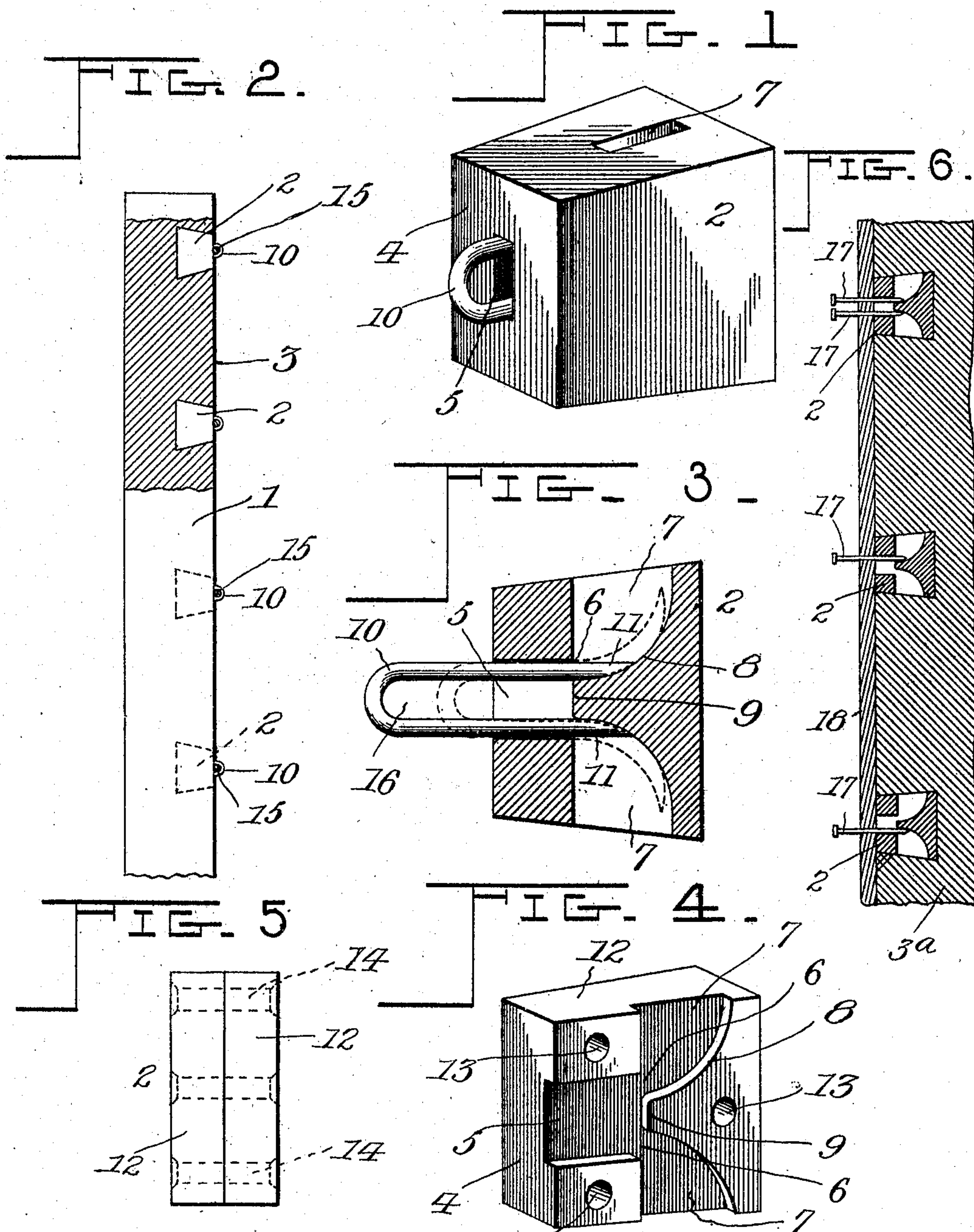


No. 806,027.

PATENTED NOV. 28, 1905.

A. E. VANCE.  
FASTENING DEVICE.  
APPLICATION FILED JUNE 13, 1904.



Witnesses:

*J. E. Page*  
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# UNITED STATES PATENT OFFICE.

ARTHUR ERNEST VANCE, OF FOREST, CANADA.

## FASTENING DEVICE.

No. 806,027.

Specification of Letters Patent.

Patented Nov. 28, 1905.

Application filed June 13, 1904. Serial No. 212,294.

*To all whom it may concern:*

Be it known that I, ARTHUR ERNEST VANCE, a subject of the King of Great Britain, residing at Forest, county of Lambton, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Fastening Devices; and I do hereby declare that the following is 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.

My invention relates to fastenings, and concerns itself especially with the construction of wire fastenings for posts made of cement or similar material. Where posts of cement are employed, considerable difficulty is experienced in attaching the fastening members to the post, for the reason that the attaching devices are very readily withdrawn and eventually become loose. At the same time in some situations cement posts are very desirable and economical.

It is the object of this invention to provide simple means for overcoming the difficulties suggested, so that secure attachments may be made to posts made of cement or similar material. To secure such a fastening device, I employ a block of metal, as illustrated in the annexed drawings, which block may be placed in position in the mold in which is formed a post, block, or other article composed wholly or partly of cement or other material adapted to be formed in a mold, and when finished such post or block may be used for supporting wire fencing, securing awning-hangings, signs, &c., to walls, securing gratings, tie-rings, or other metal fastening means, and for various other purposes where a means of securing articles in position may be desired.

