

No. 725,169.

PATENTED APR. 14, 1903.

H. B. STEPHENS.
BUILDING BLOCK GRAPPLE.
APPLICATION FILED JUNE 18, 1902.

NO MODEL.

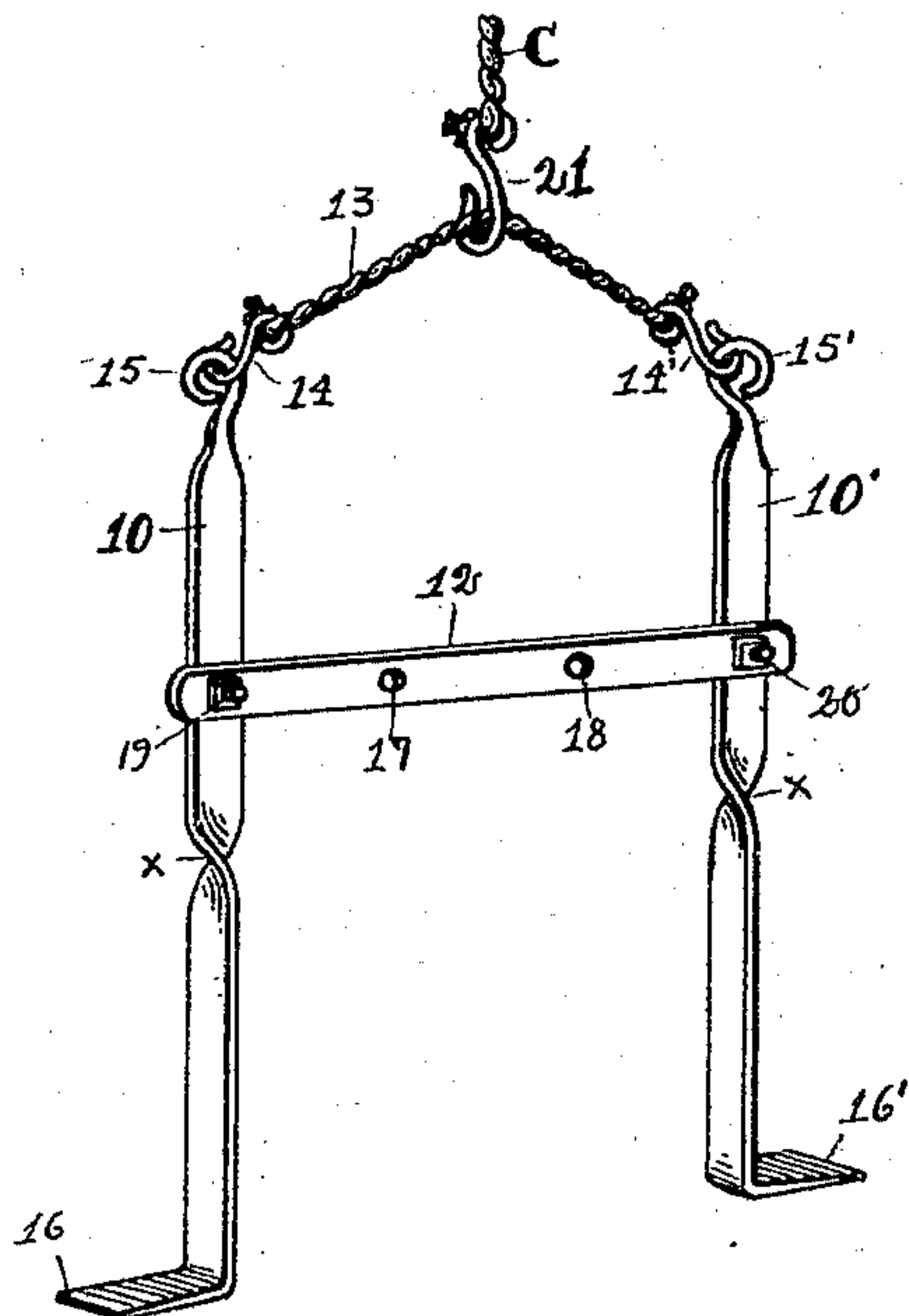


Fig. 1.

