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2,850,404

JOINT TAPE

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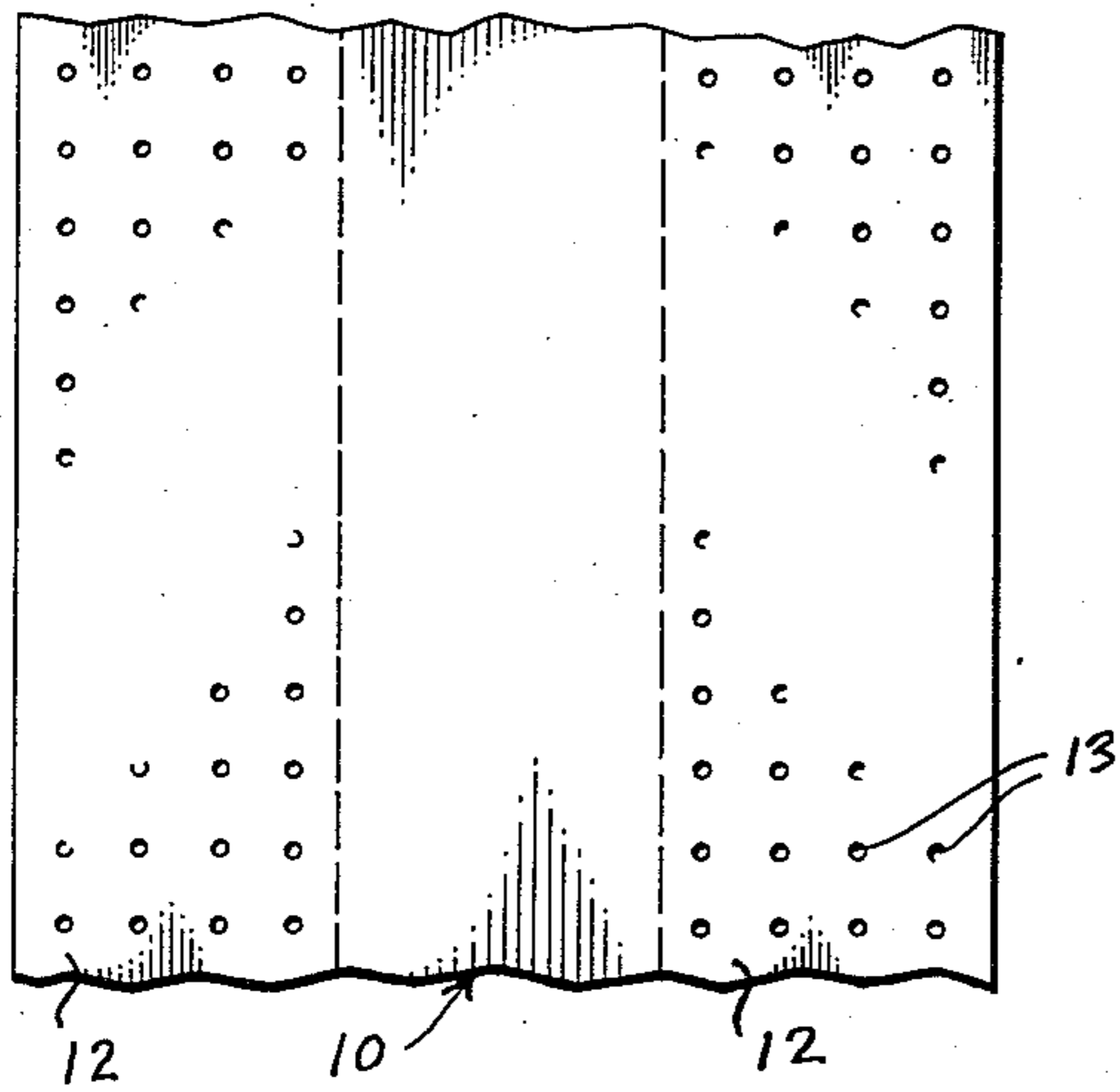


