

J. L. M. DU FOUR.
ROOFING.

APPLICATION FILED OCT. 30, 1907.

966,178.

Patented Aug. 2, 1910.

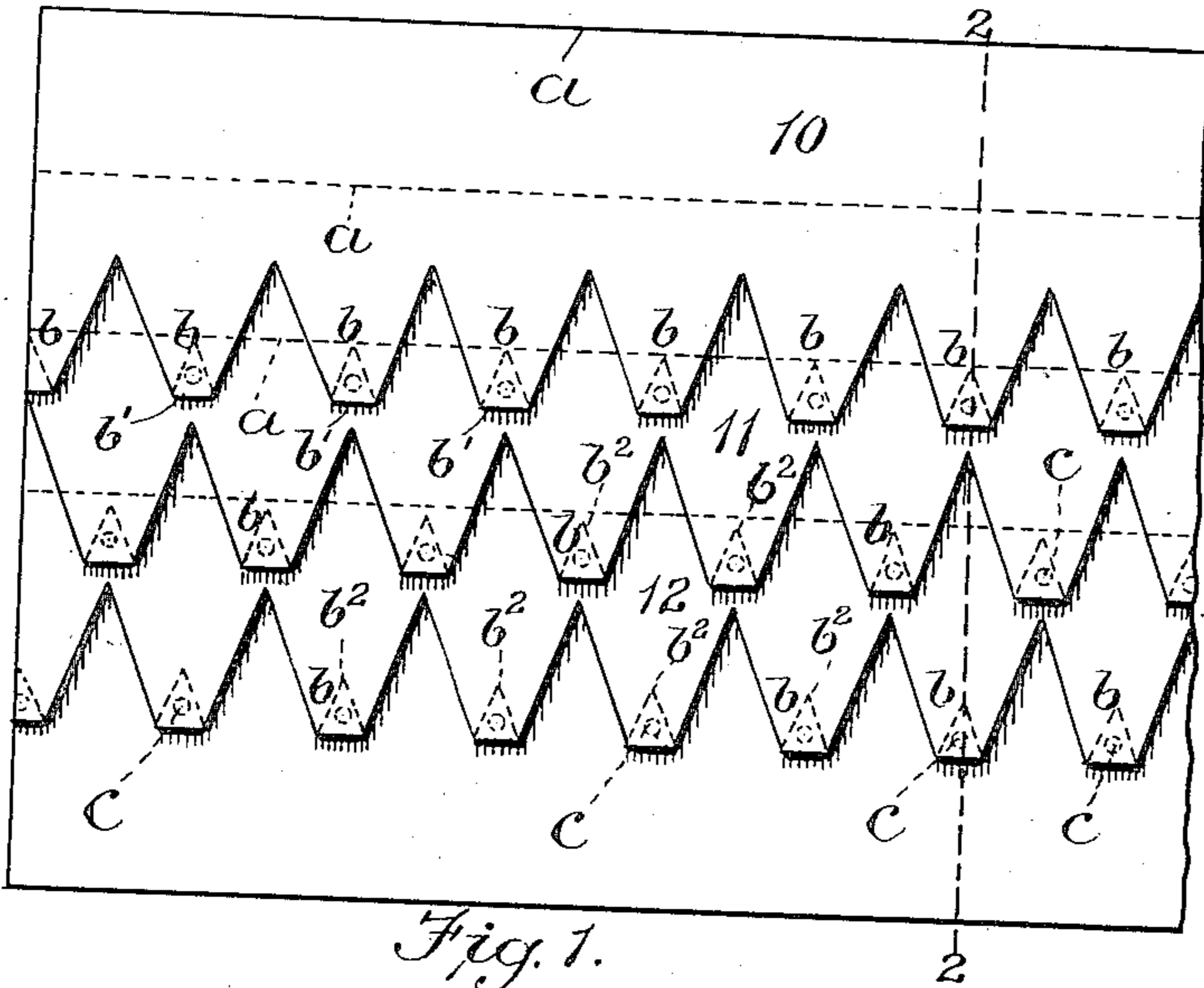


Fig. 1.

