W. H. GARGES.

ROOFING SHINGLE AND METHOD OF LAYING SAME.

APPLICATION FILED OCT. 16, 1916.

1,227,776. Patented May 29, 1917.

Fig. 1

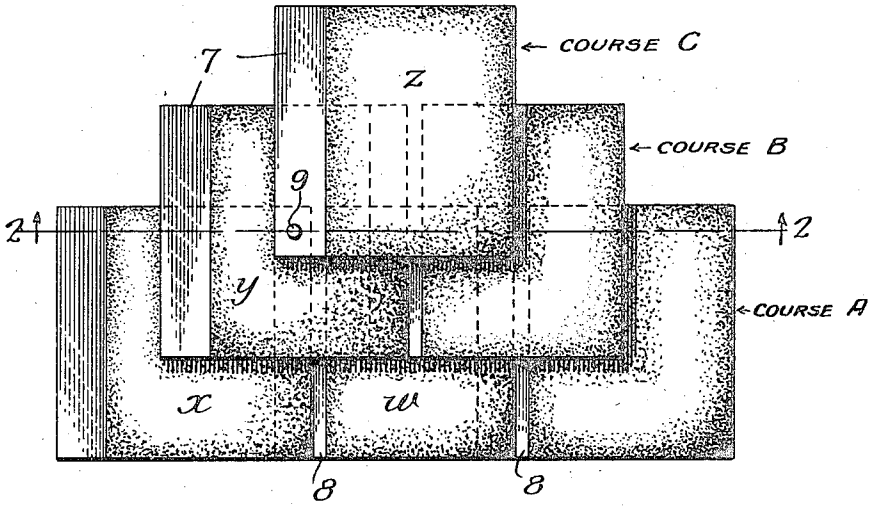


Fig 2

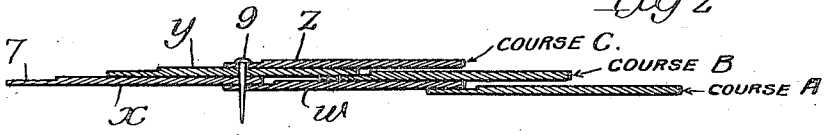
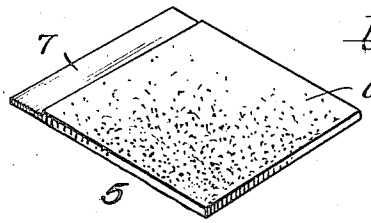


Fig. 3



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ROOFING-SHINGLE AND METHOD OF LAYING SAME.

1,227,776. Specification of Letters Patent. Patented May 29, 1917.

Application filed October 16, 1916. Serial No. 125,881.

To all whom it may concern:

Be it known that I, WILLIAM H. GARGES, a citizen of the United States, and a resident of the city of Rutherford, Bergen county, and State of New Jersey, have invented certain new and useful Improvements in Roofing-Shingles and Methods of Laying Same, of which the following is a specification.

My invention relates to roofing shingles and more particularly to shingles provided with a granulated stone coating and adapted to be laid in horizontal or longitudinal rows or courses with their side and upper edges overlapped.

One of the objects of my invention is the provision of a shingle that is capable of being readily manufactured upon the well-known shingle machines now in use, so that it will not add materially to the cost of manufacture. Another object of my invention is the provision of a shingle that is easy to handle and may be readily laid by the roofing mechanic or workman without difficulty. It is also an object of my invention to utilize the shingle I have designed and to lay the same upon the roof in a novel manner so that a workman will be able to cover a roof of a given area in a considerably shorter time than now consumed. In connection with this last object of my invention it is also one of my objects to provide a novel manner of laying shingles that will eliminate a great many of the nails necessary to be driven in shingles incident to the ordinary manner of laying the same.

I prefer to accomplish the divers objects of my invention by the means and in the manner hereinafter described and as more particularly pointed out in the claim, reference being had to the accompanying drawings forming a part of this specification, wherein,

Figure 1 is a plan of a number of shingles made in accordance with my invention and laid or superimposed upon each other in overlapped relation after the manner of my improved method of laying the same.