Fig. 1

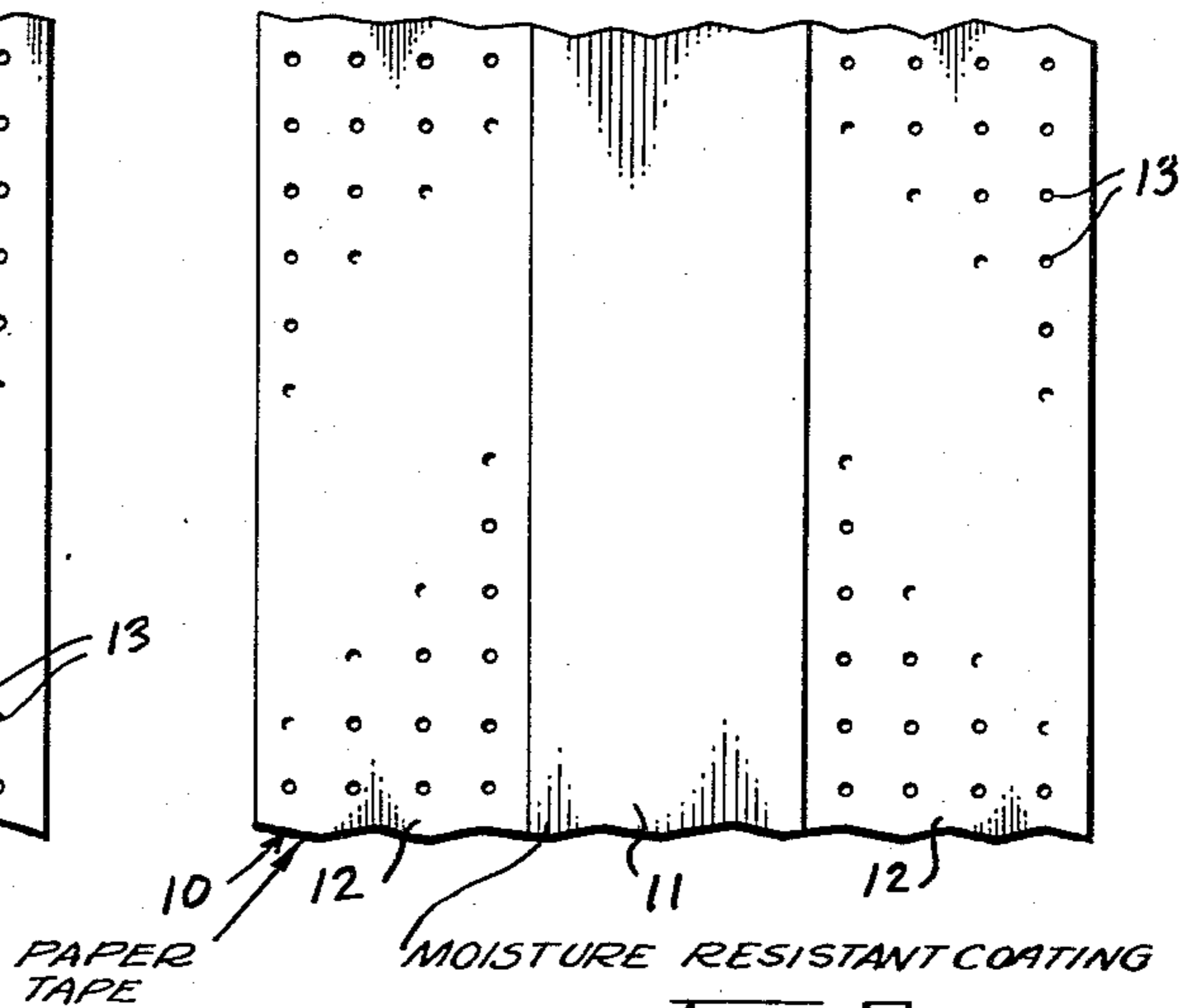


Fig. 2

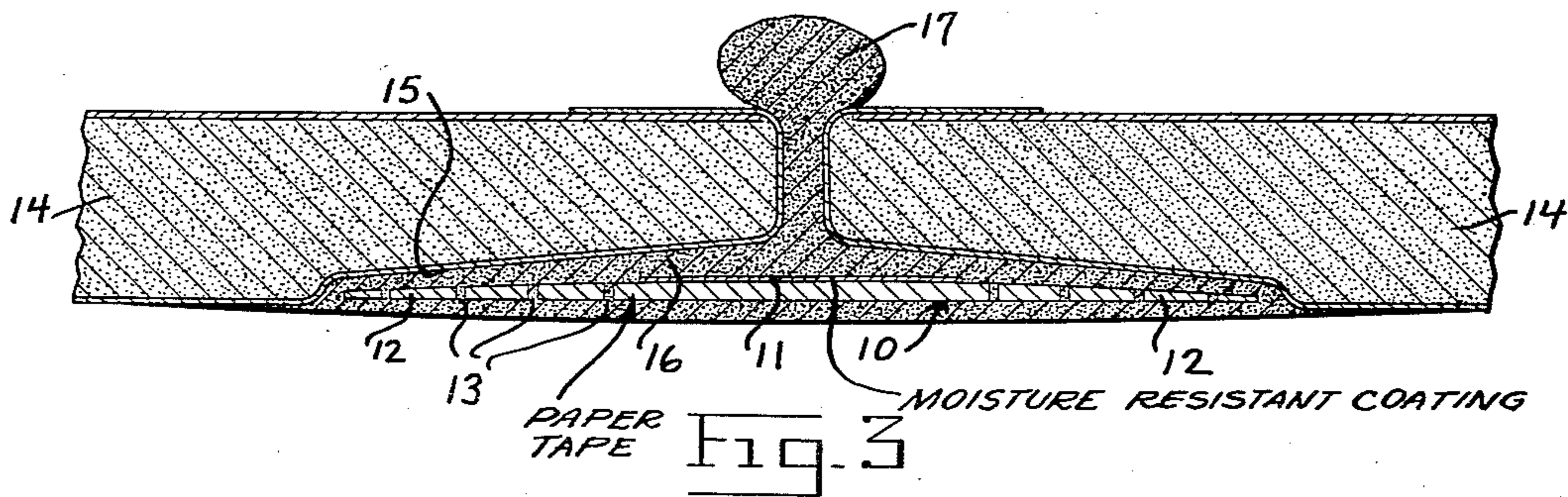


Fig. 3

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JOINT TAPE

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8 Claims. (Cl. 117-44)

The present invention relates to an improved paper tape for use with joint cement to conceal the joints between adjoining panels in drywall construction, and particularly those joints which have no backing preventing the joint cement from oozing out the back side of the joint and forming a surplus bead of cement. Such a surplus bead, as it dries, causes the center portion of the tape which overlies the joint proper to be subjected to an excess of moisture as compared to the side marginal portions of the tape. Accordingly, the latter dry much faster, and as a result the center portion of the tape frequently stretches outwardly due to the excess moisture thereby forming a paper bead defect. This defect makes a smooth finishing of the joint more difficult and frequently necessitates an extra dress coat of cement.

The principal object of my invention is to provide an improved tape which will not bead under the above described conditions.

With yet additional objects and advantages in view which, with the foregoing, will appear and be understood in the course of the following description and claims, the invention consists of the novel construction and in the adaptation and combination of parts hereinafter described and claimed.

In the accompanying drawings:

Figures 1 and 2 are front and rear views, respectively, of a short length of my tape; and

Fig. 3 is a transverse sectional view through a finished joint having my tape.

Referring to the drawings, it is seen that strong-fibered paper tape 10 has a central band 11 of its back face coated with a film of a moisture resistant material such, for example, as a rubber-base cement. A suitable such cement is Formula EC-1099 of the Minnesota Mining and Manufacturing Co., Detroit, Michigan, which is air drying. For normal installations the tape is about 2 inches wide and 0.012 inch thick, and the coated band 11 thereon may be approximately 3/4 inch wide.

The wing portions 12-12 at both sides of band 11 are formed with multiple perforations 13 whose size is not critical. These perforations may be produced as by well known punching or spark perforating methods. An important function of the perforations is to hasten absorption of moisture by the tape as it is applied. The back faces of these wings 12 have all or part of their widths skived so that the tape will have beveled side edge portions reducing to about half thickness at the side margins. This skiving is done in such a manner that a good part of the back face of the tape which is not coated will be roughened or buffed to cooperate with the perforations 13 in increasing the rate of moisture absorption of the tape.

