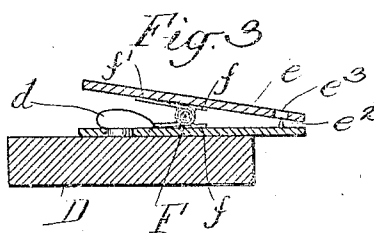
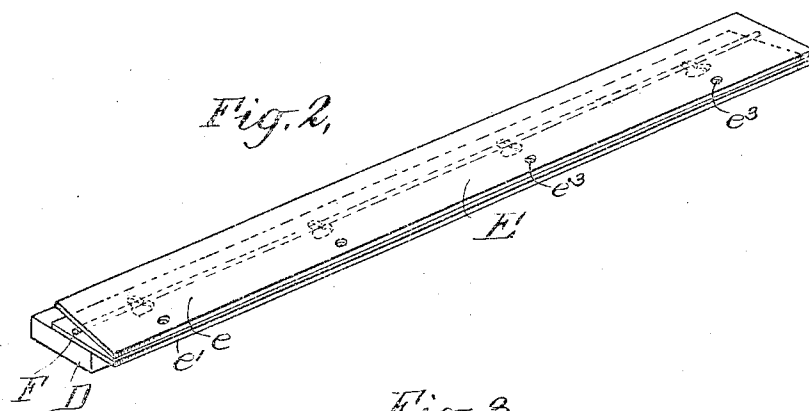
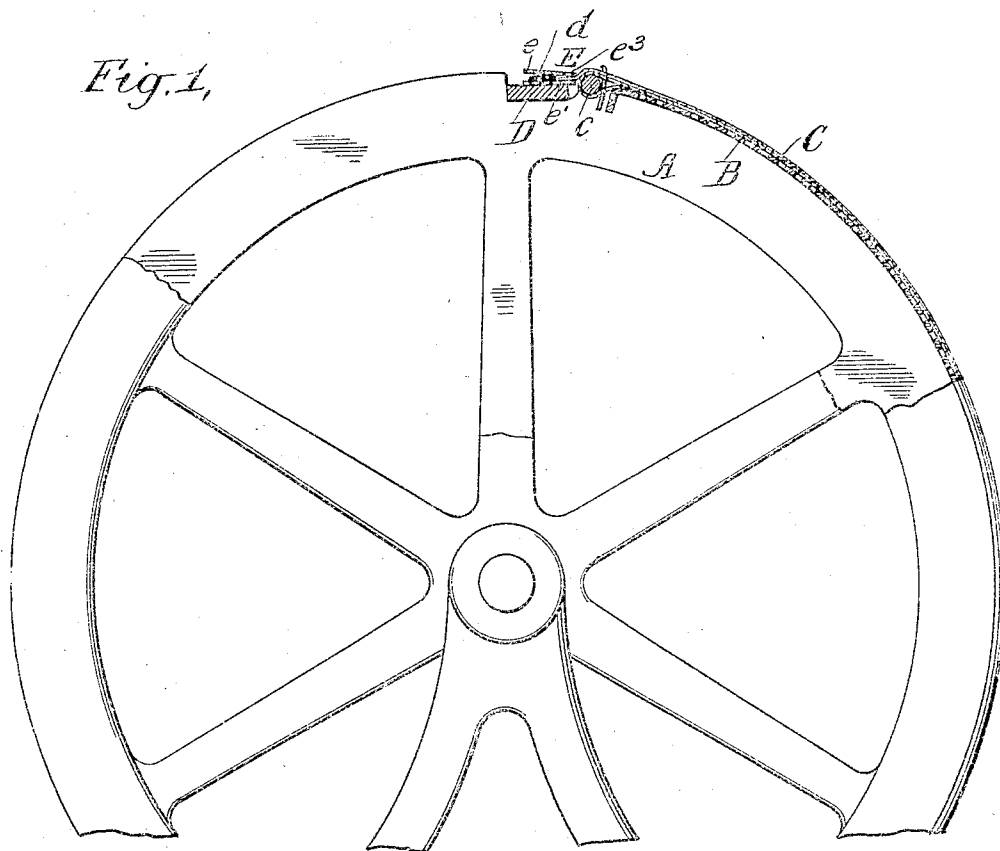


No. 786,633.

PATENTED APR. 4, 1905.

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



WITNESSES:

Harry Goss.
J. Mcintosh

INVENTOR

Albert B. Dick
BY
J. P. Edwards
ATTORNEY

UNITED STATES PATENT OFFICE.

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

STENCIL-DUPLICATING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 786,633, dated April 4, 1905.

Application filed May 10, 1904. Serial No. 207,284.

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.