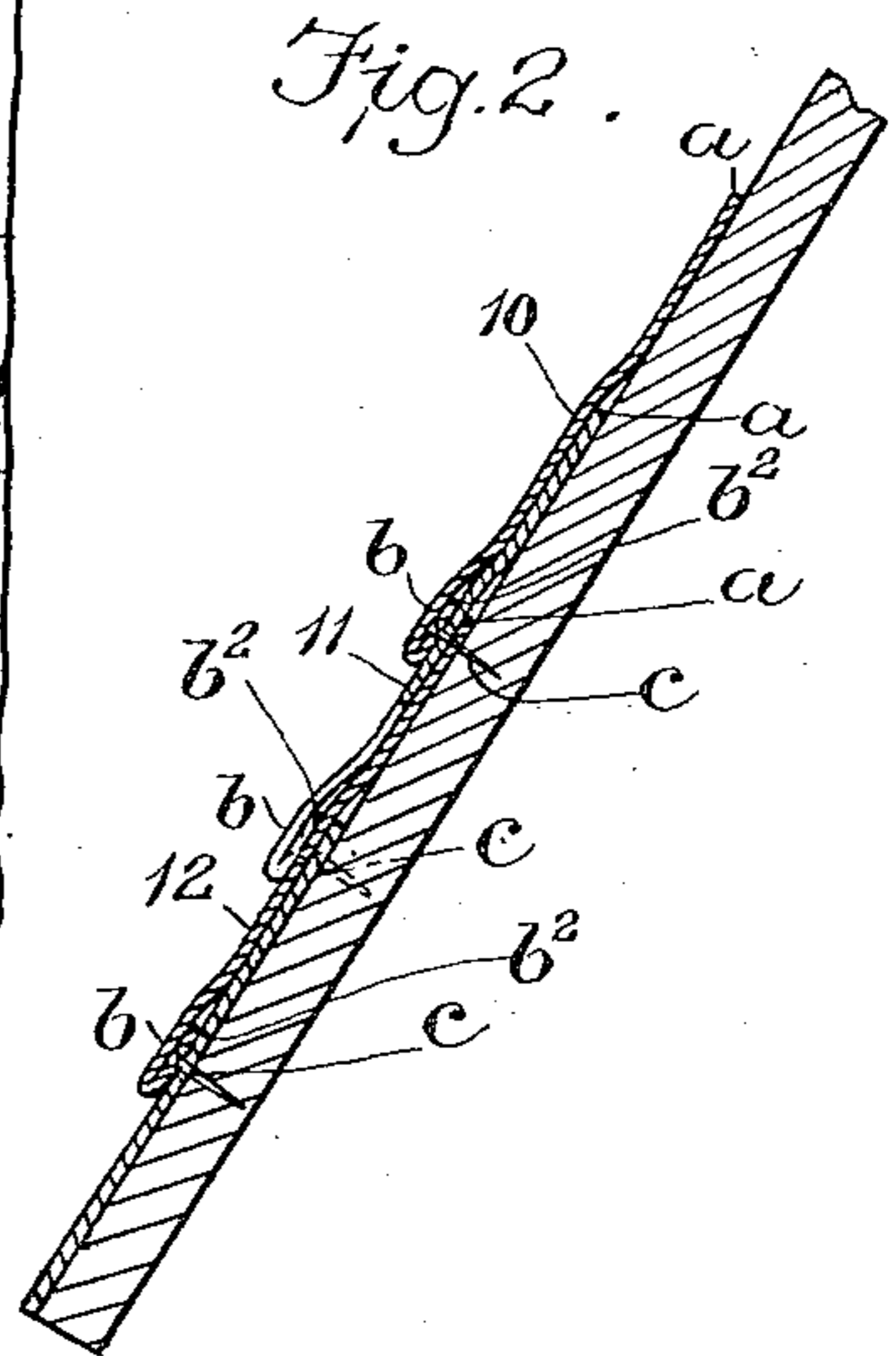


Fig. 2.

