No. 668,757. Patented Feb. 26, 1901.

R. P. SCHLEGEL.

FRAME FOR STONE FLAGS.

(Application filed Mar. 31, 1898.)

(No Model.)

Fig. 1.

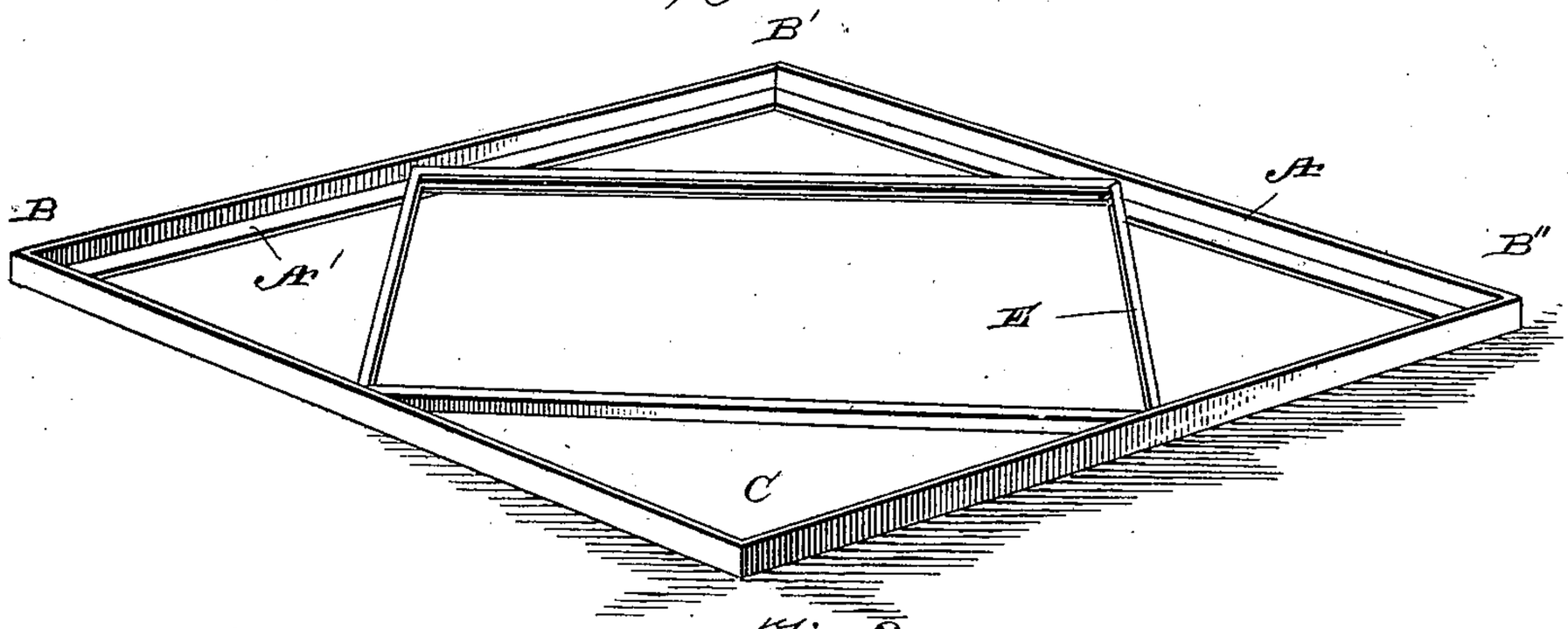


Fig. 2.

