R. P. PERRY.

COATED CONSTRUCTION MATERIAL AND METHOD OF MAKING THE SAME.

APPLICATION FILED OCT. 9, 1917.

1,369,187. Patented Feb. 22, 1921.

Fig. 2

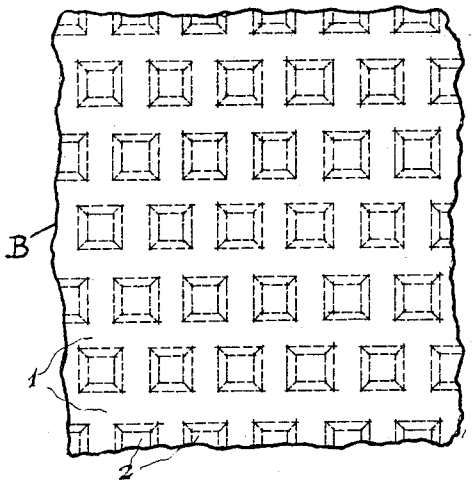


Fig. 4

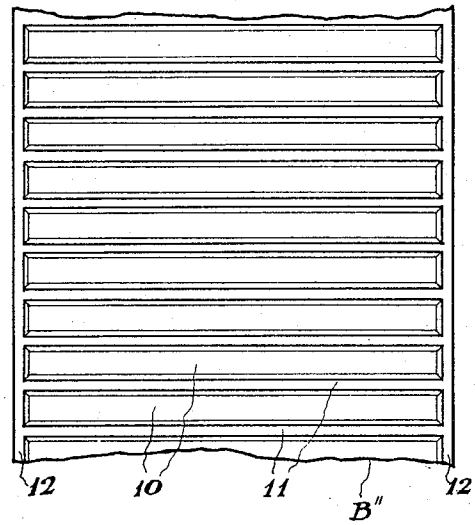


Fig. 1

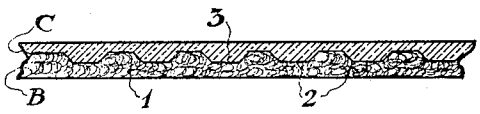
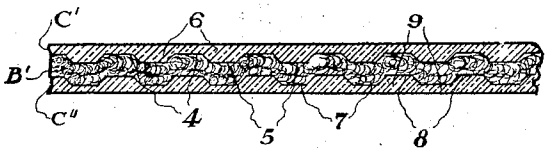


Fig. 3



INVENTOR

Ray P. Perry

BY

Edward M. Evarts

ATTORNEY

UNITED STATES PATENT OFFICE.

RAY P. PERRY, OF UPPER MONTCLAIR, NEW JERSEY, ASSIGNOR TO THE BARRETT COMPANY, A CORPORATION OF NEW JERSEY.

COATED CONSTRUCTION MATERIAL AND METHOD OF MAKING THE SAME.

1,369,187. Specification of Letters Patent. Patented Feb. 22, 1921.

Application filed October 9, 1917. Serial No. 195,656.

To all whom it may concern:

Be it known that I, RAY P. PERRY, a citizen of the United States, residing at Upper Montclair, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Coated Construction Materials and Methods of Making the Same, of which the following is a specification.

In my co-pending application entitled "Construction materials and processes of producing the same," filed October 9, 1917, and bearing Serial No. 195,655, I have described and claimed a "dry" felt having special advantages when intended to be saturated, and the process of making such felt; also a process of saturating the previously referred to "dry" felt, and the resulting saturated felt.

My present invention relates to a construction material, such as the so-called "rubber" roofings of commerce, consisting generally of a felt or similar base saturated with waterproofing material and covered with a protective coating of waterproofing material, such as asphalt, and to a process of making such material, wherein I employ a saturated felt of the sort described and claimed in my co-pending application above. This felt consists of a sheet of porous felt or paper having a plurality of depressions on one or both sides of the same. Preferably the depressions are of a predetermined cubical content and the depressions on each side are staggered with relation to each other. Where the depressions are provided on both sides of the sheet they may preferably be staggered, not merely with relation to each other on each side of the sheet, but such depressions may preferably also be staggered with relation to the depressions on the other side of the sheet.