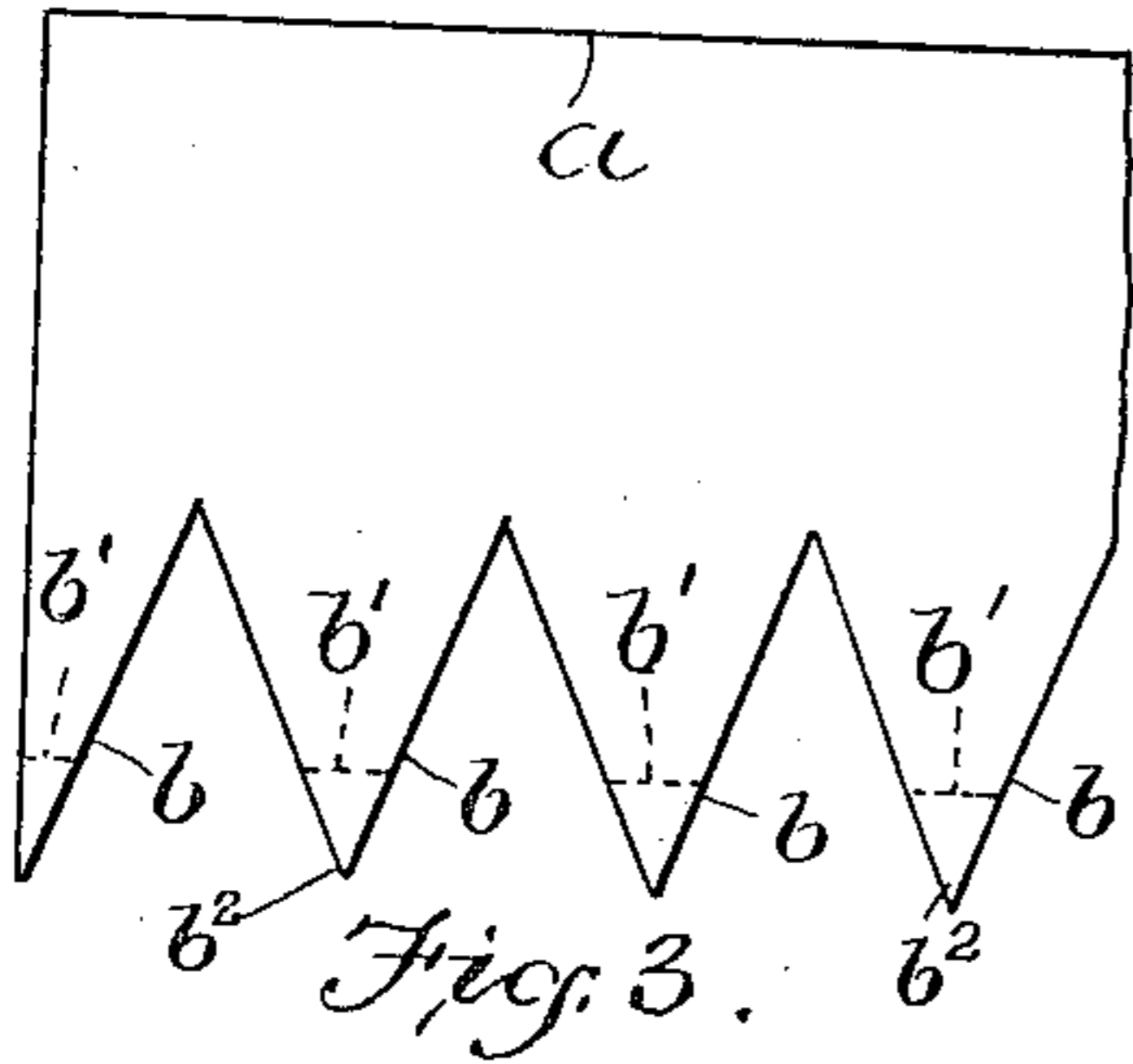


Fig. 3.

