July 2, 1957 J. R. OLDFIELD ET AL 2,798,006

METHOD OF PRODUCING SELVAGE ROLL ROOFING

Filed May 7, 1954 2 Sheets-Sheet 1

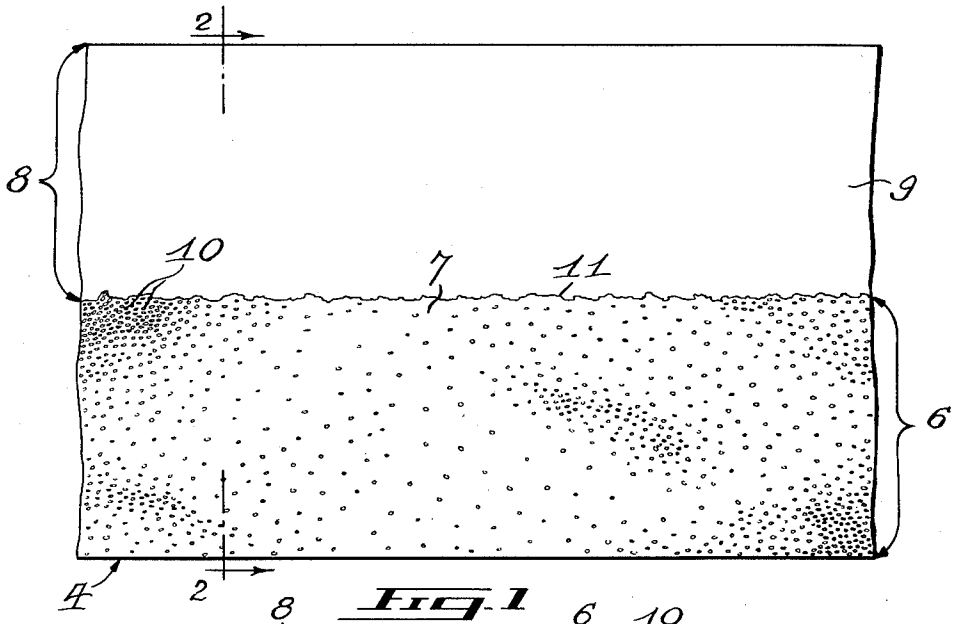


Fig. 1



Fig. 2

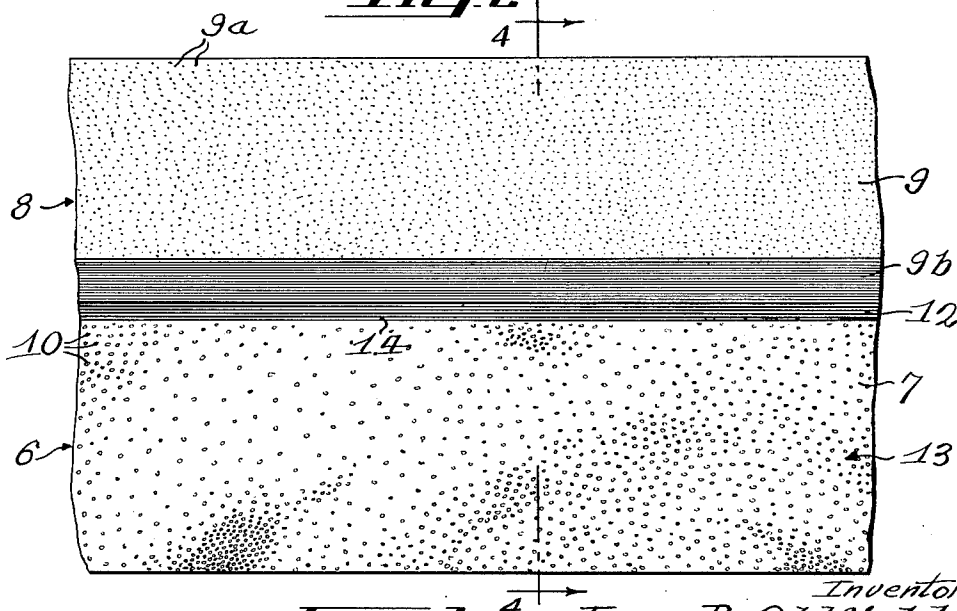


Fig. 3

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METHOD OF PRODUCING SELVAGE ROLL ROOFING

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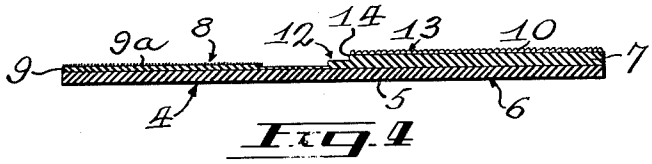