While this felt is described in my co-pending application as being embossed before it is saturated, I may, in the present instance, emboss the felt after it has been saturated. The saturated felt is generally in a somewhat moist, impressionable condition, due to the presence of the saturating material in the same, and the saturated felt is, therefore, capable of receiving and retaining the desired depressions.

However prepared, the saturated felt, having the aforesaid depressions, preferably of predetermined content, on one or both sides of the same, is coated with any desired weatherproofing material, such as asphalt, for example. The depressions are preferably staggered with relation to each other. The coating material fills the depressions, and thereby becomes fixed or "locked" in the depressions. The outer face of the coating, or of the coatings, where both sides are coated may be smooth or have the usual alligator finish. As a result of this construction and mode of procedure, a coated construction material is provided in which portions of the coating material, generally of predetermined amount, are fixed or "locked" in the depressions provided in the saturated felt. This "locking" of portions of the coating material prevents the same from peeling away from the saturated felt base, and in this way the life of the construction material is considerably lengthened.

Referring to the drawing wherein I have illustrated two species of the product of my invention,

Figure 1 shows in side elevation, and Fig. 2 shows in plan view a strip of construction material provided on one side thereof with a coating of weatherproofing material according to my invention.

Fig. 3 is a similar view of a modification, and

Fig. 4 is a similar view of still another modification.

B indicates the base of the construction material, consisting generally of a sheet of felt or paper saturated with waterproofing material, such as asphalt, for example. The sheet B is provided with the depressions 2, 2 defined by the raised portions 1, 1. While the exact form of the depressions is generally immaterial, I prefer to provide the same with sloping sides as indicated, and to make the same of substantially rectangular formation. As shown in Fig. 2 the depressions are staggered with respect to each other, this arrangement of the depressions serving to "lock" the coating material more securely in place than where the depressions are arranged in straight lines. As previously stated, the depressions may be made in the felt after the same has been saturated. After the saturated felt has been provided with the depressions, which are preferably of predetermined cubical content, the coating material C is applied to that side of the

sheet in which the depressions are provided. The coating material thereupon assumes the shape indicated in Fig. 1 of the drawing, with the result that portions 3, 3 of the coating material fill the depressions 2, 2 and thereby serve to securely fix or "lock" the coating C in place upon the base B.

In Fig. 3 I have illustrated a species wherein both sides of the saturated felt are provided with depressions, preferably of predetermined content, and with coatings of weatherproofing material. In this species the base B′ consists of a sheet of felt or paper saturated with waterproofing material, such as asphalt, and provided on one side with the depressions 5, 5 defined by the raised portions 4, 4 and on the other side with the depressions 8, 8 defined by the raised portions 7, 7. Preferably the depressions 5 are staggered with relation to each other, as are also the depressions 8, 8. I prefer also to stagger the depressions 5, 5 not merely with relation to each other, but with relation also to the depressions 8, 8. After the strip of saturated felt B′ has received the aforesaid depressions, the coatings C′ and C″ are applied to the two surfaces thereof, the coating material consisting generally of a weatherproofing material such as asphalt. The coating C′ will, in this way, be provided with the portions 6, 6 which will be fixed or "locked" in the depressions 5, 5, while the coating C″ will have the portions 9, 9 fixed or "locked" in the depressions 8, 8. In this way the coatings C′ and C″ will be securely fixed in position upon the base B′ and a construction material of superior wearing qualities will thereby result.

In Fig. 4 I have illustrated a species of my invention wherein the depressions 10 are in the form of channels of predetermined cubical content extending substantially (or, if desired, entirely) across the width of the sheet B″, the depressions being defined by the raised transverse portions 11, 11, and the raised edge portions 12, 12.

What I claim is:

1. The process of producing a construction material, which comprises the steps of providing a sheet of felt saturated with waterproofing material, forming a plurality of depressions on at least one side thereof in such a manner that the respective portions of the surface opposite said depressions are left substantially undistorted, and thereafter coating the side provided with the depressions with a layer of protective weatherproofing material, whereby portions of the coating material will be fixed in the said depressions.

