H. VON UFFEL.

STANDING WEATHERPROOF SEAM FOR ROOFING FELT.

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1,147,582. Patented July 20, 1915.

Fig. 1.

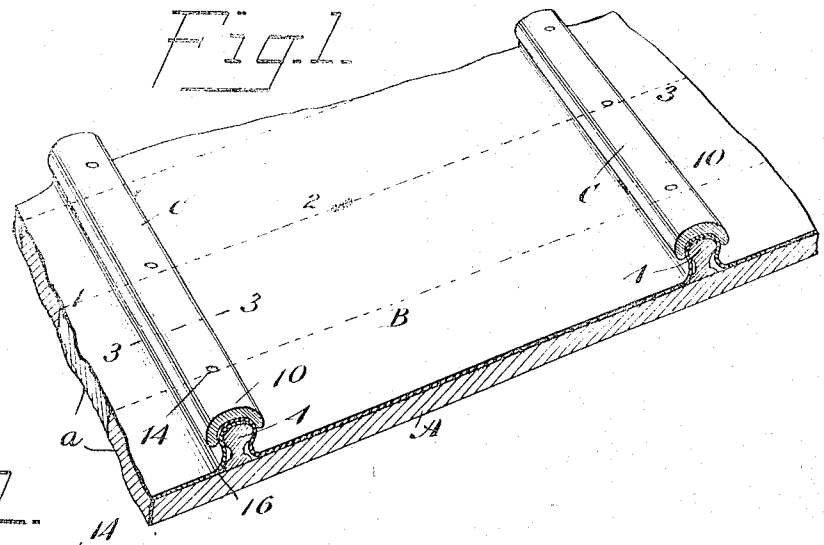


Fig. 2.

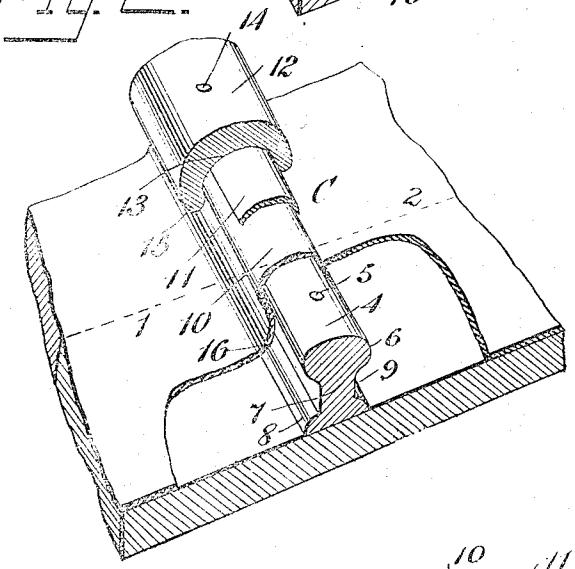


Fig. 4.

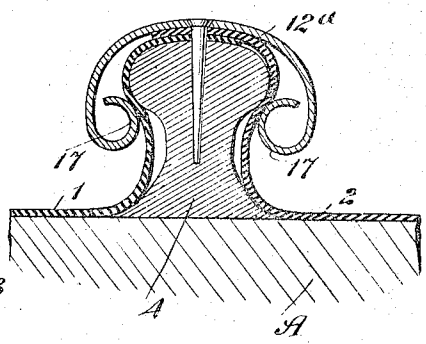
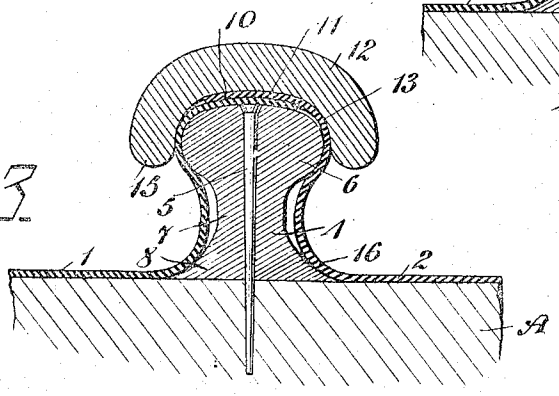


Fig. 3.



WITNESSES

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STANDING WEATHERPROOF SEAM FOR ROOFING-FELT.

1,147,582. Specification of Letters Patent. Patented July 20, 1915.

Application filed April 8, 1914. Serial No. 830,366.

To all whom it may concern:

Be it known that I, HERMAN VON UFFEL, a citizen of the United States, and a resident of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and Improved Standing Weatherproof Seam for Roofing-Felt, of which the following is a full, clear, and exact description.

This invention relates to roof coverings and has to do more particularly with seams or joints between strips of felt or rubber roofing.

The general objects of the invention are to improve a construction of joints or seams of the character referred to so as to be reliable and efficient in use, comparatively inexpensive to make and so designed as to provide for the expansion and contraction of the roofing strips and prevent buckling or wrinkling and at the same time secure weatherproofness at the seam without the need of cement as is commonly necessary and render the roofing more attractive in appearance.

