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STENCIL SHEET DUPLICATOR

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Fig. 1

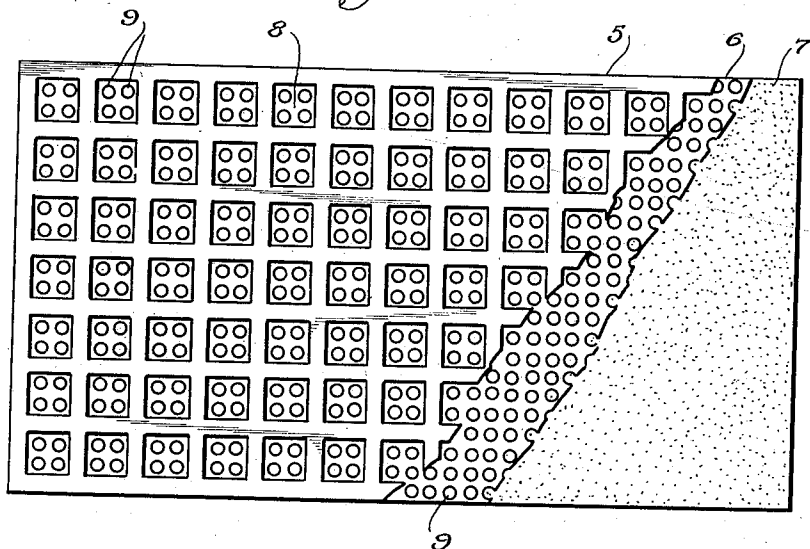
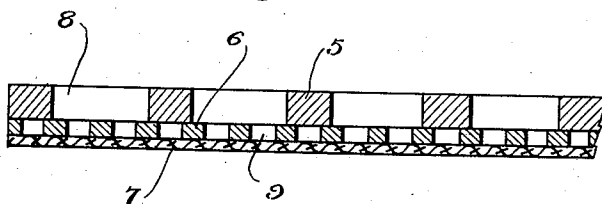


Fig. 2



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STENCIL SHEET DUPLICATOR

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3 Claims. (Cl. 101—115)

The present invention relates to a new and improved stencil sheet duplicator.

The primary object of the invention is to provide a double foraminous bottom wall over which the stencil sheet inking pads are stretched and which permits the use of different colored inks for impregnating the stencil without liability of a mixing of the inks.

The invention will be fully and comprehensively understood from a consideration of the following detailed description when read in connection with the accompanying drawing which forms part of the application.

In the drawing:

Fig. 1 is a top plan view with parts broken away to illustrate the double wall feature; and

Fig. 2 is a fragmentary transverse sectional view.

At the present time it is customary in the art of stencil sheet duplicators to provide a foraminous bottom wall that is generally formed of a thin sheet of perforated metal to which is attached the inking pad to be impregnated by the ink which flows thru the perforations of the foraminous wall. The ink flows freely along the entire length and width of the foraminous wall, with the consequent result that only one color of ink may be successfully used.

Briefly, the present invention consists in using two foraminous bottom walls or plates, welded or otherwise secured together and the lower wall is a perforated sheet that is relatively thinner than the upper wall and is provided with a series of minute perforations thru which the ink flows for impregnating the stencil sheet.

Referring to the drawing for a more detailed description thereof, the numeral 5 indicates the top foraminous wall, 6, the bottom wall, and 7, the stencil sheet inking pad, which pad is stretched over the wall 6. The walls 5 and 6 are welded, soldered or otherwise secured together and the top wall 5 is preferably thicker than the wall 6 and is provided with a series of perforations 8, each providing a separate ink compartment which prevents the ink from flowing into the adjacent perforations 8 and thereby permitting the use of several different colored inks at the same time. The lower wall 6 is also provided with a series of perforations 9 which align with the perforations 8 and thru which the ink flows for impregnating the inking pad 7.

It will be noted that the perforations 9 are shown as being round, while the perforations 8 are square, but they may be of any shape and

the perforations of each wall or plate may be of the same shape. In any event, the perforations 8 are larger than the perforations 9, and are preferably of a size to outline a relatively small number of the perforations 9. However, the perforations 8 may be of any suitable size, and in practice the area of a perforation 8 is generally from two to ten times larger than the area of a perforation 9.

From the above description it will be apparent that various colored inks may be applied to the individual perforations without liability of a mixing of the inks. Ink supplied to one series of the perforations will be confined within the walls of larger perforations 8 and impregnate the pad 7 by flowing thru the smaller perforations 9. In other words, the ink will be prevented from flowing into the adjacent perforation thereby preventing the different colored inks from mixing with each other as they are spread over the wall.

If desired, the double foraminous wall may also be made by casting in one piece and will present a design similar in effect to the double foraminous wall above described and illustrated in the drawing.

It is to be understood that this improvement is capable of extended application and is not confined to the exact showing of the drawing nor to the precise construction described and, therefore, such changes and modifications may be made therein as do not affect the spirit of the invention nor exceed the scope thereof as expressed in the appended claims.

What is claimed as new is:

1. A stencil sheet duplicator comprising a finely perforated plate, a coarsely perforated plate secured to the first plate to form therewith a unitary construction of sheet formation, and the area of each perforation of the coarsely perforated plate being two to ten times larger than the area of each perforation of the finely perforated plate.

2. A stencil sheet duplicator comprising a finely perforated substantially thin plate, a coarsely perforated relatively thick plate, said plates being intimately secured together in face to face relation to form a unitary construction of sheet formation, the finely perforated plate being adapted to receive an inking pad for disposal against the outer face thereof, and the area of each perforation of the coarsely perforated plate being of a size to outline a relatively small number of the perforations of the finely perforated

plate to confine the ink thereto for controlling its application accordingly to the pad.

3. A stencil sheet duplicator comprising a finely perforated substantially thin plate, a coarsely perforated relatively thick plate, said plates being intimately secured together in face to face relation to form a unitary construction of sheet formation, the perforations of the first plate being round and those of the second plate being

square, the first plate adapted to receive an inking pad for disposal against the outer face thereof, and the area of each perforation of the second plate being of a size to outline a relatively small number of the perforations of the first plate to confine the ink thereto for controlling its application accordingly to the pad. 5

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