## A. B. DICK. STENCIL DUPLICATING APPARATUS. APPLICATION FILED MAY 10, 1904.

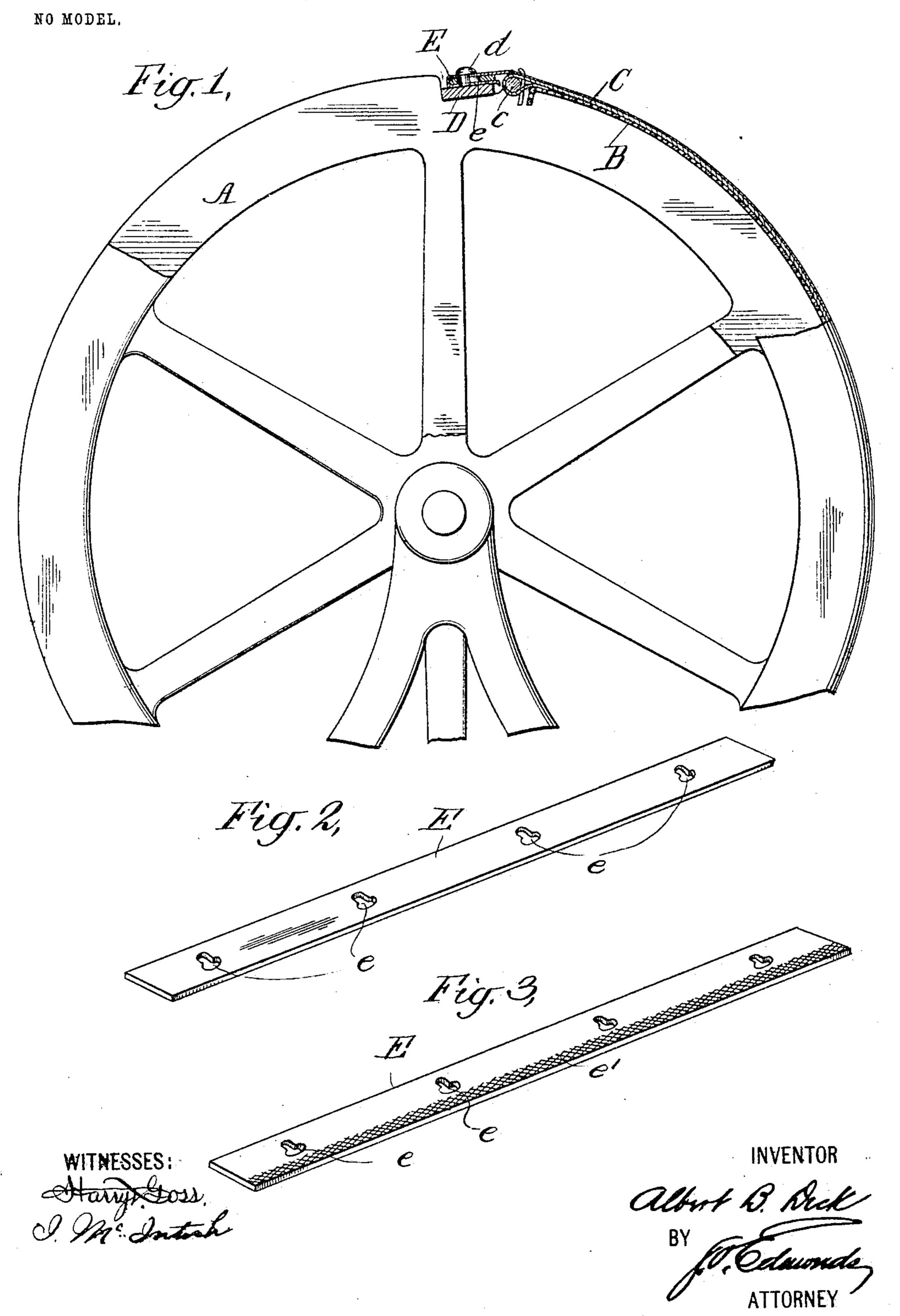


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## UNITED STATES PATENT OFFICE.

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## STENCIL-DUPLICATING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 775,078, dated November 15, 1904.

Application filed May 10, 1904. Serial No. 207,282. (No model.)

To all whom it may concern:

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

The present invention concerns generally apparatus for the duplication of autographic or type-written matter by means of a stencil-sheet, and particularly that type of such apparatus in which is employed a drum upon the periphery whereof the stencil-sheet is supported.

The object of the invention is to provide a ready and convenient means for securing the stencil-sheet in position upon such a drum.

A further object is to embody such means in the form of a detachable stencil-stub formed separately from both the stencil and drum, but capable of having the stencil conveniently attached thereto, and, further, capable of ready and easy attachment of both said means and the attached stencil to the drum of the machine.

