N° 382 A.D. 1915

Date of Application, 9th Jan., 1915—Accepted, 13th May, 1915

COMPLETE SPECIFICATION.

Improvements in Toy Building Elements.

I, WILLIAM BAILEY, 213 & 215, Brearley Street, Birmingham, Manufacturer, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The present invention relates to toy building elements for the building of toy houses and other toy structures, the said elements being of that type which are made from sheet metal and which are adapted to be detachably interlocked or connected together by means of a flange or projection upon the one element engaging with a recess or groove in the adjacent element.

The object of the present invention is to provide an improved form of building elements of the above type, which may be more easily and cheaply manufactured or produced, and the invention consists essentially in forming each of the elements from a sheet metal blank, the horizontal edge of the one element being bent into a hook shape so as to form a groove or socket, which is adapted to be engaged by the edge of the adjacent element, so that the whole of the elements may be interlocked together to form a perfectly firm or rigid structure.

Figure 1 of the accompanying drawings represents a side view of a toy house built up of elements constructed in accordance with this invention.

Figure 2 is an end view of same, shown partly in section, so as to illustrate the manner in which the roof elements interlock.

Figure 3 shows a vertical section through x, Figure 2.

Figure 4 is a similar section upon an enlarged scale, showing more clearly the manner in which the sections interlock.

Figure 5 shows a horizontal section, through x^1, Figure 1.

Figure 6 is a sectional perspective view upon a larger scale, through a portion of the roof, showing the manner in which the edge of the latter rests upon the walls, and the way the spouting is fixed.

Figure 7 shows, upon a larger scale, a section through the apex of the roof.

Figure 8 is a top side plan of one of the ridge tiles forming the apex of the roof.

Figure 9 is a transverse section through x^2, Figure 8; whilst Figure 10 is a section through x^3 Figure 8.

Figure 11 is an inside elevation showing the manner in which the door frame is secured in position and interlocked with the bricks.

Figure 12 is an elevation of a portion of the edging or cornice for the walls of the house.

Figure 13 is a vertical section through same.

Figure 14 shows an end view of one of the corner or angle bricks employed for building up the walls.

Figure 15 is a top side plan of same.

Figure 16 shows, in section, a corner pillar which may be employed in lieu of the corner bricks shown in Figures 14 and 15.

Figure 17 is an elevational view of a portion of the said corner pillar.

The same reference numerals indicate corresponding parts in each of the figures.

[Price 6d.]

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The elements 1 forming the walls of the house are stamped from sheet metal blanks, so as to give the appearance of bricks when the elements are assembled and the structure is viewed from the outside. Each of the said elements 1 is of a channel cross-section having open ends, as clearly shown in Figure 4, and its lower edge is cranked inwards to form a depending flange 2, whilst its upper edge is provided with a longitudinal groove or socket 3, formed by bending the said edge inwards and then returning same outwards hook fashion. The groove 3 upon the upper edge of the one brick is adapted to be engaged by the flange 2 upon the lower edge of the adjacent brick, the whole of the bricks being, in this manner, securely interlocked or fixed together, so that the outer faces of the bricks come flush or all in the same plane. The walls are preferably built up by one brick at a time, each brick being arranged to cover the joint formed by the ends of the two lower bricks, as shown in Figures 1 and 2. The lower edges of the walls are fitted with edging bricks 4, the said bricks being formed without a flange and provided with a flat lower edge, both longitudinal edges of the bricks being bent inwards, as shown in Figure 4, and formed with grooves or sockets 3, the groove or socket formed by the upper edge of the brick being engaged with the flange 2 upon the lower edge of the above adjacent brick. The walls are adapted to be connected together at right-angles by means of special corner or angle bricks 5, the construction of which is clearly shown in Figures 14 and 15 of the drawings. Each of the said bricks 5 is of a right-angled formation and is provided with a flange 2 and socket 3 upon its lower and upper edges respectively, the said flange and socket being engaged with the adjacent bricks in a similar manner to the above described. The corner bricks 5 are preferably employed alternately, the ordinary bricks 1 coming between each corner brick, with which they are interlocked, as shown. The corners of the walls thus present an unbroken appearance, said walls being securely fixed together at right angles to one another. Instead of the corner bricks 5 being bent at right angles they may be bent to any other angle to admit of forming octagonal, hexagonal, or other shaped buildings, or for making bay windows.

