No. 712,670. Patented Nov. 4, 1902.

B. HAFFNER.

TIE BAR.

(Application filed June 5, 1902.)

(No Model.)

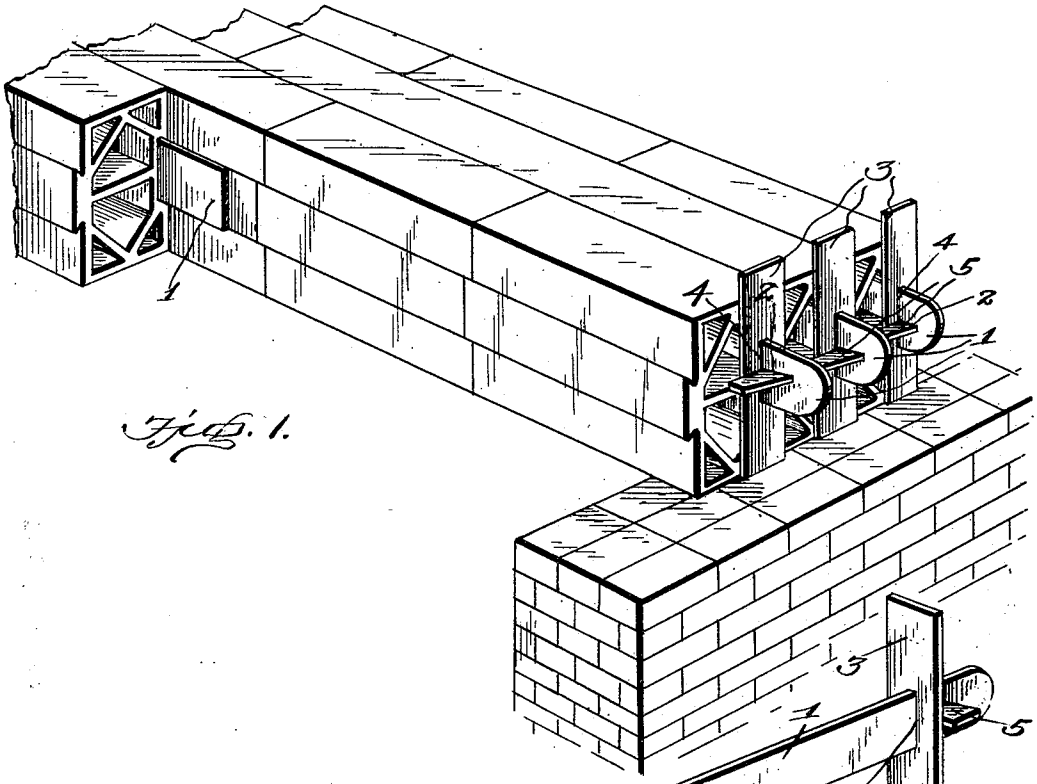


Fig. 1.

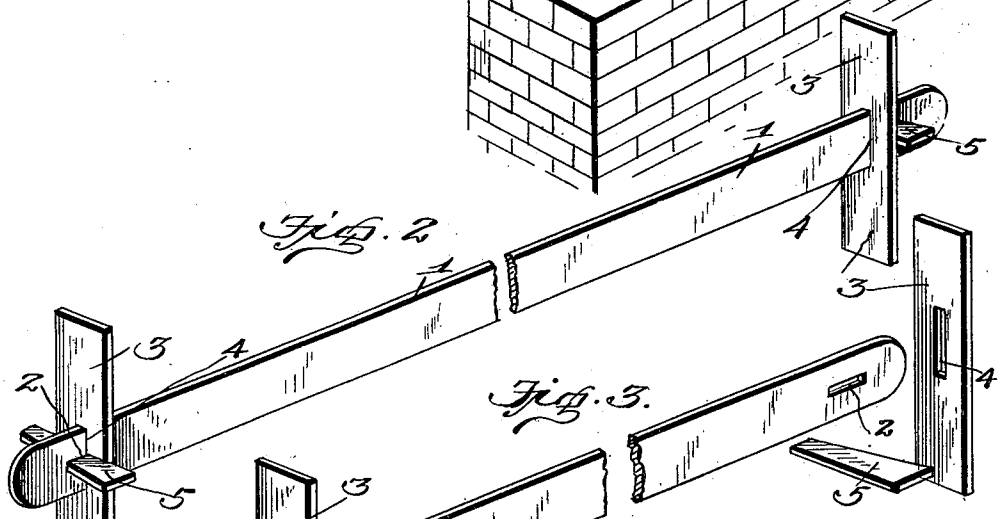


Fig. 2.

