Feb. 12, 1929. 1,701,926

L. KIRSCHBRAUN

PREPARED SHINGLE AND PROCESS FOR MAKING SAME

Filed Dec. 26, 1922

Fig. 1

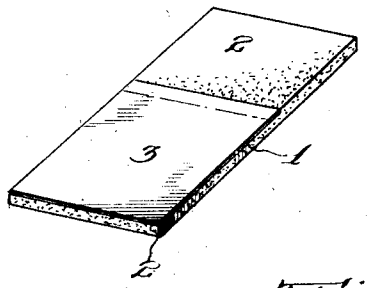


Fig. 2.

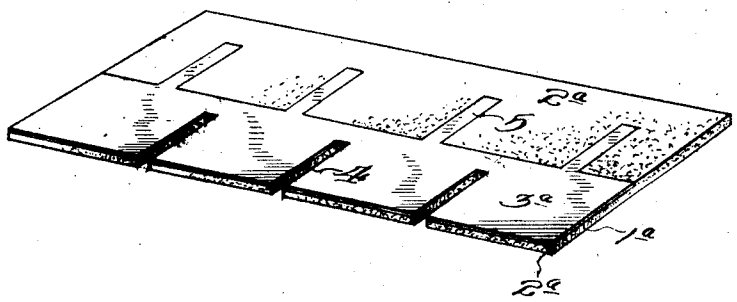
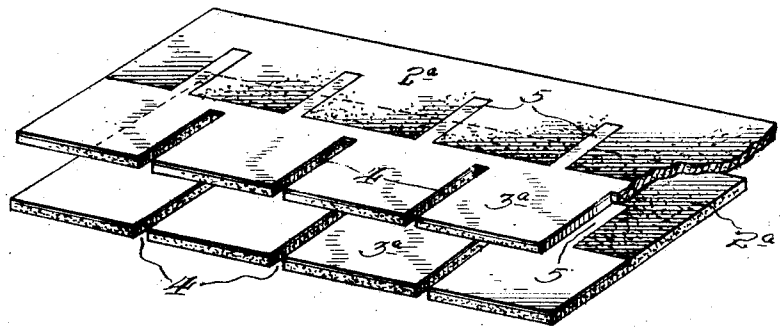


Fig. 3.



Witness:

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Atty.

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UNITED STATES PATENT OFFICE.

LESTER KIRSCHBRAUN, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE FLINTKOTE COMPANY, OF BOSTON, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

PREPARED SHINGLE AND PROCESS FOR MAKING SAME.

Application filed December 26, 1922. Serial No. 608,886.

This invention relates to improvements in making prepared shingles and refers more particularly to individual shingles or strip shingles having a metallic surface applied to the exposed portions of the shingles.

Among the objects of the invention are to provide roofing units consisting of a base of felted fibrous substance saturated and coated with a waterproofing substance such as well known bituminous or asphaltic substances, having a thin metal sheet applied and fixedly attached to portions of the shingle units or sheet exposed to the weather; to provide roofing units having a surfacing which is more resistant to the elements, and units which are more attractive when laid; to provide roofing units which are relatively cheaper to manufacture than solid metal shingles, and which have a surfacing sheet which prevents the units from curling due to changes of temperature or wind.

Fig. 1 is a perspective view of a shingle.

Fig. 2 is a perspective view of the roofing made up in the form of a strip shingle.

Fig. 3 shows strip shingles laid with parts broken away.

Describing the process for making these units, a felted fibrous sheet such as that commonly used as a base for prepared roofing shingles, is saturated and coated with waterproof bituminous or asphaltic substance, after which there is applied to the sheet preferably while hot, a metallic sheet of copper, aluminum, zinc or other weather resisting metals. The metal covering is applied in the form of strips, or in the form of blanks as hereinafter explained. The thickness of the sheet may range between .003 and .005 inch more or less, according to the type of shingle or rigidity desired.

The metallic sheet is applied preferably while the mastic or coating substance is hot so that it will fixedly adhere to the mastic coating.

Referring to the drawings, in Fig. 1 is shown a single shingle unit consisting of a saturated fibrous base 1 being coated with a bitumen or asphaltic mastic shown at 2. At 3 is shown the metallic sheet which is applied to the coating while hot and adhered thereto.