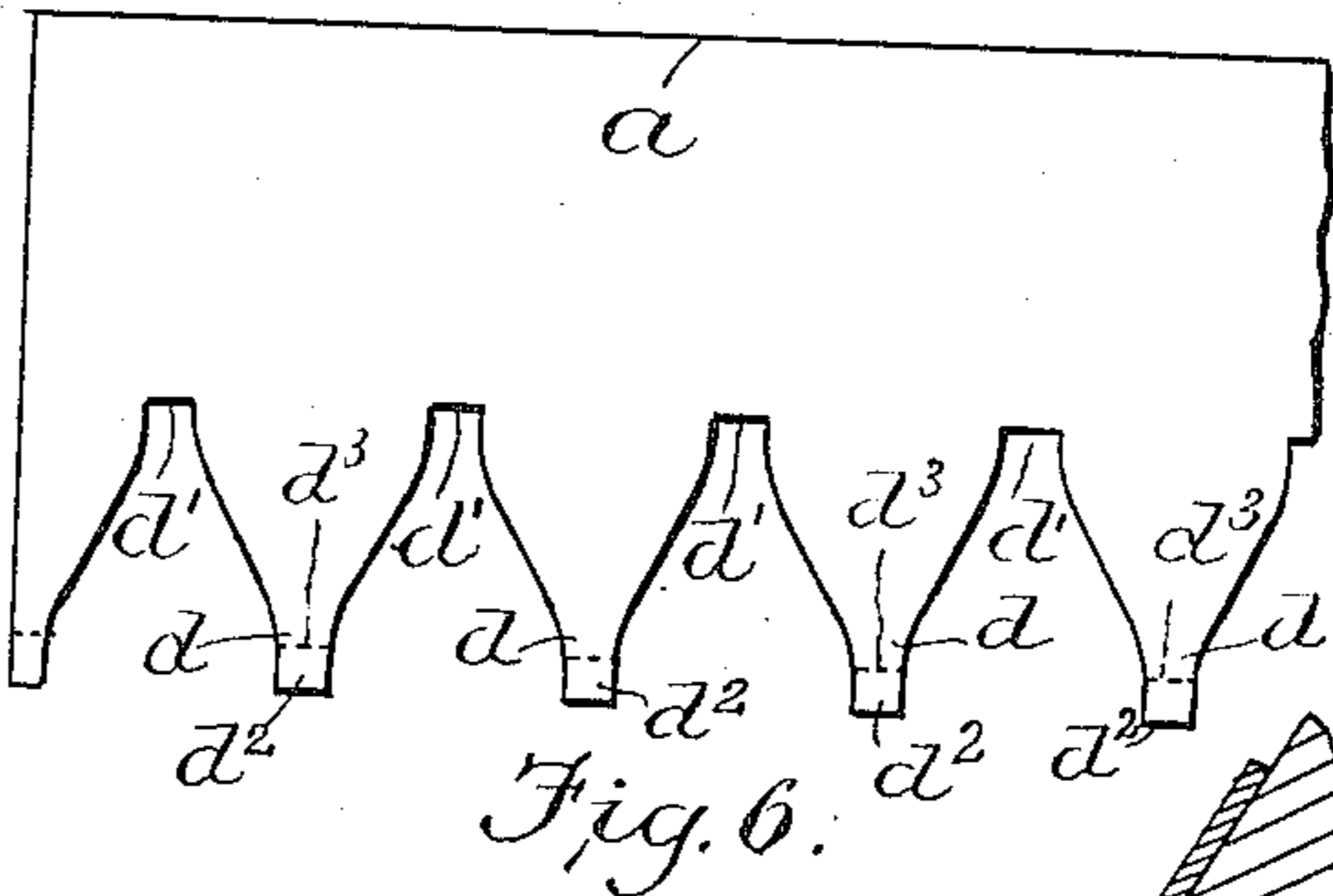


Fig. 6.