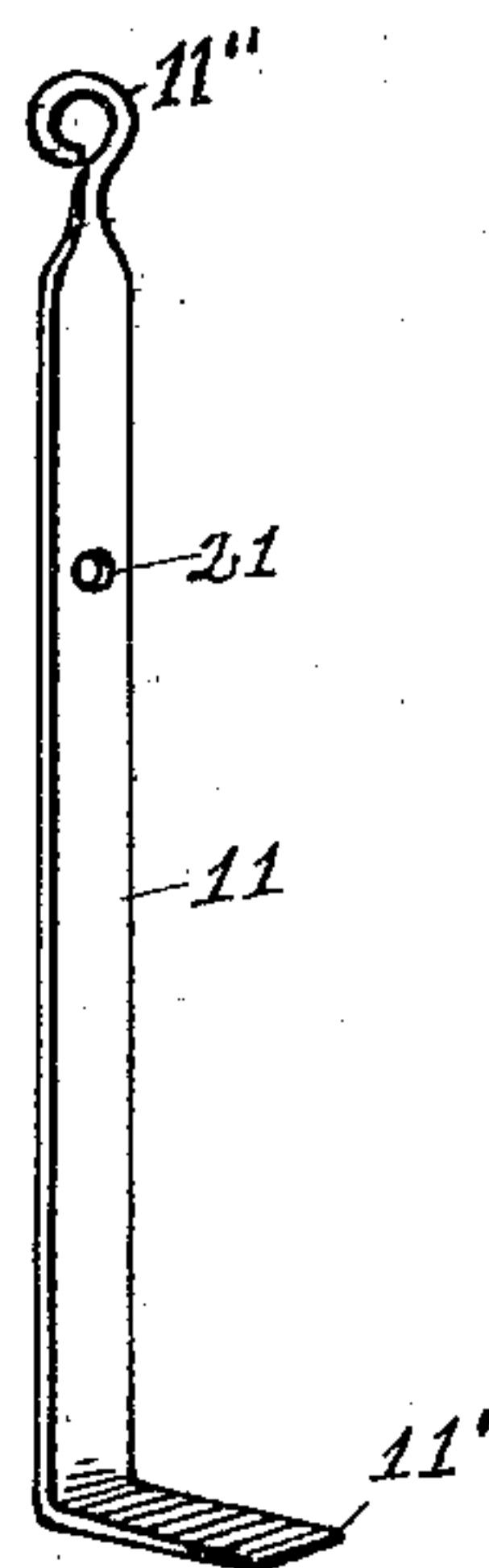


Fig. 2.

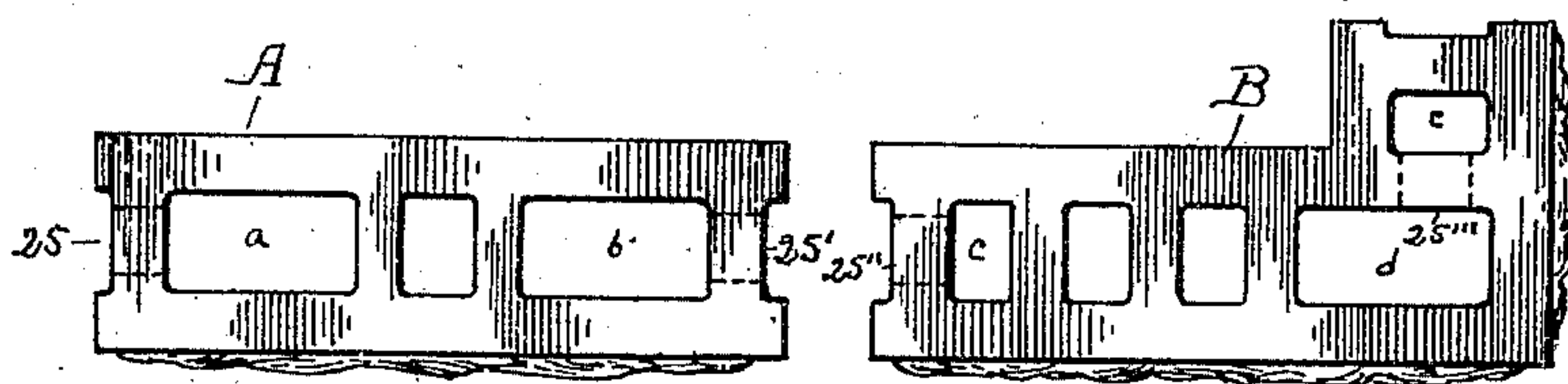


Fig. 3.