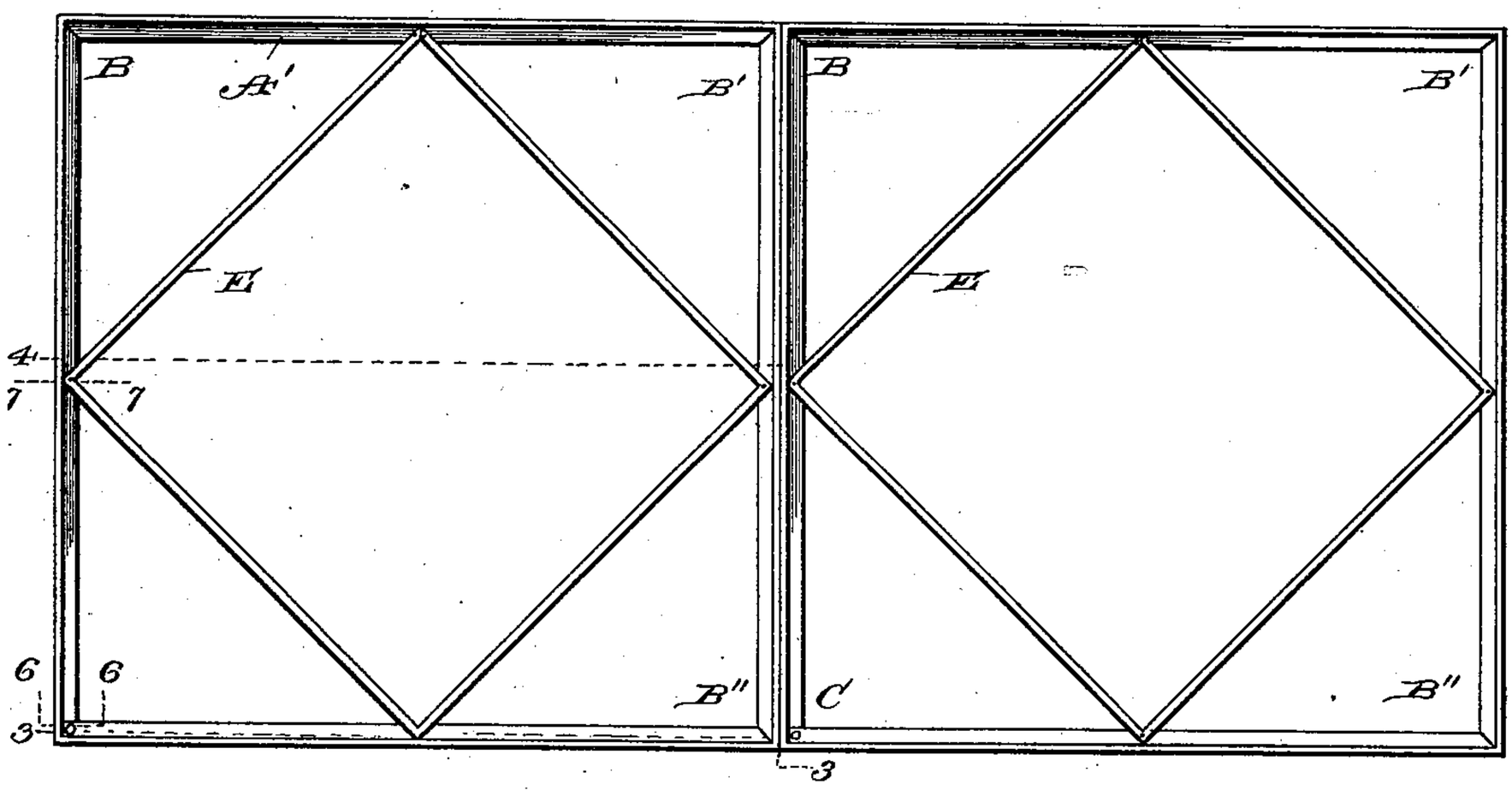


Fig. 3.

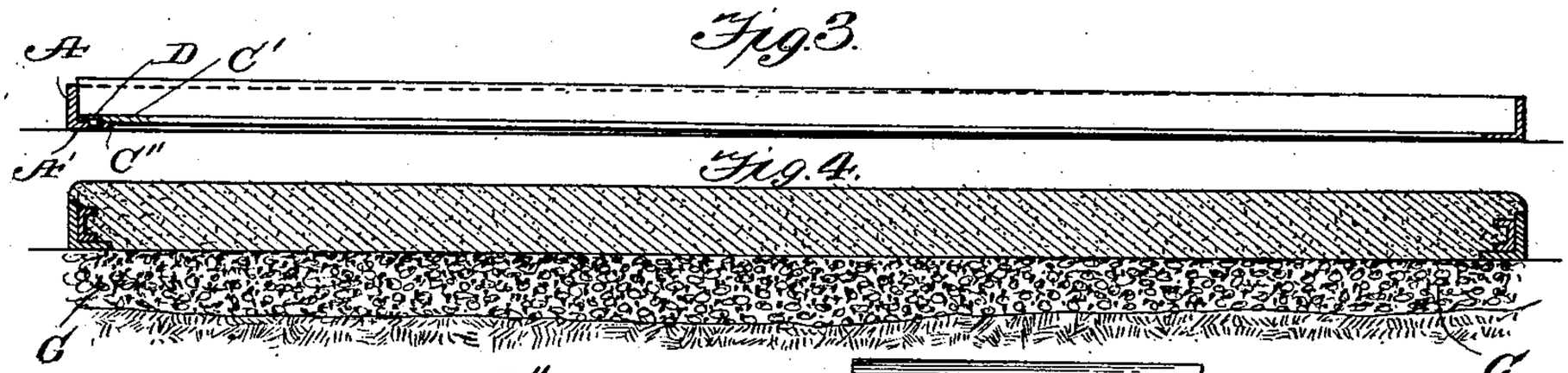
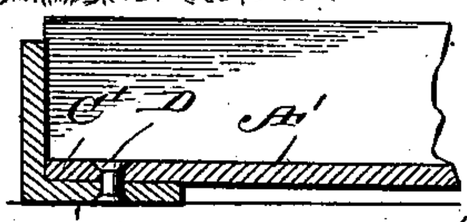


Fig. 4.