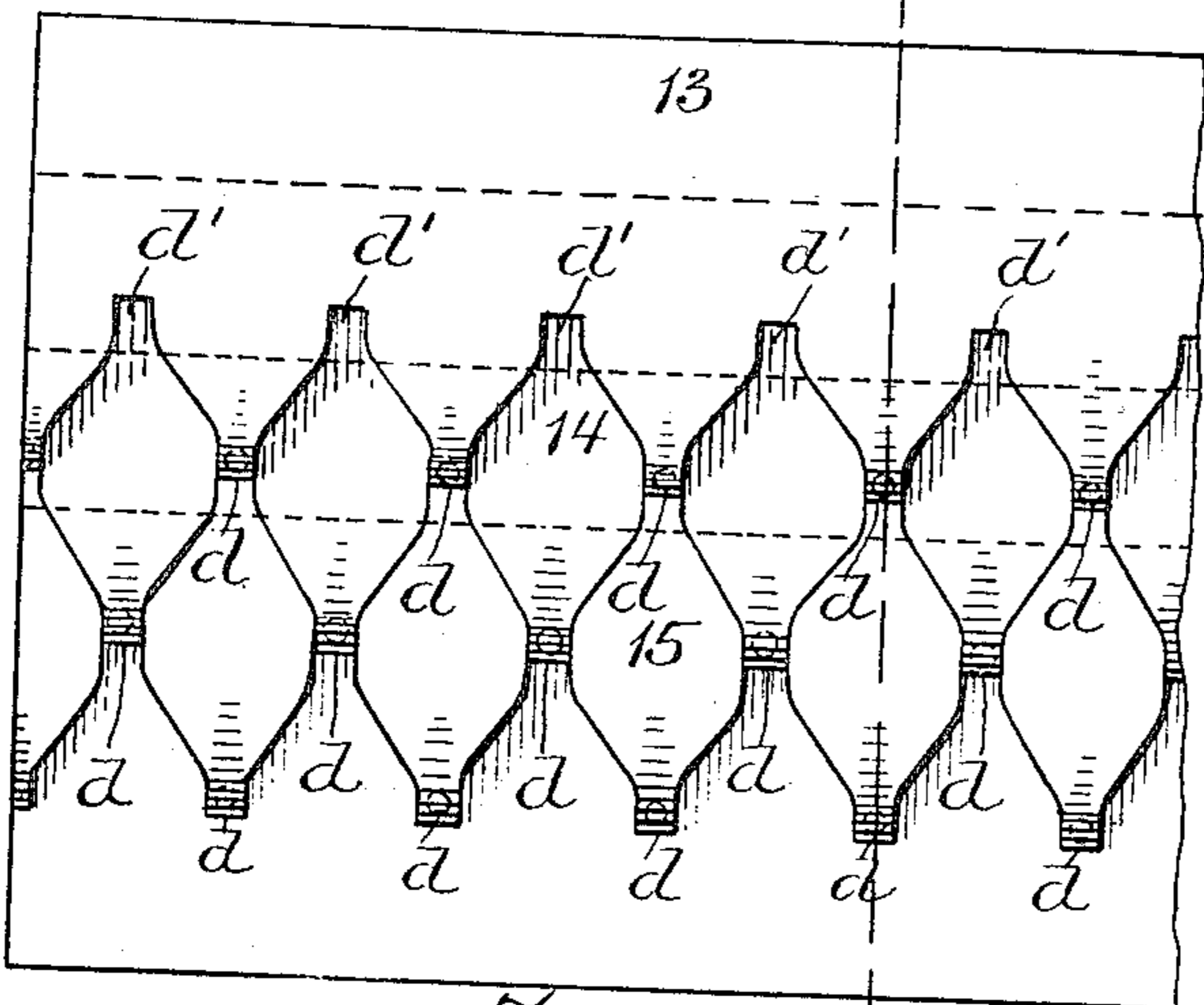


Fig. 4.

