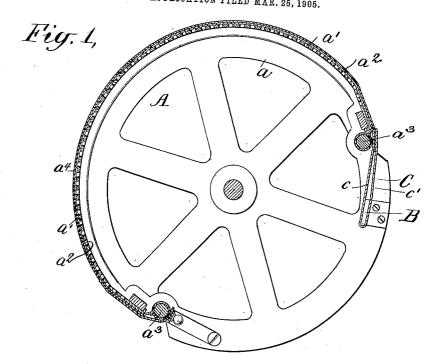
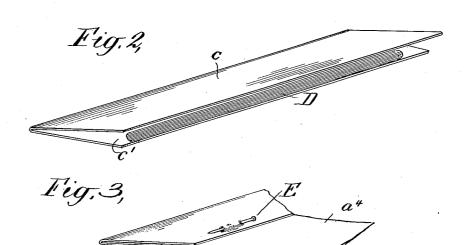
A. B. DICK.

STENCIL DUPLICATING APPARATUS. APPLICATION FILED MAR. 25, 1905.





WITNESSES: L. Mork. I. M. Inlah

BY Columber ATTORNEY

UNITED STATES PATENT OFFICE.

ALBERT B. DICK, OF LAKE FOREST, ILLINOIS, ASSIGNOR TO A. B. DICK COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

STENCIL-DUPLICATING APPARATUS.

No. 890,759.

Specification of Letters Patent.

Patented June 16, 1908.

Application filed March 25, 1905. Serial No. 251,984.

To all whom it may concern:

Be it known that I, Albert B. Dick, a citizen of the United States, residing at Lake Forest, in the county of Lake and State of 5 Illinois, have invented a certain new and useful Improvement in Stencil-Duplicating Apparatus, of which the following is a specifi-

cation. Broadly speaking, the present invention 10 relates generally to the type of apparatus disclosed in Patents Nos. 775,078 and 783,824, heretofore granted to me, to the extent at least that it concerns the attachment of a waxed sheet for stencil-duplication to the 15 drum of a duplicating machine not by securing the former to the latter directly, as heretofore in the practice of this art, but through the intervention of a detachable stencil-stub, which may, if desired, be an entirely sepa-20 rate and distinct element from either of the instrumentalities mentioned, and which may be furnished to the trade largely without reference to particular provision forming a permanent part of the machine for securing 25 stencil-sheets directly in place thereon. Thus, of the various types of rotary duplicating machines heretofore marketed, all include the common feature of a cross-bar or rod extending between the heads of the rotary 30 drum, and in some cases this cross-bar or rod has been provided with studs or projections adapted to coact with correspondingly arranged openings in the forward end of the stencil-sheet. Where, however, the stencil-35 sheet is not provided with such corresponding openings, or where, for instance, such openings have been injured or torn away, it is desirable in the interest of economy both of time and material to provide means where-40 by such a sheet, either injured or unadapted for the particular style of fastening referred to, may be utilized, and this is accomplished in the present case by means of a stencil-stub of broad adaptability to the various types of 45 rotary machines. Moreover, I have found that a stencil-stub of extreme simplicity and consequent low cost of production can be provided, effectively answering the requirements here suggested. This consists of a 50 sheet of paper or woven fabric or similar (preferably flexible) material, which may be

folded longitudinally so that the two folded

halves shall lie in substantially parallel planes. Such stencil-stub may be readily

55 secured upon any moving part of a rotary

duplicating drum, as, for instance, upon a rod or bar extending between and connecting the heads of such drum. To the free ends, the forward edge of the stencil-sheet may be secured in any suitable manner, as for in- 60 stance by an adhesive material arranged on the inner surface of one or both of such free ends and by which after the stub has been placed in position both members thereof and the forward edge of the stencil-sheet may be 65 bound firmly together, or, if desired, the forward edge of the stencil-sheet may be pinned to one or both of the free ends of such stub.

The invention is illustrated in the accom-

panying drawings, in which

Figure 1 is a central vertical section of the drum of a duplicating machine; Fig. 2 is a perspective view of a stencil-stub embodying the present invention; and Fig. 3 is a similar view illustrating a portion of the stencil-stub 75 and a stencil-sheet attached thereto in a somewhat different manner from that suggested by Fig. 2.

In these drawings, A designates the duplicator-drum, comprising two heads a, the 80 foraminated stencil-carrier a' underlying the ink-pad a^2 secured in position by end-rods a^3 . The stencil-sheet at overlies the ink-pad and is preferably secured at both ends, or at the forward end only, in manner hereinafter de- 85 scribed.

B designates a part extending between and connecting the drum-heads, in this instance taking the form of a bar, which may or may not be provided with stencil-securing means 90

as desired.

C designates the stencil-stub. As clearly shown in the drawings, this comprises a sheet which, as above stated, may be of strong paper or woven fabric or other suitable ma- 95 terial, preferably flexible, and is folded longitudinally in order that the two halves c, c', thereof may be passed on either side respectively of a part of the drum, such as the bar If desired, the inner surfaces of the free 100 ends of said stencil-stub may be provided with an adhesive material D, in order that after the stub has been placed in position as shown in Fig. 1, the stencil-sheet at may be placed between such free ends after the gum 105 has been moistened, and both the members c, c', firmly united to the forward edge of such stencil-sheet. Or, if desired, the union may be made by means of pins E, as shown in Fig. 3, or both means of attachment may be em- 110

ployed, to avoid the possibility of separating the stencil-sheet from the stub during the operation of the machine. The particular means for securing the stencil-sheet to the 5 stub may, of course, be varied within wide limits, the essential feature of the invention concerning more particularly the use of a cheap and readily applied stencil-stub, which, as above stated, shall be applicable to 10 a stencil-duplicating machine regardless of the particular provision made in such machine for the attachment of a stencil-sheet thereto. Thus, if the machine part to which the stencil-stub is attached be the "button-15 bar" now commonly in use, said stub may readily be placed around such button-bar, the buttons thereon performing no useful function, and the stencil-sheet made fast to the free ends of the stub in manner above de-20 scribed, thereby adapting the machine for use with stencil-sheets unprovided with openings designed to coact with such button-bar,

or with a stencil-sheet provided with such openings but which openings have become distorted or otherwise injured.

Having now described my invention, what I claim as new therein and desire to secure by

Letters Patent is as follows:-

In stencil-duplicating apparatus, the combination of a drum, a member extending be- 30 tween the ends of the drum and moving therewith, a flexible, non-resilient stencilstub having a fold therein intermediate its lateral edges, said stub extending around said member, a stencil-sheet, and means for 35 securing the edges of the sheet to both the lateral edges of said stub, substantially as set

This specification signed and witnessed this 23rd day of March, 1905.
ALBERT B. DICK.

 ${\it Witnesses}:$

M. H. BURKART, W. G. Arnold.