

No. 877,019.

PATENTED JAN. 21, 1908.

J. W. TROEGER.
SHINGLE.

APPLICATION FILED APR. 5, 1907.

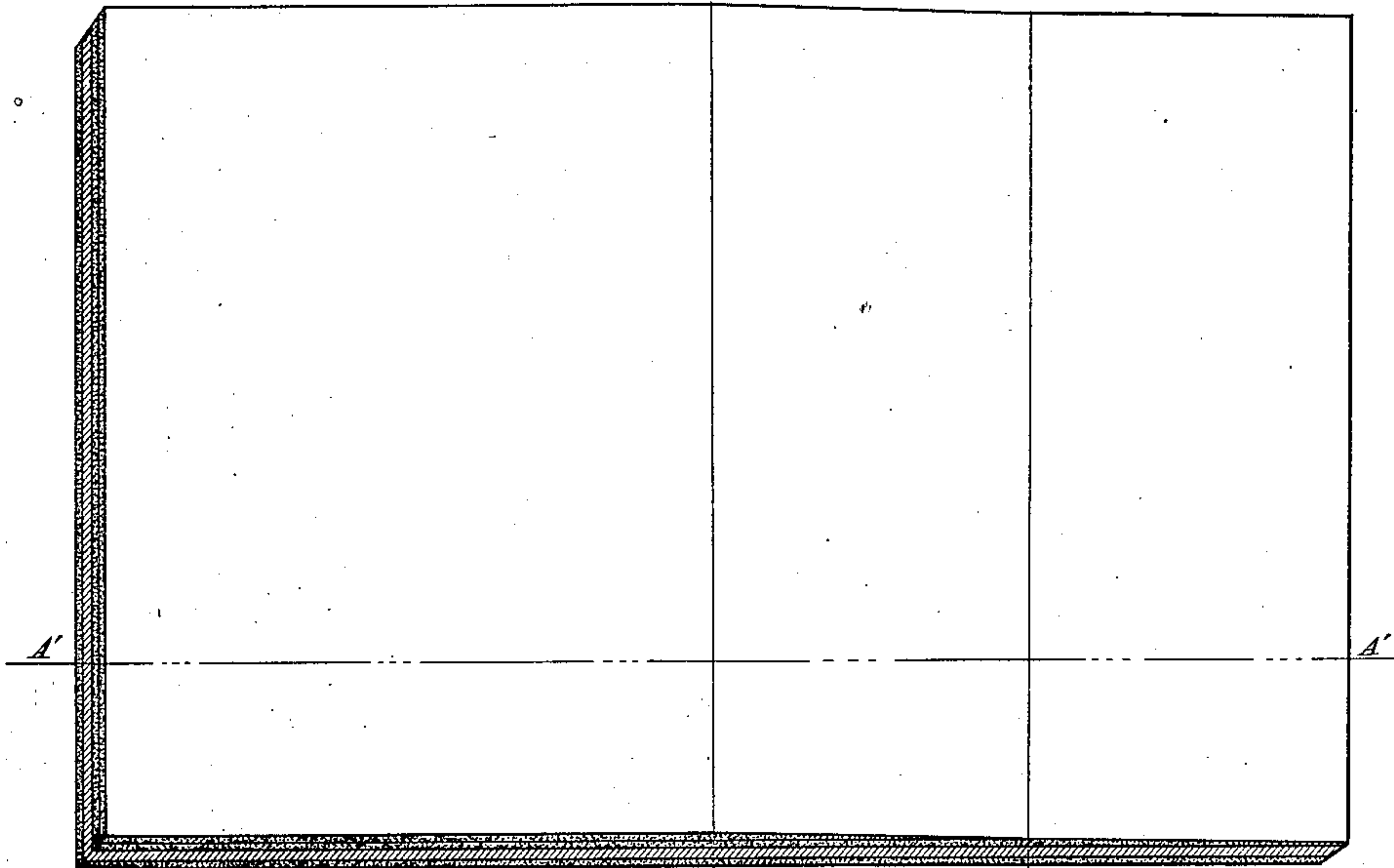


Fig. 1

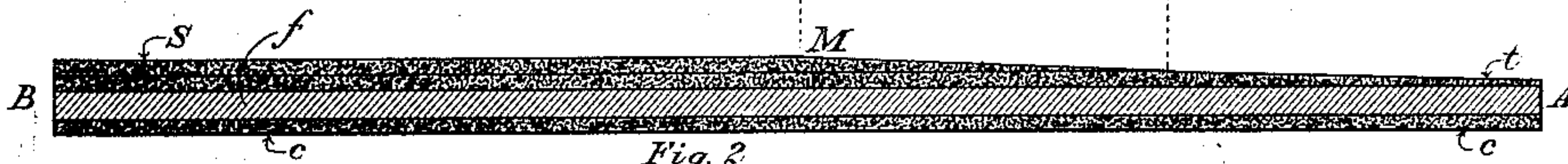


Fig. 2

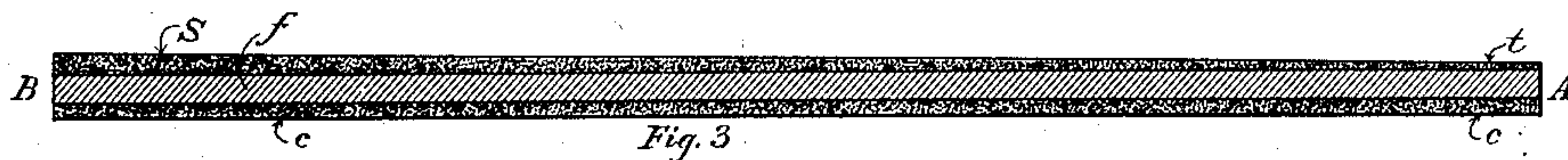


Fig. 3

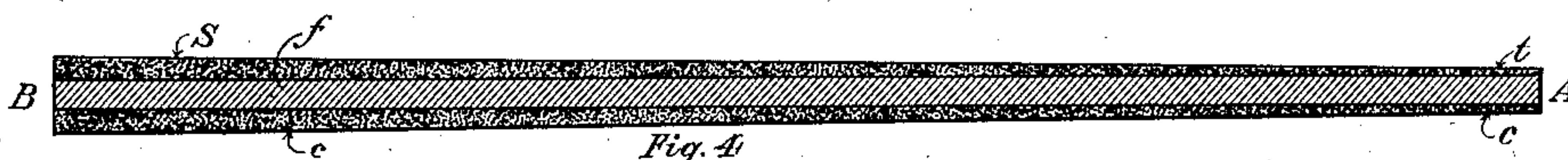


Fig. 4

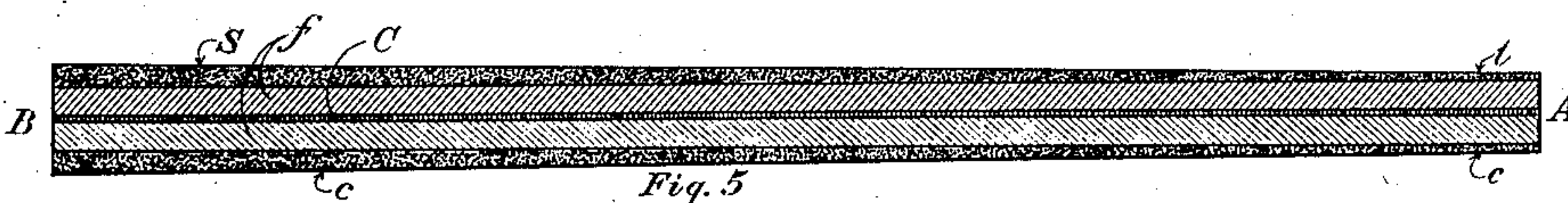


Fig. 5

WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN W. TROEGER, OF LA GRANGE, ILLINOIS.

SHINGLE.

No. 877,019.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed April 5, 1907. Serial No. 366,636.

To all whom it may concern:

Be it known that I, JOHN W. TROEGER, of La Grange, county of Cook, and State of Illinois, have invented certain new and useful

5 Improvements in Shingles, of which the following is a specification.

This invention has relation to shingles, and the object of my invention is to produce a light, practical and durable substitute for

10 the various kinds of shingles now in common use, and that shall be capable of cheap production.

The composition roofing ordinarily used in sheets departs so far from the structure of

15 shingles, in appearance, that it is generally objectionable for residences, and the methods of cutting the sheets into strips having points, scallops or tongues, is open to the objection that the strips must be nailed to the

20 roofboards at the edges where the nail-heads are exposed to the weather causing them to rust. The action of the rust causes the felt or fabric roofing to deteriorate around the nails allowing the water to leak through the

25 roof and making it unserviceable.

