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STENCIL CUTTING AND CORRECTING COMBINATION

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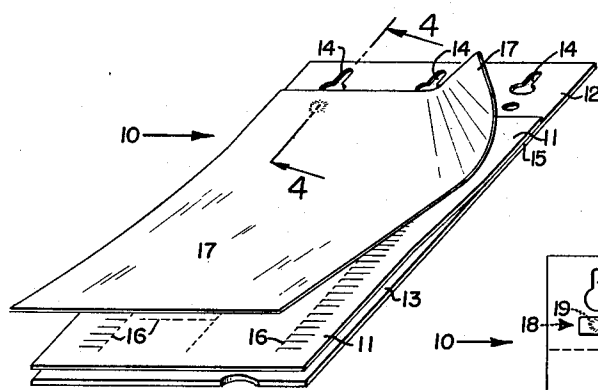


Fig. 1

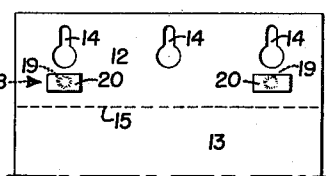


Fig. 2

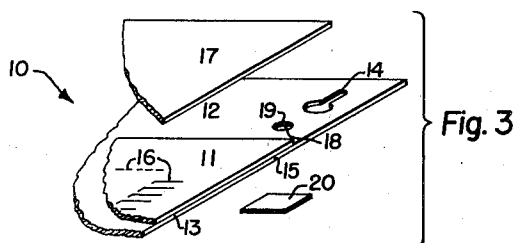


Fig. 3

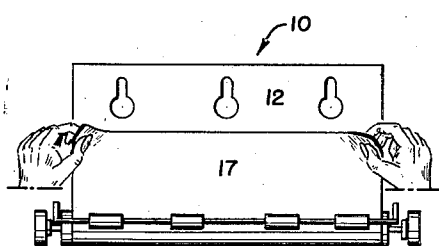


Fig. 5

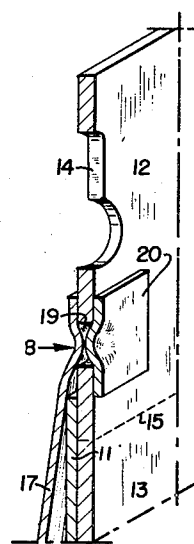


Fig. 4

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STENCIL CUTTING AND CORRECTING
COMBINATION

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2 Claims. (Cl. 101—127.1)

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This invention relates to stencil facing sheets, and more particularly to a new and improved means for holding a protective facing sheet against a stencil so as to protect the stencil while it is being cut.

The objects of this invention are to provide such new and improved means for holding a facing sheet against a stencil which facilitates holding the facing sheet in proper alignment on the stencil, which permits the facing sheet to be easily detached from the stencil with the stencil in the carriage of a typewriter and thereby permit corrections to the stencil without removing it from the typewriter, which permits the facing sheet to be easily reattached to the stencil, as upon completion of the correction operation or to protect the stencil in storage, which adds little to the bulk of the stencil and thereby permits the facing sheet to be placed onto the stencil as a unitary product, and which provides a unitary product extremely simple in construction, economical in cost and neat in appearance.

With these, and other objects in view, all of which more fully hereinafter appear, my invention comprises certain new and novel constructions and arrangements of elements as herein described, and as defined in the appended claims, and illustrated in preferred embodiment in the accompanying drawing, in which:

Figure 1 is an isometric view of a conventional stencil comprising a stencil sheet carried upon a backing sheet, and having a facing sheet attached thereto in accordance with the present invention, one corner of the facing sheet being turned upwards to show otherwise hidden constructions.

Figure 2 is a partial elevation view of the back side of the stencil illustrated at Fig. 1.

Figure 3 is an exploded view of an upper corner of the stencil illustrated at Fig. 1 to better show the relation of the elements therein which comprise the present invention.

Figure 4 is an isometric fragmentary section, on enlarged scale, as taken substantially on the indicated line 4—4 at Fig. 1.

Figure 5 is a diagrammatic view of a stencil in a typewriter carriage, and illustrates a method of gripping the facing sheet either to separate it from the stencil or to reattach it.

The art of cutting stencils for reproduction purposes has become quite extensive and highly perfected. One important development has been the use of a facing sheet which is placed over the stencil while various characters are being cut in the stencil as with a typewriter. It has been

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found that with such a sheet, clearer work is produced and the stencil paper is protected from tearing or cutting, and that the type are protected from being clogged by the stencil sheet coating. Such facing sheets may be made of various materials, providing that such materials are formed as tough, exceedingly thin and flexible sheets, and it has been found that transparent plastic rubber derivative material such as that commonly known by the name "Pliofilm" is ideally adapted for this purpose.

A facing sheet is by necessity attached to the top of a stencil in some manner to permit it to be properly aligned with the stencil when they are placed together in a typewriter; however, such attachment cannot be of a permanent character for it often becomes necessary to separate the facing sheet from the stencil to permit corrections to be made to the stencil. In existing constructions, the facing sheets are mounted upon clips which may be attached to a stencil, or they are attached to the stencil and are perforated to permit them to be torn off, or they may be pasted onto the stencil by a strip of adhesive across the top thereof. None of these constructions is ideally suited for the purpose: the use of clips provides a structure which is bulky and must be fitted upon the stencil sheet as an individual operation; the type adapted to be torn off is undesirable because the sheet must be reattached in some manner; and the type in which the sheet is pasted on, usually by a strip of non-drying adhesive adapted to permit re-use, is generally messy and is apt to soil the fingers or the stencil. Because of an apparent lack of a suitable manner of holding a facing sheet, the present invention was conceived and developed, and comprises in essence, a spot of adhesive material at each upper corner of the stencil which holds the facing sheet, said adhesive being of a type which permits repeated reuse.