The roof of the house is formed from elements stamped in the form of tiles 6, as shown in Figures 2 and 7, the one longitudinal edge of the said tiles being adapted to socket into a groove 3 formed in the longitudinal edge of the next adjacent tile, so that the whole of the tiles are locked together. The two sides of the roof are connected together by V-shaped ridge tiles 7 which are formed with a socket 3 along each longitudinal edge which is engaged by the plain edges of the tiles 7 as shown in Figure 7.

The tiles 7 are each formed at one end with an extension 8 (see Figure 8) which is adapted to socket into the end of the next adjacent tile. The whole of the tiles 7 being thus secured together.

The lower edges of the roof are arranged to rest upon the top of the walls of the house, a spouting 9 being preferably interposed beneath same, the said spouting 9 being formed with a depending flange 10 which fits into the grooves or sockets in the edge of the top bricks of the walls. The top edges of the end walls of the house are preferably fitted with an edging or cornice 11, the said edging being of a substantially U-section, as shown in Figures 12 and 13, the shorter or inner side engaging behind ears 14 on the brick elements, as shown in Figure 2.

The doors and windows of the house are preferably carried by flanged metal frames 12 and 13 respectively, the flanges of which slide behind the said projecting ears 14 which are formed integral with the socket 3 along the upper edges of the bricks 1. The upper flanges or edges of the door and window frames 12 and 13 engage with the flanges upon the lower edges of the adjacent bricks, whilst the lower edge of the window frame fits into the socket formed along the top edge of the lower adjacent bricks.

The house may be fitted with a chimney 15 which may, if desired, be formed

with sockets or flanges to engage with the adjacent tiles; or it may be secured in position in any other suitable manner.

If desired, instead of angle bricks being employed for connecting together the walls of the house, corner columns 16 as shown in Figures 16 and 17, may be employed, the said columns being formed with flanges 17 which fit behind the ears 14 upon the upper edge of the bricks 1. Half-bricks or tiles may be employed so that the vertical edges of the walls or roof come perfectly in line.

The building elements may be used for making various other forms of toy structures.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. In toy building elements of the type herein described; forming same from sheet metal blanks, one horizontal edge of which is bent into a hook-shape (3) so as to form a groove or socket with which the edge of an adjacent element is adapted to be engaged, substantially as described.

2. In toy building elements of the type herein described; forming same from sheet metal blanks of which one edge is cranked and formed with a flange or projection (2) which is adapted to be engaged with a socket or groove formed in the edge of the adjacent element by bending said edge into a hook-shape, substantially as described.

3. In toy building elements as claimed in Claim 1 or 2; the employment at the ends of the grooves or sockets, of laterally projecting tongues or ears with which flanges on adjacent elements are adapted to be engaged, substantially as described.

4. In toy building elements of the type herein described, the employment of imitation tiles or slates whose one edge is bent into a hook-shape so as to form a groove or socket adapted to receive the edge of an adjacent tile or slate element, substantially as described.

5. In toy building elements as claimed in the preceding claims the employment of V-shaped imitation ridge tiles adapted to socket one into another endwise and having grooves or channels along opposite edges to receive the adjacent tile or slate elements, substantially as described and set forth.

6. In toy building elements as claimed in the preceding claims; the employment of corner elements of a right-angled construction having the upper edge bent into hook form to produce a right-angled groove (3) and its lower edge cranked to form a tongue 2, as herein described and set forth in Figures 14 and 15.

7. In toy building elements as claimed in the preceding claims, the employment of a spouting element having a depending flange adapted to engage with the groove in the upper edge of the top elements of the walls of the structure, substantially as described and set forth.

8. In toy building elements as claimed in Claims 1 to 5, the employment of an edging or cornice element (11) of substantially U-section one side of which engages behind projecting parts on the upper elements of the wall of the structure, substantially as herein described and set forth.

