

March 1, 1932.

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1,848,076

METHOD OF APPLYING WATERPROOF SHEETS

Filed Feb. 4, 1929

Fig. 1.

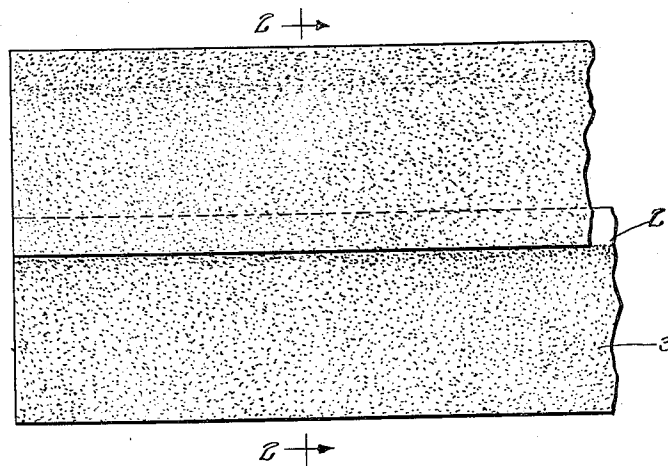
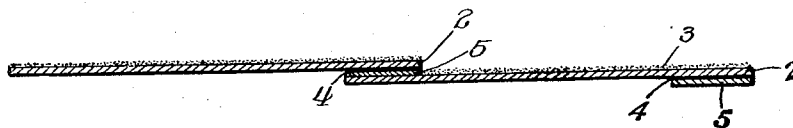


Fig. 2.



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UNITED STATES PATENT OFFICE

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METHOD OF APPLYING WATERPROOF SHEETS

Application filed February 4, 1929. Serial No. 337,531.

This invention relates to novel and improved waterproofed coverings and the manner of laying same comprising fabricating one surface or a portion of the coverings with a normally tacky adhesive layer temporarily protected with a nonadhesive tissue film that may be readily ruptured by pressure when the covering sheets are attached to release the adhesive without removing the protecting film.

Waterproof sheets, such as roll roofing, are ordinarily laid in long strips with the margins overlapped and sealed with an adhesive agent which is applied along the seam when the sheets are overlapped. To facilitate overlapping and sealing of granular surfaced, or slate covered, roll roofing, one margin of the granular surfaced side is frequently left free from the granular material and merely dusted with mineral dust or covered with a heavy tape to leave this margin smooth but non-adhesive. Adhesive is then applied over this non-adhesive margin at the time the sheets are laid.

My invention generally relates to waterproof sheets faced on one side with a normally tacky layer and then overlaid with a very thin protective layer sufficient to protect adhesion of the sheets during handling and transporting, but fragile enough to rupture in response to pressure so that the normally tacky layer may be released to flow to the surface and present an adhesive area for bonding to the surface to which the sheet is to be attached.

In the drawings:—

Fig. 1 is a plan view of a roofing section embodying my invention; and

Fig. 2 is a sectional view on line 2—2 of Fig. 1.

The invention is typified by a roofing sheet 2 of bituminized fabric covered with coating 3 of crushed slate or other granular material, the granular face being preferably coextensive with the area of the sheet. The margins

of the underside of the sheet are coated with a rather soft pliable adhesive 4 having a normally adhesive character. Over this normally adhesive layer, a non-adhesive protective tissue film of paper 5 or the like is applied to temporarily protect the adhesive layer and prevent adhesion of the convolutions in the roll. When the sheets are unrolled and laid in overlapping relation in a roof structure with the tissue protected margins over the granular coated edges, the tissue film can be readily penetrated or ruptured by pressure, thereby releasing the normally adhesive coating to adhere the overlapping edges.

Likewise, the invention may be carried out with individual roofing elements or shingles of the same character as granular or slate covered roll roofing. In this instance, the shingles are preferably stacked in the bundles with the non-granular surfaces back to back, but are laid on the roof in conventional courses with the top and bottom edges overlapper to be adhered in the same manner as the roll roofing above described. By rolling down the shingle elements or roofing rolls, the tissue film is perforated by the sharp mineral granules, liberating the adhesive.

