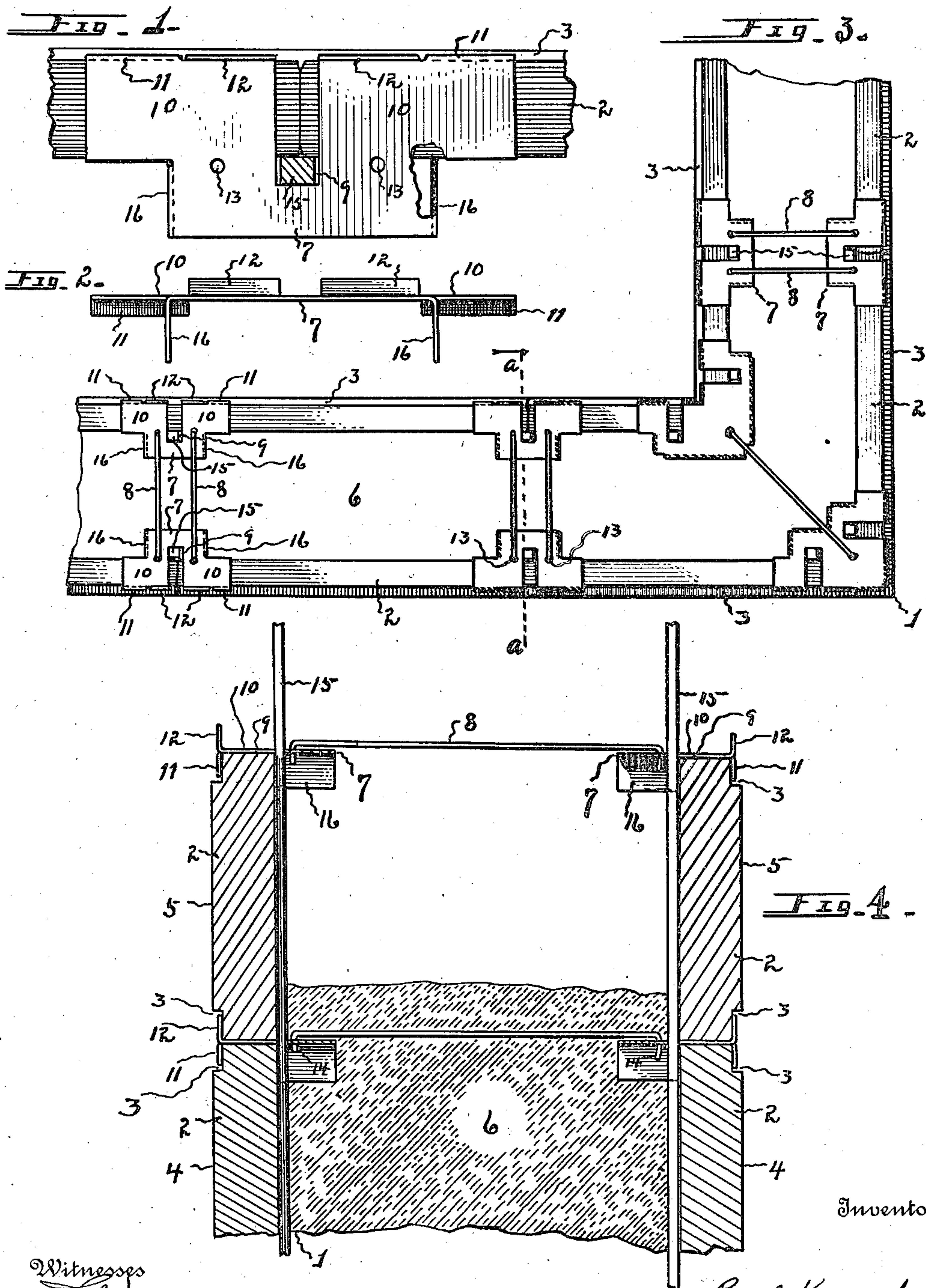


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BLOCK HOLDING MEANS FOR WALLS.
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Witnesses

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PAUL KOSACK, OF OMAHA, NEBRASKA.

BLOCK-HOLDING MEANS FOR WALLS.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, PAUL KOSACK, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Block-Holding Means for Walls, of which the following is a specification.

This invention relates to means for sustaining the outer and inner blocks of a wall at a uniform distance apart, and to be employed where the blocks are constructed as comparatively thin plates, cement or similar plastic material being used for filling the space between said plates.

The invention has reference to the employment of gripping-members or yokes and removable tie-rods for connecting the blocks of the outer and inner courses of the wall, and vertical reinforcing bars used with the yokes for connecting the courses, and causing said courses to remain in vertical alinement, after the blocks have been placed in the wall.

The invention consists of the novel combination and arrangement of parts as described herein and claimed, and as illustrated in the drawing, wherein,—

Figure 1 is a partly broken away, plan view of a yoke mounted upon a part of a wall-block, the reinforcing or alining-bar being in section. Fig. 2 is a view of the inner end of the yoke shown in Fig. 1. Fig. 3 is a plan view of a part of a building-wall with block-holding means mounted thereon, embodying my invention. Fig. 4 is a transverse, sectional view, on line *a a* of Fig. 3.

