W. F. McKAY.

PREPARED ROOFING.

APPLICATION FILED APR. 18, 1916.

1,219,652.

Patented Mar. 20, 1917.

Fig. 1.

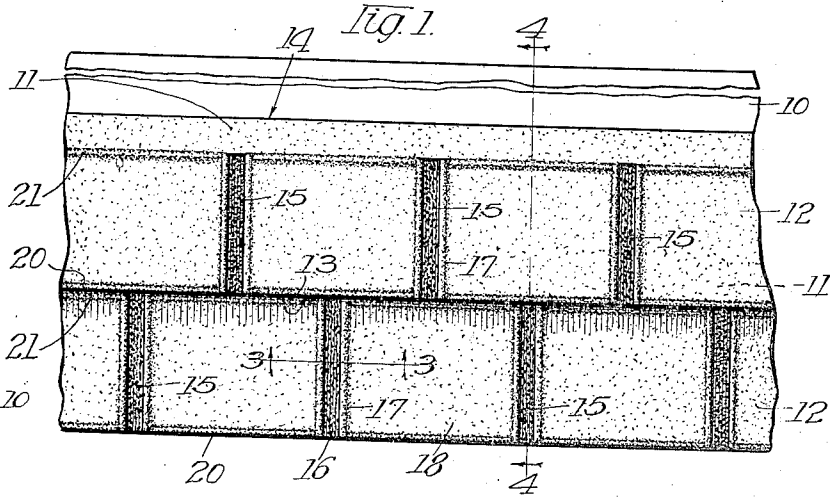


Fig. 4.

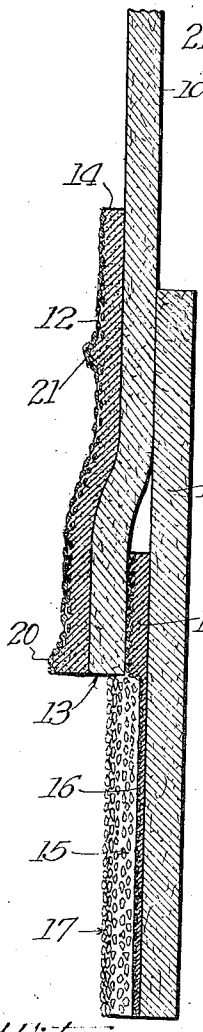


Fig. 2.

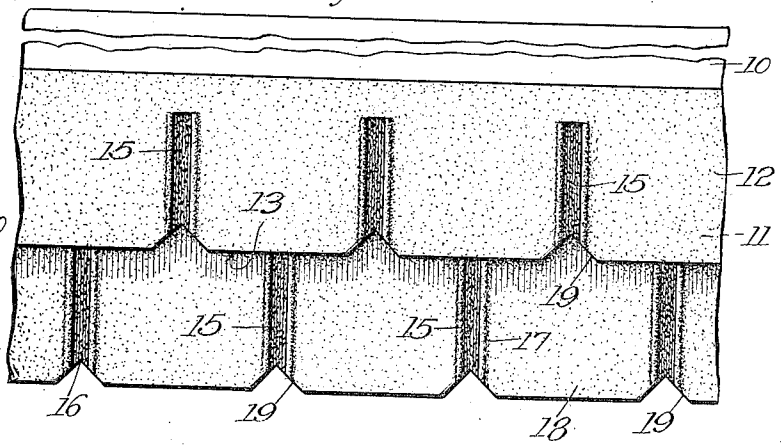
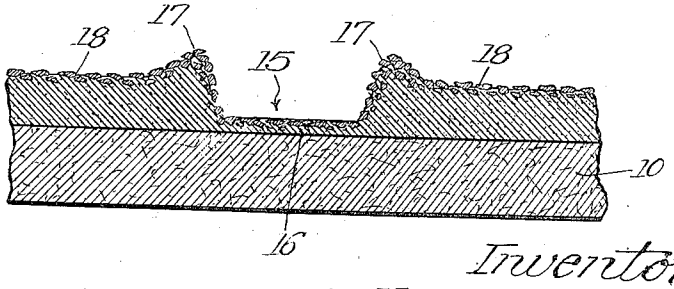


Fig. 3.



Witnesses:
Robert H. Weir
Arthur W. Carlson

Inventor:
William F. McKay
By Fowle Bain & Fleming
his Attys.

UNITED STATES PATENT OFFICE.

WILLIAM F. McKAY, OF LA GRANGE, ILLINOIS.

PREPARED ROOFING.

1,219,652. Specification of Letters Patent. Patented Mar. 20, 1917.

Application filed April 18, 1916. Serial No. 91,878.

To all whom it may concern:

Be it known that I, WILLIAM F. McKAY, a citizen of the United States, residing at La Grange, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Prepared Roofing, of which the following in a specification.