In carrying out the invention in an approved form of apparatus employing a rotary (or oscillating) drum provided with a button-bar—*i. e.*, a bar extending between the heads of such drum and provided on its upper surface with buttons or projections—I provide a detachable two-part clamp, one member whereof is provided with slots or orifices coacting with the buttons or projections upon such button-bar to position said clamp relatively to the bar. Such clamp is made in two parts movable relatively to each other and preferably spring-controlled to bind firmly together the rearward edge of said clamp, with which the edge of the stencil-sheet coacts. This edge may, if desired, be provided with means other than mere frictional contact for retaining the stencil-sheet in position, and a suitable form which such means may take comprises pins or projections carried by the lower member of the clamp and coacting with depressions or orifices formed in the upper member of the clamp.

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

Figure 1 is a sectional view of a portion of the drum of a stencil-duplicating apparatus with my invention applied thereto. Fig. 2 is an enlarged view illustrating the stencil-clamp and button-bar detached from the drum of the machine; and Fig. 3 is a cross-section of the clamp and button-bar on the line 3 3, Fig. 2.

Referring to the drawings, in which similar letters of reference denote corresponding parts, A designates one of the heads of the drum provided with the foraminated stencil-carrier B and the stencil-pad C, held in position at one end by means of the rod *e*.

D designates the button-bar, here shown as provided with a series of buttons or projections *d*, each comprising an enlarged head supported upon a shank of smaller diameter.

E designates the stencil-clamp. This is here shown as comprising two substantially parallel strips or plates *e e'*, one directly overlying the other. The members *e e'* are connected by means of a longitudinal rod F, to which the inner surface of each member is secured by means of suitable straps *f*. Said rod is also provided with a coil-spring *f'*, exerting a tendency to bring the rearward edges of said members into engagement. The forward edge of the lower member *e'* of the clamp is provided with slots or orifices of a size adapting them to coact with the buttons or projections *d* on the button-bar D. As here shown, said projections comprise enlarged circular portions adapted to receive the heads of the buttons *d* and connected slots adapted to coact with the shanks of said buttons after the stub or clamp has been drawn rearwardly. It will also be seen that after the stub or clamp has been placed in position upon the drum mere pressure upon the forward edge of the upper member *e* of the clamp will raise the rearward edge of that member, so as to permit the edge of the stencil-sheet to be introduced between such rearward edge and the corresponding edge of the lower member *e'* of the clamp.

If it be desired, instead of depending upon mere frictional contact of the clamp with the

edge of the stencil-sheet to provide a special appliance for this purpose this may readily be done in the manner illustrated in the drawings and particularly in Figs. 2 and 3, in which I have shown the rearward edge of the lower member of the stub or clamp as provided with a series of upwardly-extending teeth or projections e^2 and coacting therewith a series of orifices or depressions e^3 , formed in the rearward edge of the upper member e . As will readily be seen, the edge of the stencil-sheet may upon separating the members of the stub or clamp be introduced between the rearward edges of said members, and when said members are brought together under the stress of the spring f' the coaction of the teeth e^2 and the depressions or orifices e^3 will firmly secure such stencil-sheet in position.

Having now described my invention, what I claim as new therein, and desire to secure by Letters Patent, is as follows:

1. In stencil-duplicating apparatus, the combination with a drum, of a securing device carried thereby, and a non-resilient stencil-clamp detachably secured to said device and spring-pressed to operative position, substantially as set forth.

2. In stencil-duplicating apparatus, the combination with a drum, of a non-resilient stencil-clamp adapted to be detachably secured thereto, said clamp comprising upper and lower members and a coacting spring tending to move said members to operative or clamping position, substantially as set forth.

3. In stencil-duplicating apparatus, the combination with a drum, of a securing device, and a two-part clamp coacting detachably with said securing device, said clamp being spring-actuated and one edge thereof being provided with coacting projections and depressions for engagement with a stencil-sheet, substantially as set forth.

4. In stencil-duplicating apparatus, the combination with a drum, of a button-bar having upwardly-extending buttons or projections, a two-part clamp having orifices coacting detachably with said buttons or projections, said parts being spring-controlled, and means for detachably securing a stencil to said clamp, substantially as set forth.

5. In stencil-duplicating apparatus, the combination with a drum, of a button-bar having upwardly-extending buttons or projections, and a two-part clamp, the parts whereof are connected and spring-controlled, the lower member of said clamp being provided with orifices coacting with said buttons or projections, substantially as set forth.

6. In stencil-duplicating apparatus, the combination with a drum, of a button-bar having upwardly-extending buttons or projections, a two-part clamp, the lower member whereof is provided with orifices coacting with said buttons or projections, a connection between the parts of said clamp, and a spring adapted to hold said clamp in operative position, substantially as described.

7. In stencil-duplicating apparatus, the combination with a drum, of a button-bar provided with upwardly-extending buttons or projections, a two-part clamp detachably secured to said buttons or projections, a connection between the parts of said clamp, and means for holding said parts in operative position, one of the parts of said clamp being provided with projections and the other part with coacting depressions or orifices for coaction with a stencil-sheet, substantially as set forth.

This specification signed and witnessed this 3d day of May, 1904.

ALBERT B. DICK.

Witnesses:

S. O. EDMUNDS,
W. G. ARNOLD.