25 In carrying out the invention in connection with an approved form of duplicating apparatus now on the market and in which is employed a "button-bar" extending between and connecting the heads of the rotary drum 30 I provide a stencil-stub having slots or orifices coacting with the projections or "buttons" upon such a button-bar, and to which stub the stencil may be secured in any suitable manner, as hereinafter explained. Such a 35 stub may be made of aluminium or other metal or, in fact, of any other durable material and being detachable both from the duplicating-machine and from the stencil used thereon is capable of employment indefinitely.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is an end view of a portion of the drum of a stencil-duplicating machine, showing my invention attached thereto. Fig. 2 is an enlarged perspective view of the stencil-stub, and Fig. 3 is a similar view illustrating the stub modified with respect to the means for attaching the stencil thereto.

Referring to the drawings, in which similar

letters of reference denote corresponding 50 parts, A designates one of the heads of the drum of a duplicating-machine, B the foraminated stencil-carrier extending between and connecting such heads, and C the ink-pad secured to cross-rod c and extending over said 55 carrier.

D designates the button-bar. This bar extends between and is secured at its ends to the heads A of the drum and is here shown as provided upon its upper surface with buttons 60 d, arranged at suitable intervals and formed, preferably, with enlarged heads and shanks of less diameter.

The mechanism as thus far explained is that employed on duplicating-machines now 65 in common use.

E designates the detachable stencil-stub, here shown as consisting of a substantially flat non-resilient plate of metal or other suitable material and provided, preferably, near one 70 longitudinal edge thereof with keyhole-slots e, the larger portions whereof are of such size as to permit the heads of the buttons d to pass therethrough, the smaller portions being of a size to coact with the shanks of said buttons 75 when the stub has been placed in position over the button-bar with the buttons projecting through the slots and then such stub drawn forward. Said stencil-stub may, if desired, be provided with means for detachably secur- 80 ing the end of a stencil-sheet thereto, and such means may take any desired form. For instance, the end of the stencil-sheet may be secured to the stub by means of an adhesive material, or one edge of such stub, preferably 85 the longitudinal edge opposite the edge provided with the orifices, may be supplied with pins or projections or clamping mechanism of any suitable design, or the end of the stencilsheet may be wrapped one or more times 90 around such stub and the stub then placed in position with respect to the button-bar as shown in Fig. 1, in which case, said stub and button-bar being firmly secured together, the end of the stencil-sheet will be similarly se- 95 cured in operative position.

The form of stub illustrated in Fig. 3 is adapted to have the stencil-sheet secured there-

gested, and I have indicated thereon at e' the edge at which the stencil-securing means (adhesive substance, pins, hooks, &c.) may be arranged. The form illustrated in Fig. 2 is adapted especially for securing the stencil by having the end thereof wrapped around the stub and such stub thereafter applied to the button-bar of the machine.

Said stencil-stub is herein referred to as "substantially flat," and what is meant thereby is the general shape illustrated in the drawings, although the plate may, if desired, be slightly curved in order to conform more closely to the outline of the drum on which it is adapted to be secured. Also said stub is referred to as "non-resilient," and by this is meant that resiliency is not in the form here disclosed a useful characteristic, the same playing no part in the function either of securing the stencil-sheet to the stub or of securing the stub to the drum.

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

25 Letters Patent, is as follows:

1. In stencil-duplicating apparatus, the combination with a drum, of a substantially flat, non-resilient stencil-stub adapted to be detachably secured to said drum and having means for the temporary attachment of a stencil-sheet thereto, substantially as set forth.

2. In stencil-duplicating apparatus, the combination with a drum, of a bar attached there-

to and having a securing device, and a substantially flat, non-resilient stencil-stub coact- 35 ing with said securing device and provided with means for removably attaching a stencil-sheet thereto, substantially as set forth.

3. In stencil-duplicating apparatus, the combination with a drum, of a bar secured there- 40 to and having projections, and a substantially flat, detachable stencil-stub provided with means for coaction with said projections and for the removable attachment of a stencil-sheet to said stub, substantially as set forth. 45

4. In stencil-duplicating apparatus, the combination with a drum, of a securing device, a stencil-stub, and a stencil-sheet, said stencil-stub being substantially flat and non-resilient and detachable both from said securing device 5° and from said stencil-sheet, substantially as set forth.

5. In stencil-duplicating apparatus, the combination with a drum, of a substantially flat, non-resilient stencil-stub having, adjacent to 55 one longitudinal edge thereof, means for the attachment of said stub to said drum and, adjacent to the other longitudinal edge thereof, means for the attachment of a stencil-sheet to said stub, substantially as set forth.

This specification signed and witnessed this

3d day of May, 1904.

ALBERT B. DICK.

Witnesses:

S. O. Edmonds, W. G. Arnold.