A suitable slow drying adhesive is a macadam binder or heavy road oil mixed with a suitable non-drying oil or any suitable slow drying adhesive in a very sticky or tacky condition may be applied, after which the tissue film is superposed thereon. This may also be accomplished by placing the tissue film over a vehicle, the surface of which is formed into a very pliable lasting adhesive, or it may be a vehicle saturated with a non-drying oil and coated with a slow-drying adhesive, said surface then covered with a tissue film. Or it may be a construction vehicle adapted for use in concrete which may be placed over the adhesive surface of the vehicle, and upon the pressure of sharp granules, break through

the film, coming in direct contact with the slow-drying adhesive.

I do not wish to be limited in the structure of the waterproofing sheets or the type of adhesive employed, as in carrying out the invention it is only necessary that the adhesive be normally tacky and that the protecting tissue be sufficiently fragile to be readily punctured by pressure to permit the adhesive to ooze to the surface.

For the purpose of illustration I have shown and described my invention in certain form and explained the process in connection with certain structures, but I wish it to be understood that various changes in detail may be employed without departing from the principle of the invention.

I claim:

1. The method of attaching waterproof sheets characterized by coating a margin of one sheet with a normally tacky adhesive, covering the adhesive with a thin paper film for temporarily protecting said adhesive, overlapping the margin with an adjacent sheet, and rupturing the protective film to seal the overlapped margins.

2. The method of attaching a waterproof sheet to a base characterized by coating one face with a normally tacky adhesive, covering the adhesive with a non-adhesive tissue film, superimposing the sheet on the base, and rupturing the tissue film to adhere the sheet without removing said tissue film.

3. The method of attaching a waterproof sheet to a base characterized by coating one face with a normally tacky adhesive, covering the adhesive with a thin paper strip, superimposing the sheet on the base, and rupturing the paper strip to adhere the sheet without removing said paper strip.

4. The method of attaching a waterproof sheet to a granular surfaced base characterized by coating one face with a normally tacky adhesive, covering the adhesive with a thin paper strip, superimposing the sheet on the base and adhering the sheet to the granular surfaced base by pressing the sheet to rupture the paper strip.

5. The method of attaching waterproof sheets characterized by coating one side with a granular surface and the margin of the other side with a normally tacky adhesive, covering the adhesive with a non-adhesive tissue film, overlapping the coated margin with the granular surfaced face of an adjacent sheet, and pressing the sheet to rupture the paper and release the adhesive.

6. The method of attaching waterproof sheets characterized by coating one side with a granular surface and the margin of the other side with a normally tacky adhesive, covering the adhesive with a paper strip, overlapping the coated margin with the granular surfaced face of an adjacent sheet,

and pressing the sheet to rupture the paper and release the adhesive.

7. Sheet material having normally flowable adhesive surfaces coated with a fibrous strip sufficiently fragile so that pressure upon same will rupture the strip and allow the normally flowable adhesive to ooze to the surface.

8. As an article of manufacture, constructional sheet material, having upon its surface a soft adhesive coating capable of flowing, and a thin paper layer covering the soft adhesive coating adapted to be readily ruptured to release the adhesive coating.

9. Constructional material having a surface area provided with a flowing adhesive substance and a paper covering protecting the adhesive substance, said paper covering being readily destructible for releasing the adhesive substance.

10. Constructional material having a surface area provided with a normally flowable adhesive substance and a fibrous layer protecting said adhesive substance, said fibrous layer being readily ruptured for exposing said adhesive substance.

11. Constructional material having a surface area provided with a normally flowable adhesive substance and a paper film protecting said adhesive substance, said paper film being readily ruptured by pressure for exposing said adhesive substance.

12. Construction material comprising a waterproofing sheet having a surface area provided with a normally flowable adhesive substance, and a readily destructible paper film protecting said adhesive substance.

13. Construction materials comprising a waterproofing body and a surface area provided with a normally adhesive substance and a protective sheet covering for said adhesive substance, said protective covering being of a fragile character to readily permit the adhesive substance to engage an adjacent product.

Signed at Chicago, in the county of Cook and State of Illinois, this 2nd day of February, 1929.

ALBERT C. FISCHER.