The invention contemplates the employment of a block adapted to be permanently attached in the post, which block is provided with an opening adapted to receive a fastening device, such as a staple. Within this opening the block is so formed that when the staple is driven in its points will become bent or extended, so as to prevent the withdrawal of the staple. Arrangement is made for preventing the withdrawal of the block from the post.

In the drawings, which fully illustrate my invention, Figure 1 is a perspective of a staple-block constructed according to my invention, representing a staple as attached thereto. Fig. 2 represents a section through the

upper portion of a wire fence, a portion of a post being represented in section, as will appear. Fig. 3 is a vertical central section taken through the block shown in Fig. 1. Fig. 4 represents a portion of a block of a slightly-modified form. Fig. 5 is a rear end elevation of a block of the modified form suggested in Fig. 4. This view represents a block of somewhat narrower dimension than that shown in Fig. 4. Fig. 6 is a vertical sectional view of a wall equipped with my invention, showing how the block may be used and a strip of wood may be secured in position by means of nails.

Throughout the drawings and specification the same numerals of reference denote like parts.

Referring more particularly to the parts, 1 represents a fence-post supposed to be composed of cement or similar material which may be molded into the form of a post. Assuming that the post is to be used for a wire fence, in molding the post a plurality of blocks 2 would be embedded in the body of the post near the forward face 3 thereof, substantially as indicated in Fig. 2. The construction of one of these blocks is most clearly shown in Figs. 1 and 3. They preferably consist of castings presenting a flat forward face 4, which is held flush with the forward face of the post, as shown. These blocks are of substantially wedge form, being of greatest dimension at the rear. From this arrangement it should be understood that when a post has been formed with the blocks 2 embedded therein, as shown in Fig. 1, these blocks by reason of their form will very effectively resist the force tending to withdraw the same. Through the forward face 4 of each block an opening 5 is formed, which opening communicates at 6 with recesses 7 at the upper and lower faces of the block, as shown, the bottom walls 8 of the said recesses being curved outwardly, as shown. In this manner a bridge 9 is formed between the points 6, which is of substantially the same dimension as the inner dimension of the staple 10 to be used in connection with the block. The staple would be applied in the manner shown in Fig. 3, and when driven inwardly its points 11 would be bent and curved outwardly by the curved walls 8, as indicated most clearly in the dotted outline of the staple shown in Fig. 3.

Instead of making the blocks of cast material they may be made of stampings or drop-



forgings, in which case the block would be formed in halves or sections 12, such as shown in Fig. 4, which sections when placed together will present an internal construction substantially the same as that described in connection with the preferred form of the device. These halves or sections 12 would be provided with openings 13, which will enable the parts to be permanently connected by means of rivets 14, as indicated most clearly in Fig. 5. It should be observed that the opening 5 is of a length just sufficient to permit the introduction of a staple in the manner shown in Fig. 3, so that after the staple has been driven in to assume the position in which it is indicated in dotted lines the inner edges of the opening will effectually prevent the withdrawal of the staple, as will be readily understood. From this arrangement a very simple and effective means results for attaching the wires 15 of the fence, which wires would pass through the eyes 16 of the staples in the manner shown.

When desired, the staples may be dispensed with and ordinary nails 17 be substituted for the purpose of securing to the post or wall 3<sup>a</sup> a strip of wood, as 18, and it will be evident that such nails will be deflected in the same manner as the staples when driven in, thereby serving to lock them in position and secure the wood in place.

While I have shown in the accompanying drawings the preferred form of my invention, it will be understood that I do not limit myself to the precise form shown, for many of the details may be changed in form or position without affecting the operativeness or utility of my invention, and I therefore reserve the right to make all such modifications as are included within the scope of the following claims or of mechanical equivalents to the structures set forth.

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

1. The combination comprising a post, formed from plastic matter, and a plurality of frustum-shaped members, formed of a plurality of pieces, each provided with a channel having diverging branches.

2. The combination comprising a post, formed from plastic matter, and a plurality of frustum-shaped members, formed of a plurality of pieces, each provided with a registering channel having diverging branches.

3. The combination comprising a post, formed from plastic matter, and a plurality of frustum-shaped members, formed of a plurality of pieces secured together and each provided with a channel having diverging branches.

4. The combination comprising a post, formed from plastic matter, and a plurality of frustum-shaped members, formed of a plurality of pieces riveted together and each provided with a channel having diverging branches.

5. A fastening device for plastic structures adapted to be embedded therein while being molded or otherwise formed, said device comprising two metal plates, one of which has two grooves diverging in the same plane to receive the shanks of a staple or other like fastening, substantially as and for the purposes set forth.

6. A fastening device for plastic structures adapted to be embedded therein while being molded or otherwise formed, said device comprising two metal plates, one of which has two curved grooves diverging in the same plane to receive the shanks of a staple or other like fastening, substantially as and for the purpose described.

7. The combination with a plastic fence-post of staple-holders embedded therein and having separate sockets, portions of said sockets being tortuous, staples secured in said sockets, and fencing elements extending through the staples.

8. A fence-post formed of plastic material, a staple-fastener embedded therein having a plurality of plates, a curved channel in the fastener to receive a leg of a staple, each plate forming one wall of the channel.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

ARTHUR ERNEST VANCE.

Witnesses:

ANNA V. LIVINGSTON,  
NEWTON TRIPP.