Fig. 4

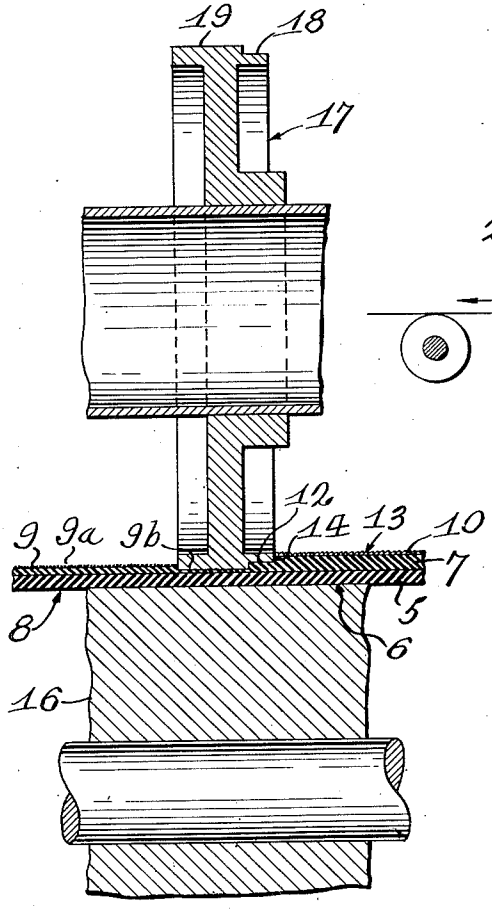


Fig. 6

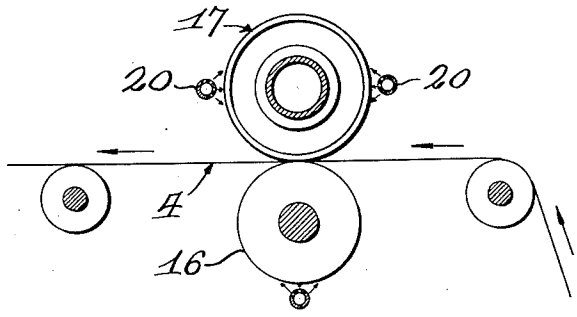


Fig. 5

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METHOD OF PRODUCING SELVAGE ROLL ROOFING

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7 Claims. (Cl. 117—9)

This invention relates to improvements in roll roofing of the kind commonly referred to in the trade as selvage roll roofing.

In the manufacture of selvage roll roofing a relatively thick coating of asphalt or similar waterproof adhesive material is applied to the lower half of a saturated felt base and is then covered by a surface layer of granules partially embedded in the coating. The upper half of the saturated felt base is usually left uncoated.

Strips of the selvage roofing are laid in courses so that the coated and granular surfaced halves of the strips in one course overlap and are cemented to the uncoated upper halves or selvage areas of the strips of the next lower course, the forward or lower edges of the strips in each course being butted against the raised portions formed by the upper edges of the granular surfaced coating of the strips in the next lower course.

An objectionable feature of selvage roll roofing as heretofore manufactured is that the upper edge of the granular surfaced coating covering the lower half of the felt base of each roofing strip is often irregular or ragged instead of being straight. This is due to unavoidable flow of the asphalt coating during the manufacturing process and gives rise to several difficulties. It makes it difficult to obtain alignment of the contiguous courses during the laying of the roofing and it also makes it difficult to avoid exposure to the weather of portions of the uncoated selvage areas of the roofing strips immediately adjoining the irregular or ragged upper edges of the coated and granular surfaced portions.

According to the present invention a narrow band of the granular surfaced coating immediately adjoining the selvage area of the base of each roofing strip is depressed below the plane of the remaining portion of said coating to provide a perfectly straight raised portion at the juncture of the depressed and non-depressed portions of said coating. The roofing strips thus produced are laid in courses with the forward or lower edges of the strips in each course butted against the straight raised portions provided at the upper edges of the non-depressed portions of the granular surfaced coatings of the strips in the next lower course and with the overlapping surfaces of the strips in adjoining or contiguous courses cemented together in the usual manner. The straight raised portions presented by the upper edges of the non-depressed granular surfaced coatings of the roofing strips eliminates the difficulty previously experienced in laying the roofing so as to obtain proper alignment of the contiguous courses. Moreover, the depression of the granular surfaced coating of each roofing strip along a narrow band-like area immediately adjoining the selvage area has another important advantage. It causes the granules lying within said band-like area to be completely embedded in the underlying coating so that the latter is brought to the surface and improves the adhesion between the overlapping portions of the roofing strips in contiguous courses at the place where good adhesion is most important, namely,

in the immediate vicinity of the joints formed by butting the forward or lower edges of the roofing strips in one course against the raised portions formed by the upper edges of the non-depressed portions of the granular surfaced coatings of the roofing strips in the next lower course.

