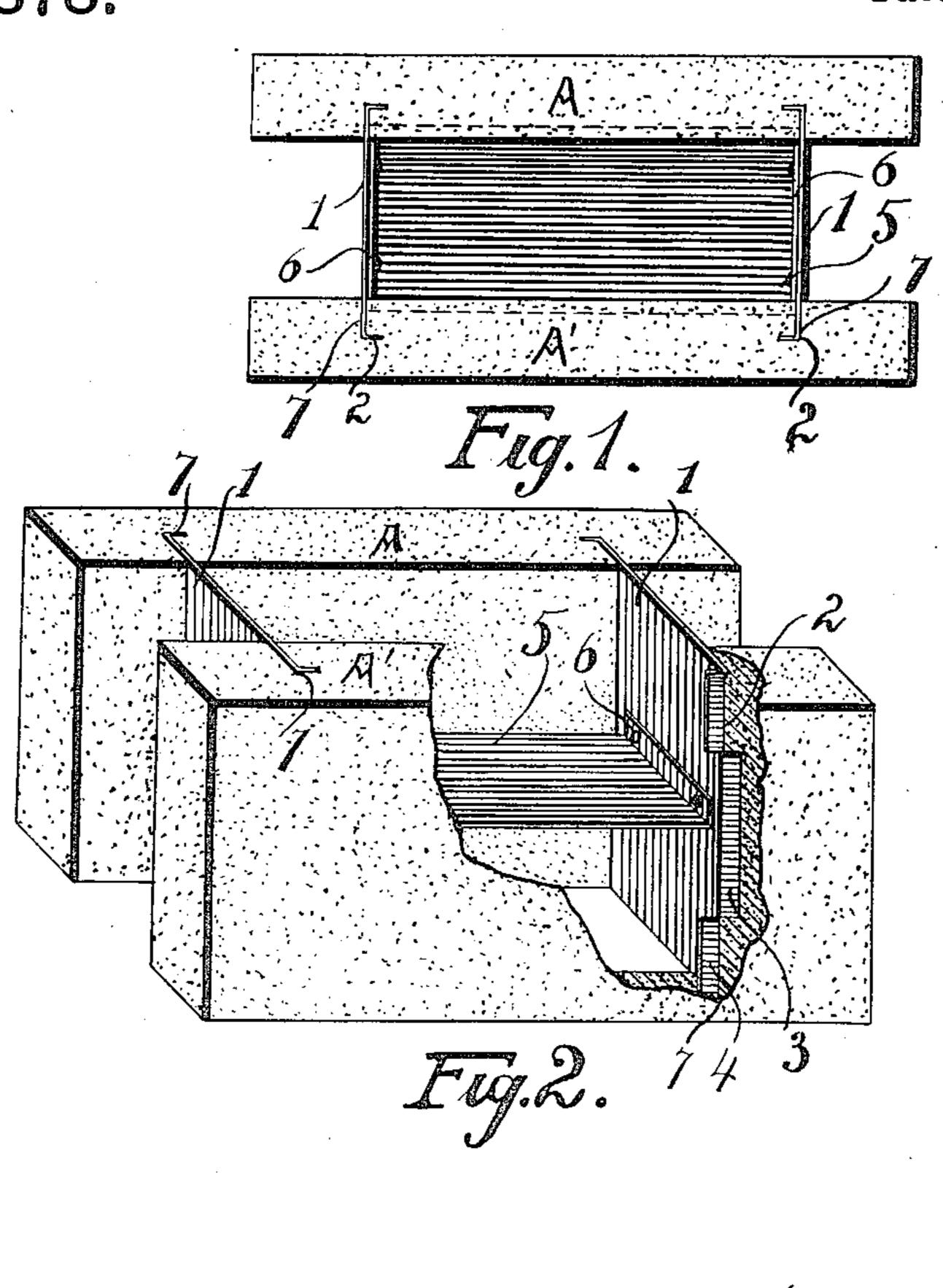
J. M. CROCKER & F. T. TAPPAN.

