

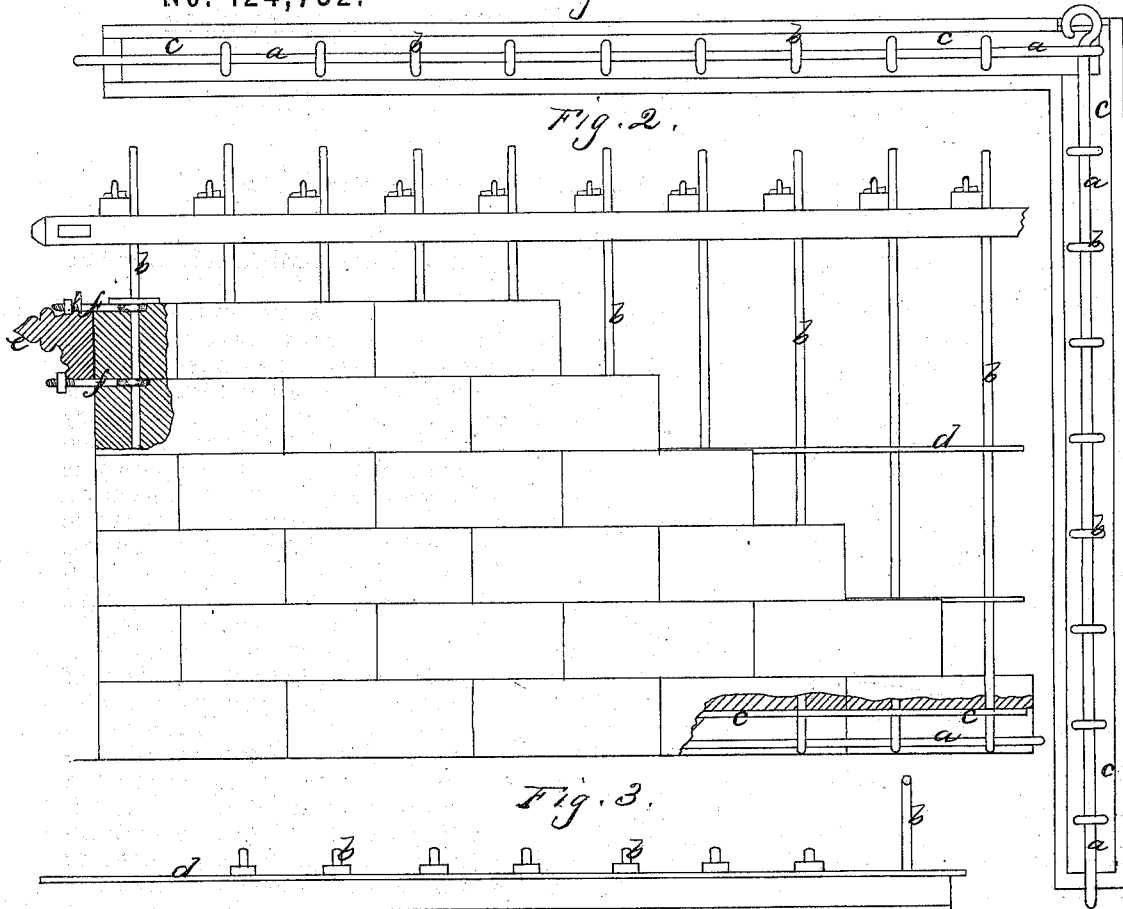
WILLIAM H. FOYE.

Improvement in Submarine and other Walls.

No. 124,732.

Fig. 1.

Patented March 19, 1872.



Witnesses.
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WILLIAM H. FOYE, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN SUBMARINE AND OTHER WALLS.

Specification forming part of Letters Patent No. 124,732, dated March 19, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, WILLIAM H. FOYE, of San Francisco, county of San Francisco, State of California, have invented certain Improvements in Constructing Submarine and other Walls; and I do hereby declare the following description and accompanying drawing are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

My invention relates to improvements in the construction of both submarine and surface-walls; and is applicable, more particularly, to the peculiar method of constructing this class of masonry, as described and claimed in Letters Patent No. 92,033, which were granted to me on the 29th day of June, 1869; and it consists in certain additions or improvements by which the laying of the wall may be facilitated, especially when the work to be accomplished is under water, and a plan for securing the cornice or other ornaments to the walls of surface-buildings.

In order to explain my invention so that others will be able to understand its construction, reference is had to the accompanying drawing forming a part of this specification, which represents a view of a wall constructed according to the plans and specification of said Letters Patent No. 92,033, to which reference is here made for a full explanation of its general construction.

After the ground-rod *a* has been placed in position with the upright guides *b* secured to it, it is necessary in submarine work to fix these upright rods at a certain distance apart, according to the distance apart of the holes through the blocks which are to be lowered upon them; or, if the wall is made of brick, they are adjusted according to the interval it is desired to leave between the rods. This we will call "spacing the upright guides." This I accomplish by piercing a metal plate, board, or other equivalent device, *c*, with holes, which space off the intervals between the upright rods, which I send down until it shall rest as nearly as possible upon the ground-rod. This prepares the rods for the next process of sending down the block

or laying the wall, as described in Letters Patent No. 92,033.

In the construction of surface-walls for buildings, where it is necessary to leave window and door-spaces, I use cross-plates across the upper end of the space, to which the upright guides are secured in order to support the masonry above, which will be employed in a manner similar to the ground-rods; and between the layers of blocks, at every fourth or fifth course, metal plates *d*, similar to the spacing-plate, can be lowered, so as to lie between the courses and further aid in giving strength to the wall. After the last course of the wall has been placed in position, an upper plate is passed over the guide-rods so as to rest upon it. The guide-rods can be coupled together at the height of the first story, or at any other point in the wall, by forming screw-threads upon the upper ends of the lower rods and the lower ends of the upper rods, and screwing them into the opposite ends of the same nut; and a nut is also employed at the upper ends of the rods for drawing them firmly up against the brick, stone, or other work of which the wall is composed. If, in the construction of the wall, it is desired to attach any molding, cornice, or other ornamental work, *e*, upon the face of the wall, it is done by means of a bolt, *f*, which is provided with a hook at one end. This hook is passed around the guide-rods *b*, and the bolt placed so as to stand at right angles to the line of the wall. The cornice or other ornament is then pierced with holes, through which this bolt passes, and a nut can then be screwed upon the outer end until the ornament is firmly fixed to the wall without disturbing or altering its regular construction.

These improvements are necessary in the construction of walls, according to the plan described in Letters Patent No. 92,033, in order to carry out the inventor's idea of a strong and substantial wall, which can be readily constructed, and be proof against shocks of earthquake or other disturbing causes.

The plan, herein described, for securing the cornice or ornamental work to the house or wall will remove the objections to these attachments, which are known to exist in California and other countries subject to earthquakes, as the great-

est danger to life during an earthquake is from falling cornices and wall ornaments.

Having thus described my invention with reference to my former Letters Patent, what I desire to secure in connection therewith, is—

1. The spacing-plates, in combination with the ground-rod *a* and vertical rod *b*, arranged in the described relation to the blocks in the wall, as set forth.

2. The cornice *c*, attached to the wall by the

bolts *jj*, held by rods *b* passing through the hooks thereof, as set forth.

In witness whereof I have hereunto set my hand and seal.

WILLIAM H. FOYE. [L. S.]

Witnesses:

GEO. H. STRONG,
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