Aug. 15, 1961 J. M. MUNRO 2,996,104

MASKING PLATE FOR TRANSFERRING A PICTURE

Original Filed June 9, 1954 3 Sheets-Sheet 1

Fig.1.

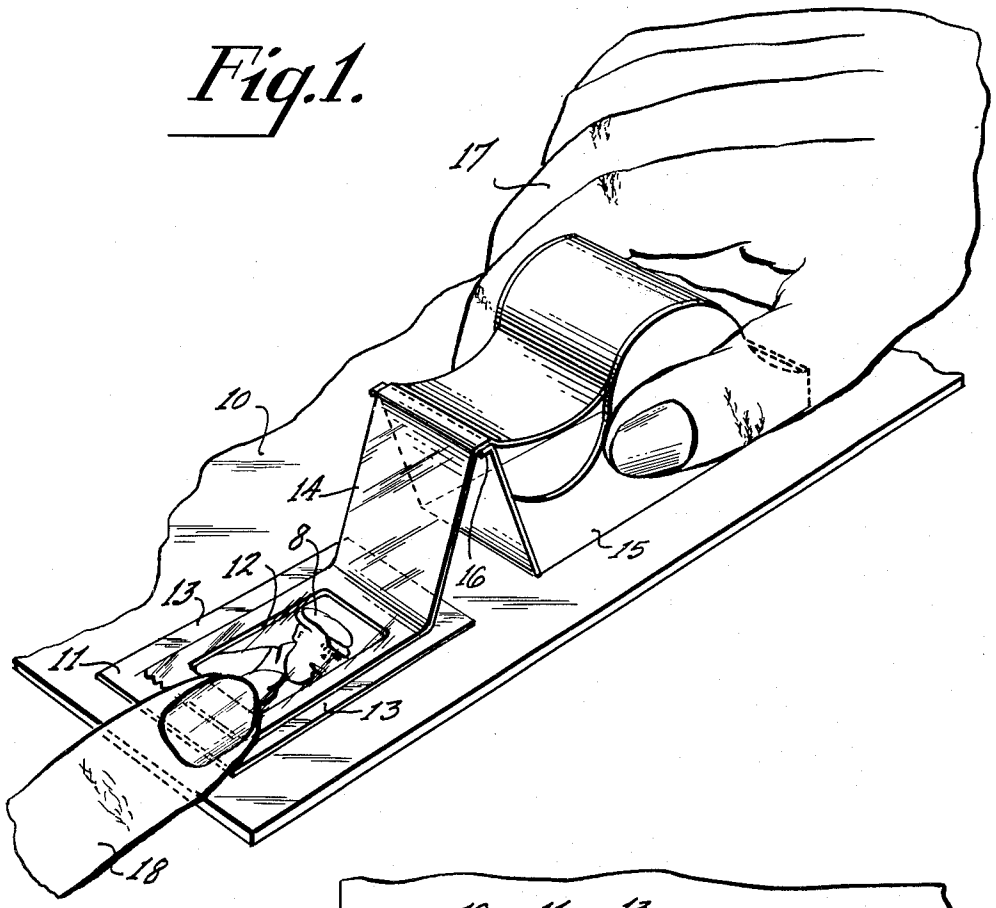
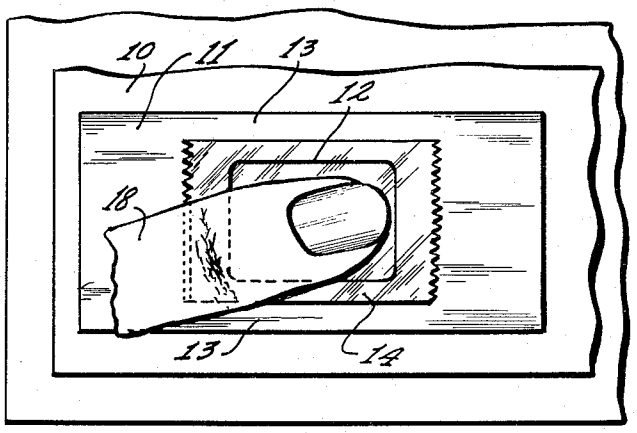


Fig.2.