9. Toy building elements constructed substantially as herein described and set forth.

Dated this 8th day of January, 1915.

WILLIAM BAILEY.

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Agent for Applicant.

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BAILEY'S COMPLETE SPECIFICATION.

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Fig. 1.

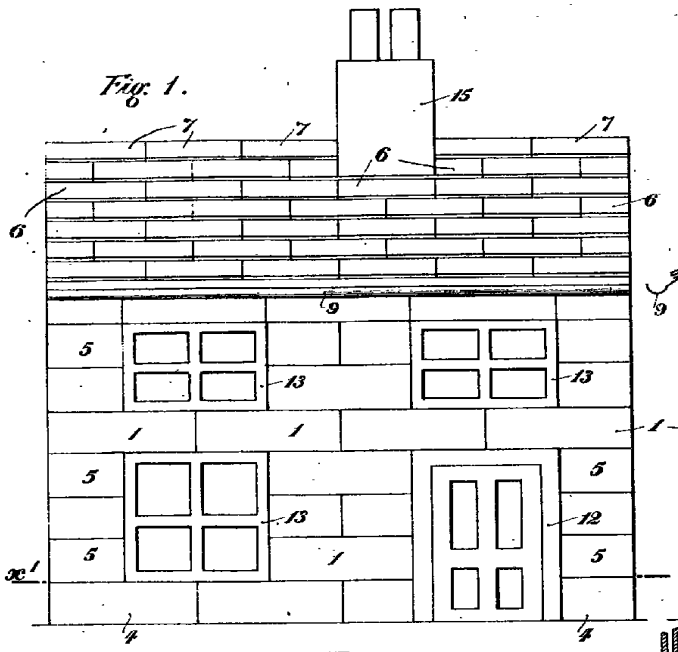


Fig. 2.

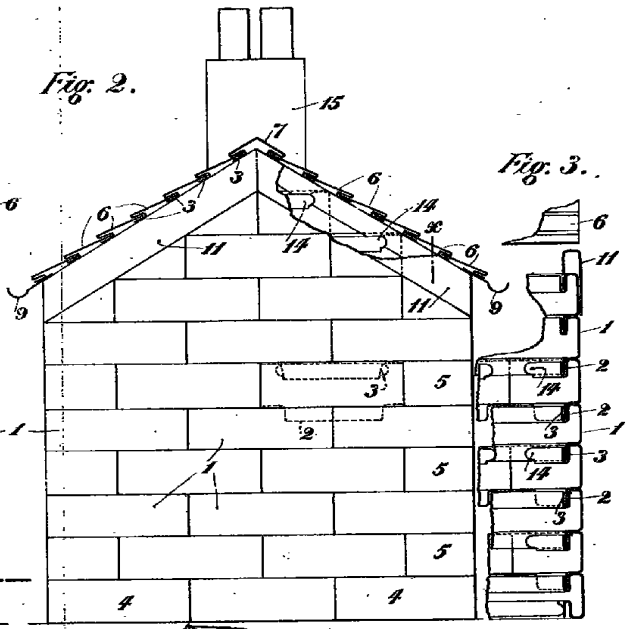
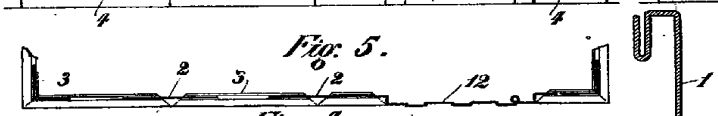


Fig. 3.

Fig. 5.



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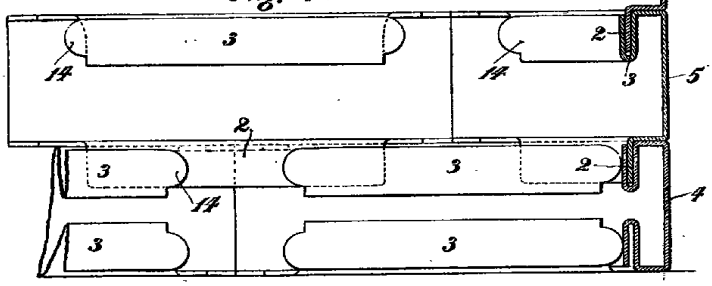
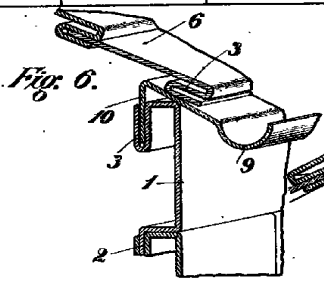


Fig. 6.