Fig. 4.

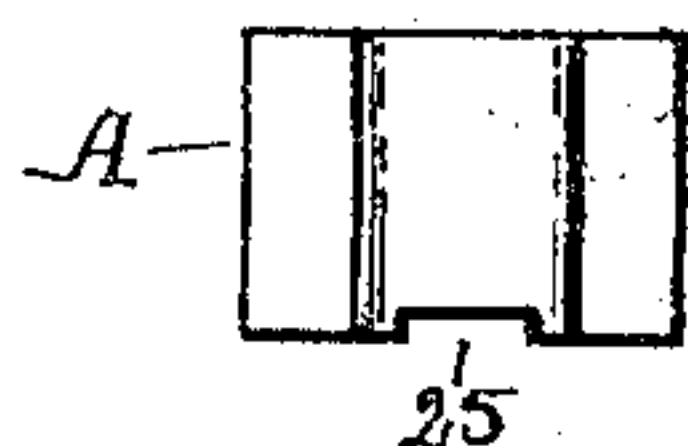


Fig. 5.

Witnesses:

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UNITED STATES PATENT OFFICE.

HARVEY B. STEPHENS, OF EATON, OHIO.

BUILDING-BLOCK GRAPPLE.

SPECIFICATION forming part of Letters Patent No. 725,169, dated April 14, 1903.

Application filed June 18, 1902. Serial No. 112,165. (No model.)

To all whom it may concern:

Be it known that I, HARVEY B. STEPHENS, a citizen of the United States, residing at Eaton, in the county of Preble and State of Ohio, have invented certain new and useful Improvements in Building-Block Grapples; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has for its object to provide a tool of new and novel construction adapted to engage in apertures or notches in building-blocks, whereby the blocks may be suspended and elevated to any desired altitude.

Another object is the provision of building-blocks provided with securing notches or apertures and tongs of novel construction for engagement with said notches or apertures, whereby the blocks may be suspended and elevated.

Other objects and advantages will appear from the following specification and from the drawings forming a part thereof.

With the above-enumerated objects in view my invention consists in a building-block grapple embodying certain novel and peculiar features and details of construction, substantially as herein described, and particularly pointed out in the appended claims terminating this specification.

In detail the invention relates to building-block grapples, substantially as shown in the accompanying drawings, in which—

Figure 1 is a perspective view of the lifting device or tongs for engaging in and lifting building-blocks of substantially the form shown in Fig. 3. Fig. 2 is a perspective view of an auxiliary arm to be attached to the lifting device shown in Fig. 1 in place of either one of the arms therein shown. Fig. 3 is a top view of a building-block. Fig. 4 is a top view of a corner building-block, and Fig. 5 is an end elevation of a building-block.

Similar letters and figures of reference denote and refer to like parts throughout the several views.

In the drawings, A indicates a building-block formed of cement or the like provided with openings *a* and *b* therethrough and with notches 25 and 25' across the under side of the

end panels thereof, as shown by the dotted lines.

B represents a corner-block provided with openings *c*, *d*, and *e* therethrough and with notches 25" and 25'" across the under side of two of the panels, as shown by the dotted lines.

The above-named parts are shown simply to illustrate the manner my invention may be used.

10 represents one of the arms of the lifting-grapple, which consists of a flat bar of metal, on the upper end of which is formed an eye 15, and the lower end is bent at right angles to form the foot 16. At the point *x* the arm 10 is given a quarter-twist to cause the foot 16 to project outward, as shown in Fig. 1. Between the point *x* and the eye 15 a hole is provided through the arm 10 to receive the bolt 19.

10' represents the oppositely-disposed arm of the lifting-tongs, which consists of a flat bar of metal, on the upper end of which is formed an eye 15', and the lower end is bent at right angles to form the foot 16'. At the point *x* the arm is given a quarter-twist to cause the foot 16' to project outward, as shown in Fig. 1. Between the point *x* and the eye 15' a hole is provided through the arm 10' to receive the bolt 20.

11 represents the auxiliary arm of the lifting-tongs, which consists of a flat bar of metal, on the upper end of which is formed an eye 11", and the lower end is bent at right angles to form the foot 11'. Through the upper portion a hole 21 is provided through the arm 11 to receive the bolt 19 or the bolt 20.