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Fig. 3.

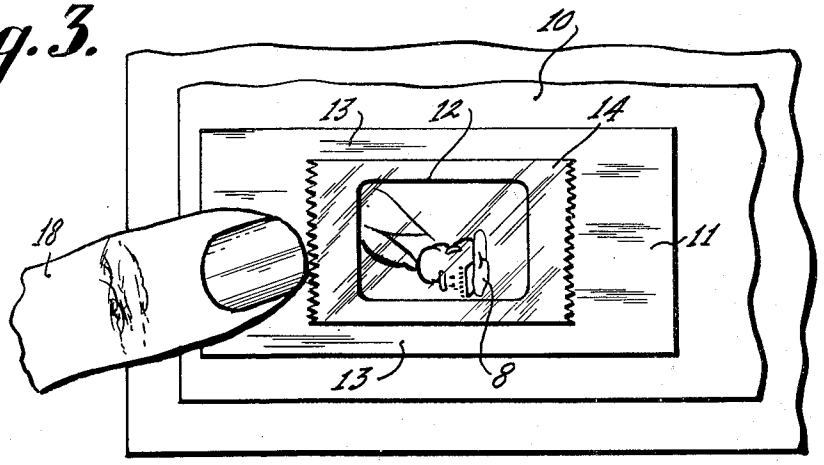
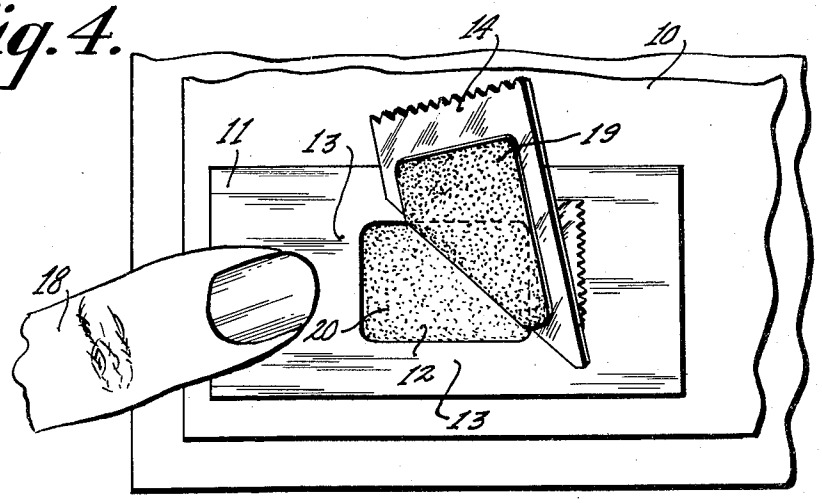


Fig. 4.



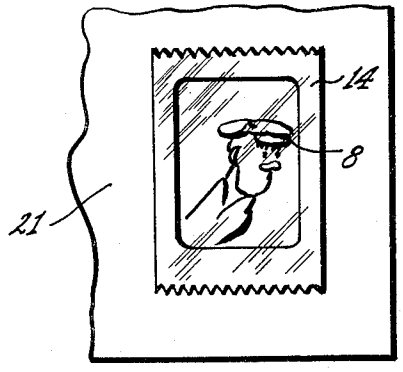


Fig. 5.