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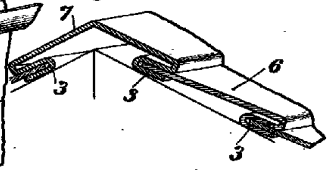

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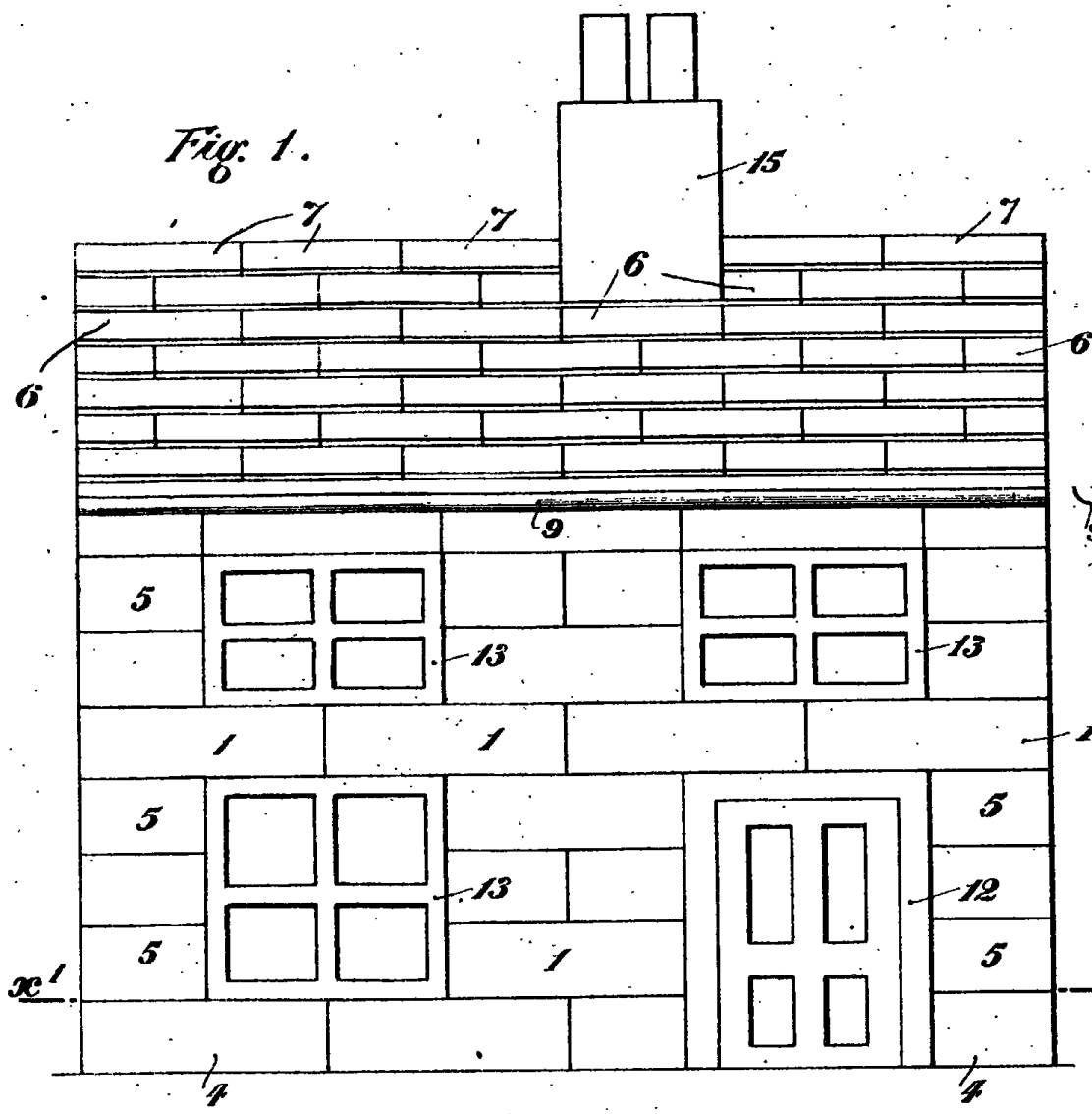
Fig. 1.