My invention relates to prepared roofing material, such as usually comprises a flexible water-proofed base or foundation having a weather-proof layer of plastic material on its exposed surface.

This class of building material though generally termed "prepared roofing" and intended primarily for the covering of roofs is equally well adapted for use as siding and in other places where a weather-proof covering is desired.

The appearance of the common form of un-ornamented prepared roofing, particularly when applied to large surfaces, is distinctly unpleasant to the eye of one accustomed to the appearance of "regular roofs" of shingles, slate, tile, etc. In an attempt to overcome this drawback which to most observers gives to a building an appearance of cheapness and temporariness, many expedients have been devised. Thus for example, roofing strips are sometimes serrated along one edge to simulate when laid in overlapping courses the appearance of a tile or shingle roof. Contrasting colors of comminuted slate or stone surfacing applied in spaced tessellæ or patterns on the plastic covering of the roofing material, have also been employed in an effort to imitate the appearance of a regular roof. The chief difficulty, however, lies in the fact that regular roofs are built up of elements having a thickness greater than is commercially practical in the manufacture of prepared roofing. This actual, physical thick material casts shadows difficult to imitate, though I have succeeded to a very satisfactory degree in giving to the shingle or tile patterns of prepared roofing an artificial appearance of depth or shading, by the employment of the method disclosed in my copending application Serial No. 656,613 filed December 7th, 1915 in which a fictitious or illusory shadow value is given by the graduated blending or merging of a lighter color layer or surface material into the darker plastic main layer whereby the coördination of the resultant illusory deep shadow areas and shadow blends with the physical elevation and depressions of the prepared roofing surface attains to a considerable extent the optical illusion of depth or relief greatly exceeding the physical depth of the material.

As heretofore stated, the chief difficulty in giving an illusory appearance of a regular roof to a roof made of prepared roofing has been that from its very nature the roofing material must be comparatively thin and therefore lacks the depth of material inherent in ordinary shingles, tiles, etc. It is essential from a practical commercial standpoint that all prepared roofing, whether in sheet form, slabs or strips must be relatively thin for the obvious reasons affecting the cost of production, the nature of the base layer, which is usually felt, the weight, shipping expense, ability to roll, facility of laying, etc., that give commercial value to the prepared roofing. As a result, no exposed edge or relief that is presented in the prepared roofing structure as laid, in overlapping courses can have in practice, depth sufficient to truly simulate the most copied form of ordinary shingled or tile roofs. If the material was made of sufficient thickness to give this impression, there would then be sacrificed the very advantages that chiefly give commercial value to prepared roofing.

The principal object of my invention is to give to prepared roofing an actual or physical depth at such points as would in the regular roofs have actual depth, as at shingle or tile edges, etc. This physical depth at selected points is obtained without affecting in any way the depth of the remaining portion of the roofing, the depressions or furrows extending approximately to the surface of the backing material or base, and the edges bounding the depressed portions extending above the major surface of the coating and being ridged or rolled up in humps thus giving to this selected area an actual physical depth greater than the depth of the plastic coating at other places. This physical depth may, to some extent, be enhanced by the submersion of the comminuted covering material at the base of the selected area in the plastic coating, thus giving greater prominence to the darker plastic coating as compared to the contrasting lighter color of the surfacing material.

In the accompanying drawings, wherein I have illustrated the invention for the purpose of full disclosure I have shown a few preferred forms of roof simulations though

it will be understood that in so doing there is no intention to limit my invention to those few selected exemplifications. Further I have, of course, not attempted to develop the drawings in exact proportion but have conventionally accentuated or decreased sizes, angles, etc., in some instances, for clearness of illustration.

In the drawings:

Figure 1 represents in plan view a laid roofing embodying my invention and bearing a multiplied pattern representing shingles, of the usual rectangular form.

Fig. 2 is a similar view showing a modified form in which the roof has notches cut in its edges to more nearly simulate tile appearance.

Fig. 3 is an enlarged sectional view on the line 3—3 of Fig. 2, and;

Fig. 4 is an enlarged sectional view on the line 4—4 of Fig. 1.

Referring to the drawings the numeral 10 indicates the base or foundation layer upon which the plastic material is applied. This foundation is preferably a sheet of roofing felt, suitably impregnated with water-proofing material, though it may obviously be made of any other tough, flexible material, having characteristics with respect to its adaptability as a roofing material similar to felt and paper. Applied to the surface of the base on selected areas is a thick plastic layer 11 of a suitable weather-resisting compound, such as asphalt or other material which will stick to the base and provide, particularly when warm, a tacky surface upon which will stick the layer 12 of comminuted grit. This latter coating or layer 12 is usually a granulated mineral, slate or sandstone, different colors being employed for simulation of different types of roofing.