The present invention is applicable to conventional selvage roofing strips having uncoated selvage areas and, also, to selvage roofing strips having the selvage areas protected by a coating of asphalt or the like which is thinner than the granular surfaced coating covering the lower halves of the strips. As applied to selvage roofing strips having uncoated selvage areas the invention is advantageous in that, in addition to facilitating the proper alignment of contiguous courses of the roofing strips, it eliminates exposure to the weather of any portion of the uncoated selvage areas of the roofing strips. In this connection it will be apparent that, since the depressed portion of the granular surfaced coatings of the roofing strips in one course are overlapped by the lower or forward portions of the strips in the next upper course, there is no possibility of any portion of the uncoated selvage areas of the strips being exposed to the weather.

Other characteristic features and advantages of the invention will be apparent from the following detailed description of the accompanying drawings:

Fig. 1 is a plan view of a portion of a selvage roofing strip of the type in which the upper half or selvage area is protected by a coating of adhesive or similar waterproof cementitious material which is thinner than granular surfaced coating applied to the lower half of the strip.

Fig. 2 is a sectional view taken substantially along the section line 2—2 of Fig. 1.

Fig. 3 is a view, similar to Fig. 1 but showing the strip as it appears after it has been subjected to the present operation whereby a narrow band of the granular surfaced coating immediately adjoining the selvage area of the strip is depressed below the remaining portion of said coating.

Fig. 4 is a sectional view taken substantially along the section line 4—4 of Fig. 3.

Fig. 5 is a view in side elevation of one form of apparatus which may be employed in producing the roofing strip shown in Figs. 3 and 4 and

Fig. 6 is an enlarged sectional view of a portion of the apparatus shown in Fig. 5.

In the present drawings the invention is illustrated as applied to the manufacture of a selvage roofing strip having the upper half or selvage area protected by a coating of asphalt or similar waterproof cementitious material which is thinner than the granular surfaced coating applied to the lower half of the strip.

Referring now to Figs. 1 and 2, 4 designates a selvage roofing strip comprising a saturated felt base 5 having the lower half 6 protected by a relatively thick coating 7 of asphalt or similar waterproof adhesive material and having the upper half or selvage area 8 covered by a thinner coating 9 of the same waterproofing material. The relatively thick coating 7 is completely covered by a weather resistant layer 10 of granular material consisting of slate or other mineral granules partially embedded in said coating. In making this type of roofing strip it is practically impossible to consistently avoid a flow of the granular surfaced coating 7 which results in this coating presenting an irregular or ragged line 11 at the upper edge thereof immediately adjoining the selvage area 8. As previously stated, this irregular or ragged line 11 not only interferes with proper alignment of contiguous courses of the roofing strips but, in the case of roofing strips having uncoated selvage areas 8, results in unavoidable exposure

to the weather of portions of the selvage area 8 lying immediately adjacent the ragged line 11.

In the practice of the present invention the application of the coatings 7 and 9 and the granular surfacing layer 10 is followed or accompanied by the application of a layer 9a of fine sand to the coating 9 to prevent the latter from sticking to contacting portions of the roofing when the roofing is made into rolls for storage and shipping purposes. The roofing strip is then subjected to a pressing operation, preferably a hot pressing operation, whereby a narrow band 12 (Figs. 3, 4 and 5) of the granular surfaced coating 7 immediately adjoining the selvage area 8 is depressed below the plane of the remaining portion 13 of said coating. The pressing element used in forming the depressed band 12 of the granular surfaced coating 7 must be of such a nature as to provide a straight raised portion 14 at the juncture of the depressed and non-depressed portions 12 and 13 of said coating. During the pressing operation here referred to the granules lying within the band-like area 12 of the granular surfaced coating to which the pressure is applied are caused to be completely embedded in the underlying portion of the coating which is thus brought to the surface of the depressed area 12 to promote better adhesion of the overlapping portions of the roofing strips in contiguous courses in the immediate vicinity of the joint formed by butting the lower or forward edges of the strips in one course against the straight raised portions 14 of the strips in the next lower course.

