May 28, 1929. J. M. MINNEC 1,714,800

SHINGLE

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Fig. 1.

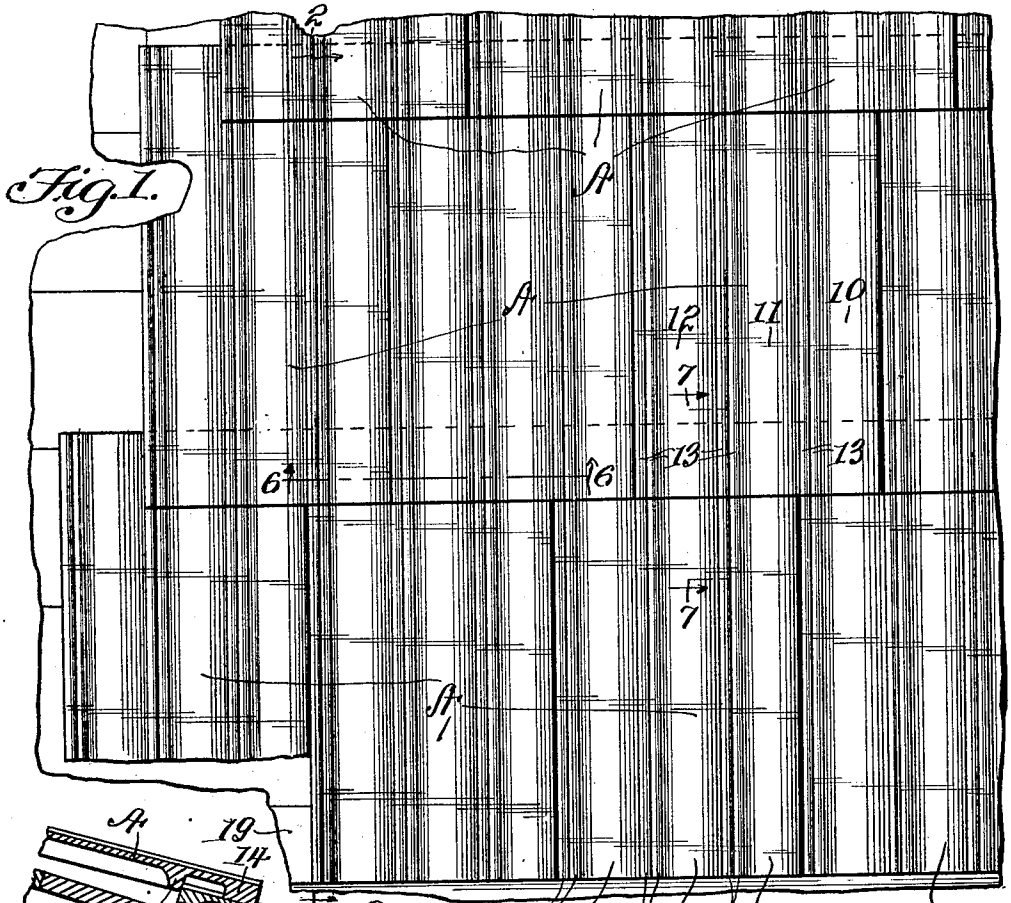
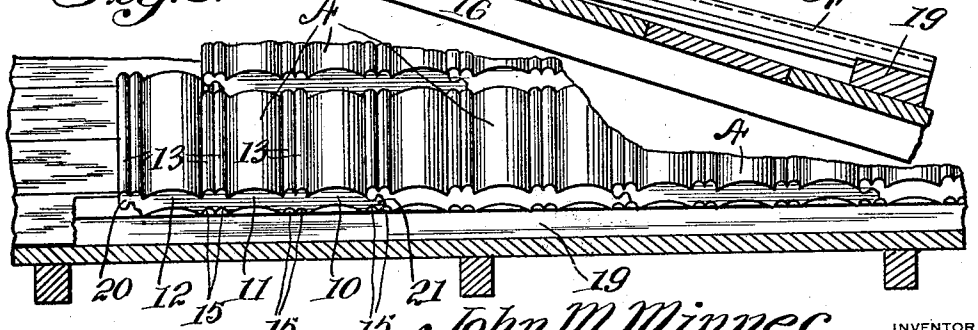


Fig. 2.

Fig. 3.



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Fig. 4.