In the drawings a typical tape installation has been illustrated for the joint between adjoining wallboard panels 14 which have their front faces conventionally tapered at 15 to collectively form a shallow generally V-shaped joint channel for receiving the tape and joint cement 16. The joint has no backing and so when the

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cement is first applied by spreading it in the joint channel it tends to erupt at the back of the joint and form an excess cement bead 17. The tape 10 is then centered over the joint and imbedded in the cement, and during this operation the perforations 13 help any trapped air to escape as well as speeding absorption of water by the tape from the cement. After the tape has then been covered by a thin layer of cement the latter is left to dry. It is intended that the taper of the wings 12 of the tape be generally in conformance with the taper 15 of the panels so that the wings will have about the same density of absorbed moisture throughout and will dry at somewhat the same rate. As the joint cement dries, the moisture in the cement bead 17 is prevented from migrating directly into the center portion of the tape by the coated band 11 in the back face thereof. Hence, the center portion will not receive an excess of moisture which might cause the objectionable paper beading condition which this invention aims to prevent. After this first applied cement has dried, one or more surfacing coats are spread and carefully feathered. The surface is then normally sanded.

In the production of the tape it is desirable to blot the coating 11 of moisture resistant material while it is tacky with a suitable powdered material such as agricultural gypsum, silica flour, joint cement, etc. This not only assures that the coating will not adhere to the tape proper when the tape is rolled for storage after being processed, but also aids in the adherence of the joint cement mortar to the coating 11 when the tape is applied. In this latter regard, a grit may also be added.

It is thought that the tape and the manner of its operation will have been clearly understood from the foregoing detailed description of the preferred embodiment which I have elected to illustrate. It is believed to be apparent that changes in the details of construction may be resorted to without departing from the spirit of the invention, wherefore it is my intention that no limitations be implied and that the hereto annexed claims be given a scope fully commensurate with the broadest interpretation to which he employed language fairly admits.

What I claim is:

1. A tape for covering the joint between adjoining panels in drywall construction comprising a strip of moisture absorbent paper having its back face coated along a central band portion with a moisture resistant material and having opposite side edge portions of said back face roughened to speed up absorption thereat, the remainder of said strip being free to absorb moisture through its back face.

2. A tape for covering the joint between adjoining panels in drywall construction comprising a strip of moisture absorbant paper having perforated side edge portions which are tapered toward the side edge margins of the strip and which have their back faces roughened to speed up absorption thereat, and a moisture resistant coating applied to the back face of the strip between said roughened back faces, the remainder of said strip being free to absorb moisture through its back face.

3. A tape for covering the joint between adjoining panels in drywall construction comprising, a strip of moisture absorbant paper having opposite side edge portions of its back face tapered toward the side margins of the strip, and a moisture resistant coating applied to the back face of the strip between said side edge portions, the remainder of said strip being free to absorb moisture through its back face to its front face.

4. A tape for covering the joint between adjoining panels in drywall construction comprising, a strip of moisture absorbant paper having opposite side edge portions perforated, and a moisture resistant coating applied to the back face of the strip between said side edge portions,

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the remainder of said strip being free to absorb moisture through its back face to its front face.

5 5. A tape for covering the joint between adjoining panels in drywall construction comprising, a strip of moisture absorbant paper having opposite side edge portions perforated and their back face roughened to speed up absorption thereat, and a moisture resistant coating applied to the back face of the strip between said side edge portions, the remainder of said strip being free to absorb moisture through its back face to its front face.

10 6. A tape for covering the joint between adjoining panels in drywall construction comprising, a strip of moisture absorbant strong-fibered paper having a central longitudinal coated portion of a rubber-base material which is resistant to the passage of moisture from the back face of the strip to its front face, the remainder of said strip being free to absorb moisture through its back face to its front face.

15 7. A tape for covering the joint between adjoining panels in drywall construction comprising, a strip of moisture absorbant paper, a central layer of a moisture resistant material adhering to said strip and located in inwardly spaced relation to its longitudinal side edges and spaced rearwardly from the front face thereof, the remainder of

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said strip outwardly of said central layer being free to absorb moisture through its back face to its front face.

8. A tape for covering the joint between adjoining panels in drywall construction comprising, a strip of moisture absorbant paper, a central layer of a moisture resistant material adhering to said strip and located in inwardly spaced relation to its longitudinal side edges and spaced rearwardly from the front face thereof, the remainder of said strip outwardly of said central layer having its back face roughened and being free to absorb moisture through its back face to its front face.

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