Fig. 5.

Fig. 6.



Witnesses

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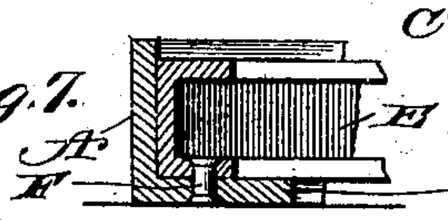
Fig. 7.



UNITED STATES PATENT OFFICE.

ROBERT P. SCHLEGEL, OF NEWARK, NEW JERSEY.

FRAME FOR STONE FLAGS.

SPECIFICATION forming part of Letters Patent No. 668,757, dated February 26, 1901.

Application filed March 31, 1898. Serial No. 675,927. (No model.)

To all whom it may concern:

Be it known that I, ROBERT P. SCHLEGEL, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented a new and useful Frame for Stone Flags, of which the following is a specification.

This invention relates to frames for artificial blocks; and the object is to provide a simple and strong frame to receive the composition of which the block is formed, whereby a strong and neat artificial block or flag may be produced.

In order to enable others skilled in the art to which my invention most nearly appertains to make and use the same, I will now proceed to describe its construction and operation, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view illustrating the metallic frames used in the manufacture of artificial-stone blocks in accordance with my invention. Fig. 2 is a top plan view of two of said frames adjoining each other. Fig. 3 is a vertical sectional view taken on the line 3 3 of Fig. 2. Fig. 4 is a vertical sectional view taken on the broken line 4 of Fig. 2, showing also the artificial stone as formed into a block and laid upon a foundation or bed. Fig. 5 is a detail view illustrating the manner of cutting out the horizontal flange of the angle-iron frame in order to form a corner. Fig. 6 is a vertical sectional view on the line 6 6 of Fig. 2. Fig. 7 is a similar view on the line 7 7 of Fig. 2.

Like letters of reference mark the same parts wherever they occur in the various figures of the drawings.

In carrying out my invention I provide a number of metallic frames, each of which consists of an outer frame A, of angle-iron, here illustrated as rectangular in form. In forming this frame the horizontal flange A′ of the angle-iron is cut away at A″, a right-angled V-shaped piece being cut out, the apex of which is at the bottom of the vertical flange of the angle-iron, so that when the vertical flange at the apex is bent until the sides of the space A″ come together a right angle will be formed in the vertical flange, and three of these right angles form three of the corners of the angle-iron frame, as at B, B′, and B″.

To form the last angle C of the frame A, one end C′ of the horizontal flange A′ is lapped over the other end C″ and the two ends secured together by a rivet D, as shown in detail in Fig. 6. Within this angle-iron frame is secured a channel-iron frame E, the channel or groove being inward and the metal being bent to form an inner square, with its angles at the middle of the sides of the angle-iron frame A, the channel-iron frame being secured to the horizontal flange A′ of the angle-iron frame by means of rivets F, as shown in detail in Fig. 7.

In the construction of blocks in accordance with my invention the frames are laid upon a bed G of cinders or other properly-prepared bed material and a mixture of Portland cement, iron-ore tailings, and water is spread over the frames to the required thickness. The blocks are then cut apart between the outer edges of the angle-iron frames where they adjoin each other. The upper surface is then properly troweled and the blocks marked off with proper tools to any desired form. The mixture is then allowed to set or harden in position. This method I consider to be preferable, although the blocks can be made in a factory, singly or in numbers, and laid in position at any time or place and at any season of the year without the necessity of blocking off the entrance of houses or stores in front of which they are laid. They are always ready for use and can be raised, lowered, or removed without injury to themselves or damage to any other portion of the sidewalk, pavement, floor, or other structure.

The mixture herein described when seasoned is strong, hard, durable, smooth, and will absorb moisture, thereby avoiding slippery walks due to the freezing of unabsorbed water lying upon them. The block thus formed is not susceptible to frost and is not readily broken in raising, lowering, removing, or relaying.

Instead of the mixture herein set forth crushed stone, screenings, or sand may be used with the cement and water.

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

1. In a frame for artificial-stone blocks, the combination with an outer frame, substantially L-shaped in cross-section, of an inner frame, the corners of which are secured at the intermediate portions of the sides of the outer frame, said inner frame formed of channel-bars and resting at its corners upon one of the flanges of the L-shaped outer frame and abutting the other flange thereof, substantially as described.

2. In a frame for artificial-stone blocks, the combination with a rectangular outer frame having its sides formed substantially L-shaped in cross-section, of an inner bracing-frame having its sides formed U-shaped in cross-section, said inner frame at its corners resting upon one of the flanges of the sides of the outer frame, and abutting the other flange thereof, said corners of the inner frame being secured to the intermediate portions of the sides of the outer frame, substantially as described.

ROBERT P. SCHLEGEL.

Witnesses:
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