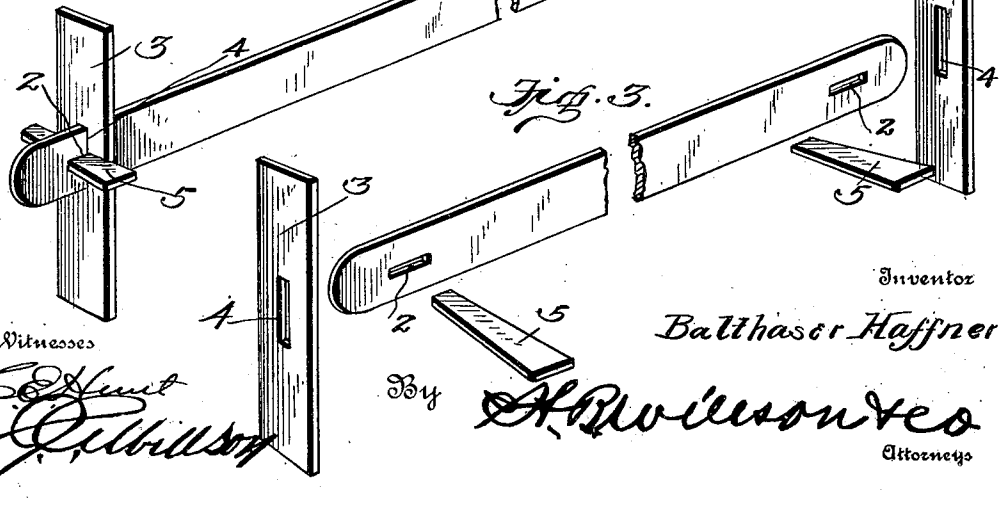


Fig. 3.

Inventor

Balthaser Haffner

Witnesses

By H. B. Williamson & Co

Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

BALTHASER HAFFNER, OF MAURER, NEW JERSEY.

TIE-BAR.

SPECIFICATION forming part of Letters Patent No. 712,670, dated November 4, 1902.

Application filed June 5, 1902. Serial No. 110,349. (No model.)

To all whom it may concern:

Be it known that I, BALTHASER HAFFNER, a citizen of the United States, residing at Maurer, in the county of Middlesex and State of New Jersey, have invented a certain new and useful Improvement in Tie-Bars; and I do 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.

The invention relates to tie-bars or anchor-rods to be used in the construction of walls, and was primarily designed to be used in connection with my building block, shown and described in Letters Patent granted to me July 2, 1901, No. 677,351.

The object of the invention is to construct a tie-bar of this character which can be readily adapted to any style of construction and which will be light, strong, and durable and securely bind together the parts to which it may be applied and when locked in place will not readily become loose.

With the above and other objects in view, which will readily appear as the nature of the invention is better understood, said invention consists in the novel construction and arrangement of parts, which will be hereinafter fully described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a view of a portion of a wall, showing the application of the invention. Fig. 2 is a detail perspective view of the tie-bar with the parts assembled and removed from the wall. Fig. 3 is a detail view of the parts separated.

In the drawings, 1 denotes the tie-bar or rod, which consists, preferably, of a strip or bar of metal provided near its ends with longitudinally-disposed slots or openings 2.

3 denotes anchor-plates, which consist, preferably, of flat, oblong, or rectangular-shaped plates provided with slots 4 of a length corresponding to the width of the tie-bar.

In use after the tie-bar 1 has been placed in position in the wall the plates 3 are slipped on the ends thereof across the slots 2 in said bar and a wedge-shaped key 5 is driven through the slots 2, thereby clamping the anchor-plates close up to the wall and securely holding the parts together.

By use of a flat strip of metal, as shown in the drawings, I am enabled to use the same in connection with most all forms of building-blocks, as the strip is made thin enough to lie in between the blocks, taking up no more space than the cement or mortar would occupy. Therefore a specially-constructed block would not be required nor would it be necessary to cut away a portion of any of the blocks to accommodate the same, as would be the case should it be desired to use the usual tie-rod between the blocks. In the use of a wedge-shaped key in connection with the slotted ends of the tie-bar a quick adjustment is to be had without the necessity of special tools and a greater holding-surface is to be had.

From the foregoing description, taken in connection with the accompanying drawings, it is thought that the construction, operation, and advantages of my improved tie-bar will be readily apparent without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

A device for anchoring walls or building-blocks, comprising a thin, flat, metal strip, provided at its ends with longitudinally-disposed slots, anchor-plates provided with slots adapted to engage the ends of the said flat strips and tapering or wedge-shaped keys adapted to be driven through the longitudinal slots in the ends of the said flat strips to clamp the parts together, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

BALTHASER HAFFNER.

Witnesses:

WM. A. SPENCER,

ROY S. HALL.