Sept. 4, 1934. J. L. WETTLAUFER 1,972,810

ASPHALT PREPARED BUILDING MATERIAL AND METHOD OF MAKING SAME

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Fig. 1

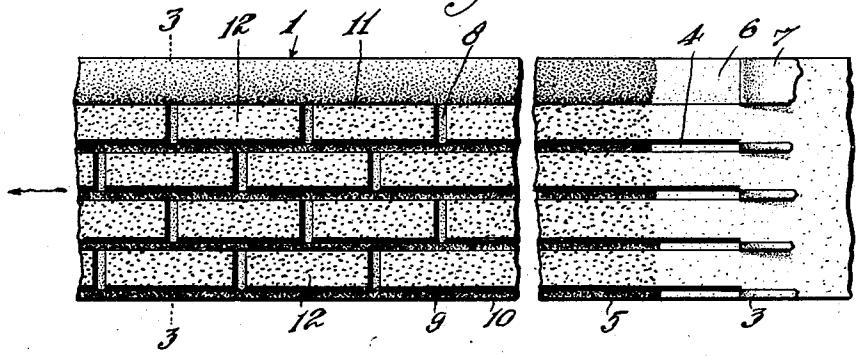


Fig. 2

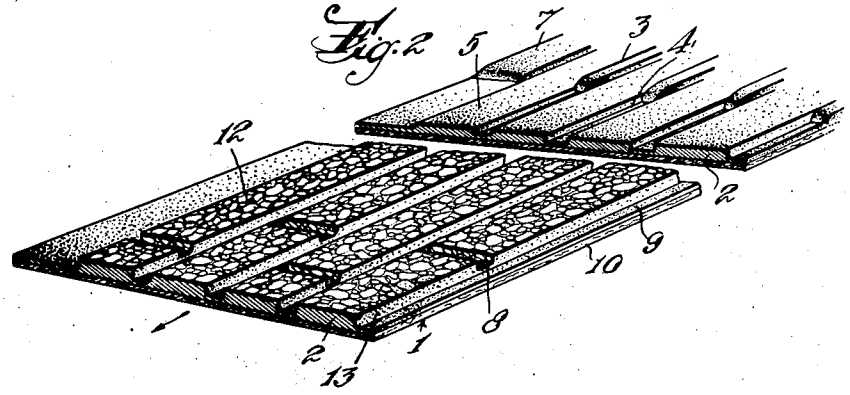


Fig. 3

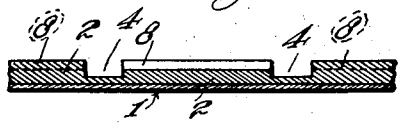
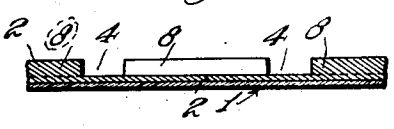


Fig. 4



INVENTOR.
Jules L. Wettlaufer
BY
Samuel Stearman
ATTORNEY.

