave at spaced points and protrude slightly through the concave and convex edges. Each link is a flat, strap-like bar which is disposed with its sides parallel to the side faces of the stave, and the edges of the latter are recessed about the protruding ends of the links, as indicated at 5. Within these recesses 5 the ends of the links are twisted ninety degrees about their longitudinal axes so that the terminals of the links are horizontally disposed. One terminal is formed with an eye 6 and the opposite terminal with a downturned hook 7 engageable in the eye of a link in the adjacent stave.

In the construction of a wall, the stave being inserted is first positioned to have its eye 6 register with the hooks 7 of two superposed staves and then shifted to thread the eyes over the hooks. Each stave is thus positioned and when the wall is completed the component staves will be positively locked against unauthorized removal. It will be noted that the hooks are substantially in alinement with the joint between abutting edges 2 and 3 so that the pivotal nesting movement between said edges will not be interfered with. Cement or mortar may be "buttered" in the recesses before setting up the staves which acts to lock the coupled links in their adjusted relation.

Fig. 3 depicts the link terminals extending straight into the recesses or pockets 5 without the twist embodied in the preferred construction. The hooks 8, therefore, extend laterally and are engaged in the horizontal eyes 9 by a lateral turning movement of the rounded edge 2 in its concave seat. This construction also affords a pivotal connection between staves without interfering with their perfect nesting.

In both forms the pivotally connected tie links constitute a continuous tie rod extending through the entire wall. The links of one stave form a binder between the relatively staggered pair of staves on each side and tend to hold them firmly together in end to end engagement as is clearly illustrated in Fig. 1.

What is claimed is—

1. A stave having a body, and a tie link extending through the body and adjacent to the respective body ends, said link being formed of a strip of flat sheet metal set on edge and having its wide faces parallel to the front and rear faces of the body, one end of the strip being twisted and formed with a hole and the other end of the strip being twisted and contracted and formed

into a hook to be received in the hole of an adjacent link.

2. A stave having a body, and a tie link extending through the body and adjacent to the respective body ends, said link being formed of a strip of flat sheet metal one end of the strip being formed with a hole disposed between the normal sides of the strip and the other end of the strip being contracted and formed with a hook to be received in the hole of an adjacent strip.

In testimony whereof I affix my signature.

FRANK O. EVANS.