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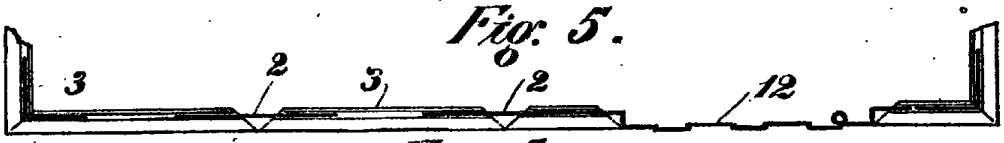
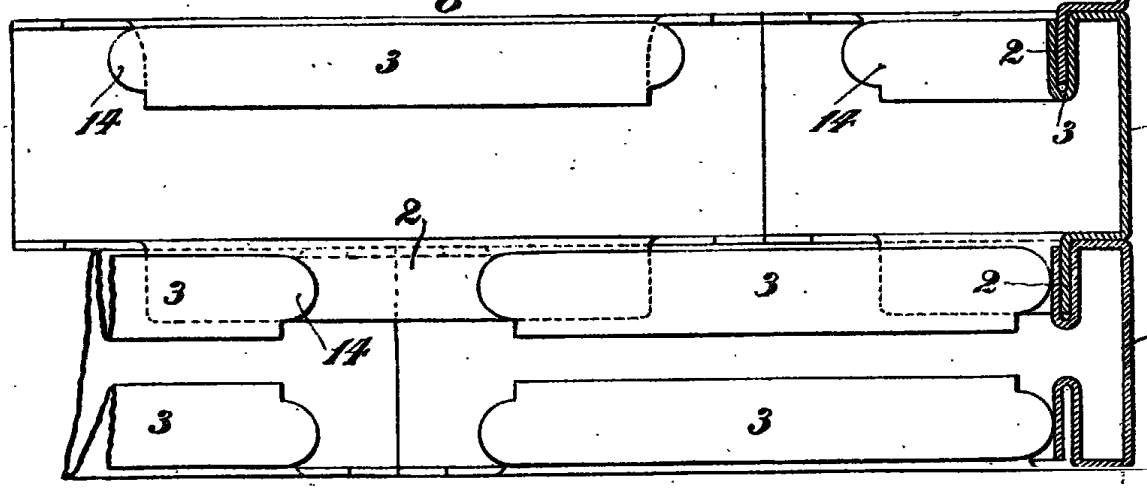


Fig. 4.