The conventional stencil 10 generally comprises a stencil sheet 11, which is fixedly attached at its top edge to the edge portion 12 of a backing sheet 13. These sheets are of the same size except at the top where the edge portion 12 extends beyond the stencil sheet 11 to provide a row of connector openings 14 which are adapted to permit the stencil to be connected to a reproduction machine as a last step in its use. In use in a reproduction machine the backing sheet 13 must be removed, and the backing portion 13 is separated from the tab by a perforated line 15 below the region where the stencil sheet 11 is connected to the edge 12, and this line 15 is adapted to

easily tear when necessary, as when the stencil has been cut. To cut the stencil sheet 11, as in a typewriter, it is provided with conventional markings 16, which may assume various forms depending upon the type of the stencil.

The stencil is provided with a facing sheet 17 which is necessarily substantially transparent to permit observation of the markings 16, and this facing sheet 17 is generally of a plastic material such as commercial "Pliofilm" which has been found to be ideal for this purpose. This facing sheet 17 is likewise of the same size as the stencil sheet 11 except that it extends beyond the top edge of the stencil sheet 11 sufficiently to permit its attachment onto an exposed portion of the edge 12; however, this extension is not sufficient to completely close the connector openings 14, it being desirable not to do so. The attachment of the facing sheet 17 to the edge 12 is effected by adhesive spots 18 at each side of the edge 12 which contact the upper corners of the facing sheet 17. The adhesive substance which forms the spots 18 is preferably a high tenacity, such as that commonly sold under the name "Scotch tape," which permits the facing sheet 17 to be repeatedly attached to and removed from the stencil 10, and conventional substances of this character are ideally adapted for this purpose as hereinafter explained.

The advantages of the use of the adhesive spots 18 to hold the facing sheet 17 in position become immediately apparent when the stencil 10 is used in a typewriter and it becomes necessary to remove the facing sheet to make a correction to the stencil. To remove the facing sheet, the upper corners of the facing sheet 17 are grasped as by the thumb and fingers, as clearly illustrated at Fig. 5, and it is simply torn away from the adhesive spots 18. To replace the facing sheet, it is simply repositioned with the corners at the spots 18, and then effective and tight adhesion is accomplished by simply pinching the sheets together at the spots 18. By having this small adhesive area, it is further possible to perform these operations without soiling the fingers or the stencil.

In the illustrated embodiment of this invention, an adhesive spot 18 is formed by punching an orifice 19 in the edge 12 to the size and configuration of the spot 18, and a tab 20, of thin sheet adhesive material, as above described, is adhered to the back side of the edge 12, opposite the side whereon the facing sheet 17 is placed, with the central portion of the tab 20 covering the orifice 19 whereby the adhesive-coated surface within the area defined by the orifice 19 forms the spot 18. This tab 20 may be formed of a piece of cellulose "Scotch tape," as above mentioned, this product being especially suitable for the purpose at hand because of the high tenacity of the adhesive and the thinness of the tape, the tabs 20 not adding any appreciable thickness to the edge portion 12.

There is a definite advantage to this recessed construction of the spot 18 in that there is in such construction no tendency of the adhesive material to stick to the surface of any material

laid on foreign substances or to surfaces of the face of portion 12 when the facing sheet is not present, the adhesive material being effective to stick to a surface only responsive to positive pressure and depression of the facing sheet and tab together as by pinching as hereinbefore stated, and as clearly illustrated at Fig. 4. This avoids the sticking together of the stencils when stacked even without the facing sheets, and makes it possible to stack the stencils without sticking and also makes possible a great saving in that a single protective sheet (which is of comparatively expensive material and difficult to obtain at times, as in war) may be used on several stencils successively, which cannot be done with sheets that are perforated and torn off, nor with sheets pasted to the stencil with a strip of non-drying adhesive.

While I have described in detail a preferred construction of my invention, other alternatives or equivalents will occur to those skilled in the art, which arrangements and constructions are within the scope and spirit of my invention; hence, it is my desire that I be limited in my protection only by the proper scope and spirit of the appended claims.

I claim:

1. A stencil assembly including, in combination, a backing sheet, a stencil sheet carried thereby, the backing sheet having an extension portion beyond a margin of the stencil, an orifice in said extension portion, a piece of thin, flexible sheet material attached to the back of said extension portion and extending across said orifice and having on that portion of its face which is exposed through said orifice a pressure sensitive adhesive coating, and a thin, flexible facing sheet covering the face of the stencil and extending beyond the stencil edge and covering said orifice, said facing sheet being normally spaced from said adhesive surface by the thickness of the backing sheet but being adapted to contact said adhesive coating responsive to pressure within the area of the orifice.

2. A new article of manufacture comprising, in combination, a backing sheet having a body portion and an end tab normally attached to but manually separable from the body portion, a stencil sheet overlying the body portion and having one edge thereof attached to the tab, a thin, flexible and transparent protective sheet overlying the stencil sheet and a portion of the tab, an orifice in the tab beneath the protective sheet and a piece of thin sheet material secured to the back of the backing sheet and overlying said orifice and having a pressure sensitive adhesive coating exposed within said orifice, whereby the adhesive piece and the protective sheet may be pressed into engagement within the orifice.

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