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Fig. 5

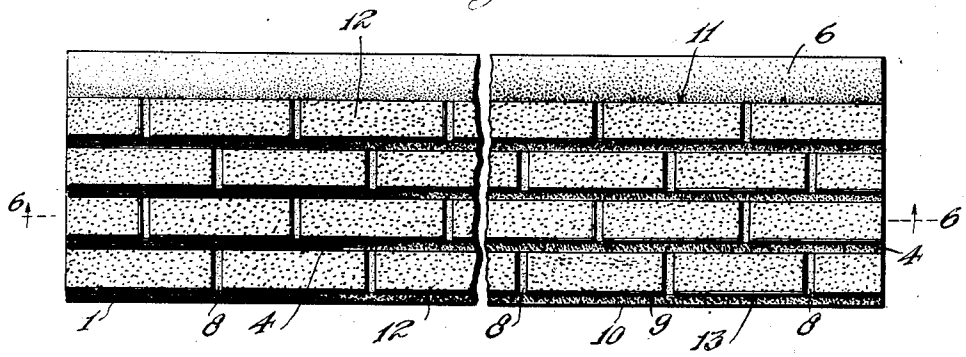


Fig. 6

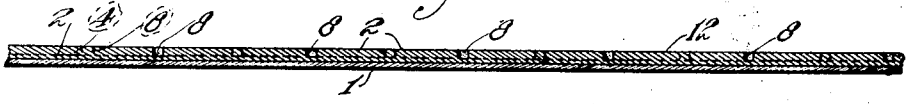
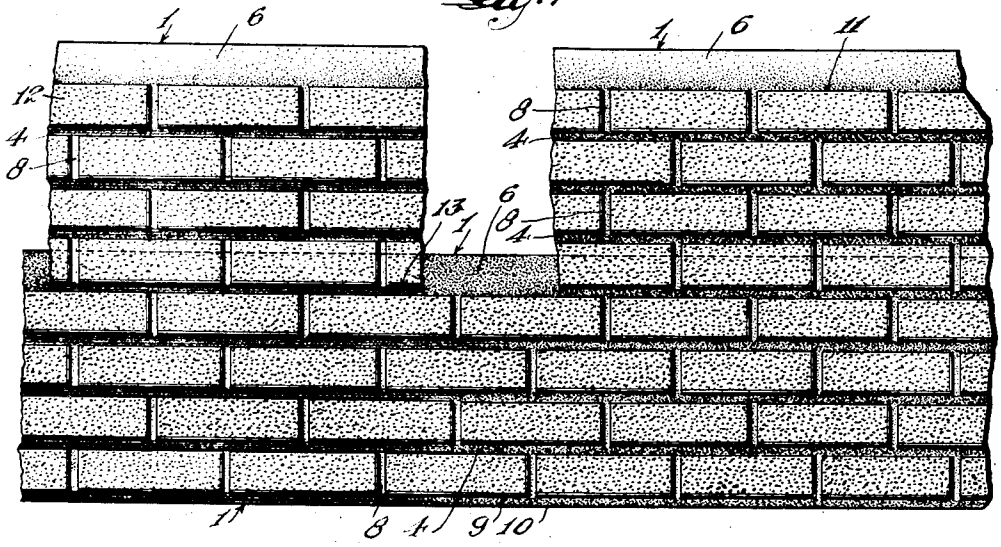


Fig. 7



INVENTOR.
Jules L. Wettlaufer

BY Samuel Steamans
ATTORNEY.

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UNITED STATES PATENT OFFICE

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ASPHALT PREPARED BUILDING MATERIAL AND METHOD OF MAKING SAME

Jules L. Wettlaufer, Belmont, Mass., assignor to The Patent and Licensing Corporation, Boston, Mass., a corporation of Massachusetts

Application December 2, 1931, Serial No. 578,548

2 Claims. (Cl. 91—67.9)

The object of this invention is to provide a novel product in the form of sheet material which, when laid on a wall, creates the effect of individual bricks.

A further object is to provide a method of producing my novel product.

In accordance with my invention a sheet of felted fibrous material which has been saturated with asphalt or other waterproofing substance, is given a heavy coat of waterproofing substance such as asphalt. While the coating is still hot, narrow grooves of coating are scraped or doctored longitudinally of the sheet at spaced intervals. Fine granular material, such as slate, is then applied to the grooves, after which coarse granular material is applied over the entire surface of the sheet. The sheet is then subjected to a pressing operation by means of rolls or otherwise to cause the granular material to adhere firmly to the surface. Simultaneously with or after the pressing operation the sheet is kerfed or scored transversely at spaced intervals so as to completely embed the granules in the coating and expose the coating along spaced narrow transverse bands thereby completing the design on the surface of the sheet. Instead of kerfing the sheet transverse bands may be printed on the sheet in color contrasting to that of the slate.

The invention will be more readily understood from the following description in conjunction with the accompanying drawings of which;

Figure 1 is a fragmentary view, in plan, of a sheet of roofing material, made in accordance with my invention, illustrating several details of the method of production;

Figure 2 is a similar view, in perspective, showing details similar to Figure 1;

Figure 3 is an enlarged cross-sectional view along the line 3—3 of Figure 1;

Figure 4 is a similar view showing a slight modification of the structure shown in Figure 3;

Figure 5 is a fragmentary view, in plan, of the upper surface of the finished product;

Figure 6 is a cross-sectional view taken along the line 6—6 of Figure 5;

Figure 7 is a view, partly fragmented, illustrating the appearance of the product when applied to a wall or other surface.

Referring to the drawings, the numeral 1 indicates generally a sheet of roofing material which is saturated with waterproofing material such as asphalt. In treating this base sheet to prepare the product herein contemplated, a comparatively heavy layer (say 0.040 to 0.070" thick) of blown asphalt or similar weatherproof substance, indicated by the numeral 2, is applied to one surface of the sheet. While this coating layer is still hot, it is doctored by means of the doctor blades 3 to form narrow grooves 4, extending longitudinally of the sheet, with intervening thick areas 5 in relief. A comparatively wide band 6 is similarly doctored along one of the margins of the sheet by means of a doctor blade 7. Finely divided granular material such as blue-black slate of such size that it passes through a 30 mesh screen and is retained on a 100 mesh screen, is immediately applied to the grooves 4 and the band 6. A comparatively coarser granular material of such size that it passes an 8 mesh screen and is retained on a 40 mesh screen is then applied to the entire upper surface of the sheet, this granular material being preferably of a color resembling that of the usual forms of brick. The sheet may then be subjected to a pressing and scoring operation during which the granular material is caused to adhere firmly to the surface of the sheet and the kerfs 8 are formed at spaced intervals transversely of the thicker areas 5, the kerfs of each of said areas being preferably staggered or offset with relation to the kerfs in the adjacent areas.