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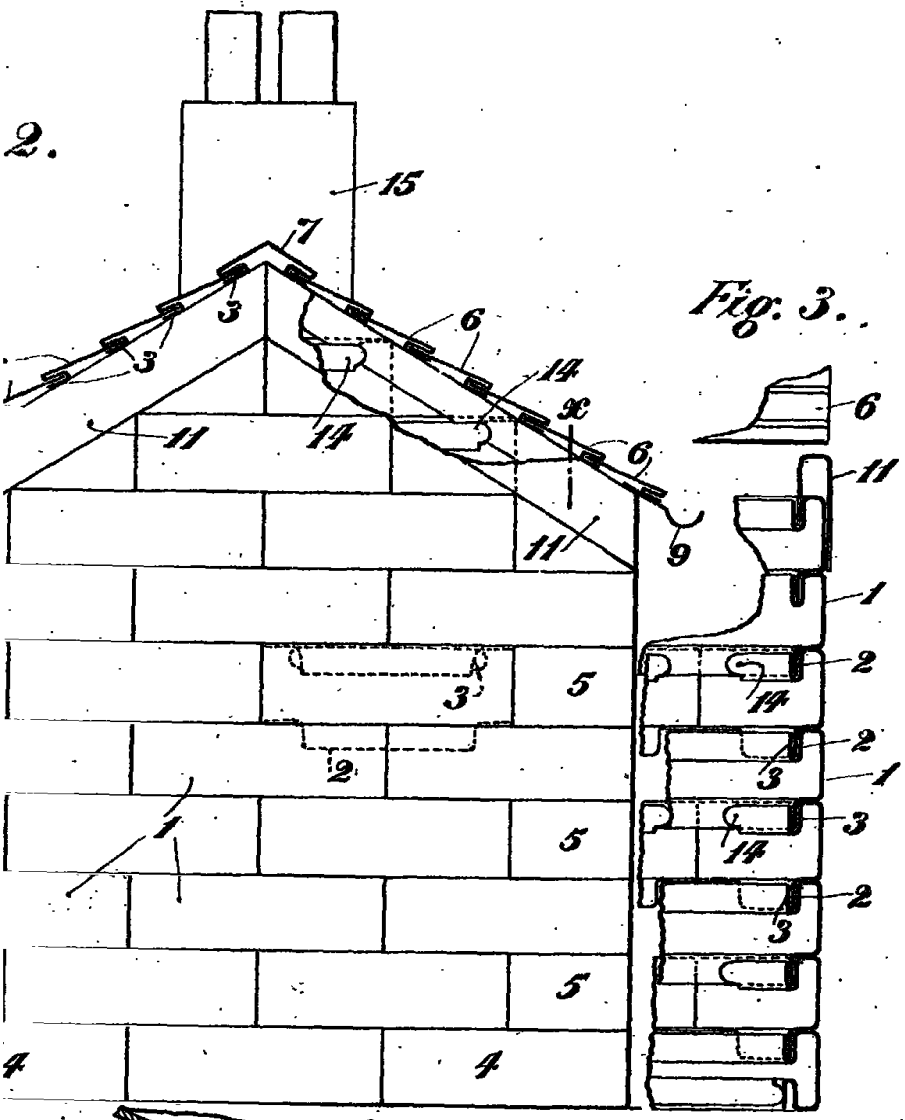

Fig. 3.

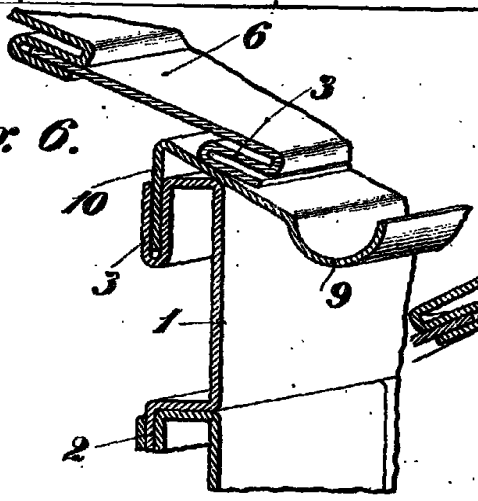

Fig. 6.

Fig. 7.

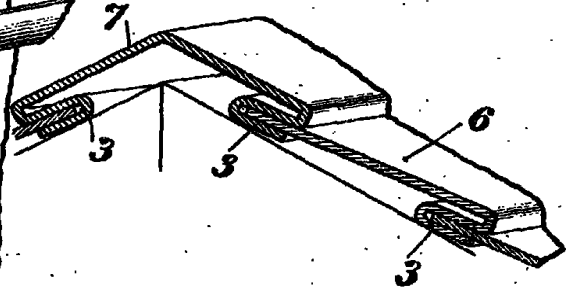

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Fig. 8.

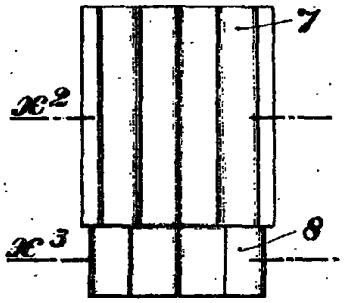


Fig. 9.