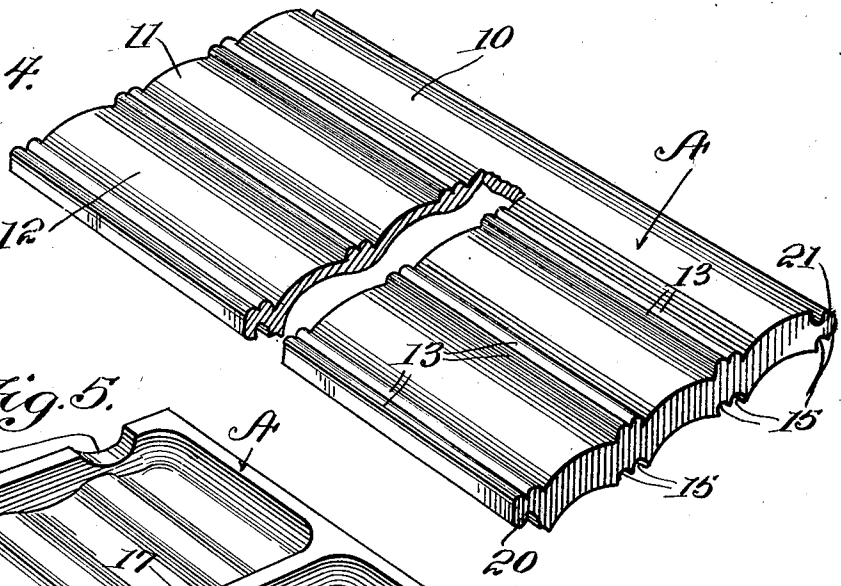


Fig. 5.

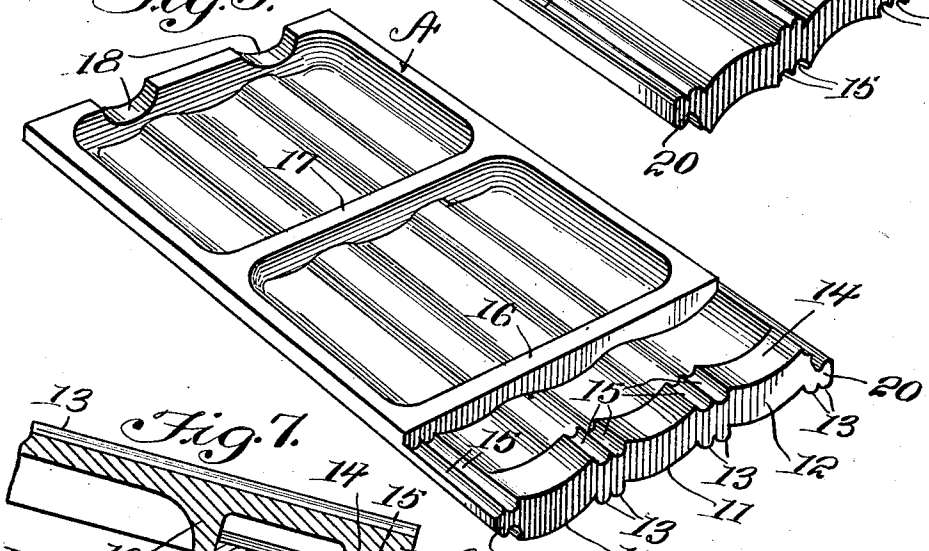


Fig. 7.

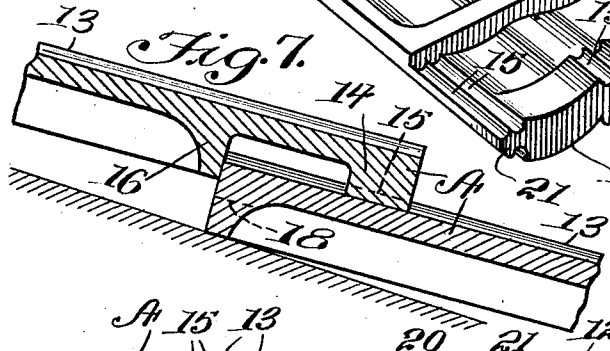
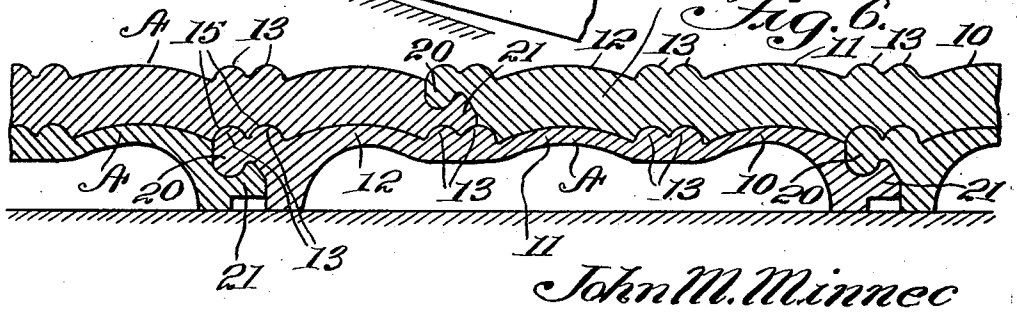


Fig. 6.



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UNITED STATES PATENT OFFICE.

