

No. 826,733.

PATENTED JULY 24, 1906.

E. R. MOORE.
DUPLICATING APPARATUS.
APPLICATION FILED FEB. 27, 1906.

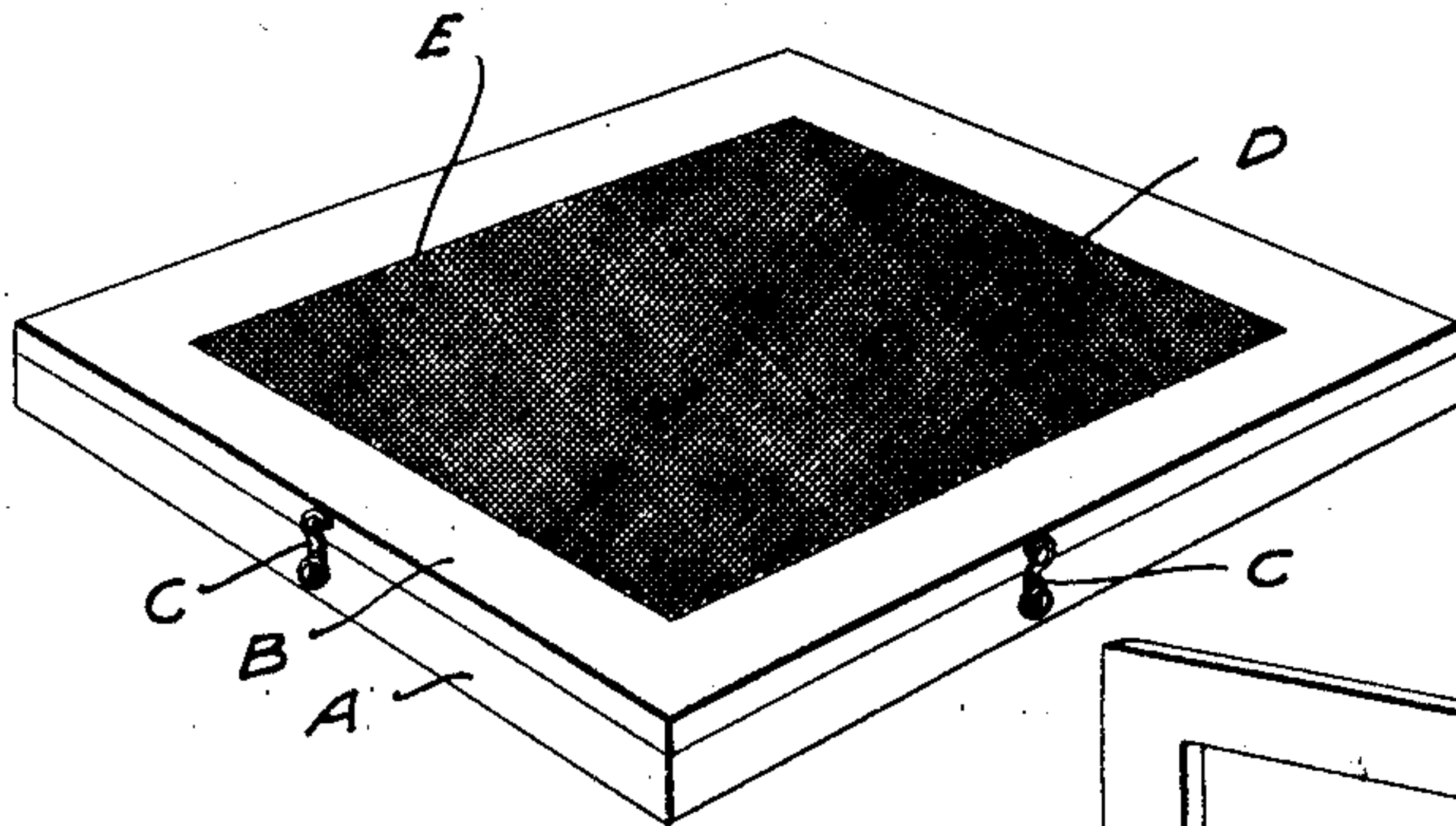


FIG. 1.