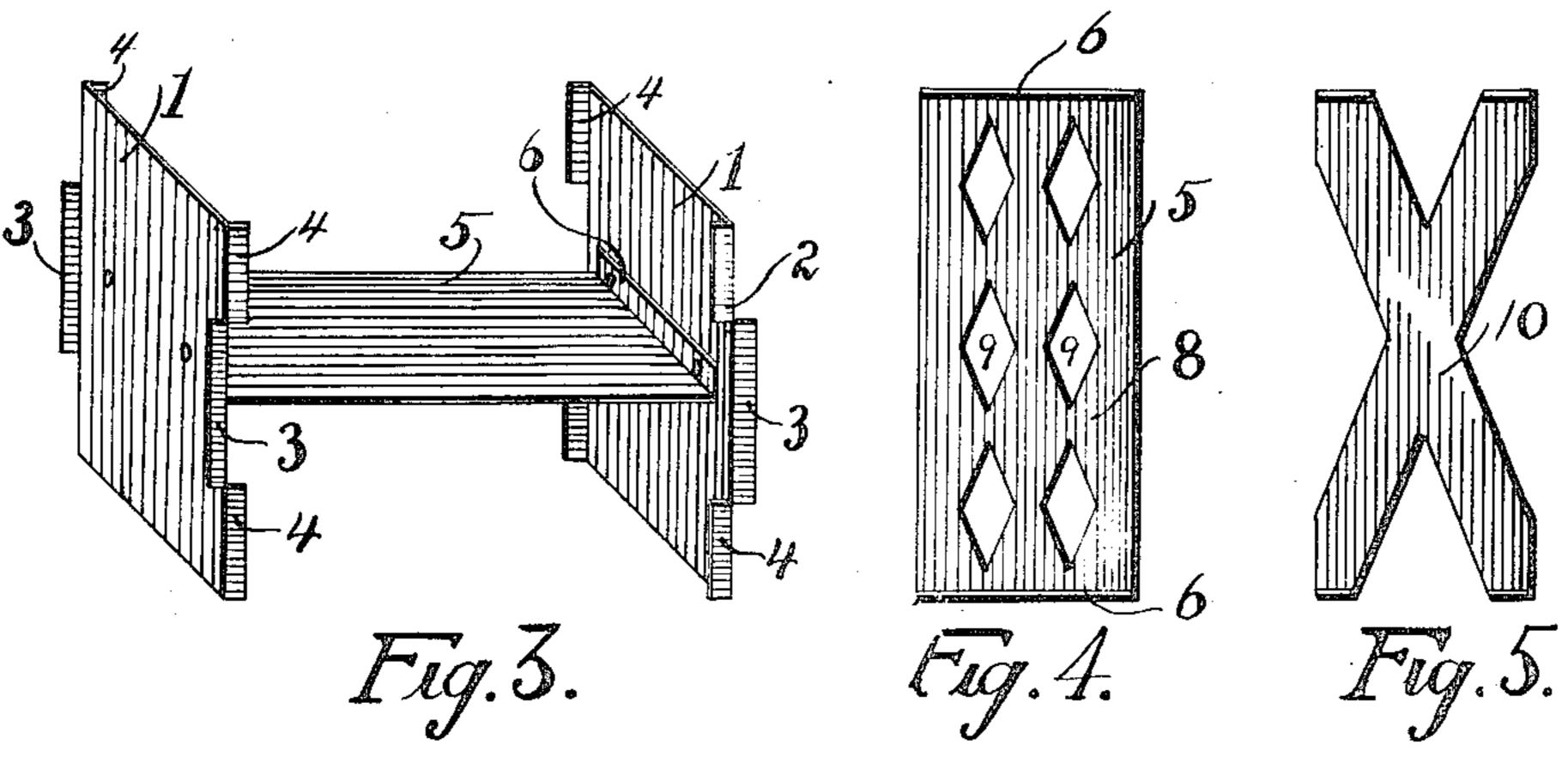
BUILDING BLOCK TIE.