The pressing and kerfing operations may be performed simultaneously by means of a cylinder having raised ribs, corresponding in length and width to the kerfs 8, running in the direction of the axis of the cylinder and arranged in a series of rows running around the periphery of the cylinder, said rows being spaced apart axially, a distance corresponding to the width of the grooves 4 and the ribs in each row being spaced apart a distance equal to the length of a brick. The ribs in each row are staggered in relation to the ribs of an adjacent row. It is apparent that the pressing and kerfing operations may be performed separately if so desired. In either case, the grit is caused to become substantially completely embedded in the coating in the transverse kerfs in order to expose the coating and thereby form a band contrasting in color with the areas 5 which now are in relief with respect to the grooves 4 and kerfs 8. The kerfs 8 are preferably of less depth than the grooves 4, as shown in Figure 3, but may be of equal depth therewith as shown in Figure 4.

Instead of kerfing the bands 8 a somewhat similar effect may be produced by applying asphalt along these areas by means of a suitable printing roll.

The finished sheet will have a surfacing simulating a plurality of staggered rows of common

brick. The areas in relief will be of substantially the same shape and size as common brick and the grooves 4, and kerfs 8 will be of substantially the same width as ordinary mortar joints. The band 6 provides head lap and the groove 9 along the other longitudinal edge acts as a spacer when the sheets are applied to a wall or other surface. The edge 10 of one sheet will lie flush against the edges 11 of the outermost row of brick-simulating surfaces 12 of the preceding sheet.

When the sheets are applied to a wall they will simulate a brick structure in which adjacent rows of bricks are staggered in relation to each other. The brick simulating surface will be colored in contrast to the mortar simulating joints.

Instead of doctoring the coating by means of blades to form the grooves 4 and band 6, a similar effect can be produced by means of a coating drum having spaced peripheral ribs whereby a comparatively thin layer of coating will be applied to the sheet along the areas where the sheet contacts with the ribs and heavy intermediate bands of coating will be applied to the sheet by the surface of the drum between the ribs.

Furthermore a product in accordance with my invention can be made in laminated form by applying spaced strips of roofing material to a sheet of roofing felt which has been saturated and coated with asphalt. While the coating is still in an adhesive state the strips, corresponding in width to ordinary brick, are applied longitudinally of the sheet and at intervals spaced apart by a distance equal to the width of the grooves 4. The strips are preferably composed of roofing felt which has been saturated and coated with asphalt and surfaced with coarse mesh granular material corresponding in color to that of brick. The sheet and strips are then pressed firmly together and transverse bands are printed or kerfed on the strips in the same manner as described in connection with kerfs 8. The bands may be printed or kerfed on the strips before applying the strips to the sheet and thus avoid the necessity of subjecting the laminated sheet to the printing or scoring operation.

The sheet may be formed without the marginal portion 9 in which case the edges 13 of the lowermost row of brick simulating surfaces will constitute the lower edge of the sheet. This form may be desirable in those instances where the felt is of greater thickness than the coating, since in such instances, the edge 10, at the point of overlap, may stand out beyond the plane of the brick simulating surfaces of the subjacent sheet, and thereby detract from the appearance. If the marginal groove 9 is not placed on the sheet, each succeeding sheet must be spaced from the edges 11 of the uppermost row of brick of the preceding sheet, a distance equal to the width of the grooves 4.

Regardless of the method employed for producing my novel product, the result will be a cheap weather-resistant siding material which can be applied easily and rapidly.

I claim as my invention:

1. A method of preparing siding material which comprises coating a saturated fibrous felted sheet with asphalt, doctoring the coating along lines longitudinally of the sheet to provide a plurality of narrow longitudinal grooves in said coating with intervening raised areas of the original thickness of said coating, applying finely divided wear-resistant material to said grooves, applying coarse granular material to the upper surface of said intervening raised areas, and subjecting the sheet to a pressing operation whereby to form transverse narrow grooves at spaced intervals along said raised areas.

2. As an article of manufacture, a sheet of saturated and coated fibrous material, narrow grooves formed in said coating and extending longitudinally of said sheet, said grooves being surfaced with finely divided granular material, rows of spaced transverse kerfs formed in said coating intermediate said grooves, the kerfs in each row being staggered in relation to the kerfs of an adjacent row, said grooves and kerfs defining a plurality of substantially rectangular areas in relief, said relief areas being surfaced with coarse granular material differing in color from that applied to the grooves.

JULES L. WETTLAUFER.