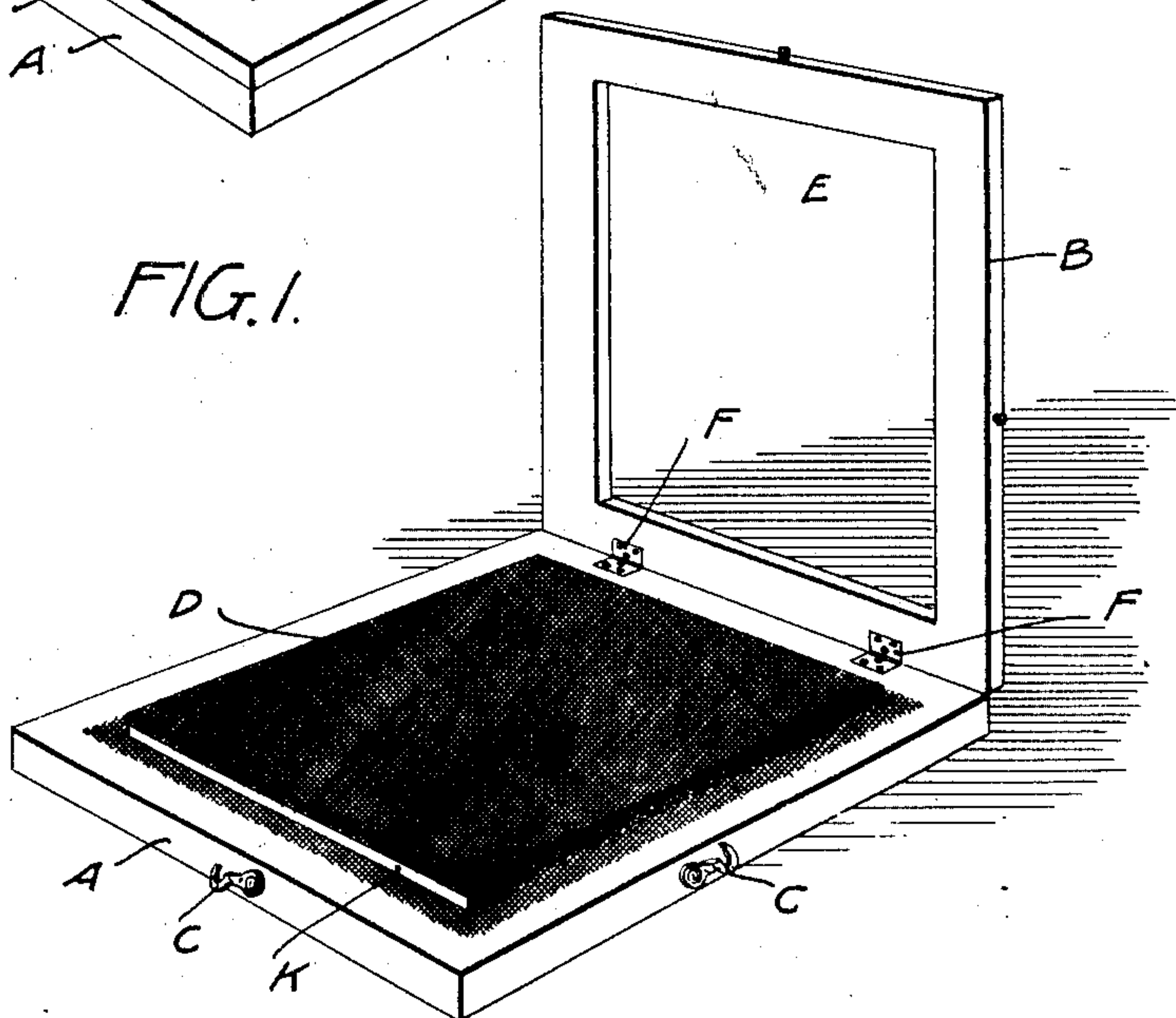


FIG. 2.

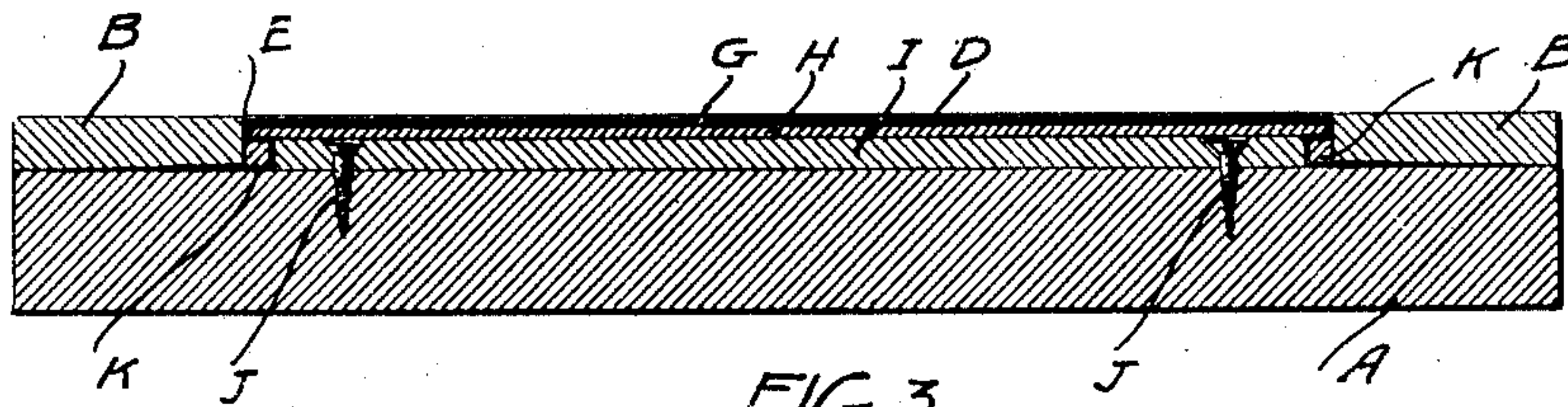


FIG. 3.