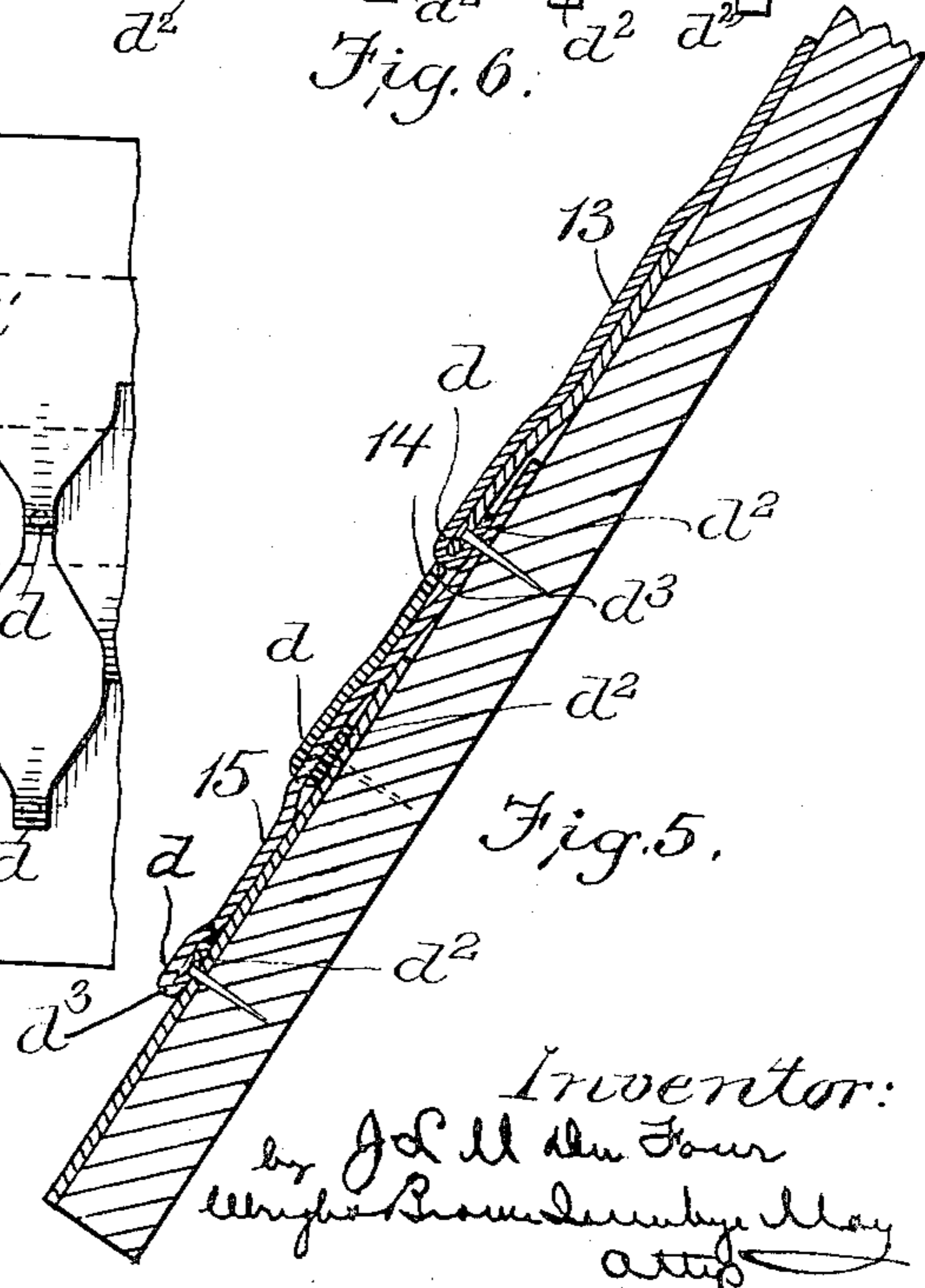


Fig. 5.

Witnesses.
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UNITED STATES PATENT OFFICE.

