No. 683,233. Patented Sept. 24, 1901.

A. I. SVAN.

SELF CENTERING BUILDING BRICK.

(Application filed Feb. 1, 1901.)

(No Model.)

Fig. 1.

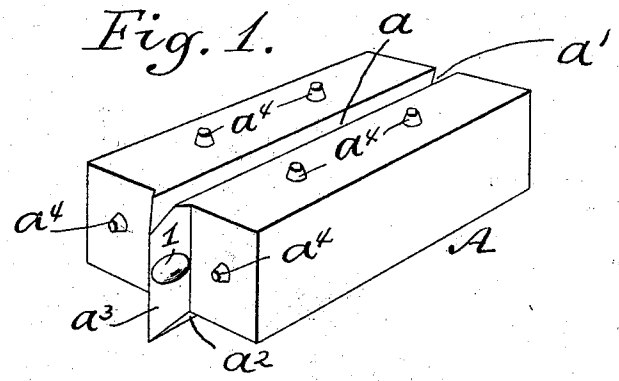


Fig. 2.

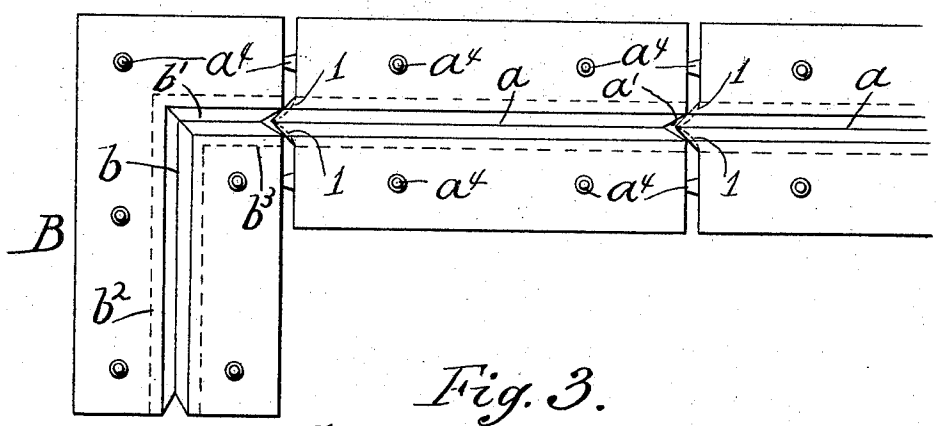


Fig. 3.

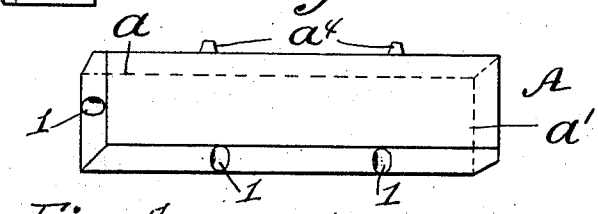


Fig. 4

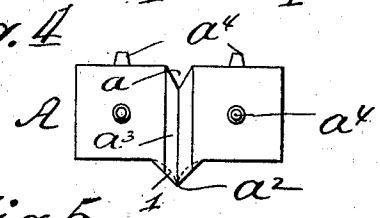
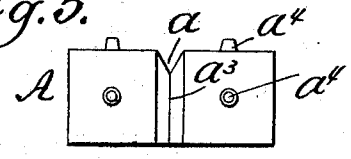


Fig. 5.



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SELF-CENTERING BUILDING-BRICK.

SPECIFICATION forming part of Letters Patent No. 683,233, dated September 24, 1901.

Application filed February 1, 1901. Serial No. 45,556. (No model.)

To all whom it may concern:

Be it known that I, ANDREW IVAN SVAN, a citizen of the United States, and a resident of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Self-Centering Building-Bricks, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar characters of reference indicate corresponding parts.

This invention relates to self-centering building-bricks, the object thereof being to provide novel and improved articles of this character which are self-centering in the process of laying, parallel in series, and when laid or assembled to form a given structure so firmly bound together as to prevent lateral displacement of the bricks and distortion of the structure by reason of heat or other natural causes which are liable to disturb the integrity of a structure composed of ordinary bricks.

The invention will be hereinafter fully described, and specifically set forth in the annexed claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of one of my improved bricks; Fig. 2, a plan view showing a plurality of the bricks assembled; Fig. 3, a side elevation of one of the bricks; Fig. 4, an end elevation, and Fig. 5 a similar view illustrating a slight modification.

In the practice of my invention I employ a clay or other brick A, of ordinary proportions, embodying a right-angled parallelogram, the opposite faces being parallel and equal to each other. On the upper surface, midway between its opposite edges, is formed a longitudinal groove a, which communicates with a vertical groove a', formed in one end of the brick. These grooves are V-shaped, their sides being equal and extended approximately at an angle of sixty degrees. On the bottom of the brick A, midway between its opposite edges, is formed a longitudinal rib a^2, which connects with a similar rib a^3 on one end of the brick. These ribs are V-shaped in cross-section, having equal sides which extend at an angle of, say, forty-five degrees, whereby said ribs can enter and register with the grooves a and a' without tightly fitting them. The upper and one end surface of each brick A are also provided with a suitable number of lugs a^4, which are of equal height, whereby when a plurality of bricks are assembled they are vertically and horizontally parallel. The grooves a^2 and a^3 are provided with concaved recesses 1 to allow of displacement of cement or plaster during the process of laying the brick, whereby they are readily self-centered, so that their vertical edges register perfectly when built up in series. The bottom row of bricks of a given structure may be formed without the ribs a^2, as shown by Fig. 5 of the drawings. For use at corners, as illustrated by the brick B, Fig. 2 of the drawings, the grooves, as b and b', and ribs b^2 and b^3 are L-shaped in plan, and I may further modify the direction of the grooves and ribs to suit requirements of various structures without deviating from the scope of my invention.

In the operation and use of my invention the bottom series of bricks being placed and suitably coated with cement or plaster it is simply necessary to place the next upper series and force them toward each other, whereby owing to the disparity of degree in the angles forming the grooves and ribs and the uniformity in height of the lugs on the upper and end surfaces of the bricks they will be automatically self-centered one above the other and arranged in perfect parallel alinement equidistant from each other both horizontally and vertically.

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

1. A building-brick having lugs of equal height on its upper, and one end surface, a longitudinal V-shaped groove formed in and extended centrally across its upper surface and a similarly-shaped groove communicating therewith and formed in and extended vertically across one end surface, a V-shaped rib extended horizontally across its lower surface and a similarly-shaped rib extended therefrom on one end surface, the angles of the sides of the ribs being of lesser pitch than the angles of the sides of the grooves, substantially as shown and described.

2. As a new article of manufacture, a building-brick having a right-angular groove which

is V-shaped in cross-section and an oppositely-located right-angular rib which is V-shaped in cross-section, the angles forming the sides of the said rib being of lesser pitch than the angles forming the sides of the grooves, substantially as shown and described.

3. As a new article of manufacture a building-brick having lugs of equal height and oppositely-located V-shaped grooves and ribs, the angles of the ribs being of lesser pitch than the angles of the grooves, substantially as shown and described.

4. As a new article of manufacture, a building-brick having lugs of equal height and oppositely-located V-shaped grooves and ribs, said ribs having concaved recesses in their sides and formed at angles of lesser degree than the angles of the said grooves, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 22d day of January, 1901.

ANDREW IVAN SVAN.

Witnesses:
B. PATERSON,
S. HARNISCH.