April 10, 1956 H. H. MAHLER 2,741,564

COATED PAPER

Filed Dec. 1, 1953

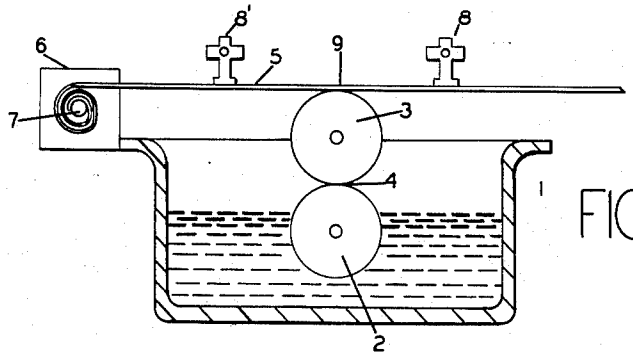
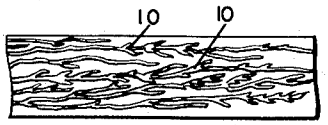


FIG. 1

FIG. 2



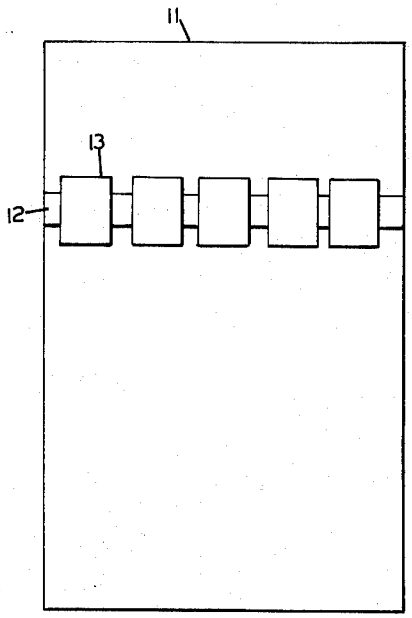


FIG. 3

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United States Patent Office 2,741,564
Patented Apr. 10, 1956

2,741,564

COATED PAPER

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Application December 1, 1953, Serial No. 395,475

3 Claims. (Cl. 117—37)

The present invention relates to a tape or sheet of thin flexible material on which is deposited a light amorphous microcrystalline wax in a very thin coating for the purpose of using it to adhere small paper pieces, such as stamps or other emblems or the like.

The present invention is more particularly concerned with the mounting of postage stamps for stamp collectors on cards to provide a secure mounting, but yet the postage stamp may be readily removed when desired.

The means according to the present invention permits the transmission of collectors' stamps through the mail from place to place with the assurance that the stamps will always be securely kept in good condition.

Up to the present time, cards of this type were usually prepared with an application of rubber cement and the stamps were attached to them. Rubber cement is not only uneconomical since it is expensive, but also the stamps adhere strongly and cannot be readily peeled off and therefore are often damaged when they are removed from the paper card.

In accordance with the present invention, the paper or other type of strip material is coated on both sides with a thin coating of a special type of microcrystalline wax, which is known in the trade as "Flexo-Wax C" or "Flexo-Wax C Light," which is described in my copending application Serial No. 233,156, filed June 23, 1951. Flexo-Wax C is a specific product having properties clearly defined in several technical dictionaries. This product is defined in "Concise Chemical and Technical Dictionary" edited by H. Bennett and published by Chemical Publishing Company. On page 405, "Flexo-Wax C" is defined as "Long chain hydro-carbon; organic amorphous wax; specific gravity 0.82^{25}; melting point 63–8 in water; soluble in hot toluene; used for engravings, coatings, polishes, etc." I have described the type of wax which I use on small plastic plates. I have discovered, however that this wax may also be applied to sheet material and to rolls or strips for accomplishing substantially the same purpose, but the application is somewhat different.

In the present invention, the wax is applied to a tape or strip in such a manner that when it dries the surface is crystallized somewhat like ice crystallizations on a glass surface. These crystals maye be formed in a general pattern of lines depending upon how the wax is applied to the sheet or to the paper and as such these lines of crystals will form the equivalent of embossing or raised lines of wax surface on the paper or on the thin cards or sheets to which they are applied.