JOHN M. MINNEC, OF BERWYN, ILLINOIS.

SHINGLE.

Application filed March 26, 1928. Serial No. 264,613.

This invention relates to shingles adapted for use upon roofs or may be effectively employed as siding upon building structures.

An object of the invention comprehends stops carried upon each of the shingles adapted to engage the preceding shingles whereby the necessity of nailing strips upon a layer of shingles to square a succeeding row thereon is obviated.

Another object of the invention contemplates grooves and beads upon the adjacent faces of the shingles adapted for interfitting engagement and to seal each shingle upon the other.

A further object of the invention embodies locking members carried upon each of the shingles adapted for locking engagement with companion shingles when laid.

More specifically stated, the shingles are supported at other points to relieve strain at any one point and which define air pockets therebetween to insulate the shingles from the subroof or studding.

With the above and other objects in view, the invention further consists of the following novel features and details of construction, to be hereinafter more fully described, illustrated in the accompanying drawings and pointed out in the appended claim.

In the drawings:—

Figure 1 is an elevation of a plurality of my improved type of shingles for active use.

Figure 2 is a sectional view taken on line 2—2 of Figure 1.

Figure 3 is a fragmentary elevation of the shingle as laid upon the roof and of the initial row and their connection with the roof per se.

Figure 4 is a perspective view of one of the shingles partly broken away to illustrate the construction thereof.

Figure 5 is a perspective of the underside of the shingle.

Figure 6 is a horizontal sectional view taken on line 6—6 of Figure 1.

Figure 7 is a longitudinal sectional view taken on line 7—7 of Figure 1.

Referring to the drawings in detail, wherein like characters of reference denote corresponding parts, the letter A indicates generally a shingle which, as best shown in Figures 4 and 5 of the drawings, is composed of three sections, namely, 10, 11 and 12 respectively, said sections being arcuate-shape in cross section. The upper side of each of the shingles and between each of the sections aforementioned are provided with dual beads 13 which in effect more sharply define the line or lines of demarcation between the sections whereby each shingle will resemble three tiles.

The lowermost ends of each of the shingles are provided with horizontally disposed portions 14 depending from the under sides of each of the sections. The portions 14 are in addition provided with grooves 15 extended longitudinally of the shingles A and which are adapted to receive portions of the beads 13 when the shingles are laid in the manner as best illustrated in Figure 7 of the drawings. A cross member 16 depending from the under side of each of the shingles is adapted to engage the upper edge of the preceding shingle whereby stops are provided which obviate the employment of strips of wood, generally nailed upon an initial row of shingles and upon the upper edge of which is stacked a new row ready for nailing. In the present invention, after the first row of shingles is laid, subsequent rows of shingles can be readily applied with little difficulty and the shingles will not be punctured or defaced in the application thereof. Struts 17 extended transversely of the shingles at an appropriate point in the length thereof is adapted to prevent buckling of the individual shingle. The uppermost ends are provided with cut out portions 18 upon the under sides thereof which permit the passage of air beneath the entire structure faced with the shingles whereby the latter are insulated from the subroof or studding, as the case may be.

As will be noted in Figure 1 of the drawings, the shingles are disposed and laid in staggered relation to prevent strain and stress incident to the weight of the shingles in any one spot and to more evenly distribute the weight and load whereby the rafters will not sag at any one place.

A strip or nosing 19 anchored upon the edge of the subroofing is adapted to engage the cross member 16 or strip whereby the initial row of shingles will not slide from the roof as subsequent layers of shingles are laid. As will be noted from the illustrations in Figures 4, 5, and 6, the side edges of the shingles are provided with locking devices in the nature of male and female members 20 and 21 respectively. The male members are adapted to resemble the beads 13 when lockingly engaged with companion shingles, as best illustrated in Figure 6 of the drawings.

As noted in the aforementioned figure, all joints are broken to prevent the ingress of wind and moisture whereby the roofing will be rendered impervious to moisture. The air pocket as defined between the shingles and subroof is adapted to insulate the subroof from heat from the outside and to prevent egress of heat from the inside.

The invention is susceptible of various changes in its form, proportions and minor details of construction, and the right is herein reserved to make such changes as properly fall within the scope of the appended claim.

Having described the invention, what is claimed is:

A shingle composed of a multiplicity of arcuate shaped sections having beads extending between the meeting portions thereof, portions horizontally disposed and depending from the under sides of each of the shingles having grooves adapted to receive the beads upon the upper sides of preceding shingles to elevate same from the subroofing, said horizontally disposed portions having cut-out portions to permit the passage of air beneath the entire roof structure, stops carried by and depending from each of the shingles being adapted to engage the upper edges of companion shingles, and male and female members carried upon the side edges of each of the shingles being adapted for locking engagement with companion shingles to render the roof impervious to moisture.

In testimony whereof I affix my signature.

JOHN M. MINNEC.