June 3, 1930. H. GORDENSTEIN 1,761,722

DRY STENCIL

Original Filed Dec. 8, 1928

Fig. 1

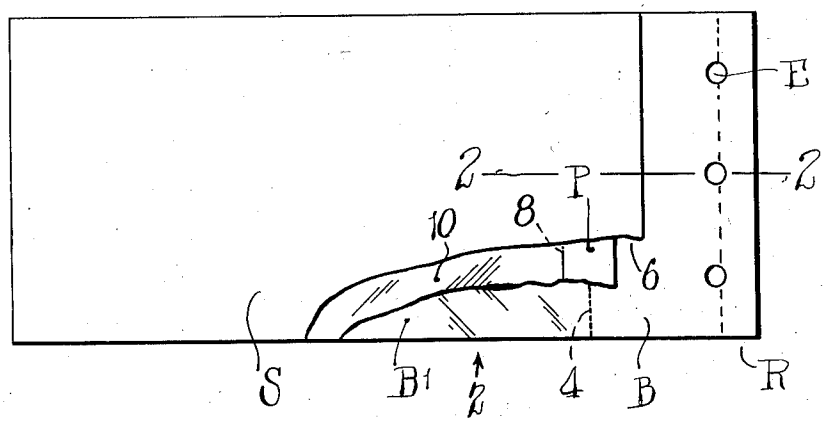



Fig. 2.

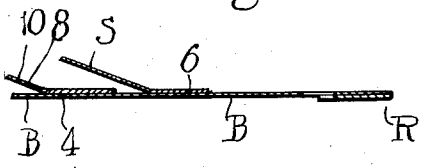
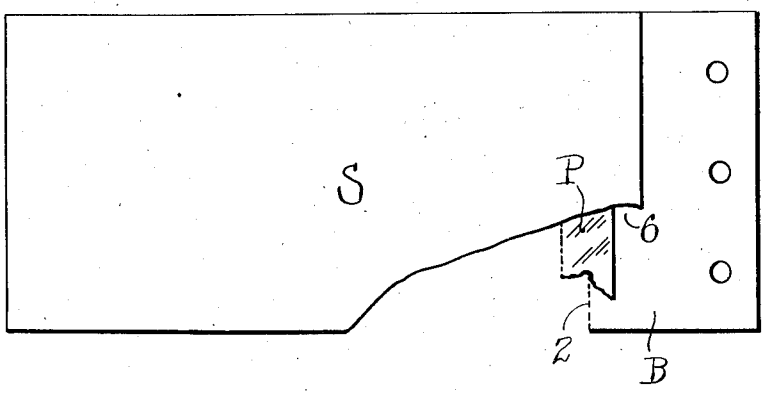



Fig. 3.




INVENTOR.
Harry Gordenstein
BY Walter C Ross
his ATTORNEY

Patented June 3, 1930 1,761,722

# UNITED STATES PATENT OFFICE

HARRY GORDENSTEIN, OF SPRINGFIELD, MASSACHUSETTS

## DRY STENCIL

Application filed December 8, 1928, Serial No. 324,605. Renewed February 13, 1930.

This application relates to improvements in stencils and is directed more particularly to those known as dry-stencils such as are used in connection with mimeographing machines and the like.

In order to facilitate a clear understanding of the novel features of the present invention brief reference to present day stencils and their use will be made.

The stencils of the type to which the invention relates consist essentially of an especially prepared stencil sheet and back which are secured together at their upper ends. The stencil overlies the back and in cutting the stencil or providing it with matter to be reproduced on the mimeograph machine the back serves to provide a support or to back up the stencil sheet. This is especially true when for instance the stencil is cut on a typewriter as the back lies against the platen thereof.

The back is provided with eyelets or openings adjacent the upper end thereof and is perforated adjacent said end so that the main body of the back may be separated from this end portion. After the stencil cutting operation the stencil is wrapped around the rotatable drum of a stencil machine and the eyelets of the back are slipped over suitable pins or studs provided on the drum for holding one end of the stencil sheet in place. The other end of the stencil is then properly clamped to the drum. With the stencil applied to the drum the back is torn from the end portion thereof which serves to hold one end of the stencil in place.

In connection with the stencil thus briefly described there are objections and disadvantages which I shall now refer to in order to distinguish the novelty of my invention thereover.

The stencil sheet to which is applied certain chemicals or which is prepared by some mechanical or chemical treatment is readily effected by atmospheric conditions such as moisture so that certain chemicals or other materials applied thereto are taken up by the back. At least the stencil sheet tends to deposit on the back, with which it is in contact, some of the ingredients of which it is composed so that the sheets are not only likely to stick together but at the same time the back is stained or discolored. Also there is a tendency for the stencil sheet to become displaced on the drum due to the eyelets of the strip giving away or the stencil sheet tearing away from the end strip of the back.