Fig. 10.

Fig. 11.

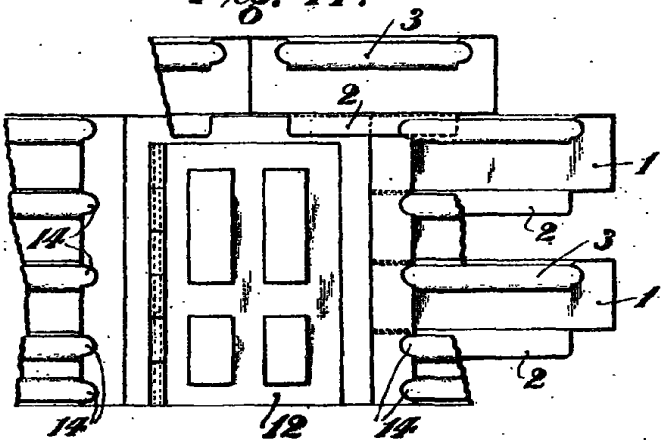


Fig. 12.

Fig. 13.

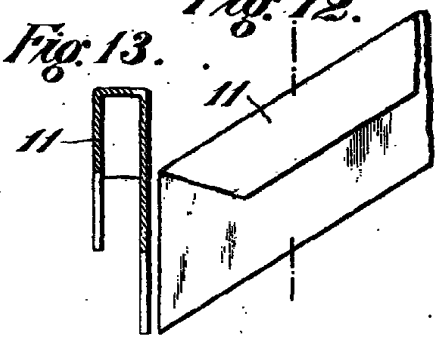
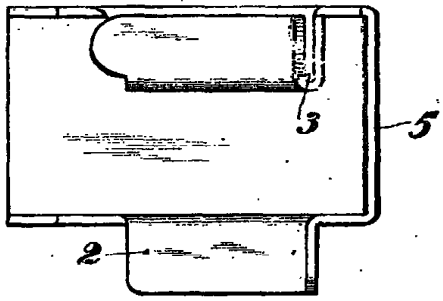


Fig. 14.



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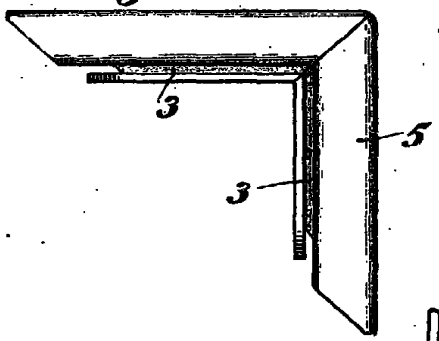


Fig. 17.

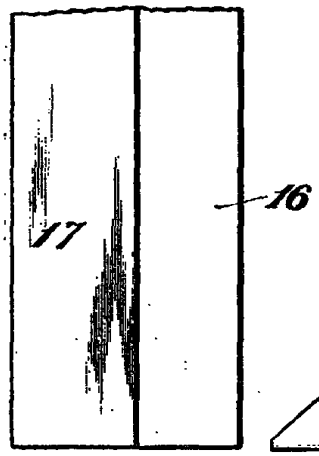
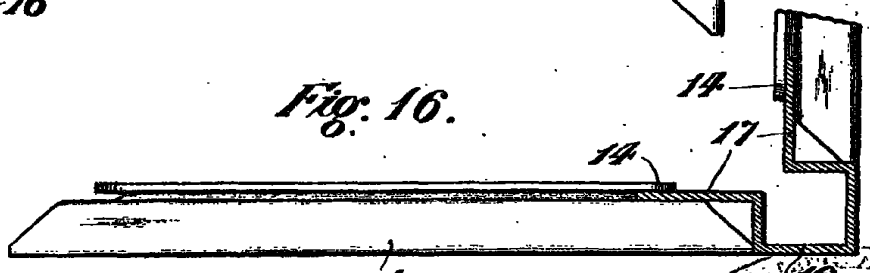


Fig. 16.



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