

W. H. DEAN.  
 WALL CONSTRUCTION.  
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983,214.

Patented Jan. 31, 1911.

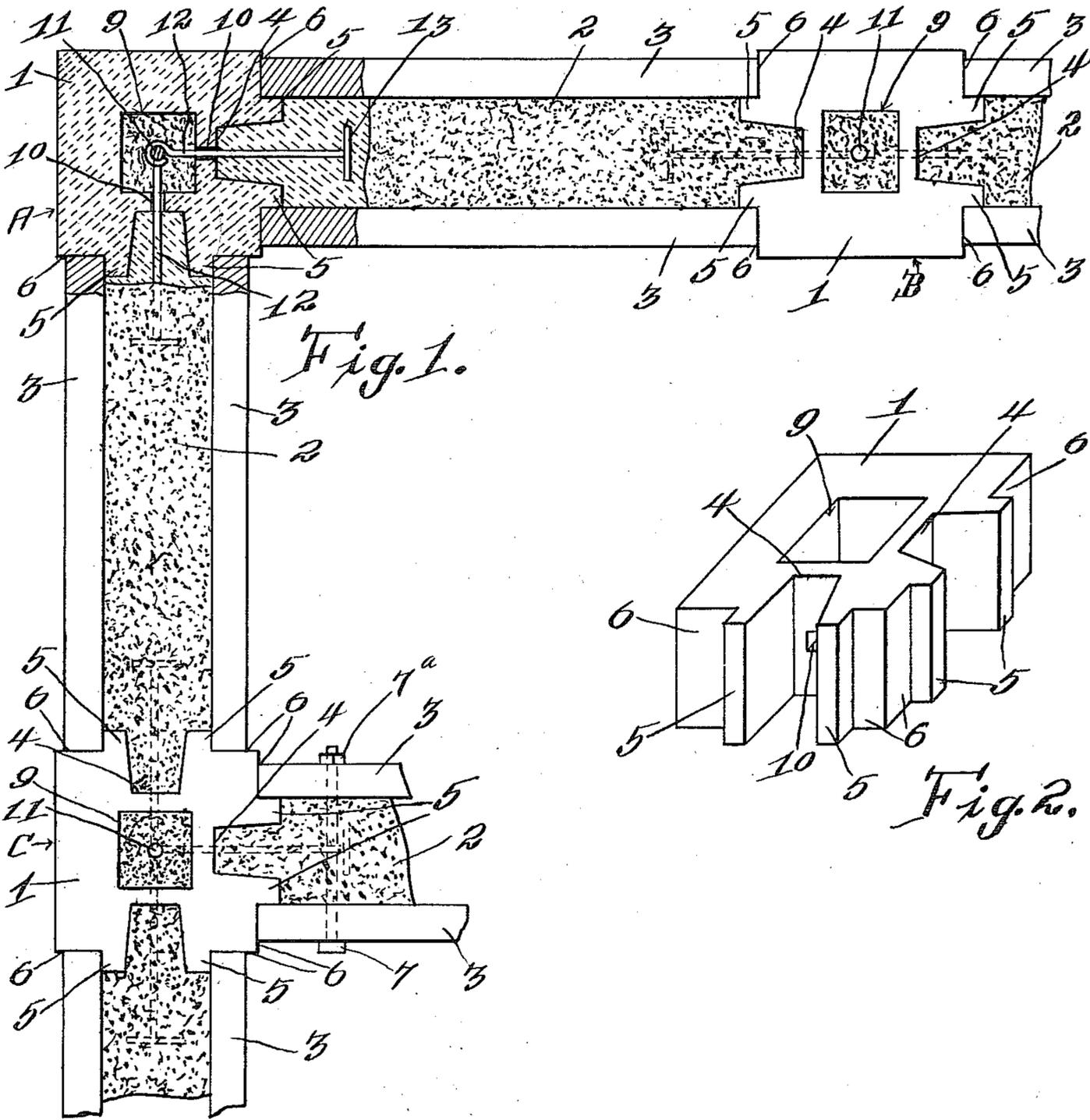


Fig. 1.

Fig. 2.

Witnesses  
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# UNITED STATES PATENT OFFICE.

WILLIAM H. DEAN, OF CHICAGO, ILLINOIS.

## WALL CONSTRUCTION.

983,214.

Specification of Letters Patent. Patented Jan. 31, 1911.