JOSEPH L. M. DU FOUR, OF SOUTH BOUNDBROOK, NEW JERSEY, ASSIGNOR TO FLINT-KOTE MANUFACTURING COMPANY, OF RUTHERFORD, NEW JERSEY, A CORPORATION OF NEW JERSEY.

ROOFING.

966,178.

Specification of Letters Patent.

Patented Aug. 2, 1910.

Application filed October 30, 1907. Serial No. 399,815.

To all whom it may concern:

Be it known that I, JOSEPH L. M. DU FOUR, of South Boundbrook, in the county of Somerset and State of New Jersey, have
5 invented certain new and useful Improvements in Roofing, of which the following is a specification.

This invention has relation to roof coverings and more particularly to those in
10 which shingle strips (so called) of relatively water-proof material are employed and are overlapped one upon the other to produce an effect similar to that produced by wooden shingles or metal or mineral tiles.
15 The object of the invention is to provide certain improvements in such roofings by which the roof will present an attractive appearance and by which the nails or fastenings may be covered from exposure to the
20 elements.

To this end, the invention consists in a shingle strip having an edge which is serrated and provided with points, the extremities of which may be bent under and
25 secured by nails or other fastenings so that said fastenings may be covered by bodies of the points or projections. For convenience, the points or projections are preferably scored transversely or otherwise rendered
30 more flexible near their extremities to enable them to be bent accurately along a line parallel to the general direction of the strip.

As a further refinement of the invention, the serrated edge of each strip may have
35 spaces between the bodies of the points or projections to receive the extremities of the points or projections of the superimposed strips to enable the extremities of such points or projections of each strip to be bent
40 under the spaces between the points or projections of the strip therebeneath.

Referring to the accompanying drawings,—Figure 1 illustrates a portion of a roof which is covered with a roofing embodying my invention. Fig. 2 represents a
45 section on the line 2—2 of Fig. 1. Fig. 3 represents a portion of one of the shingle strips. Fig. 4 represents another embodiment of the invention and illustrates a portion of a roof covered with my improved
50 shingle strips. Fig. 5 represents a section on the line 5—5 of Fig. 4. Fig. 6 represents one of the strips.

The roofing or roof covering, as a whole,
55 is formed of a series of strips indicated at

10 11 and 12. Each strip is formed of a suitable foundation material such as felt or the like, which is thoroughly impregnated with a suitable water-proofing material such as asphaltum, oil, pitch or other suitable
60 substance. In addition, each strip may be faced with a suitable water-proofing or finishing material. Each strip is relatively flexible and may be wound in rolls for transportation.

One edge of each strip, as at *a*, is straight, whereas the other edge is serrated or indented to provide a plurality of teeth, points or projections *b*, which may be of any suitable, convenient or attractive shape. In
70 Fig. 1, the teeth or projections have the shape of acute angles so that, when the strips are overlapped, the point of one tooth may substantially register with the reëntrant angle between the two teeth of the adjacent
75 strips, in consequence of which the roof appears as though it were constructed with diamond-shaped tiles or shingles. Each of the teeth *b* is transversely scored, weakened or rendered more flexible as at *b'*, so that
80 the extremity of each point or projection may be bent along a line which is substantially parallel with the general direction of the edge of the strip, with the extremities *b'* lying under the bodies of the points or pro-
85 jections.

In laying the roofing, a strip is placed upon the support or foundation with its under face upward and with its points projecting toward the roof tree. The fastening
90 devices *c* are then driven through the points into the foundation or support of the roof. The strip is then swung upwardly to bring the outer face of the strip uppermost, the bending of the points occurring along the
95 scored or weakened lines *b'* so that the bodies of the points or projections cover the fastening devices, as clearly shown. When the next strip is secured in place, the extremities of the points are preferably caused
100 to substantially register with the reëntrant angles of the strip therebeneath, so that, when the second strip is finally bent upward, a diamond effect is produced. When the roof is completely laid, the fastenings are
105 all covered and invisible.