More specifically the invention has for its object to provide a standing seam which is weatherproof and allows the strips to expand and contract under temperature changes, such seam consisting of a bar which is nailed or otherwise secured to the roof where the seam is to occur and over which adjacent edges of contiguous roofing strips are lapped and conformed approximately thereto, and a channel-shaped cap strip or bar is then placed over the lapped edges so as to insure weatherproofness and attractiveness in appearance, the strips of roofing being bent up along the sides of the bar so that at the bends space is provided for the lateral expansion and contraction of the roofing strips.

With such objects in view, and others which will appear as the description proceeds, the invention comprises various novel features of construction and arrangement of parts which will be set forth with particularity in the following description and claims appended hereto.

In the accompanying drawing, which illustrates one embodiment of the invention, and wherein similar characters of reference indicate corresponding parts in all the views, Figure 1 is a fragmentary view of a roof having the improved covering applied thereto; Fig. 2 is a sectional perspective view showing the manner of constructing the seam; Fig. 3 is a transverse section on the line 3—3 Fig. 1; and Fig. 4 is a sectional view of a modified form of the invention.

Referring to the drawing, A designates the roof of a building or any other surface that is to be covered by a felt or rubber composition roofing B, such roofing being made into strips 1, 2, 3 that are laid flat on a roofing A, preferably lengthwise of the slope thereof. The joints C between the adjacent edges of contiguous strips of a roofing are so designed as to provide for the expansion and contraction of the roofing strips while preventing wrinkling or buckling thereof. Each seam or joint includes a rail or bar 4 made of wood or other suitable material and secured to the roof A by nails 5 or equivalent fastenings. The bar 4 has a rounded head 6, a reduced web portion 7, and a base 8, somewhat like the cross-sectional shape of a railroad rail. In other words, the bar 4 has on its opposite sides longitudinal grooves 9 to provide for the expansion and contraction of the roofing felt. The edges 10 and 11 of contiguous strips of felting material are bent upwardly along opposite sides of the bar 4 and lapped over the head 6 thereof, as clearly shown in Fig. 3, and over these lapped edges 10 and 11 is placed a channel-shaped cap bar 12, whereby a water tight joint is formed without cement or waterproof compound, otherwise necessary.

In laying the covering B a bar 4 is first fastened to the roof in the desired position and the strip 1 of felting material is placed on the roof A with the edge 10 bent upwardly as shown in Fig. 2 along the left side of the bar 4 and then over the top of the head 6. The next strip 2 is then laid in position and its edge 11 bent upwardly and over the bar 4 and edge of the roofing strip 1. After the edges of the strips 1 and 2 are thus positioned, the channel-shaped cap bar 12 is placed over the overlapping edges with the head portion of the bar 2 fitting in the channel 13 of this cap bar. The cap bar may be secured in place in any suitable manner, as, for instance, by nails 14. The edges 15 of the side members of the cap bar do not extend any lower than the bottom of the head 6, so that there is considerable space

between the cap bar and the roof to provide for expansion and contraction of the roofing material, the latter being free to move at the bend 16 as the changes in temperature cause this expansion and contraction. It will be observed that the bends 16 of the roofing material rest on the laterally curved portions of the base 8, so that there is no danger of the roofing material breaking at the bend under the weight of ice or snow, yet between the bend 16 and the top of the joint the roofing material is out of contact with the bar 4, so that the material can freely expand and contract, and in its expansion and contraction the roofing material has sliding contact with the side portions of the base 8 and is always supported by such side portions.

In the modification shown in Fig. 4 the cap bar 12^a is shown as made of sheet metal of U-shaped cross-section, and the side members or flanges thereof are formed into internal rolls or beads 17 which serve to grip the opposite sides of the seam. The metal cap bar 12^a is secured in position by nails or equivalent fasteners and the side portions thereof are resilient so as to yield under the construction of the roofing strips.

As shown in Fig. 1, the bars 4 extend transversely to the boards *a* of the roof A, and the roofing strips of course also extend transversely of the roof boards, but it will be observed that roofing strips of felt are not tacked to the roof board but are clamped and held fast between the bars 4 and cap bars 12. The advantage of this is that as the roof boards shrink, the roofing strips do not wrinkle or buckle as is the case where the roofing strips are tacked directly to the roof boards.

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

1. The combination of a roof, fiber roof covering strips thereon and an expansible seam between the adjacent edges of the strips, said seam comprising a bar fastened thereto and having a rounded head, a web narrower than the head and a base wider than the web and formed with curved side surfaces, the roofing strips being laid on the roof at opposite sides of the bar and bent upwardly along the sides of the bar and lapping the top thereof, said roofing strips being in contact with the head and the curved side surfaces of the bar, and means for fastening the marginal edges of the roofing strips to the top of the bar.

2. The combination of a roof, fiber roof covering strips thereon and an expansible seam between the adjacent edges of the strips, said seam comprising a bar fastened thereto and having a rounded head, a web narrower than the head and a base wider than the web and formed with curved side surfaces, the roofing strips being laid on the roof at opposite sides of the bar and bent upwardly along the sides of the bar and lapping the top thereof, said roofing strips being in contact with the head and the curved side surfaces of the bar, and a cap piece fitting over the top of the bar and holding the marginal edges of the said strips clamped between the cap piece and bar.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

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Witnesses:
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