Application filed March 19, 1910. Serial No. 550,471.

*To all whom it may concern:*

Be it known that I, WILLIAM H. DEAN, 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 Wall Construction, of which the following is a specification.

My invention relates to a method of constructing concrete walls, but more particularly to a method of wall construction in which pillars or piers are built up of blocks, which have been previously formed, and the wall molded between the pillars.

Still more particularly, however, my invention relates to the blocks which are used to construct the pillars, and has for its object to provide the blocks with means formed integral therewith for holding the usual mold sections, used for forming the wall, in proper position between the pillars, thereby obviating the use of any clamps, plumb bobs, or the like.

In the accompanying drawing, which forms a part of this specification, and in which like reference numerals indicate corresponding parts throughout the several views,—Figure 1 is a top plan view showing a portion of a wall constructed in accordance with my invention, but partly in section to show the method of anchoring the wall sections to the pillars. Fig. 2 is a perspective view of one of the blocks used in constructing the pillars.

Reference being had to the drawing and the numerals indicated thereon, 1 indicates the blocks which form the pillars, 2 the wall sections between the pillars, and 3 the mold sections which form the wall sections 2. The pillars are to be located the proper distance apart to comply with the specifications of the building, and, as shown in Fig. 1, the blocks 1 are to be molded to form corner, intermediate, and partition pillars, indicated at A, B, and C respectively.

The sides of the blocks, which adjoin the ends of the wall sections 2 are formed with a vertical groove 4 in which the ends of the wall sections are adapted to fit. Also formed on the sides of the blocks 1 which are provided with the grooves 4, are projections or ribs 5. The inner faces of the ribs 5 are on a line with the sides of the grooves 4 and form recesses 6 for receiving the ends of the mold sections 3, into which the mate-

rial which forms the wall sections is filled. The mold sections 3 are held from spreading apart by means of bolts 7 provided with clamping nuts 7<sup>a</sup>.

As shown most clearly in Fig. 1, the blocks 1 are preferably made hollow, as at 9, and have small openings 10 formed through the sides thereof between the grooves 4 and the central opening 9. In building the pillars, the blocks are laid one upon another, with their grooved sides registering, until the pillar reaches the desired height. A metal rod 11, or the like, is placed centrally and vertically within the openings 9 of the several blocks, and the inner hooked ends of the anchoring members 12 are then inserted through the openings 10 and connected to the rod 11. The openings 9 are then filled with a wet mixture of concrete which, with the rod 11, securely hold the blocks together. As shown in Fig. 1, the anchoring members 12 are provided with heads 13 and when the material which forms the wall sections 2 is filled into the mold sections 3, said members will be embedded therein and will securely hold the wall sections and the pillars together.

By forming the blocks with the ribs 5 and recesses 6 the mold sections 3 may be easily and readily mounted in proper position between the pillars without the use of clamps or any other fastening devices, other than the bolts 7.

In building the wall, the pillars are built up to the desired height, and the anchoring members placed in position, as above described. The ends of the mold sections 3 are then placed in the recesses 6 and the clamping nuts 7<sup>a</sup> of the bolts 7 tightened until the inner faces of the mold sections engage the outer faces of the ribs 5. The mold sections are then in position to receive the material which forms the wall sections. When the material hardens sufficiently, the mold sections are removed by driving out the bolts 7, and the sections clamped to the ribs 5 of the blocks 1 above the wall section previously molded, and the construction of the wall continued. The pillars are built up in advance of the wall sections, so that the ribs 5 will be in position to receive the mold sections as the construction of the wall progresses.

While I have shown my invention as be-

ing used for constructing concrete walls, it may also be used to construct foundations for frame or other buildings.

I claim:

- 5 1. In a wall construction, spaced pillars having spaced vertical ribs formed upon certain sides thereof and inwardly from the ends of said sides, and a wall of plastic material molded between the pillars, said wall  
10 having its ends extending into the grooves between the aforesaid ribs, and its outer surface flush with the outer surface of said ribs.  
2. In a wall construction, hollow, spaced

pillars containing a filler of plastic material, a wall of plastic material molded between the pillars, rods embedded in the aforesaid filler of the pillars, and anchoring members connected at one of their ends to the aforesaid rods, and extending from the pillars and embedded in the aforesaid wall. 15 20

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. DEAN.

Witnesses:

JOHN B. GOOCH,

JOHN J. McDONAGH.