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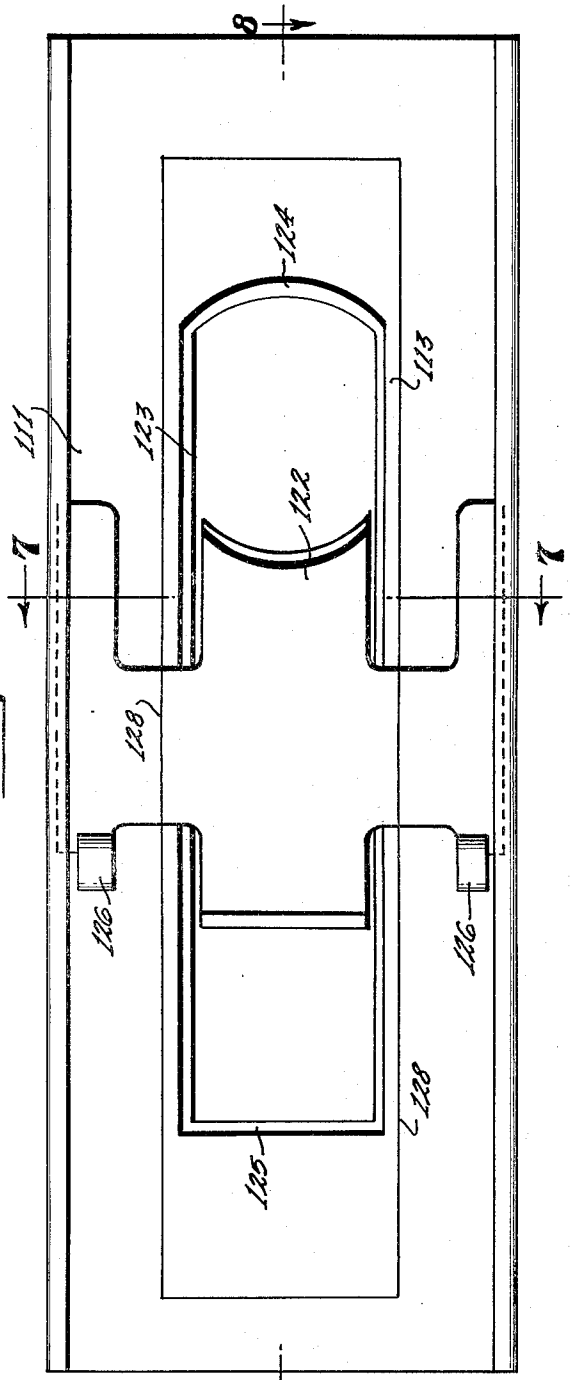


Fig. 6.

Fig. 7.

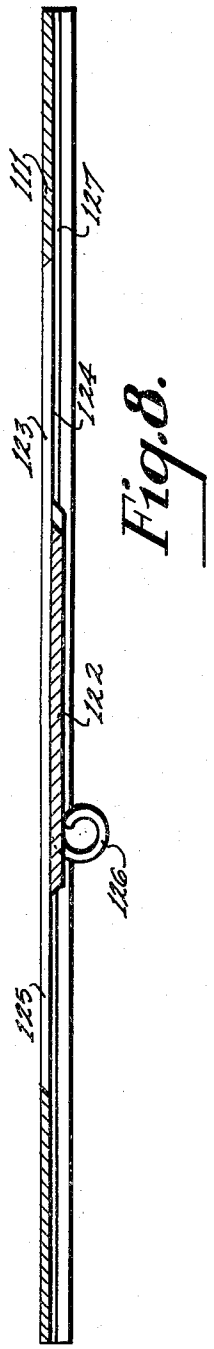


Fig. 8.

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2,996,104

MASKING PLATE FOR TRANSFERRING A PICTURE

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Original application June 9, 1954, Ser. No. 435,596, now Patent No. 2,819,196, dated Jan. 7, 1958. Divided and this application Oct. 28, 1957, Ser. No. 692,694

1 Claim. (Cl. 154—1)

This invention relates to a masking plate useful in a method of mounting pictures in scrapbooks, to a method of preserving pictures by mounting on a suitable surface, and to a method of transferring pictures from printed paper to another surface. Reference is made to parent application Ser. No. 435,596, filed June 9, 1954, now U.S. Patent 2,819,196, for a Method of Transferring a Picture, of which this is a division.

Heretofore it has been known that a newspaper picture could be transferred to waxed paper by a method comprising the application of pressure to the waxed surface. The quality of the picture thus transferred has been sufficiently poor that the method has been practiced to only a limited extent.

