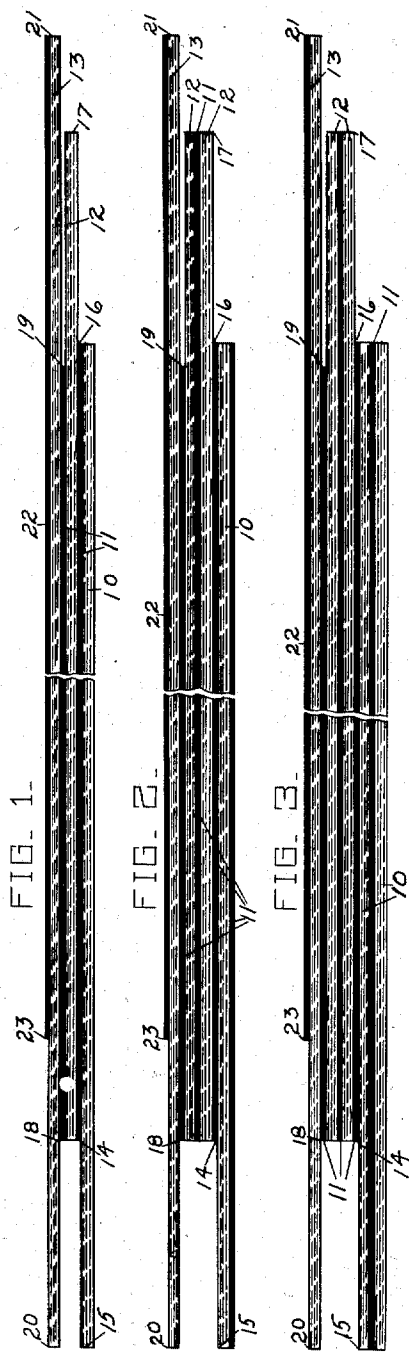


W. C. EDWARDS, JR.
 READY TO LAY COMPOSITION ROOFING.
 APPLICATION FILED OCT. 9, 1912.

1,083,243.

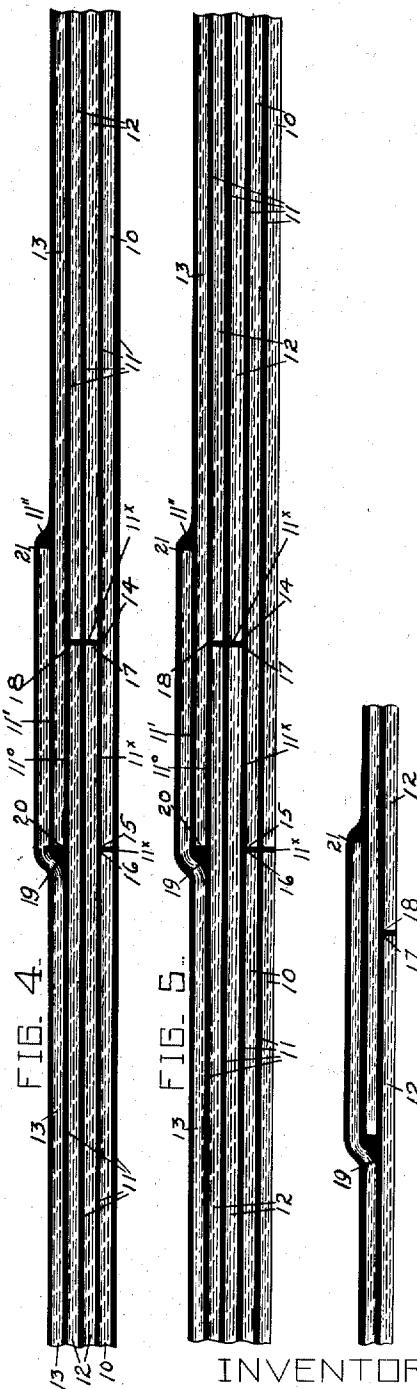
Patented Dec. 30, 1913.

2 SHEETS—SHEET 1.



WITNESSES

Wm. Leonard Jr.
J. S. Smith



INVENTOR

William C. Edwards Jr.

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2 SHEETS—SHEET 2.