As shown in Figs. 5 and 6 the depression of a portion of the granular surfaced coating 7 of the roofing strip to provide the band-like area 12 and the straight raised portion 14 is preferably accomplished by passing the roofing strip over a backing-up roll 16 and beneath a pressure applying roll 17 located directly above the backing-up roll. The peripheral surface of the pressure applying roll 17 is stepped to provide two peripheral portions 18 and 19 of different diameters and widths. The roll 17 is arranged so that the narrower and smaller diameter peripheral portion 18 bears upon and depresses a portion of the granular surfaced coating 7, immediately adjoining the selvage area 8, to form the aforesaid depressed band-like area 12 in which the granules 10 are fully embedded so that the coating is brought to the surface of this depressed area 12. The wider and larger diameter portion 19 of roll 17 bears upon a band-like portion 9b of the sand surfaced coating 9 immediately adjoining the granular surfaced coating 7 and causes the underlying sand particles 9a to be depressed into the coating 9 which is thus brought to the surface to improve adhesion between the overlapping surface of contiguous course of the roofing strip in the immediate vicinity of the depressed area 12.

The roll 17 is preferably heated and this may be accomplished, as shown in Fig. 5, by the provision of burner pipes 20 through which flame is directed against the periphery of the roll.

Having thus described the nature of our invention and a preferred embodiment thereof it will be understood that various modifications may be made within the scope and spirit of the invention as defined by the appended claims.

What we claim is:

1. A method of producing selvage roll roofing which comprises applying a relatively thick coating of adhesive water-proof material to the lower half of a felt base, covering said coating with a surface layer of granular particles partially embedded therein and depressing the granular surfaced coating along a narrow band immediately adjoining the upper half of the felt base to provide a straight raised portion at the juncture of the depressed and non-depressed portions of the coating.

2. A method of producing selvage roll roofing which

comprises applying a relatively thick coating of water-proof cementitious material to the lower half of a felt base, applying a thinner coating of the same material to the upper half or selvage area of the base, surfacing the relatively thick coating with a layer of granular particles partially embedded therein and depressing the granular surfaced coating along a narrow band immediately adjoining the upper half of the base to provide a straight raised portion at the juncture of the depressed and non-depressed portions of the granular surfaced coating.

3. A method of producing selvage roll roofing as set forth in claim 1, in which the aforesaid depression of the granular surfaced coating along a narrow band immediately adjoining the upper half of the base is effected by a hot pressing operation in the course of which the granules lying within said band are completely embedded in the underlying coating and the latter is brought to the surface.

4. A method of producing selvage roll roofing which comprises applying a relatively thick coating of adhesive water-proofing material to the lower half of a felt base, applying a thinner coating of the same material to the upper half of the selvage area of the base, covering the relatively thick coating with a surface layer of relatively course granular particles partially embedded therein, covering the thinner coating with a layer of relatively fine sand particles, depressing the relatively thick granular surfaced coating along a narrow band immediately adjoining the upper half of the felt base to provide a straight raised portion at the juncture of the depressed and non-depressed portions of said coating and depressing the sand surfaced coating along a band-like area immediately adjoining the depressed portion of the relatively thick coating.

5. A method of producing selvage roll roofing as set forth in claim 1, in which the aforesaid depression of the granular surfaced coating along a narrow band immediately adjoining the upper half of the base is effected by passing the coated base beneath a pressure applying roller presenting a peripheral portion of relatively large diameter bearing on the upper half of the base and a second peripheral portion of smaller diameter bearing on a portion of the granular surfaced coating immediately adjoining the upper half of the base.

6. A method of producing selvage roll roofing as set forth in claim 1, in which the aforesaid depression of the granular surfaced coating along a narrow band immediately adjoining the upper half of the base is effected by passing the coated base beneath a heated pressure applying roller presenting a peripheral portion of relatively large diameter bearing on the upper half of the base and a second peripheral portion of smaller diameter bearing on a portion of the granular surfaced coating immediately adjoining the upper half of the base.

7. Selvage roll roofing comprising a felt base, a relatively thick coating of granular surfaced water-proofing material covering the lower half of the upper surface of the base, a narrow band of said granular-surfaced coating immediately adjoining the upper half or the selvage area of the base being depressed below the remaining portion of said coating to provide a substantially straight raised and relatively narrow band portion at the juncture of the depressed and non-depressed portions of the coating, the raised, narrow band portion extending the full length of the roll roofing.

References Cited in the file of this patent

UNITED STATES PATENTS

1,972,810	Wettlaufer	Sept. 4, 1934
2,400,746	Fassiotto et al.	May 21, 1946
2,569,543	Stolp	Oct. 2, 1951