13 represents a bail formed of rope or wire, to the ends of which are secured the hooks 14 and 14', which hooks are adapted to engage in the respective eyes 15 and 15'.

21 represents a hook secured to the end of the pulley-rope C, said hook being adapted to engage the rope 13, as shown in Fig. 1.

12 represents a bar through the ends of which holes are provided for receiving the bolts 19 and 20, and the center portion is provided with auxiliary holes 17 and 18.

In order to handle the straight block, (shown in Fig. 3,) the tongs are constructed substantially as shown in Fig. 1, and the feet 16 and 16' of the tongs are entered in the openings *a* and *b*, respectively, and then moved lat-

erally into the respective slots 25 and 25'. The hook 21 is then engaged with the rope 13, and power is then applied to the rope C, and by means of pulleys the block A may be
 5 raised to the elevation desired and placed in position on the top of other blocks of similar construction, and when so placed it is apparent that on account of the notches 25 and 25' the feet 16 and 16' may be easily removed
 10 from underneath the block and the tongs thus detached from engagement with the block.

Desiring to raise a corner-block, (shown in Fig. 4,) I remove, for instance, the bolt 20
 15 and detach the hook 14' from the eye 15', and thus remove the arm 10'. I then secure the arm 11 in place of the arm 10' by passing the bolt 20 through the hole 21 and attach the hook 14' in the eye 11'. I then pass the foot
 20 16 down through the opening *c* and insert it in the notch 25'' and at the same time pass the foot 11' down through the opening *e* and insert it in the notch 25''', or the arm 11 may be turned half around before it is secured as
 25 a member in the tongs, and if so placed the foot 11' would be inserted in the opening *d* and then inserted in notch 25'''.

Should the block which I desire to raise be shorter in proportion than those shown, then
 30 either of the arms may be mounted by either of the bolts in one or the other of the holes 17 or 18.

It is apparent that by means of tongs constructed substantially as shown and described
 35 and by means of the notches formed on the under-side of the blocks I have provided means whereby building-blocks or the like may be easily, quickly, and safely handled for elevating them into their position in the
 40 wall of a building and that they need not be moved after the tongs are detached therefrom.

From the above description, taken in connection with the accompanying drawings, it
 45 will be apparent that I have produced improvements in building-block grapples embodying new and novel features and details of construction and have also accomplished the various objects above stated, and I wish it to
 50 be understood that I do not restrict myself to the exact details of construction, but hold that any slight changes or variations in such de-

tails as would suggest themselves to the ordinary mechanic will clearly fall within the scope of my invention.

Having now fully shown and described my invention and the best mode for its construction and use to me known at this time, what I claim as new, and desire to secure by Letters
 60 Patent of the United States, is—

1. The within-described building-block grapple consisting of two arms pivotally united by a bar near the central portions and a bail at their upper ends, said arms being
 65 provided with oppositely-disposed feet adapted to engage in notches in the blocks, and an auxiliary arm to be used in place of one of said arms when desired, all substantially as shown and described and for the purposes set
 70 forth.

2. In a building-block grapple, the combination of the arms 10 and 10' with oppositely-disposed feet 16 and 16' bent on their lower ends and eyes 15 and 15' formed on their upper ends, the bar 12 provided with holes
 75 therethrough, the bolts 19 and 20 for securing the ends of the bar to the arms, the bail 13 provided with the hooks 14 and 14' connecting the upper ends of the arms, and the hook 21 adapted to engage the bail 13, all
 80 substantially as shown and described and for the purposes set forth.

3. In a building-block grapple, the combination of the notches 25 formed on the under side of the blocks, the arms 10 and 11 provided with feet 16 and 11' bent at right angles to the respective arms said feet lying at right angles to each other, the eyes 15 and 11' formed on the upper ends of the respective arms, the bar 12 provided with holes
 85 therethrough, the bolts 19 and 20 for securing the ends of the bar to the arms, the bail 13 provided with the hooks 14 and 14' connecting the upper ends of the arms, and the hook 21 adapted to engage the bail 13, all
 90 substantially as shown and described and for the purposes set forth.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

HARVEY B. STEPHENS.

Witnesses:

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 BEATRICE HEARN.