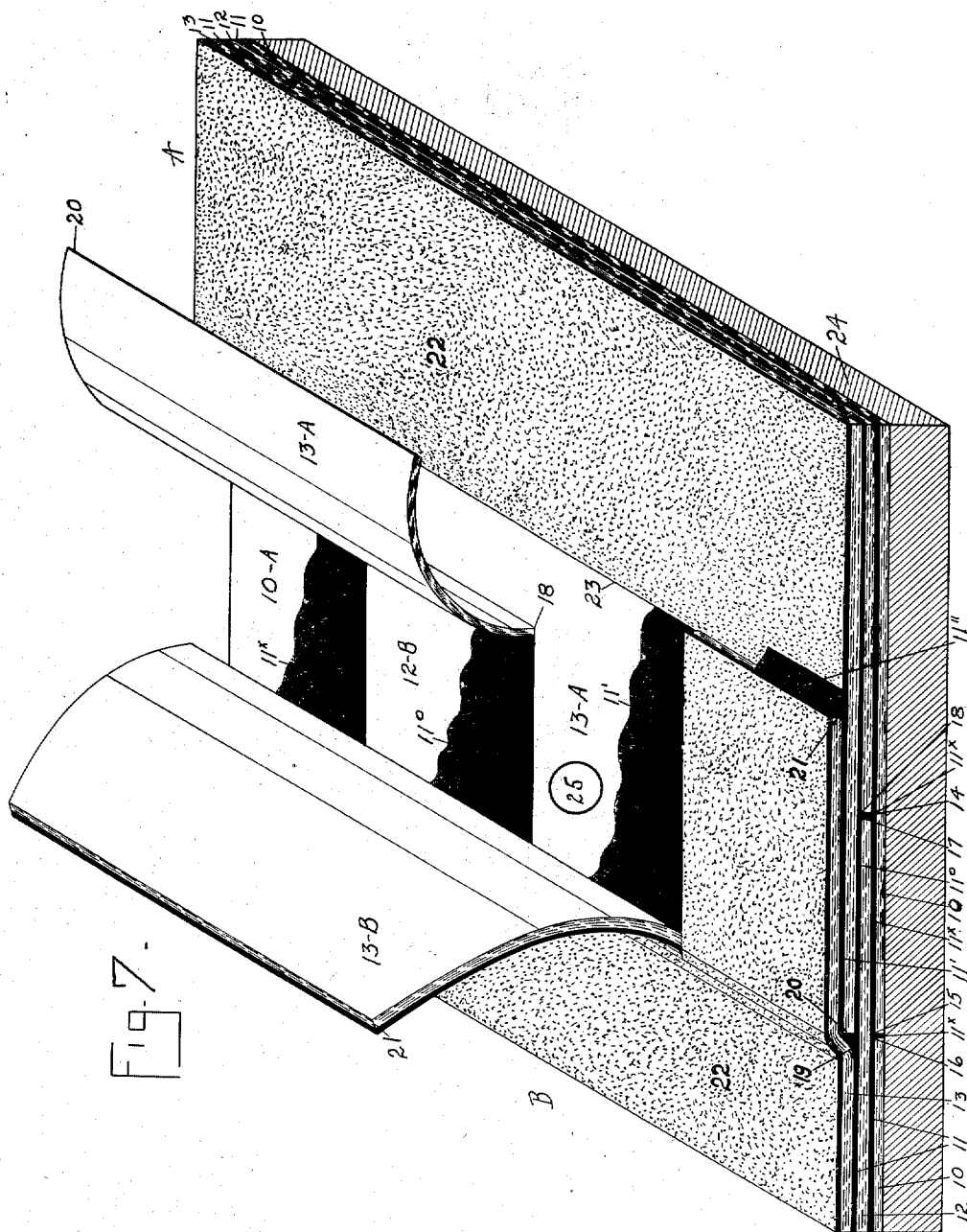


Fig. 7.

WITNESSES
W. L. Lewis Jr.
J. C. Seale

INVENTOR
William C. Edwards Jr.

UNITED STATES PATENT OFFICE.

WILLIAM C. EDWARDS, JR., OF KANSAS CITY, MISSOURI.

READY-TO-LAY COMPOSITION ROOFING.

1,083,243.

Specification of Letters Patent.

Patented Dec. 30, 1913.

Application filed October 9, 1912. Serial No. 724,743.