Fig. 2 is a longitudinal section taken on line 2—2 of Fig. 1 looking in the direction of the arrows.

Fig. 3 is a perspective view of my improved shingle, slightly exaggerated for the purpose of better illustrating its construction.

Referring to the drawings, wherein similar reference characters are employed to designate the same parts throughout the figures, it will be observed my improved shingle preferably comprises a fibrous body or base 5 that is substantially rectangular in outline and is cut from the usual fibrous or pulpous material employed in the manufacture of roofing of divers kinds. This fibrous base I prefer to cut square of a dimension substantially ten inches upon each side the purpose of which will hereinafter more fully appear, and the same is preferably infused or suitably treated with a carboniferous substance, such as asphaltum, bitumen, or the like, to render the same waterproof and moistureproof. In the manufacture of the base 5 I prefer to coat the surface that is afterward to be exposed to the weather with a suitable inert material, such as crushed or granulated stone, which produces an artistic coating 6, and the same is suitably embedded in the surface of the base by running the material through pressure rollers during the course of manufacture. I do not wish, however, to have the coating 6 extend entirely over the base 5, but prefer to permit a portion or strip 7 to be left along one edge of the shingle, as shown in the drawings.

In laying the shingles upon a roof I prefer to dispose the same in courses, such as A, B and C, in the usual manner of laying shingles, except that the uncoated strip 7 is painted with a suitable asphaltum or bituminous cement prior to placing the next adjacent shingle thereon, and when the overlapping adjacent shingle is placed thereon I prefer to leave a narrow space 8 between the overlapping shingle and the edge of the coating on the under shingle for the artistic effect in the finished roof. The courses are laid substantially in the manner shown in Fig. 1 of the drawings, wherein it will be seen that substantially four inches of the lower portion of each shingle is exposed to the weather in "course A". "Course B" is laid with the broken joints with respect to "course A" and so on to the top of the roof. When "course C" is laid upon "course B", with four inches of the latter to the weather, it will be observed that the lower portion of the shingles in "course C" will be disposed or extend below the upper edge of the shingles in "course A", the uncoated strip 7 in "course C" substantially alining vertically with the similar strip in "course A" and

leaving sufficient space in the overlapped portions of "courses C" and "A" to permit a suitable fastening means 9 to be inserted or driven through overlapped superimposed portions of the four shingles. For the purpose of convenience in understanding this method of laying the shingles I have designated the shingles adapted to be secured by the single fastening means 9 by the letters *w*, *x*, *y* and *z* in Fig 1. of the drawings. In the ordinary manner of laying shingles the roofer usually drives a fastening element through each shingle as it is laid, sometimes using two or more nails for this purpose. By my improved method of laying the shingles and facilitated by the peculiar and novel construction of my improved shingle I am able to eliminate at least seven driving operations and secure the four superimposed shingles together by a single nail. It will be readily understood that this is a great saving both in time and material in laying roofs, as the cement upon the strip 7 of each shingle is adapted to cause the overlapped portion of the adjacent shingle to adhere thereto and prevent leakage and will afford no opportunity for wind and other elements to enter thereunder.

While I have herein disclosed certain specific means for carrying out my invention it will, of course, be obvious to others still in the roofing art that divers modifications and refinements thereof are possible without materially departing from the spirit of my invention. For example: the shingles may be other shapes than rectangular and may be elongated instead of square. I therefore desire it understood that all such changes are contemplated as included within the scope of my invention as expressed in the following claim.

What I claim is:—

A shingle roof comprising a series of courses, the shingles in each course each having a reduced edge portion at one side lapped by the next shingle on that side, the shingles of each other course breaking joint with those of the next course and each third course lapping lengthwise two preceding courses, and fastening means through the lapped portions near the upper end of each two shingles in any course passing also through the mediate parts both as to length and breadth of a shingle of the next course above, and through the lower end of the reduced overlapped part of a shingle of a third course and its head lapped by the next shingle in that course.

Signed at Rutherford, county of Bergen, and State of New Jersey, this 7th day of October, 1916.

WILLIAM H. GARGES.

Witnesses:
WM. J. HOPE,
H. Y. BLAKISTON.