I aim to overcome these objections and disadvantages according to my invention by the provision of the novel combination and arrangement now to be described with reference to the accompanying drawings in which—

Fig. 1 is a plan view of a stencil of my invention with parts broken away for clearness.

Fig. 2 is a sectional elevational view taken on the line 2—2 of Fig. 1, and

Fig. 3 is a plan view of the stencil as it appears when ready for applying to the drum of a mimeographing machine.

Referring to the drawings the invention will now be described in detail.

2 represents a back which may be of paper or some other suitable flexible material which has its upper edge doubled back upon itself as shown to provide a reinforced edge R. Eyelets E are provided in the upper edge of the back and are disposed so that the eyelets are reinforced by the doubled back portion of the sheet whereby the studs or pins of a mimeographing drum will not break through the eyelet openings.

The back 2 is perforated along a line represented at 4 so that a body portion $B^1$ may be separated from a strip portion B which may be called a binding strip. A stencil sheet S is provided which is of the usual stencil paper well known in the art and has its upper end secured to the binding by an adhesive material of some sort at a point indicated at 6.

Between the stencil S and body $B^1$ of the back there is disposed a protective sheet 10. This sheet may consist of waxed paper or the like which may function to prevent the back and stencil from sticking together and to prevent the back being discolored by the ingredients of the stencil. Said sheet 10 is perforated at 8 as shown so that the main body thereof may be separated from a protective strip P which will be left on the binding strip B portion of the back. The per-

forations 8 are disposed so that the edge of the protective strip P extends beyond the inner edge of the binding strip B as shown.

With the different sheets in their superposed relation, that is, with the protective sheet between the stencil sheet and back the said back is not only protected by any tendency of the stencil and back to stick together is obviated. In this way the assembled sheets may be stored for long periods of time as they are not likely to be injured by atmospheric conditions.

In use the protective sheet 10 is first removed by tearing on the perforations and then the stencil S is marked or cut by means of a typewriter or otherwise, the portion $B^1$ of the back serving as a support for the sheet during the marking operation.

When the stencil has been marked it is ready to be placed about the drum of a mimeographing machine. This is accomplished by slipping the eyelets E over the pins or studs of said drum while the stencil is wrapped around the drum and its other end anchored in the usual way. Any pulling strains which would ordinarily cause the eyelets to tear out are now met with the reinforcement so that in this respect the stencil of the invention is more serviceable than those of the prior art.

As a further feature it will be noted that the portion P of the protective sheet carried by the strip and which overlies the inner edge of the bonding strip B is useful in protecting the stencil sheet and in effect reinforces said sheet against rupture which might be caused by the rotation of the drum or the forcing of ink therethrough.

The invention may be practiced in various ways by changes and modifications and I do not wish to be limited by the specific form of the invention shown and described but rather if at all by the appended claims.

What I claim is:

1. A stencil of the class described comprising in combination, a back sheet of paper having its upper end doubled upon itself to provide a reinforced end portion and provided with a line of perforations and a plurality of eyelets, the said perforations being disposed at a distance from said reinforced end portion and the said eyelets being disposed in said reinforced portion, a protective sheet of paper overlying said back having its upper end secured thereto adjacent said perforations and being provided with a line of perforations thereacross disposed towards the main body of the sheet and away from the perforations of the back sheet and a stencil sheet overlying said protective sheet having its upper end secured to said back sheet between the upper end of the protective sheet and the eyelets of said body sheet.

2. A stencil of the class described comprising in combination, a back-sheet provided with perforations extending thereacross adjacent its upper end to provide separable main body and strip portions, a protecting sheet overlying said back sheet and a stencil overlying said protecting sheet, both of which have their upper edges secured to the strip portion of said back sheet, the said protective sheet being provided with perforations extending thereacross adjacent the upper edge thereof to provide a main body portion which is separable from a strip portion secured to the strip portion of the back sheet and the said perforations being disposed away from the perforations in the back sheet and towards the main body thereof whereby when the main body portions of the back sheet and protective sheets have been separated from their respective strip portions the strip portion of the protective sheet will be disposed between the inner edge of the strip portion of the back sheet and the stencil.

3. A stencil of the class described comprising in combination, a back sheet provided with perforations extending thereacross adjacent its upper end to provide separable main body and strip portions, a protecting sheet overlying said back sheet and a stencil overlying said protecting sheet, both of which have their upper edges secured to the strip portion of said back sheet, the said protective sheet being provided with perforations extending there across adjacent the upper edge thereof to provide a main body portion which is separable from a strip portion secured to the strip portion of the back sheet and the said perforations being disposed away from the perforations in the back sheet and towards the main body thereof whereby when the main body portions of the back sheet and protective sheets have been separated from their respective strip portions the strip portion of the protective sheet will be disposed between the strip portion of the back sheet and the stencil.

HARRY GORDENSTEIN.