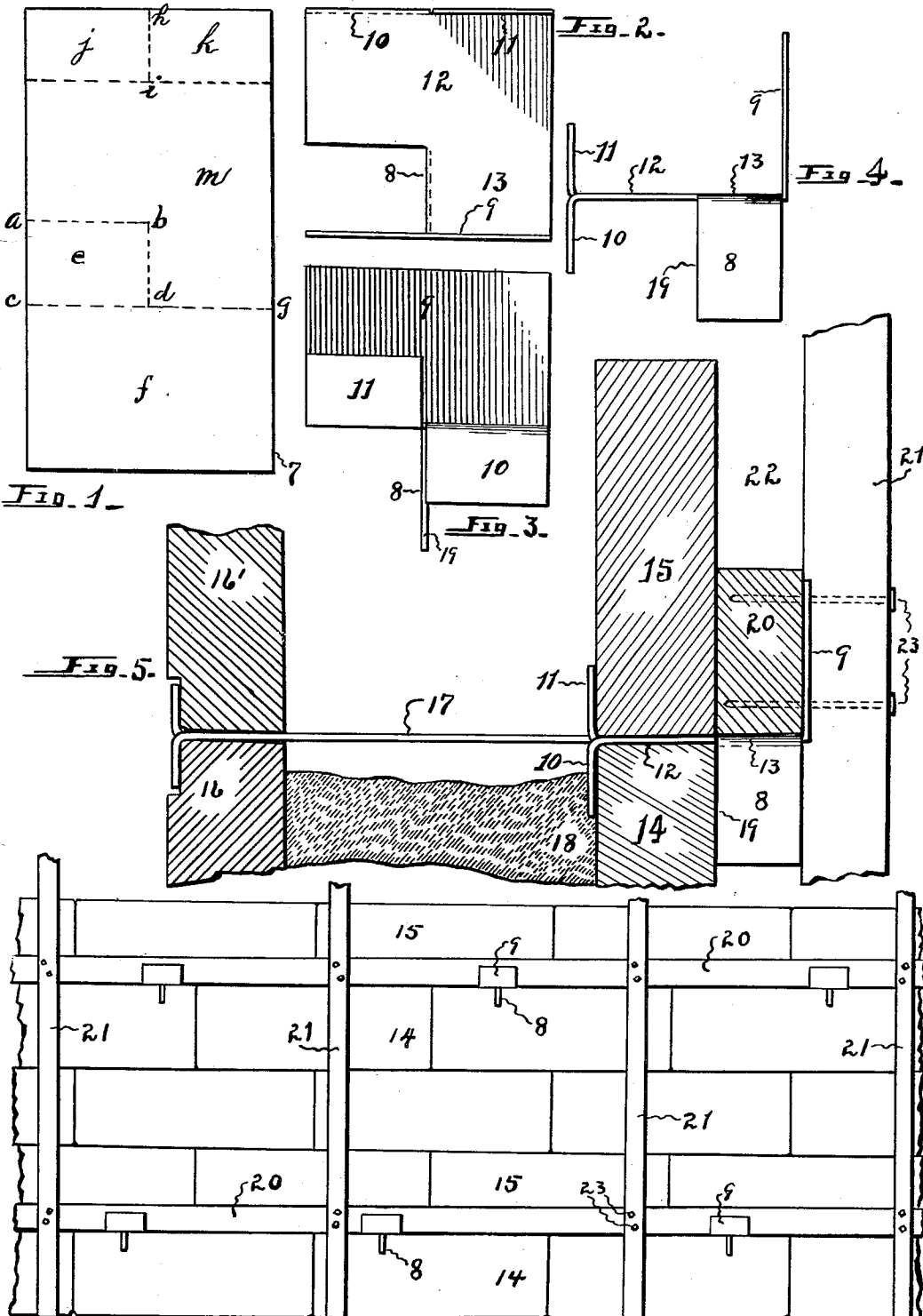


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WALL STIRRUP.

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Witnesses *L. Broadwell,*
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FIG. 6.

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UNITED STATES PATENT OFFICE.

PAUL KOSACK, OF OMAHA, NEBRASKA.

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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 Wall-Stirrups, of which the following is a specification.

This invention relates to improvements in wall stirrups or the provision of a means for the support of bedding and furring strips upon the interior parts of building walls.

In the construction of brick or stone buildings, blocks of wood are usually embedded in the inner side of the walls, to which furring strips are secured so that lath may be nailed thereon for purpose of plastering. The adjustments required for embedding these blocks, however, usually causes much expense and loss of time, and in many instances where artificial stone or cement blocks are employed in wall construction, the use of such anchors or blocks is not convenient or practical.

The object of the invention is to provide wall stirrups which may be economically constructed of sheet metal, which may be conveniently seated between the courses while the wall is in process of construction and which will provide a holding means upon the inner side of the wall for reliably sustaining the members to be seated thereon for supporting the lath and wall plaster.

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

Figure 1 is a diagrammatic view illustrating the manner of forming the wall stirrup from a rectangular sheet, or metallic plate. Fig. 2 is a plan view of the stirrup. Fig. 3 is a vertical end view thereof. Fig. 4 is a vertical side view of the stirrup. Fig. 5 is a broken away view of a building wall in vertical section, with my newly invented stirrup mounted thereon, a bedding strip and a furring strip also being shown, the bedding strip being in section. Fig. 6 is a view showing a part of the inner side of a wall with the wall stirrups mounted thereon, and showing horizontal bedding strips and vertical furring strips.