To all whom it may concern:

Be it known that I, WILLIAM C. EDWARDS, Jr., a citizen of the United States of America, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Ready-to-Lay Composition Roofing; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

The expression ready to lay roofing is applied by me to a built up composition composed of one or more layers of such body materials as wool felt, asbestos felt, canvas, burlap, paper and the like, the said layers being saturated and cemented together by the agency of some cementitious material such as asphalt, pitch, tar, etc. Such roofing being factory fabricated, can be produced of an even grade and of high character. The value of this type of roofing lies in the fact that it is easily handled and laid by unskilled mechanics, and can be secured from stock. However ready to lay roofings are open to the serious objection that they are not continuous in structure. Where the sheets are lapped at sides and ends, and nailed to the roof sheathing, in the course of time, cracks or openings appear in the lap through which water penetrates causing damage and loss. Also ready to lay roofing requires about ten per cent. extra material per square in order to form the said lap, which therefore increases the cost a corresponding amount. The present type of lap also forms a ridge on the roof surface obstructing the free flow of the water.

The principal objects of this invention are: The factory fabrication of roofing materials in long strips, adapted to be transported in rolls and applied to roof surfaces to produce a continuous roofing surface. The fabrication of ready to lay roofing in strips or sheets having a reinforcing flap at each edge. To secure a flat continuous joint between adjacent strips of ready to lay roofing materials. To effect a saving in the quantity of material necessary to cover a surface by doing away with the present waste of material at the lap. To form a joint between adjacent sheets of ready to lay roofing, which joint will be stronger and

more waterproof than the body of the roofing sheet.

The invention consists in the novel construction and combination of parts such as will be first fully described and then specifically pointed out in the claims.

In the drawings, Figure 1. shows a vertical sectional view taken through my improved three ply ready to lay roofing. Fig. 2. shows a vertical sectional view taken through my improved four ply ready to lay roofing. Fig. 3. shows a vertical sectional view taken through my improved five ply ready to lay roofing. Fig. 4. shows a vertical sectional view taken through the joint of adjacent sheets of my four ply roofing seen in Fig. 2. Fig. 5. shows a vertical sectional view taken through the joint of adjacent sheets of my five ply roofing seen in Fig. 3. Fig. 6. shows a vertical sectional view taken through the joint of adjacent sheets of my two ply roofing, when formed like the two upper ply seen in Figs. 1, 2 and 3. Fig. 7. shows a perspective view of a fragmentary portion of a roof surface covered with my three ply ready to lay roofing seen in Fig. 1. showing the method of forming the continuous joint between adjacent sheets of said roofing.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

Referring to Fig. 1. Layers of wool felt or similar body material, 10, 12 and 13 are seen joined together by films of a cementitious material, 11, such as asphalt. The base layer 10 and the middle layer 12 are offset with respect to each other to form at opposite edges, the extended portions 14—15 and 16—17 of said base and middle layers. The upper layer 13 extends beyond the edge 14—18 of the middle layer 12 to form an under flap portion 18—20; also at the opposite edge, an upper flap portion 19—21 of said upper layer 13 is formed, said flap being free from the marginal portion 17—19 of the middle layer. This upper layer may be covered with a coating 22 of a cementitious substance into which may be incorporated any desired surface material such as gravel, feldspar, quartz, mica, etc. Between the points 20 and 23 however such coating 22 is preferably omitted. The office of the extended portions 14—15 and 16—17 of the base and middle layers and of the under flap 18—20 and upper flap 19—21 of

the upper layer will be seen in Fig. 7. Upon a roof sheathing or other surface 24 is laid the first sheet of roofing, A. A cementitious coating 11* is now applied to the parts 18-14, the upper surface of layer 10 between 14 and 15 and the edge of the base layer 10 at 15. The part 16-17 of the middle layer 12 of a second sheet of roofing, B, is now pressed firmly down upon the coated parts 15-14-18 of sheet A; then a cementitious coating 11° is applied to the upper surface of this layer 12 of sheet B between the points 17 and 19, the under flap 18-20 of the upper layer 13 of the sheet A is then pressed firmly down upon the coated parts 17-19 of sheet B. A cementitious coating 11' is next applied to the upper surface of layer 13 of sheet A between the points 20-23 and the upper flap 19-21 of the upper layer 13 of the sheet B is pressed firmly down upon said coated parts 20-23 of the upper layer 13 of sheet A, and the edge 21 is coated with a cementitious coating 11'', thus completing the formation of a continuous joint between the sheets A and B. As seen in Fig. 7. in the upper part thereof, a portion of the layer 12 of sheet B between the points 17 and 19 is wholly removed to expose the coating 11* and the parts 14-15 of the base layer 10 of sheet A. The other parts used to form the joint are exposed for a full understanding of the methods of forming the joint. At 25 will be seen a nailhead, the said nail being driven through the parts 13 and 10 of sheet A, and the part 12 of sheet B, down and into the sheathing 24.