In accordance with the invention of said parent application, a picture is transferred from printed paper to a scrapbook, mounting board, or another surface by a method comprising the steps of: providing a thin masking plate having a central opening and marginal portions adjacent the edges of said central opening, said masking plate being constructed of metal or related smooth surface material to which pressure sensitive tape can be temporarily positioned with little adhesion; temporarily adhering to said marginal edges a strip of transparent pressure sensitive tape of sufficient width to bridge said central opening of the masking plate; positioning the masking plate on the printed paper the thickness of said paper comprising a base portion and a printed portion; applying pressure to the smooth surface of the transparent tape to push the pressure sensitive portion thereof onto the picture to be transferred, such pressure being applied only to the portion of the tape in said central opening of the masking plate, and not to the marginal portions guarded or protected by the masking plate and rapidly snapping (i.e. applying a rapid movement to) the tape to peel away the tape from both the paper and the marginal portions of the masking plate and the thickness of the paper is split so that the printed portion adheres to the tape, whereby the picture is transferred from the printed paper to the transparent tape and the masking plate acts to cut the thus split-off printed portion of the paper to provide smooth edges for the picture; and securing the transparent tape to a scrapbook, mounting board, or other surface by means of the marginal portions of the pressure sensitive tape. The picture is seen that the transparent tape, and appears glossy whether the picture was transferred from a newspaper, or glossy magazine, or other fibrous printed paper. Ordinarily a portion of the thickness of the printed paper is removed as the pressure sensitive tape is rapidly peeled away, and the paper thus removed is the backing of the picture visible through the transparent tape secured to another surface by the marginal adhesive portions.

In accordance with the present invention, said method employs a masking plate comprising a smooth thin member providing a minimized adherence to pressure sensitive adhesive tape, said plate having an aesthetically pleasing central opening, and said plate having guide lines indicating the position for a transparent pressure sensitive tape of predetermined width, said guide line

being substantially symmetrical to the center of said opening.

Because the method is operative without regard to the reasons therefore, no proof of the theory of operation has been obtained. Possibly the pressure sensitive tape forms a temporary bond with the paper which, as measured in the usual slow peeling test (e.g. one centimeter per second) has only a few ounces of adhesive strength. The process of delaminating the pressure sensitive tape from the printed paper may require a small but finite time. When the peeling is conducted at a speed greatly in excess of the de-adhering capacity of the tape, advantage may be taken of the momentary adhesive strength between the pressure sensitive tape and the printed paper, and if this is greater than the delamination strength (related to the tensile strength) of the printed paper, a layer of paper (comprising the printed picture) may be pulled from the body of the paper sheet as the tape is so rapidly peeled. The peeling speed necessary for effective transfer of picture by said method appears to be dependent in part upon the tensile strength and smoothness of the printed paper. The very glossy paper of magazines provide a degree of momentary adherence which is very much smaller than for newspapers. In order to obtain good transfer from such glossy paper, it is necessary to employ greater pressure during the initial securing of the tape onto the picture to be transferred and it is also necessary to peel the tape with greater rapidity than would be necessary in transferring a picture from a printed paper having a lower tensile strength, delaminating strength, and/or surface roughness (e.g. a newspaper). Although the average person who is trained to practice the method of the present invention readily learns the differences between excessively slow and sufficiently rapid removal of the tape from the combination of the masking plate and the printed paper, certain advantages are attained by attaining a speed of lineal peeling in excess of one foot per second. In order to accelerate to such a high speed quickly, the movement is desirably started so that the tape peels from a portion of the masking plate at an end of the central opening before the commencement of the peeling of the tape and picture. Thus it is possible to achieve the high speed peeling of the picture throughout the entire length of the central opening in the masking plate.

In the accompanying drawings, FIGURES 1–5 represent various states of the method of the present invention. FIGURE 6 is a plan view of the masking plate suitable for use in said method. FIGURE 7 is a sectional view taken on the lines 7—7 of FIGURE 6. FIGURE 8 is a sectional view taken on the lines 8—8 of FIGURE 6.