As previously stated, the particular shape of the points or projections is immaterial, as almost any desired effect may be produced. In Figs. 4, 5 and 6, the strips, which are in-
110

5 dicated at 13 14 and 15, are provided with
 points, the sides of which are curved and
 which converge toward the extremities.
 These points or projections are indicated at
 5 d . They are separated as shown by the
 spaces d' , the edges of the spaces being ar-
 ranged in a line parallel to the general di-
 rection of the edge of the strip. The ex-
 tremities d^2 at each point, which are of the
 10 same width as the spaces d' , are provided
 with transverse scoring or weakening lines
 d^3 . In laying the strips, the points d^2 of a
 strip are inserted under the spaces d' of the
 strip therebeneath, until the scored lines d^3
 15 register with or are coincident with the
 edges of the spaces d' . The nails or other
 fastening devices are then driven through
 the lower strip and through the points there-
 under, and the upper strip is then bent up-
 20 wardly along the scored lines d^3 to lie flat
 upon the preceding strip. The next strip is
 secured in place in the same way. In this
 way, not only are the points or projections
 secured by the nails, but each strip is also
 25 secured in place by nails which pass through
 its body in proximity to the spaces d' .
 It will be seen that the projections of each
 strip have relatively wide base portions and
 narrow outer end portions which are bent
 30 under the base portions, and secured by fas-
 tenings which are concealed by the base por-
 tions. The bends thus formed impart stiff-
 ened outer ends to the projections, said outer
 ends and the edges of the base portions col-
 35 lectively forming uniformly shaped sym-
 metrical figures or panels, as shown in the
 drawings. The form of these panels is made
 permanent by the bends which so stiffen the
 outer ends of the projections that they can-
 40 not be bent or warped by elemental action,
 a result which would be likely to occur if
 the outer end portions of the projections
 were not thus bent adjacent to the points
 where they are fastened.
 45 While the covering herein-described, is
 particularly desirable for roofs, yet it is ap-
 plicable for various other purposes, such as
 covering the sides of a building etc., and
 hence in using the term "roof covering", I
 50 mean to include thereby coverings for vari-
 ous other analogous purposes.
 Having thus explained the nature of my

said invention and described a way of mak-
 ing and using the same, although without
 attempting to set forth all of the forms in 55
 which it may be made or all the modes of its
 use, I declare that what I claim is:—

1. A roof covering consisting of overlap-
 ping strips of relatively flexible material,
 each strip having along one edge a plurality 60
 of projections with relatively wide base por-
 tions and narrow outer end portions which
 are bent under the base portions, and fasten-
 ings inserted in the bent under portions and
 concealed by the base portions, the bends of 65
 the projections forming stiffened outer ends
 which are in alinement with each other
 throughout the length of the strip, each strip
 being laid with the stiffened ends of its pro-
 jections coinciding with the inner ends of 70
 the recesses between the projections of the
 next strip, whereby the edges and stiffened
 ends of the projections collectively form
 uniformly shaped symmetrical figures or
 panels, the form of which is made perma- 75
 nent and free from liability to distortion, by
 the stiffening of said ends.

2. A roof covering consisting of overlap-
 ping strips of water-proof flexible material,
 each strip having along one edge points or 80
 projections with intervening spaces, with the
 extremities of its points bent under the
 spaces of strip thereunder, and fastenings
 passed through the bent-under extremities
 of said points or projections and covered by 85
 said points or projections.

3. A roofing strip of relatively flexible
 material having along one edge a plurality
 of projections with relatively wide base por-
 tions and narrow outer end portions, the 90
 inner ends of the recesses between the pro-
 jections being formed to receive the outer
 end portions of the projections of an adja-
 cent strip, whereby the end portions of the
 projections of one strip may be inserted un- 95
 der the next strip at the inner ends of its
 recesses, and bent over said inner ends.

In testimony whereof I have affixed my
 signature, in presence of two witnesses.

JOSEPH L. M. DU FOUR.

Witnesses:

F. C. OVERBURY,
 P. G. GARDNER.