The length of the metallic sheet shown at 3 is slightly longer than the portion of the shingle which would normally be exposed to the weather, a dotted line being drawn across the upper portion of the metal to denote the lower edge of the overlapping shingle. The exposed metal thus presents a weather resisting surface which is but slightly affected by the elements. It also gives a rigidity to the shingle which prevents curling and breaking off of the tab portions due to wind and temperature changes.

In Fig. 2 a strip shingle unit is shown, the base portion 1^a being a felted fibrous material similar to that shown in Fig. 1, with a coating 2^a of a bituminous or asphaltic covering. To this unit, or to the sheet while passing through the roofing machine is applied the metallic covering shown at 3^a. This covering conforms to that portion of the shingle which is exposed to the weather, being cut away to form the spaces 4 between the tabs and having tongues 5 along the upper edge of the metal sheet which cover the exposed portion of the felted base between the tabs of the overlapping unit. Thus, the entire exposed portion of the shingle units is covered with the weather resisting metal sheet.

The metal covering, which as explained, may be of copper, zinc, aluminum or other weather resisting metals, may be applied in the form of a continuous band upon the surface of the roofing sheet as it passes through the roofing machine, that is, after the bituminous waterproofing coating substance has been applied to the saturated sheet, the metal band which is previously cut in the form shown in Fig. 2 or in a plain band if the shingles are to be made as shown in Fig. 1, is applied to the surface of the hot mastic coating and rolled to make it fixedly adhere thereto.

The sheet may be subsequently cut into units of the desired configuration. An alternate method of making the shingles is to first cut the coated roofing sheet into units of the desired design and then apply the metal blanks such as that shown in Figs. 1 and 2 by means of a die or press to the individual shingle units.

The thickness of the metallic sheet may vary according to the type of shingle or rigidity desired, and to prevent the metal covering from becoming detached from the shingle units, the edges of the covering may be crimped into the base portion. This precaution will normally be unnecessary if the metallic covering is fixedly applied and the mastic coating of the proper character.

The shingle presents a very attractive ap-

pearance, and has better weather resisting qualities than the usual types of prepared roofing now sold on the market.

Although a plain strip shingle with regular tabs is shown in the drawing, it is understood that the design or configuration of the unit may be changed as desired.

I claim as my invention:

1. A method of making roofing elements which comprises applying a bituminous coating to the surface of a felted sheet, cutting spaced notches in one edge of the sheet and affixing to the face of the sheet along the notched edge a band of metal of less width than the sheet having notches in one edge which are placed in registry with the notches in the sheet.

2. A method of making roofing elements which comprises applying a bituminous coating to the surface of a felted sheet, cutting spaced notches in one edge of the sheet and affixing to the coated surface of the sheet a band of metal having notches in one edge, these notches being placed in registry with the notches in the sheet.

3. A method of making roofing elements which comprises cutting spaced notches in one edge of a sheet coated with a bituminous substance, and affixing to the sheet by means of the coating a band of metal having notches in one edge similar in size and spacing to those cut in the sheet, and the notches of the sheet and band being placed in registry.

4. A method of making roofing elements which comprises saturating and coating a felted sheet with asphalt, cutting spaced notches in one edge of the sheet to form tabs extending from the main body thereof, and affixing to the sheet by means of the coating and along the edge in which the notches occur, a band of copper having notches cut in one edge similar to those cut in the sheet, the band being applied so that its notches are in registry with those of the sheet.

LESTER KIRSCHBRAUN.

CERTIFICATE OF CORRECTION.

Patent No. 1,701,926. Granted February 12, 1929, to

LESTER KIRSCHBRAUN.

It is hereby certified that the above numbered patent was erroneously issued to "The Flintkote Company, of Boston, Massachusetts, a Corporation of Massachusetts", whereas said patent should have been issued to "Anaconda Sales Company, of New York, N. Y., a Corporation of Delaware", said Corporation being assignee of the entire interest in said invention, as shown by the records of assignments in this office; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 19th day of March, A. D. 1929.

M. J. Moore,
Acting Commissioner of Patents.

(Seal)