The paper or tape is preferably coated on both sides so that the strip or paper or little pieces of it may be mounted on a card to which the stamps or other similar elements may be secured. The remarkable feature about this type of mounting is that while the stamps are secured firmly they may be readily peeled off without any difficulty and without destroying any portion of the stamp or taking off any of the paper surface on the stamp side.

The method of making the tape or strip of paper and the method of applying the wax to it will be described more

fully in the specification as set forth below when taken in connection with the drawings illustrating an embodiment of the invention, in which:

Figure 1 shows a section through the device by means of which the wax may be applied.

Figure 2 is a plan view of a section of a strip of paper coated with the material, and,

Figure 3 is a card showing stamps mounted by the use of the present invention.

In the figures, **1** indicates a container which is provided with a pick-up roll **2** and a second roll **3**, the two surfaces of which lightly touch one another along a contact surface **4**.

The roll **2** is immersed in the wax which is of the type described in my previous application of which the best known example is "Flexo-Wax C" or "Flexo-Wax C Light." This is a well known type of amorphous crystalline hydro-carbon wax which is very uniform in consistency and which has a melting point in the neighborhood of 160° F. "Flexo-Wax C" is retained in a melted condition just below the normal melting point of the wax and the roll **2** is of such a type that its surface will easily pick up the wax coating by means of which the wax will be coated or carried on the engaging or touching roll **3**. The roll **3** has in contact with it the paper strip **5** which is moved over the roll by winding motor **6** at one end which carries a spindle **7** on which the tape may be wound.

A pair of clamps **8**, **8'** may be applied at either side of the roll **3** to keep the paper **5** in contact with the roll, **3**. The distance between the contact **9** at the roll **3** and the clamp **8'** is such that the wax will substantially dry by the time the coated roll is wound on the spindle **7** or comes beneath the clamp **8'**. This however is not absolutely essential since the "Flexo-Wax C" will quickly crystallize and form lines of projecting crystalline wax from the surface of the paper very quickly after the wax has been deposited. This is readily shown by the striations **10**, **10**, in Figure 2, which shows one face of the wax surface. By these means the surface is coated with embossed lines of the microcrystalline "Flexo-Wax C," in such a manner that a postage stamp or any similar item will readily stick to its surface. The sheet of paper is preferably coated at both sides so that it may be put as a base on a card to which the stamps may be adhered. This is shown in Figure 3 where **11** is a paper card and **12** indicates a strip of paper to which the "Flexo-Wax C" has been applied on both sides as described above, and **13** indicates a postage stamp or other similar article which is adhered to the surface of the strip **12**.

The striations in the "Flexo-Wax C" will depend somewhat upon how heavy a coating is applied to the sheet. In general however they may be made to be spaced apart $\frac{1}{16}''$ to $\frac{1}{32}''$ with the striations of crystallization running outwards at angles on either side of the general line in the direction to which the striations extend.

There would be no difficulty in rolling the strips as an ordinary tape would be rolled in a tape roll since when once the crystallization has taken place on the sheet and the sheet is fairly cool, the successive layers of tape will not stick together, so that the tape may be used conveniently in rolls or strips or in any other form.

Where stamps and other similar items are to be mounted on a card or card-board, then the card-board itself may be mounted in the same manner that one side of the tape is coated for the same purpose. The stamps may then be applied to one side of the card in the same manner as they are applied to the tape.

Having now described my invention, I claim:

1. A flat paper tape coated on both surfaces with an amorphous micro-crystalline hydro-carbon wax which completely coats the tape and has crystallized lines of wax

extending in striations over the coated surface forming embossing on the wax surfaces on both faces of the tape.

2. A flat paper tape coated on at least one side with an amorphous micro-crystalline hydro-carbon wax fully covering the surface of the tape on the coated side with upwardly extending micro-crystalline striations extending in lines from the wax coating on the surface of the tape.

3. A flat paper tape having a coating of amorphous crystalline hydro-carbon wax coating both surfaces of the tape with projecting striations projecting from the coated surface running in the general direction parallel to the lengthwise direction of the tape.

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