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BUILDING-BLOCK TIE.

Specification of Letters Patent. Patented Mar. 22, 1910.

Application filed May 3, 1909. Serial No. 493,644.

To all whom it may concern:

Be it known that we, John M. Crocker and Frank T. Tappan, citizens of the United States, residing at Coldwater, in 5 the county of Branch and State of Michigan, have invented certain new and useful Improvements in Building-Block Ties, of which the following is a specification.

Our invention relates to devices for tying 10 together two parallel building blocks made of plastic material, such as concrete, and has for its object the provision of a tie that with the minimum weight of material will rigidly connect the two blocks together.

Our invention will be described in detail hereinafter and illustrated in the accompanying drawings in which—

Figure 1 is a top plan view of two parallel blocks showing our improved tie in position 20 therebetween, Fig. 2, a view in perspective of the two blocks and the tie, the near block being broken away, Fig. 3, a detail view of the tie shown in Figs. 1 and 2, Fig. 4, a view showing a modification of the tie, and 25 Fig. 5, a view showing still another form of tie.

In the drawings similar reference characters indicate corresponding parts in all of the views.

30 Our improved building block tie is shown in Figs. 1 and 2 in position as molded into two parallel blocks A and A' and consists of two vertical plates 1 having their side edges cut as shown at 2 and the edges on each 35 side of the cuts and the ends bent perpendicular to the plates as shown at 3 and 4 to form flanges, the flanges 3 at the upper and lower ends of the plate being on one side of the plate and the intermediate flanges 4

40 on the other side. 5 indicates a horizontal web member conbent upwardly as shown at 6 and riveted or otherwise secured to plates 1.

After the blocks are molded with the tie secured in position therein the flanges 3 and 4 on the end plates 1 hold the blocks at the desired distance apart and the edges of

horizontal web member 5 being molded into the blocks also as shown at 7 makes the tie 50 rigid and gives it strength and durability.

As the two blocks A and A' are separated by an air space it will be understood that the blocks forming the inner side of the wall will be kept dry at all times, the mois- 55 ture percolating through the blocks forming the outer wall being taken up by the air between the blocks and carried off.

In Fig. 4 is shown a modified form of tie in which the web 8 is formed with perfora- 60 tions 9 to permit a freer circulation of the air between the blocks, and in Fig. 5 the web 10 is shown shaped like a letter X so that the perforations at the sides of the web between the arms of the X-form are against 65 the surface of the blocks to insure a circulation of air against the inner sides of the blocks between the end plates 1.

Having thus described our invention what we claim is—

1. In combination with two building blocks spaced apart, a tie connecting said blocks comprising upright end plates and a horizontal web connecting said upright plates, the side edges of the end plates and 75 horizontal web molded into the blocks.

2. In combination with two building blocks spaced apart, a tie consisting of vertical end plates bridging the space between the blocks and secured thereto, and a perfo- 80 rated horizontal web secured to said end plates and engaging the blocks.

3. In combination with two building blocks spaced apart, a tie consisting of vertical plates bridging the space between the 85 blocks and secured thereto, and an X-form horizontal web secured to said end plates and engaging the blocks.

4. In combination with two building necting the two end plates 1, having its ends | blocks spaced apart, a tie connecting said 90 bent upwardly as shown at 6 and riveted or | blocks comprising upright end plates having their side edges bent to form flanges, and a horizontal web connecting said upright plates, the flanged edges of the end plates and of the horizontal web molded 95 into the blocks.

5. In combination with two building blocks spaced apart, a tie connecting said blocks comprising vertical end plates having their side edges bent to form flanges, and an inarticulate horizontal web connecting said plates having its sides and ends cut out to form an X, the side edges of the end plates and the web molded into the blocks so that cut out portions at the sides of the web insure circulation of air along

the inner surfaces of the blocks between the end plates.

In testimony whereof we hereto affix our signatures in the presence of two witnesses.

JOHN M. CROCKER. FRANK T. TAPPAN.

Witnesses:

BURT E. BARLOW, GRACE W. BARROW.