Referring now to the drawing for a more particular description, numeral 7 indicates a metallic sheet or plate, preferably rectangular in form, which may be employed in

the construction of the wall stirrup. It may be incised transversely between its ends on parallel and adjacent lines *a b* and *c d*, the incisions opening upon one of its side edges, and when portion *e* is bent downwardly upon line *b d*, so that it will be disposed at substantially a right angle to the body of the plate, it provides a bracket or supporting arm 8.

End portion *f* of the plate adjacent to portion *e* may be bent upwardly 90 degrees, on line *d g*, to form wing 9; and, opening upon the edge of the opposite end of the plate, a short incision may be made on line *h i* longitudinally of and midway between the sides of said plate to form end-portions *j* and *k*; and in practice, end portions *j* and *k* are bent 90 degrees, in directions opposed to each other, to provide the respective holding-lugs or wings 10 and 11.

As thus described, wing 9, lugs 10 and 11 and bracket 8 are disposed at right angles to body-portion *m* of the metallic sheet; and the flat body-portion *m*, in effect, provides two members which, for convenience in description, are called bearing-plates 12 and 13, plate 13 having a less width than plate 12.

The wall stirrups may be economically constructed, the metallic plate being first incised, and then bent to the form mentioned. They may be readily mounted upon the wall while the courses are being laid, and are effective and reliable for sustaining the horizontal bedding strips.

While the wall stirrup may be used to advantage in almost all instances where stone or brick are laid in courses, it is herein illustrated in connection with a filled wall employing outer and inner connected wall blocks or plates.

Numerals 14 and 15 indicate inner wall plates or blocks of respective lower and upper courses of a building wall, the outer blocks of the wall being indicated at 16 and 16', said outer and inner blocks being constructed of cement or similar material and connected by any suitable tie-strips 17, adhesive filling material 18 being deposited in the space between the outer and inner blocks to form the complete wall.

Bracket arm 8 is provided with a contact-edge 19 disposed substantially parallel with lugs 10 and 11 and wing 9. After a course has been laid, as by use of blocks 14 and 16, the wall stirrup is mounted thereon, and it

will be seen that lug 10 and edge 19 of bracket arm 8 will engage the respective inner and outer sides of block 14 near its upper edge, bearing-plate 12 being seated upon the upper face of said block.

The stirrup is so constructed that the space between bracket 8 and lug 10 conforms to the thickness of the block employed, and since the two members mentioned have bearings upon opposite sides of the block, the stirrup will be securely held, and the upwardly projecting lug 11 will be engaged by block 15 of the next or upper course of the wall.

After blocks 15 of the upper course have been laid, the stirrups being in horizontal alinement as shown in Fig. 6, bedding strips 20 may then be disposed horizontally and inserted between wings 9 and the adjacent blocks 15, the same being seated upon bearing plates 13, and a movement, outwardly from the wall, of strips 20 will be prevented by said wings 9.

Any desired number of stirrups may be used in connection with a single bedding strip, and the length of the strips is not material. It will be noted that wings 8 operate as brackets; they are disposed transversely to the wall, and on this account provide adequate supporting means for sustaining the bedding strips; and nailing of these strips to the wall is not required.

After the courses have been completed, vertical furring strips 21 may be secured to the horizontal bedding strips by nails 23, as shown in Fig. 6, and an air space 22 (Fig. 5) thereby may be formed between the furring strips and the inner side of the wall.

The stirrup thus described may have any suitable length and width, and where it is desired to use building blocks of considerable thickness, the width or length of bearing plates 12 may be increased. Bearing-plate 13 has a lesser width than plate 12, since it conforms to the thickness of the bedding strip.

Exterior walls of solid construction usually require the formation of an air space between the walls and plaster, and it is be-

lieved that these wall stirrups may be employed to advantage in all such instances.

Having fully described my invention, what I claim and desire to secure by Letters Patent is,—

1. A metallic wall stirrup having a flat body portion with longitudinal engaging lugs upon one of its ends projecting in opposite directions therefrom and at right angles thereto, its opposite end having an upright wing disposed substantially parallel with said lugs; said body portion being incised from one of its sides upon adjacent lines substantially parallel with said upright wing, the part between said incisions being bent downwardly and forming a bracket arm intermediate the wing and said lugs.

2. A wall stirrup having a flat rectangular body-portion with oppositely-disposed lugs upon one of its ends, its opposite end being provided with an upset wing, said body portion having incisions extending longitudinally from one of its sides, the part between said incisions being bent downwardly and providing a bracket arm with a contact-portion disposed substantially at right angles to said body portion in a plane between the wing and said lugs.

3. A wall stirrup having a flat rectangular body-portion with oppositely-disposed lugs upon one of its ends, its opposite end being provided with an upset wing; said body-portion having adjacent parallel incisions formed therein and extending longitudinally from one of its sides, one of said incisions being at the junction of said wing with said body-portion, the part between said incisions being bent downwardly and providing a bracket arm with a contact-portion disposed substantially at right angles to said body-portion in a plane between the wing and said lugs.

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

PAUL KOSACK.

Witnesses:

E. L. HUMPHREY,
HIRAM A. STURGES.