

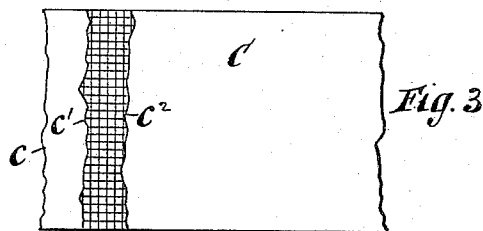
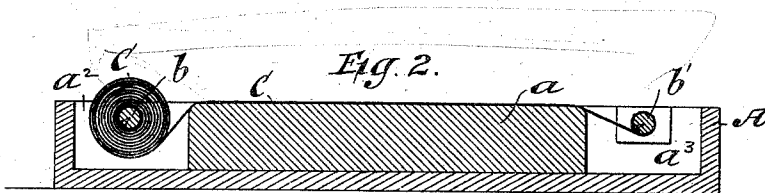
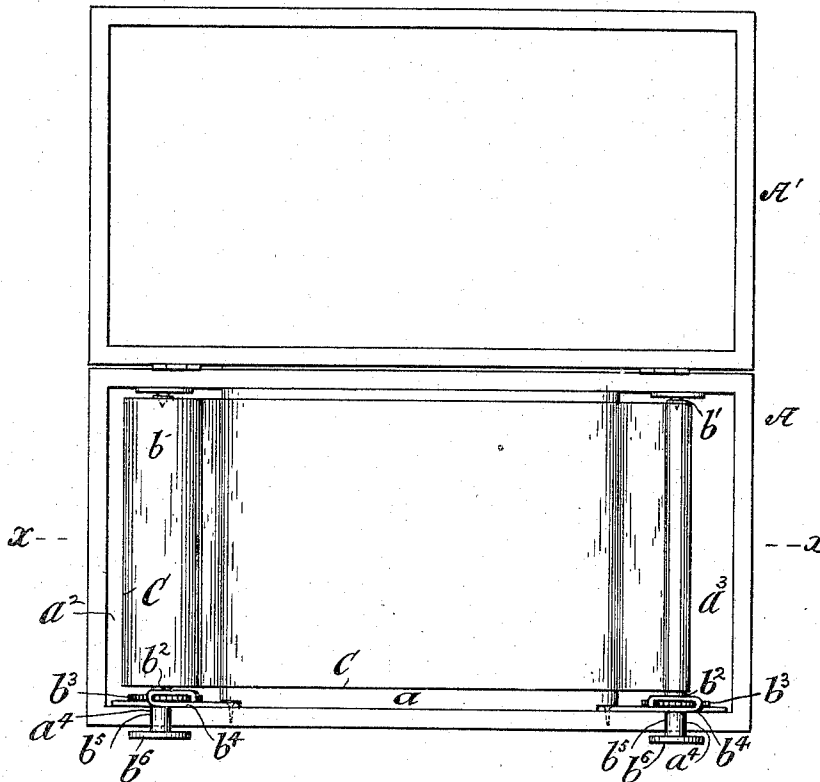
(No Model.)

F. F. DAUS.
DUPLICATING APPARATUS.

No. 493,757.

Patented Mar. 21, 1893.

Fig. 1



Witnesses
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UNITED STATES PATENT OFFICE.

FELIX F. DAUS, OF NEW YORK, N. Y.

DUPLICATING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 493,757, dated March 21, 1893.

Application filed November 15, 1892. Serial No. 452,029. (No model.)

To all whom it may concern:

Be it known that I, FELIX F. DAUS, a citizen of the United States, residing in the city of New York, county and State of New York, have invented a new and useful Improvement in Duplicating Apparatus, of which the following is a specification.

My improvement is intended for use in the well known process of making fac-simile copies of writings, drawings, music, &c., which have been made with prepared ink, by placing the same face downward on a gelatinous pad or bed composed of gelatine and glycerine, whereby a negative of the original writing is made on the pad or bed, next removing the original and then making copies of it by pressing sheets of paper separately on the negative.

I will describe an apparatus embodying my improvement and then point out the novel features in the claim.

In the accompanying drawings, Figure 1 is a top view of the apparatus shown open and ready for use. Fig. 2 is a vertical section thereof taken at the line *xx*, Fig. 1. Fig. 3 is a top view of a portion of the negative material or copying pad employed in the apparatus; and Fig. 4 is a sectional view thereof.

A, designates a box provided with a cover, and having a central portion secured thereto to form a table, *a*.

b, *b'*, are rollers arranged in recesses, *a*², *a*³, of the box, A, and pivotally and detachably connected to the front and rear sides thereof. The front pivot, *b*², of each roller is provided with a ratchet wheel, *b*³, with which a pawl, *b*⁴, engages to prevent rotary movement in one direction thereof. Each of these pivots, *b*², has a neck portion, *b*⁵, resting in a notch, *a*⁴, of the box, A, and provided with a knob, *b*⁶, by which the rollers may be rotated.

C, is a pad capable of being rolled, and here shown with the inner end of the rolled portion attached to the delivery roller, *b*, and its outer end extending across the table, *a*, and secured to the take-up roller, *b'*. This pad, as shown in Figs. 3 and 4, is composed of a layer of paper, *c*, that has been saturated with oil and dried and then united by adhesive material to a layer of linen material, *c'*, of coarse mesh. The surface of the latter is

coated with a layer of gelatinous material, *c*², composed of gelatine and glycerine, upon which layer the written or other matter to be duplicated is transferred in the usual manner.

The ink of the transferred written matter loses by evaporation or absorption its property of imparting copies after the lapse of about thirty-six hours, thereby rendering its removal unnecessary by the usual slow and tedious process of washing out.

In order to afford the requisite time for the ink to lose the property of imparting copies, the pad, C, is made of such length that by the time its surface has been wholly covered by negative matter in practical use, and its inner end reached after successive movements toward the take-up roller, *b'*, its outer end portion will be in a condition for use again. In this manner, the same surface of the pad may be used for successive transfers of newly written matter requiring duplication.

By this improvement, I provide a rolled pad or material for receiving negatives in the use of said process, the paper of which being oiled is prevented from adhering to the gelatinous material when wound upon the rollers, and in addition to its capacity to resist tearing, will also prevent the passage of air and formation of air bubbles between it and the gelatinous surface. The rough surface presented by the linen affords an effective means to insure the firm adhesion of the gelatinous material thereto and prevents any tendency to peel off.

I claim—

In combination, a copying pad composed of a layer of oil paper adhesively united to a layer of linen material, the surface of the latter being coated with a layer of gelatinous material, a box having a central portion forming a table for the pad, a delivery and take-up rollers for the pad pivotally and detachably secured within the box, and a ratchet wheel, pawl and finger knob for each roller to control the movements thereof, substantially as described.

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Witnesses:

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