In Figs. 2 and 4, the middle layer is formed as in Fig. 1, but with two layers 12 cemented together at 11. The base layer likewise is formed as in Fig. 1. but given a protective coating 11 over its under surface.

In Figs. 3 and 5, the middle layer is formed identical to the middle layer in Fig. 2. just described. The base layer being composed of two layers of 10 cemented together at 11.

As will be seen by reference to the various cross-sections, by means of my invention a continuous joint is formed between adjacent sheets of ready to lay roofing. Since the base and middle layers are formed of equal area and offset the distance 14-15, there is no loss of material at the joint except that required to form the upper flap 19-21. The upper flap 19-21 of sheet B does not appreciably thicken the roofing at the joint, so that for all practical purposes a flat joint is secured. The upper flap 19-21 and under flap 18-20 cover the joint between the abutting ends of the middle layers, 12. If desired the parts 17-19 and 18-20 can be lengthened so that both the upper flap 19-21 and under flap 18-20

will cover the joint between the abutting ends of the base layers 10. Thus it will be seen that the completed roof is stronger and more waterproof at the joint than in the body of the roofing structure.

My improved ready to lay roofing can be fabricated with the above described uncemented edge portions formed on both end and side edges, the vertical sections shown in Figs. 1. to 6. inclusive and as seen in Fig. 7. are to be considered taken either transversely or longitudinally with the adjacent roofing sheets.

My invention is applicable to other uses than roofing, being valuable in such other uses as for instance the waterproofing of foundations, tunnels and linings.

Such other modifications may be employed as are within the scope of the appended claims.

Having described my invention what I now claim as new and desire to secure by Letters Patent is:

1. A ready to lay roofing comprising a built up composition composed of upper, middle and base layers of body materials, cementitiously bonded together over a major portion of their surfaces, the said base and middle layers being offset, with respect to each other, to form at opposite edges extended portions of said base and middle layers; the upper layer covering both base and middle layers, the edges of said upper layer comprising free flap portions, unattached to said under layers.

2. In a roofing structure composed of adjacent sheets A and B of built up ready to lay roofing, each sheet comprising layers of body materials, cementitiously bonded together over a major portion of their surfaces, the upper body layer being extended a short distance beyond one edge of the under layer to form an under flap portion of said upper body layer, the said upper layer being uncemented to a marginal portion of the under layer at the opposite edge thereby forming an upper flap portion of said upper body layer; a continuous joint being formed between said sheets of roofing, in which the under layer of sheet B abuts the under layer of sheet A, the under flap of sheet A covering the cementitiously coated marginal edge portion of the under layer of sheet B, said under flap portion of sheet A being cementitiously coated and covered by the upper flap portion of sheet B.

3. In a roofing structure composed of adjacent sheets A and B of built up ready to lay roofing, each sheet comprising upper, middle and base layers of body materials, cementitiously bonded together over a major portion of their surfaces, the said base and middle layers being offset with respect to each other to form, at opposite edges, extended portions of said base and middle

layers, the said upper layer being extended
a short distance beyond one edge of said
middle layer to form an upper flap portion
of said upper layer, and said upper and
5 middle layers at the opposite edge being
uncemented together, thereby forming an
upper flap portion of said upper body layer;
a continuous joint being formed between
said sheets of roofing, in which the extend-
10 ed portion of the middle layer of sheet B
abuts the middle layer of sheet A and
covers the cementitiously coated extended

portion of the base layer of sheet A, the
under flap portion of the upper layer of
sheet A covers the cementitiously coated ex- 15
tended portion of the middle layer of sheet
B, and the upper flap portion of the upper
layer of sheet B covers the cementitiously
coated under flap portion of sheet A.

WILLIAM C. EDWARDS, JR.

Witnesses:

W. H. LOOMIS, Jr.,

J. C. SEARLES.

It is hereby certified that in Letters Patent No. 1,083,243, granted December 30, 1913, upon the application of William C. Edwards, Jr., of Kansas City, Missouri, for an improvement in "Ready-To-Lay Composition Roofing," an error appears in the printed specification requiring correction as follows: Page 3, line 3, for the word "upper" read *under*; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 20th day of January, A. D., 1914.

[SEAL.]

J. T. NEWTON,
Acting Commissioner of Patents.