My invention is a composition shingle which is applied to the roof in the same manner as the well-known wooden shingle, producing the same shingle effect as to appearance, and has a pleasing natural color or may

30 be painted as desired.

The invention consists of the features of construction and combination of parts to be herein more fully described and particularly

35 pointed out in the appended claims.

Referring to the accompanying drawings, Figure 1 represents the shingle in perspective, and Fig. 2 is a cross-section of the same, showing the several layers in combination.

40 Figs. 3 and 4 represent views of cross-sections of shingles in which the coatings are applied in slightly different forms. Fig. 5 shows the shingle made with two layers of foundation fabrics.

45 Like letters refer to like parts.

The foundation of the shingle may be felt, cloth, fibrous board, perforated metal, screening or other roofing fabrics, impregnated or filled with a waterproofing compound. The sheet is cut into shingles of convenient sizes, and a layer or coating of plastic weather-proof material is applied to the upper face and, preferably, one to the under face. These coating layers may be applied

50 in various forms. The most serviceable form is to apply a thin layer of the coating to

the upper side, which resists the acid often present in buildings, and a heavier layer to the upper face and to reinforce this layer with a second layer extending over about

60 half its length, being thickest at the butt end, B, and tapering slightly to the middle, M, where it diminishes abruptly down to the first layer. As the shingle is waterproof through and through and as the thin end is

65 not exposed to the weather, it is not necessary to be heavily coated. The double layer of coating on the butt end serves several useful purposes: 1. It greatly increases the durability of the shingle where it is exposed to the eroding effect of the weather, without using up unnecessary material; 2. It increases the rigidity of the shingle and hence its power to resist the curling effect of the sun, so that it lies snugly upon the course

70 beneath and remains so. 3. It strongly reinforces the shingle at the nailing line, which affords the nails or other fasteners a firmer and more-lasting hold on it. The upper half of the shingle being tapering in form, it

75 makes a level plane on which the next course lies snugly and at the same time saves coating material where it serves no useful purpose; this is a matter of economy and makes the shingle comparatively lighter. 4. The

80 additional thickness of the butt end more clearly distinguishes the courses or layers on the roof and makes the resemblance to the familiar wooden shingles more pronounced.

The upper layer of coating may also be applied as shown in Fig. 3, being thickest at the butt end, B, and tapering gradually and uniformly to the tip end, A.

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Fig. 4 shows a form in which the plastic coating is applied to both upper and lower

90 faces in variable thickness, beginning at the butt end, B, and tapering uniformly to the tip end, A.

In Fig. 5 is shown a cross-section of a shingle having a double layer of foundation

100 fabric, *ff*, held together by a cementing layer, C. The coating layers, *cc* and *St*, are applied in the same manner as to the single layer fabric, as described in reference to Figs. 1, 2 and 3. The plastic coating may be applied

105 only on the upper face or on both the upper and lower faces. It may be uniform in thickness on the under face and of variable thickness on the upper face or uniform on both faces, in accordance with the wishes

110 of the maker. Any number of layers may be used in this manner, the object being to pro-

duce a shingle of special thickness and strength.

These shingles are laid in courses, one above the other, in the same manner as the common wooden shingles leaving four or more inches of the butt end exposed to the weather. They are fastened to the roof-boards or sheathing with nails or staples, across the middle of the shingle where the succeeding course will protect the nails from the effects of the weather.

Having thus described the invention, what I claim and wish to secure by Letters Patent is—

1. The herein described shingle having a porous base or fabric impregnated with a waterproofing compound, a layer of weather-proof coating applied to both faces and the upper face reinforced with a second layer for about half its length, substantially as and for the purposes set forth.

2. The herein described shingle having a

porous base or fabric impregnated with a waterproofing compound, a layer of weather-proof coating, of uniform thickness, applied to the under face and a layer of variable thickness applied to the upper face, making the shingle wedge-shaped, substantially as and for the purposes set forth.

3. The herein described shingle having a multiple layer of porous fabric impregnated with a waterproofing compound and cemented together and a coating of weather-proof material, of variable thickness, tapering from one end to the other, applied to the upper and under faces, making the shingle wedge-shaped, substantially as and for the purposes set forth.

In testimony whereof I affix my signature in the presence of two subscribing witnesses.

JOHN W. TROEGER.

Witnesses:

H. S. MASON,

WILLIAM MASON.