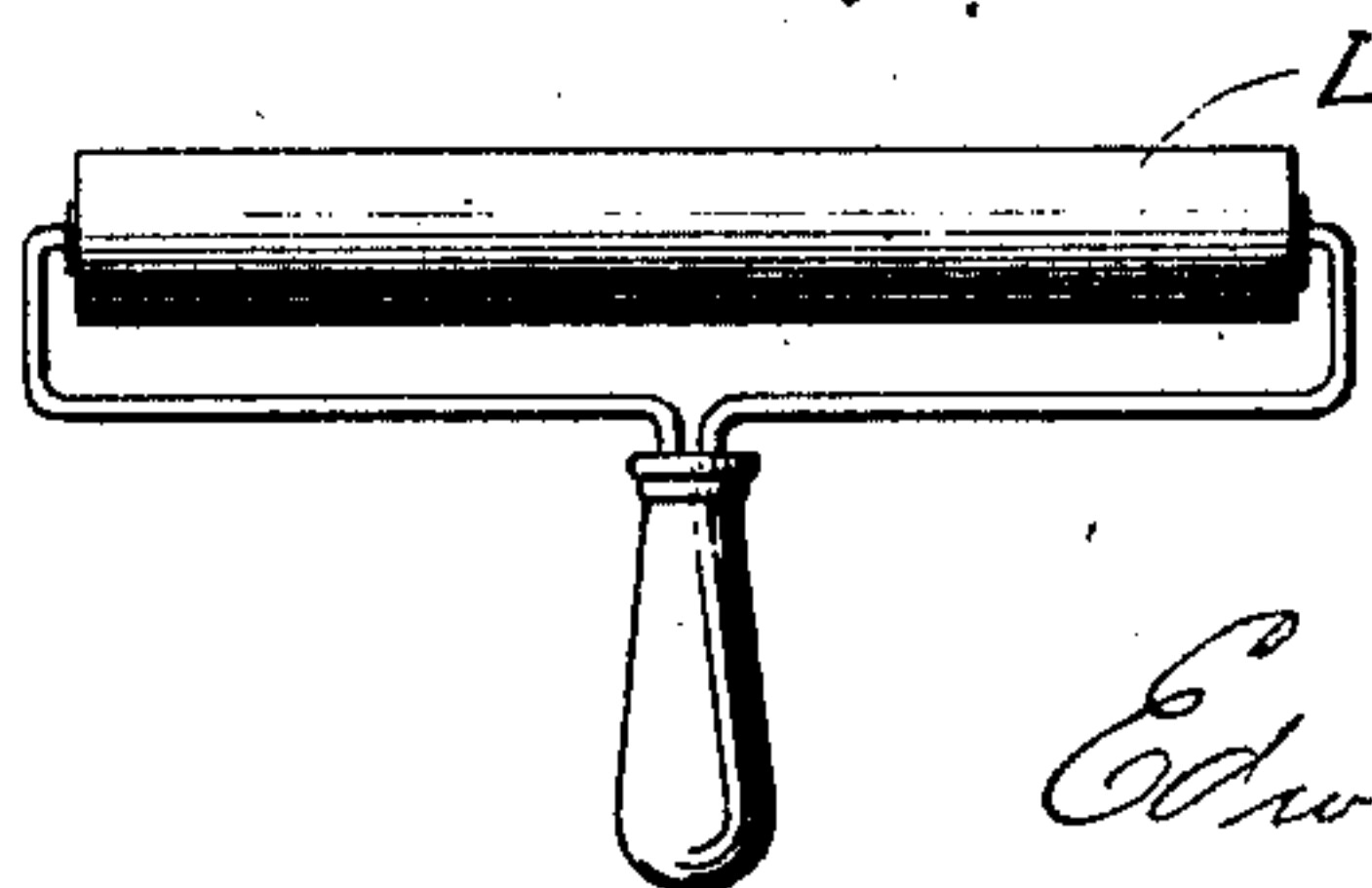


FIG. 4.

WITNESSES
M. M. Lewis
M. Walstrom

INVENTOR
Edwin R. Moore

UNITED STATES PATENT OFFICE.

EDWIN R. MOORE, OF ST. PAUL, MINNESOTA.

DUPLICATING APPARATUS.

No 826,733.

