March 4, 1952 T. BILY 2,588,199

STENCIL FRAME FOR SCREEN PRINTING

Filed Feb. 14, 1948

Fig. 3

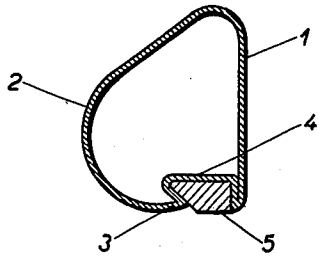


Fig. 2

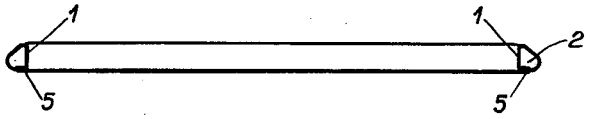
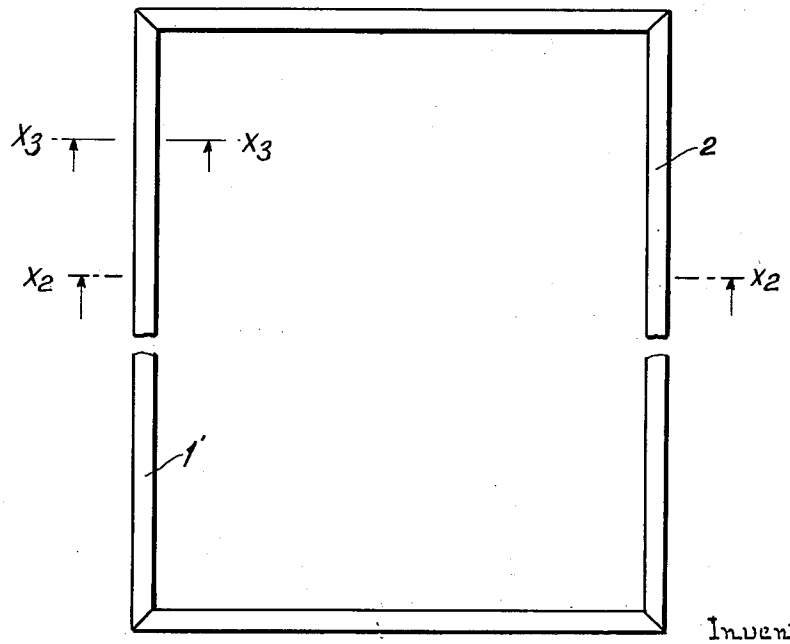


Fig. 1



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Patented Mar. 4, 1952

2,588,199

UNITED STATES PATENT OFFICE

2,588,199

STENCIL FRAME FOR SCREEN PRINTING

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Application February 14, 1948, Serial No. 8,474
In Germany August 5, 1941

Section 1, Public Law 690, August 8, 1946
Patent expires August 5, 1961

2 Claims. (Cl. 101—127.1)

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The present invention relates to supports in frames for printing stencils used in screen printing devices.

The main object of the invention is to provide a support or frame of the type described which is strong though light in weight and which will permit an easy and quick removal of the printing stencil from the support and an easy and quick replacement thereof.

The support according to my invention comprises a tubular frame, preferably made of metal, having flattened walls facing the frame opening, said walls being essentially perpendicular to the plane of the stencil. Said frame contains a dovetail shaped groove which faces the stencil and extends longitudinally in the frame surrounding the opening thereof and said groove contains an inlet made of thermoplastic binding material which reaches at least to the outer edges of the groove to contact the stencil and to hold the same upon the frame.

A constructional embodiment of my invention is illustrated by way of example in the accompanying drawing in which

Fig. 1 shows a top view of my new frame,

Fig. 2 a cross section along line x_2—x_2 in Fig. 1, and

Fig. 3 an enlarged cross section along line x_3—x_3 in Fig. 1.

As shown in the drawing the support for printing stencils consists of a tubular frame 2 preferably made of metal. The inner walls 1 of said frame are flat and at least approximately perpendicular to the plane of the stencil which contacts the base surface 3 of the frame. A dovetail shaped groove 4 arranged in said base surface 3 extends longitudinally in the frame 2 and surrounds the frame opening. Within said groove 4 is an insert 5 made of thermoplastic binding material and this inlet fills said groove at least up to its opening edges to contact the stencil and to hold the same upon the frame. This stencil may be easily and quickly removed from the frame if required and another stencil may as easily and quickly be attached thereto.

Said dovetail shaped groove 4 in the preferred embodiment shown in the drawing comprises only one receding side, the side opposite thereto being

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essentially parallel and close to the flattened tube wall 1 which surrounds the frame opening. This arrangement brings the binding insert 5 close to the frame opening thus better securing the stencil upon the frame with regard to said opening and avoids dead corners within the frame tubes. This shape of the groove permits also to introduce more easily the binding insert 5 into the groove and to remove the same therefrom should a replacement be necessary.

Although one form of my invention has been shown and described by way of illustration, it will be understood that, it may be constructed in various other embodiments which come within the scope of the appended claims.

What I claim as my invention is:

1. A support for printing stencils comprising in combination a tubular frame having flattened walls facing the frame opening, said walls being essentially perpendicular to the plane of the stencil, a dovetail shaped groove facing the stencil and extending longitudinally in said frame to surround the opening thereof, and an insert made of thermoplastic binding material filling said groove at least up to its opening edges to contact the stencil.

2. A support for printing stencils according to claim 1 wherein the groove has only one receding side, the other side of the groove opposite to said receding side being essentially parallel and close to the flattened tube wall surrounding the frame opening.

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