Referring now to the drawing for a more particular description, numeral 1 indicates a wall consisting of wall-blocks 2 having longitudinal grooves 3 formed near and opening upon their side-edges, said blocks being disposed edgewise to form outer and inner sides for any number of courses, as indicated at 4 and 5, filling material 6 being placed between the courses to provide a solid wall.

In the use of the herein described holding means, the building blocks are constructed as thin rectangular plates, and they form the several courses of the wall, being spaced horizontally and held at a uniform distance apart by means of yokes 7 and tie-rods 8, the courses being held in vertical alinement and secured together by means of bars 15 adapted to have seatings in recesses 9 be-

tween the arms 10 of the yokes and adjacent to the inner sides of blocks or plates 2.

Each yoke 7 is formed as a flat, metallic plate for a seating upon the edge of a building block or upon a part of the edges of two adjacent building blocks, the front edges of arms or wings 10, near their terminals, being provided with downwardly-projecting flanges 11 for a seating in groove 3 of the building block upon which the yoke is seated; and, adjacent to and inwardly of flanges 11 at the sides of recess or slot 9, each arm or wing is provided with upwardly-projecting flanges 12 for engaging in groove 3 of a block in the next or upper course.

At 13 are shown openings formed in the yokes; and in practice, when forming a wall, the yokes are disposed one above another between the courses, and hooks 14 of tie rods 8 are inserted in said openings, said rods 8 thereby connecting the yokes upon the inner and outer blocks of a course, bars 15 being held between the arms of the yoke adjacent to the inner sides of the blocks. After a course or several courses of the wall have been laid, the filling material, preferably a composition, in semi-liquid form, of cement, sand and water is placed between the courses, the blocks of the courses, in the meantime, being held in vertical alinement by rods 15, said rods also operating to reinforce the wall.

It will be seen that the body of each yoke projects inwardly of the wall and is sustained, in part, by downwardly-projecting flanges 16, which operate as braces, since the inner ends of the flanges are adapted to bear against the inner sides of the blocks.

After a wall has been constructed as described, grooves 3 may be filled with cement or similar adhesive material, and thereby, flanges 11 and 12 will be covered or embedded in said material.

By use of the herein holding means, walls may be economically and readily constructed, and the yokes, tie-rods and alining rods are convenient for handling. The reinforcing or alining-bars may be of any suitable length, said length not necessarily being uniform. The tie rods have a uniform length to construct a wall of uniform thickness. Where walls of greater thickness are desired, all that is necessary is to lengthen the tie-rods, since they span the space, transversely of the wall, between the yokes.

Having fully described my invention what

I claim and desire to secure by Letters Patent is,—

1. In devices for the purpose described, the combination with rectangular wall blocks disposed edgewise to form the outer and inner courses, said blocks having longitudinal grooves opening upon the edges of their outer sides, of apertured yokes provided with terminal transverse flanges and disposed horizontally upon the edges of the blocks of said outer and inner courses; tie rods disposed horizontally between and removably mounted in the apertures of said yokes; the transverse flanges of the yokes engaging within the longitudinal grooves of said wall blocks.

2. In devices for the purpose described, the combination with rectangular wall blocks disposed edgewise to form the outer and inner courses, said blocks having longitudinal grooves opening upon the edges of their outer sides, of apertured yokes provided with terminal transverse flanges and disposed horizontally upon the edges of the blocks of said outer and inner courses; tie rods disposed horizontally between and removably mounted in the apertures of said yokes; upright reinforcing bars engaging said wall courses and engaged by said yokes; the transverse flanges of said yokes engaging within the longitudinal grooves of said wall blocks.

3. In block-holding means for walls, the combination with oppositely-disposed blocks forming the wall courses, a plurality of yokes disposed opposite to each other upon the blocks of the courses, said yokes being

provided with flanges for engagement with the outer sides of said blocks; alining bars disposed vertically upon the inner sides of the blocks of said courses and engaged by said yokes; and a plurality of tie rods extending between the courses and connecting said yokes.

4. In combination with oppositely-disposed building blocks forming wall courses, a plurality of yokes disposed in pairs opposite to each other upon the blocks of said courses, said yokes being provided with longitudinal flanges for engaging the inner sides of said blocks and having transverse terminal flanges; alining bars engaged by said yokes and disposed vertically upon the inner sides of the blocks of said courses; tie rods extending between the oppositely-disposed yokes of a pair, the transverse terminal flanges of said yokes engaging the outer sides of said blocks.

5. In block-holding means for walls, the combination with oppositely-disposed blocks forming the wall courses, a plurality of yokes disposed opposite to each other upon the blocks of the courses, said yokes being provided with flanges for engagement with the outer sides of said blocks; a plurality of tie rods extending between the courses and connecting with said yokes, and an adhesive filler disposed between said wall courses.

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

PAUL KOSACK.

Witnesses:

HIRAM A. STURGES,
ELIZABETH MURRY.