Specification of Letters Patent.

Patented July 24, 1906.

Application filed February 27, 1906. Serial No. 303,278.

To all whom it may concern:

Be it known that I, EDWIN R. MOORE, a citizen of the United States, residing at No. 1905 Iglehart street, St. Paul, in the county of Ramsey and State of Minnesota, have invented a new and useful Duplicating Apparatus, of which the following is a specification.

My invention relates to an apparatus for duplicating handwriting and type-writing, so that letters, circulars, notices, and the like may be made quickly, cheaply, and legibly in large or small quantities.

This invention refers especially to that class of devices whereby paper, very soft and fibrous, having been coated with wax or paraffin is then cut with the steel dies of a type-writing machine or perforated by the point of a stylus, such stenciled characters in the wax sheet being afterward reproduced by rollers with ink upon their surface pressing the ink through the open stencil to a sheet of paper placed in contact.

I am aware that waxed paper as stencils for duplicating letters is now in use. I also know that small ink-pads for rubber hand-stamps are used in great numbers. While my apparatus appears somewhat similar to those inventions, yet it differs greatly from them in construction and in operation. I require and use a perfectly level and smooth ink-bed of slate, glass, or metal, my ink-saturated fabric resting upon the slate holding a large quantity of ink without running over the sides of the ink-plate, yet responding to the lightest pressure above. The important and essential difference between other stencil duplicating systems and mine is this: Other inventors use rollers of felt or other material to which ink is applied and then pressed through the wax-cut stencils to the paper below, often resulting in the ink oozing over the edges, frequently soiling the hands and clothing of the operator. My device is entirely different, for my absorbent ink-retaining fabric acts as a reservoir or ink-supply, and my roller is at all times perfectly dry and clean and free from ink. I use the roller merely to apply the even gentle pressure upon the blank paper that receives the ink from the cloth beneath the stencil, so that with the greatest ease and neatness I can from one inking obtain a large number of good copies.

The drawings that accompany this speci-

cation will make everything clearly understood.

Figure 1 is a perspective view of my invention closed. Fig. 2 shows it open, (all the drawings representing it without the stencil.) Fig. 3 is a sectional view of the construction, showing especially the central ink-table, ink-supply, and printing-surface. Fig. 4 is a view of the hand-roller.

A represents a board about eleven inches wide and thirteen inches long, to which is fastened by hinges at F a frame B of the same dimensions as A. In the center of B, but a trifle smaller than the opening E of the frame B, I fasten by screws J J a thin board I. Upon the top of the central base I is securely fastened at its edges a thin level smooth slab of slate H the same width as the central base I, but about one-half inch longer. On top of the slate H is laid a piece of best-quality cotton flannel G the exact length and width of the slate H, (the cotton flannel is laid so that the soft cotton side is uppermost.) Then over that is laid a piece of fine muslin D an inch or so longer and wider than G or H, so that when stretched upon the cotton cloth G its edges project all around. To make it fit tight and smooth, I press strips of wood K under the projecting edges of the slate H. Then when the cover-frame B is closed down over A and fastened by the hooks C C a smooth printing-surface appears just a little higher than the surrounding frame B, the opening E neatly fitting over the slate H and its foundation I.

In actual use the operation is as follows: Having raised the frame B and thoroughly saturated the cloth G and muslin cover D with ink suitable for the purpose, a sheet of wax-cut stencil-paper is laid down upon the central printing-surface. The frame B is again fastened down by the brass hooks C C, thus holding everything tight and smooth. A sheet of paper is then laid upon the stencil-paper, the printer's roller, Fig. 4, is rolled across the paper, and all the characters and letters cut into the stencil will be reproduced on the sheet of paper, and with one inking many copies may be taken in the simple manner just described.

While I mention slate for the ink-bed surface and cotton flannel as an absorbent ink-retaining material, I do not confine myself to these, but am free to use others that would

answer the same purpose. Neither do I limit myself to one layer of fabric. I find that sometimes two layers work better than one, depending somewhat upon the quality of the fabric or the ink used.

What I claim in my invention, and desire to secure by Letters Patent, is—

A device of the class described comprising a base A, a flat plate I of less length and breadth secured thereon, a second plate H of non-yielding material mounted on said first-named plate and overlapping the edges thereof and having a smooth upper surface, a sheet of absorbent material G corresponding in length and breadth with said plate H, and a sheet D of comparatively thin fabric covering said sheet G and extending beyond the

edges thereof, strips K fitting into the recesses formed between the base A and the overlapping edges of the plate H and securing the edges of said sheet D and drawing the same snugly over said sheet G, and a cover B hinged on said base A and having an opening to receive said plates and sheets, the top of said cover when closed being flush substantially with said sheet D, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWIN R. MOORE.

Witnesses:

D. M. BROWN,
S. M. WILLIAMS.