2. The process of producing a construction material, which comprises the steps of providing a sheet of felt saturated with waterproofing material, forming a plurality of depressions on each side thereof in such a manner that the respective portions of the surface opposite said depressions are left substantially undistorted, and thereafter coating each side provided with the depressions with a layer of protective weatherproofing material, whereby portions of the coating material will be fixed in the said depressions.

3. The process of producing a construction material, which comprises the steps of providing a sheet of felt saturated with waterproofing material, forming a plurality of staggered depressions on at least one side thereof, and thereafter coating the side provided with the depressions with a layer of protective weatherproofing material, whereby portions of the coating material will be fixed in the said depressions.

4. The process of producing a construction material, which comprises the steps of providing a sheet of felt saturated with waterproofing material, forming a plurality of staggered depressions on each side thereof in such a manner that the respective portions of the surface opposite said depressions are left substantially undistorted, and thereafter coating each side provided with the depressions with a layer of protective weatherproofing material, whereby portions of the coating material will be fixed in the said depressions.

5. The process of producing a construction material, which comprises the steps of providing a sheet of felt saturated with waterproofing material, forming a plurality of depressions of predetermined cubical content on at least one side thereof in such a manner that the respective portions of the surface opposite said depressions are left substantially undistorted, and thereafter coating the side provided with the depressions with a layer of protective weatherproofing material, whereby portions of the coating material will be fixed in the said depressions.

6. The process of producing a construction material, which comprises the steps of providing a sheet of felt saturated with waterproofing material, forming a plurality of staggered depressions of predetermined cubical content on each side thereof in such a manner that the respective portions of the surface opposite said depressions are left substantially undistorted, and thereafter coating each side provided with the depressions with a layer of protective weatherproofing material, whereby portions of the coating material will be fixed in the said depressions.

7. The process of producing a construction material which comprises the steps of providing a sheet of felt saturated with waterproofing material, forming depressions

therein so that the distance from the bottom of said depressions to the opposite side of the sheet is less than the average thickness of the sheet, and thereafter coating the sheet with a layer of protective weatherproofing material, whereby portions of the coating material will be fixed in the said depressions.

8. A construction material comprising a sheet of felt saturated with waterproofing material and having a plurality of depressions on at least one side thereof formed in such a manner that the respective portions of the surface opposite said depressions are substantially undistorted, and a protective coating of weatherproofing material on at least that side of the sheet having the said depressions, whereby the coating material has portions thereof located and fixed within the said depressions.

9. A construction material comprising a sheet of felt saturated with waterproofing material and having a plurality of depressions on at least one side thereof formed in such a manner that the respective portions of the surface opposite said depressions are substantially undistorted, and a protective coating of weatherproofing material on at least that side of the sheet having the said depressions, whereby the coating material has portions thereof located and fixed within the said depressions, the outer face of the coating being substantially unindented.

10. A construction material comprising a sheet of felt saturated with waterproofing material and having a plurality of depressions of predetermined cubical content on at least one side thereof formed in such a manner that the respective portions of the surface opposite said depressions are substantially undistorted, and a protective coating of weatherproofing material on at least that side of the sheet having the said depressions, whereby the coating material has portions thereof located and fixed within the said depressions.

11. A construction material comprising a sheet of felt saturated with waterproofing material and having a plurality of staggered depressions of predetermined cubical content on at least one side thereof formed in such a manner that the respective portions of the surface opposite said depressions are substantially undistorted, and a protective coating of weatherproofing material on at least that side of the sheet having the said depressions, whereby the coating material has portions thereof located and fixed within the said depressions.

12. A construction material comprising a sheet of felt saturated with waterproofing material and having a plurality of depressions on at least one side thereof, the bottom of said depressions being nearer to the opposite side of the sheet than the thickness of said sheet, and a protective coating of weatherproofing material on at least that side of the sheet having the said depressions, whereby the coating material has portions thereof located and fixed within the said depressions.

In testimony whereof I affix my signature.

RAY P. PERRY.