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ASBESTOS TAPE

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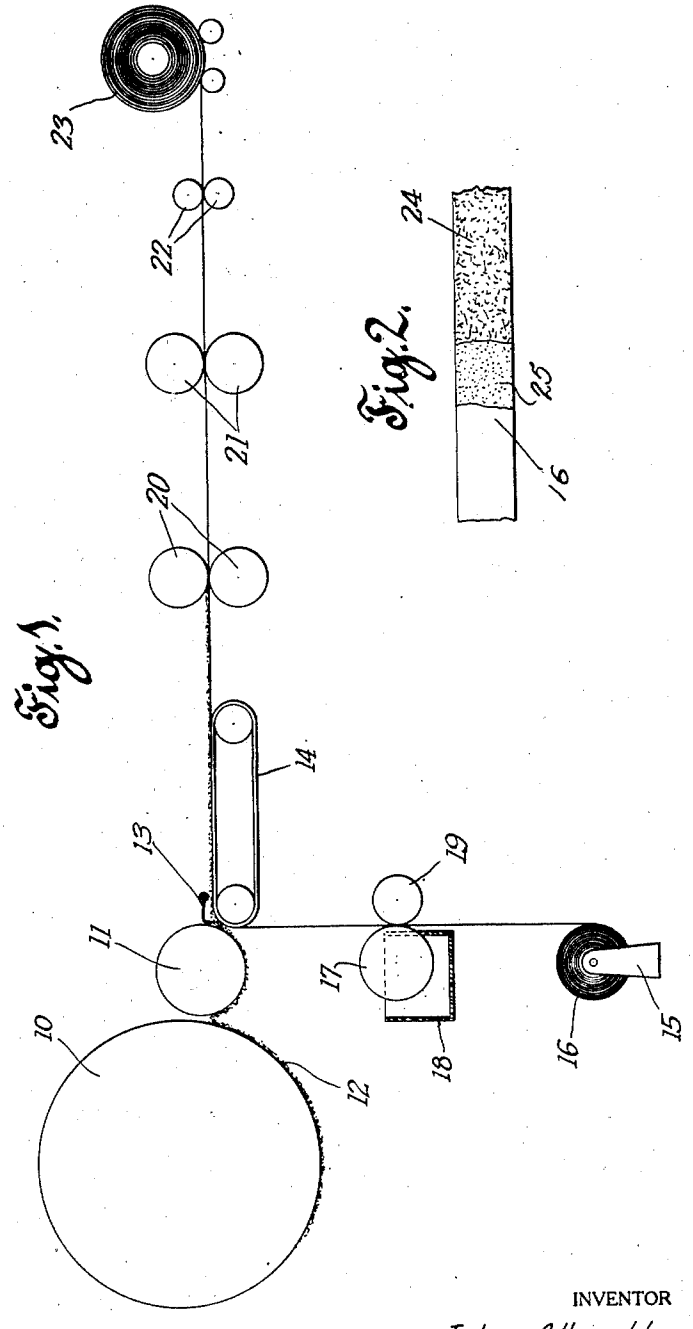

Fig. 1.

Fig. 2.

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ASBESTOS TAPE

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This invention relates to asbestos tape and the method of making the same.

The invention relates generally to applying to a paper strip, by means of an adhesive, flocculent fibrous material, such as asbestos, to form a cloth or fabric, usable, especially where asbestos is used, as an insulation tape, a jacket for wire, a coating for wire yarn, and various other purposes.

Among the objects of the invention is the provision of a greatly simplified form of asbestos tape which will not necessitate the employment of expensive apparatus or machinery. It is an object, also, to provide an asbestos strip which will permit the use of asbestos of the shortest fibre without detriment to the usefulness of the fabric. A further object contemplates the employment of a base holding means for the fibrous material, such as tissue paper, or other similar non-filled, simple and inexpensive fabric.

Further objects, and objects relating to economies of manufacture and details of construction will become apparent on consideration of the article and process hereinbelow set forth and of the accompanying drawings, which set forth the distinctive features of the invention. Referring to the drawings:

Figure 1 shows diagrammatically the mechanism entering into the process; and

Figure 2 shows a detail of the completed strip beside an incompleted strip.

While it should be understood that the invention is not confined wholly to the use of asbestos, such a use has been found to be highly advantageous and the description will therefore be limited to such a material.

The numeral 10 indicates the main cylinder of a carding machine to which raw flocculent asbestos is fed and carried, as indicated in Figure 1, to the doffer cylinder 11 in the form of a lose web or mat 12. Thence, by means of the reciprocating combs 13, the sliver is passed on the conveyor belt 14. The mat 12 is illustrated as a single sheet or web and as such, the whole process may be carried out and the tape rolls subsequently cut from the finished bolt to size, but it is obvious that the material may be removed from the doffer in sections or that the sheet may be cut during the process to form a plurality of separate strips. For simplicity of illustration, however, the cutting step is eliminated in the description.

Positioned conveniently relative to the doffer is a bobbin support 15 for a roll of tissue paper 16. This paper is fed between a roller spreader 17, dipping in a glue vat 18 and a pressure roller 19 up to the conveyor belt 14 where it is passed beneath and in contact with the sliver of asbestos fibre. Being flocculent, the asbestos rests lightly on the paper until it passes through the pressure rolls 20 and 21 which compacts the material and forces contact thereof with the glue or similar adhesive on the tissue paper. The compacted sheet is then passed through the guide rolls 22 and wound into a roll 23, subject to cutting to tape sizes.

The tape or strip 24 (Fig. 2) as finally obtained, is a flat, closely matted fabric which can be readily handled in connection with various manufacturing processes. As previously indicated, an important use of this tape is in connection with asbestos yarns wherein the strip is wrapped about single metal core strands and the strands interwoven. In all uses in fact where asbestos is desirable, either as insulation of heat or of electricity, application is facilitated by the use of tape as fabricated by the process herein described. The simplicity of the process and the cheapness of the materials entering therein contribute to make the invention of highest utility in the asbestos and wire manufacturing industries.

While the various steps have been detailed as applied to asbestos and tissue papers, it should be understood that the claims hereunto appended are limited only by the scope

of the invention, all equivalent processes and subject-matter being included therein.

Having described the invention, the scope thereof is limited by the following claims:—

1. Insulation strip comprising a layer of paper; a layer of asbestos; and an adhesive between said asbestos and paper.

2. Insulation strip comprising a layer of paper having attached thereto a layer of short fibred non-coherent asbestos.

3. Insulation strip comprising a layer of tissue paper; a layer of compressed and matted asbestos; and a layer of adhesive material between said paper and asbestos.

In testimony whereof, I affix my signature.

JOHN ALLEN HEANY.