Referring now in detail to the drawings, there is shown a method of transferring a picture, represented by the numeral **8**, from a printed paper **10** to a scrapbook, display card or other surface. A thin masking plate **11** is constructed of metal or similar smooth surface having little adhesion for pressure sensitive adhesives. The masking plate is characterized by a central opening **12** around which are marginal surfaces **13**. Transparent pressure sensitive adhesive tape **14**, of a width slightly greater than the widest portion of the central opening **12**, can be withdrawn from a dispenser **15**. The dispenser **15** may be of the conventional type having a cutting blade **16**. The operator can hold the dispenser **15** in a right hand **17**, and with a left thumb **18** temporarily affix an end of the transparent tape **14** to a terminal marginal portion **13** of the metallic masking plate **11**, as shown in FIG. 1. The tape can be temporarily secured to a sufficient portion of the masking plate **11** to bridge the central opening **12**, and the com-

bination of the tape and masking plate can be placed over the printed picture to be transferred. Pressure can be applied to the smooth surface of that portion of the tape **14** bridging the central opening **12**, thereby forcing the pressure sensitive adhesive surface of the tape **14** into firm adhesion with the printed picture to be transferred, as shown in FIGURE 2. Such pressure can be applied, for instance, by the left thumb **18**.

Before the rapid peeling of the tape is commenced, the masking plate **11** is securely positioned to withstand a strong force without being moved, and may be held against the printed paper **10** and a supporting surface by the left thumb **18**, as shown in FIGURE 3. Then the tape **14** is unpeeled with great rapidity, and at a rate of at least one foot per second. Because of the great rapidity of the unpeeling action, the printed picture is transferred from the printed paper **10** to the transparent tape **14**. If the printed paper **10** is similar to newspaper stock, some delamination of the paper **10** will result, leaving a thin layer **19** of paper on the tape **14**, and leaving a middle layer **20** of the paper exposed, as shown in FIGURE 4.

After the printed picture has thus been transferred to the transparent tape, the combination of the tape and picture can be mounted in a scrapbook, on a display card, or on some other suitable surface **21**. The portions of the tape previously engaged with the marginal surfaces **13** of the masking plate have the active pressure sensitive adhesive surface by which the combination is thus mounted to the surface **21**, as shown in FIGURE 5.

The masking plate **11** may be constructed of thin smooth plastic, thin smooth metal, or other material of minimized tendency to adhere to pressure sensitive tape. The central opening **12** must be of an artistic and aesthetically pleasing shape, such as a rectangle.

As shown in FIGURES 6–8, a masking plate **111** can be provided with a slidable cover **122** for an elongated slot **123**. The cover can be shifted so that a round-ended opening **124** can be shortened or lengthened, and so that a square ended opening **125** can also be shortened or lengthened. Handles **126** can be provided to make it easier to shift the slide **122** in slots **127**.

Ordinarily it is desirable to provide a masking plate adapted for a transparent tape of a predetermined width, and adjustable merely for the length of tape to be employed. However, a masking plate with lateral adjustability could be provided. It should be especially noted that the masking plate **111** and slide **122** are provided with guide lines **128** indicating the correct location of the edges of the tape, whereby the tape can be positioned to bridge either the opening **124** or the opening **125** with adhesion to substantially equal lateral marginal surfaces **113**.

In other modifications of masking plates in which the central opening is heart shaped, circular, or of other artistic design, the provision of guide lines on the masking plate greatly simplifies the task of positioning the tape symmetrically.

Although certain embodiments have been given by way of example and illustration, it is obvious that various modifications of the structures and/or method may be made without departing from the spirit of the invention as defined in the appended claim.

The invention claimed is:

A masking plate for transferring a picture comprising: a plate having a central opening whereby the bottom edge of the plate may serve as a cutting edge for delaminating paper at the edges of the central opening; a slidable cover of substantially the same width as said plate, said slidable cover being slidably engaged with the plate at each side for longitudinal sliding of the cover on the plate, said slidable cover partially covering the central opening in at least one position, said slidable cover having a downward and inwardly tapered edge contiguous to said central opening; handle means on the slidable cover to facilitate the shifting of the slidable cover along the plate; and guidelines on the surface of the plate and spaced from the longitudinal edges of the central opening, said guide lines being parallel to each other to indicate the correct location for the edges of transparent, pressure-sensitive tape.

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