In the embodiment illustrated in Figs. 1 and 2, the prepared roofing may be in either strip or slab form, having the surfacing of plastic material and grit extending from the free exposed edge 13 to a line 14 adapted to underlie slightly the exposed edge of the next succeeding course. At suitable intervals I have provided transverse furrows or kerfs 15 in the layer of plastic material and grit, the bottom 16 of the furrow lying close to the upper surface of the base 10. At each side of the furrows 15 there is formed a ridge 17 of plastic material and grit raised a distance considerably above the surrounding surface 18 which is the normal upper surface of the grit. This ridge 17 flanking each side of the furrow 16 gives to the same an actual or physical depth considerably greater than if it were a depression the side of which terminated on a level with the surface 18. This furrow or kerf 15 extends from the free edge 13 of the layer to a short distance from the inner edge 14 of the plastic strip, and when the superposed strip is laid upon the lower one its lower or exposed edge overlies the upper portion of the plastic material so as to come in approximate alinement with the upper ends of the kerfs 15.

To further accentuate the depth of the shingles it may be found advisable in some instances to form ridges similar to ridges 17 along the projecting edge 13 as at 20 and on a parallel line along the upper ends of kerf 15 as at 21.

In the modification illustrated in Fig. 2, notches 19 are cut in the exposed edge of the material at the lower ends of the kerfs 15 thus giving a somewhat different ornamental effect to the roofing, simulating more nearly the effect of tiling.

From the above it will be obvious that the depressions formed at regular intervals extend through the plastic material to a depth slightly less than the depth of the plastic material throughout its major portion and the formation of the ridges bordering the depressions or kerfs give an actual depth to the kerf in excess of the depth of the plastic material throughout its major portion. As a result the total actual depth of the kerf is effective in forming shadows simulating the shadows caused by the uneven surface of regular roofs. In the particular forms illustrated the shadows simulate the interstices formed by the usual manner of laying shingles or tiles in spaced relation.

Obviously many other embodiments of my invention, and variations in details of patterns and the like, may be devised without departing from the spirit of the invention or the scope of the appended claims.

Having described my invention, what I claim is:—

1. As an article of manufacture, a flexible prepared roofing material comprising a layer of weather resisting material having depressions formed therein, and ridges formed of said material in the areas bordering the depressions to increase the actual thickness of the said areas and produce shadows simulating the shadows caused by the uneven surface of regular roofs.

2. As an article of manufacture, a prepared roofing material comprising, a base layer, a layer of plastic material adhering thereto and having a depression formed therein, and a ridge of plastic material bordering the depression and projecting above the surface of the surrounding plastic material.

3. As an article of manufacture, a prepared roofing material comprising a base layer and a superimposed layer of plastic material having depressions formed therein, the thickness of the plastic material in the region bordering the depressions being greater than in other regions outside the depressions.

4. As an article of manufacture, a pre-

pared roofing material comprising a base layer, a superposed layer of plastic weather resisting material, a coating of comminuted material adhering to the plastic material, the material superposed upon the base layer having depressions formed therein in regular pattern to simulate when laid the interstices between the shingles or tiles of a regular roof, and ridges formed of the aforesaid plastic material and comminuted material bordering the depressions to create an impression of greater thickness to the areas lying outside of the depressions.

5. As an article of manufacture, a prepared roofing material comprising a base layer, a superposed layer of plastic material having a kerf formed therein to a depth slightly less than the depth of the plastic material throughout its major portions, and ridges of plastic material bordering the kerf to create an impression of greater thickness to the areas lying outside of the depressions.

6. As an article of manufacture, a prepared roofing material comprising a base layer, a layer of superposed plastic material, a layer of grit adhering to the plastic material, said layer of grit and plastic materials having kerfs formed therein to a depth slightly less than the depth of the plastic material throughout its major portion, said kerfs extending from the free edge of the material across that portion of the roofing only which is exposed when laid, and ridges of plastic material and grit bordering the kerfs to create an impression of greater thickness to the areas lying outside of the depressions.

7. As an article of manufacture, a prepared roofing material comprising a base layer, a layer of plastic material extending in a stripe from one edge thereof to a width slightly in excess of that exposed when the strip is laid, a layer of grit overlying the plastic material, and kerfs formed in regular pattern in the plastic material and its superposed coating of grit, extending from the free exposed edge a distance less than the width of the coated area and ridges of plastic material bordering the depressions and projecting above the surface of the plastic layer.

8. As an article of manufacture, a prepared roofing material comprising a base layer, a layer of superposed plastic material, and ridges formed of the plastic material in a regular pattern to simulate the juncture lines of shingles or the like in a regular roof.

In testimony whereof I hereunto set my hand in the presence of two subscribing witnesses.

WILLIAM F. McKAY.

In the presence of—

STANLEY W. COOK,

MARY G. ALLEN.