(No Model.)

J. C. INGRAM. COPYING DEVICE.

No. 479,280.

Patented July 19, 1892.

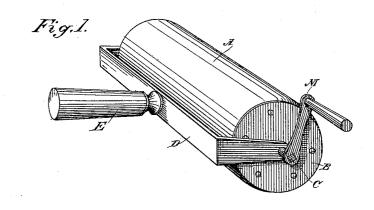
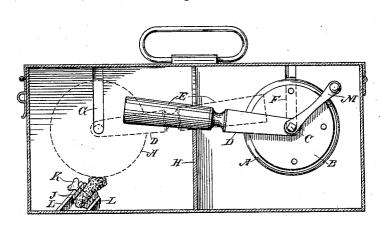


Fig.2.



Witnesses, J. House H.T. Ascheck Joseph & Ingram, Joseph & Ingram, allis

UNITED STATES PATENT OFFICE.

JOSEPH C. INGRAM, OF SAN FRANCISCO, CALIFORNIA.

COPYING DEVICE.

SPECIFICATION forming part of Letters Patent No. 479,280, dated July 19, 1892.

Application filed September 26, 1891. Serial No. 406,927. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH C. INGRAM, a citizen of the United States, residing in the city and county of San Francisco, State of 5 California, have invented an Improvement in Copying Devices; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an improved device 10 for copying letters and either written or printed matter.

It consists of a roller adapted to receive the impression from the written sheet and transfer it to the copying-sheet, a box with slotted 15 sides, within which said roller is contained, a cleansing device situated in the bottom of the box, a means for rotating the roller in contact therewith, and in certain details of construction, which will be more fully explained 26 by reference to the accompanying drawings, in which-

Figure 1 is a view of the roller. Fig. 2 shows the containing-base with the side broken

away to expose the interior.

A is a roller, which is made of any suitable composition which will readily take up the inscribed characters from the paper upon which they have been originally written or placed by simply rotating the roller in contact with 30 the written surface. This roller is made of a length equal to the width of the page or sheet which is to be copied and its diameter is such that its circumference will be equal to the length of the sheet to be copied. This roller 35 is cast or formed of suitable soft composition between the end plates or disks B, which are secured upon the shaft C, and which disks hold the composition in its proper cylindrical shape upon the shaft. This shaft is journaled 40 in a frame or yoke D, having a handle E, by which it is conveniently operated.

When a page has been prepared for copying, it is only necessary to place the roller in contact with one end of the sheet and rotate 45 it over the page, when the characters inscribed thereon will be transferred to the surface of the roller. From this roller the characters are readily transferred to any desired number of sheets where the characters are to

50 be reproduced.

N is a box having a width slightly greater

F and G made in the sides. When the roller is not in use, its shaft slips into the slots F upon each side of the box, so that the roller 55 is suspended within the box out of contact with the bottom, the handle resting upon a transverse partition H.

In the opposite end of the box is fitted a device for cleansing the roller after its work is 60 done. This consists of fine sponge or other suitable absorbent material, which is secured between the clamping-bars J, these bars being drawn together to compress the sponge by means of screws K at each end or in any 65 other suitable manner, thus leaving the sponge projecting from one edge of the clamp to as great an extent as may be desired.

Upon each side of the box are guides L, into which the ends of the clamping-bars may be 70 slipped, passing down the inclined slots in the guides, as shown. When the clamps are in their place, the sponge will project upward, so that when the shaft of the roller is placed in the slots G the roller will rest upon the 75

surface of the sponge.

M is a crank fixed to one end of the rollershaft so as to project exterior to the box, and by means of this crank the roller is turned while in contact with the sponge, thus wash- 80 ing off the surface and preparing it for future use without contact with the fingers or other disagreeable cleansing operations. After being cleansed the roller may be returned to the other compartment, with the shaft resting in 85 the slots F.

The box is provided with a suitable cover. which closes over it, so that the whole is protected from dust or injury.

Having thus described my invention, what 90 I claim as new, and desire to secure by Letters Patent, is—

- 1. A copying device consisting of a roller mounted upon a shaft and journaled in a frame, a box having vertical slots made in its 95 sides, into which the projecting ends of the roller-shaft lie, a cleansing-sponge fixed in the bottom of the box, and a crank fixed to the roller-shaft, whereby it may be rotated in contact with the sponge, substantially as herein 100 described.
- 2. A copying device consisting of a roller having its shaft journaled in a frame and a than the length of the roller, and it has slots I crank upon the outer end of the shaft, a box

479,280 ż

having vertical slots formed in its sides to receive the roller-shaft with the crank exterior to the sides of the box, a cleansing-sponge, clamps between which said sponge is secured, and inclined slotted guides in the bottom of the box, into which said clamps are fitted, substantially as herein described.

In witness whereof I have hereunto set my hand.

JOSEPH C. INGRAM.

Witnesses: S. H. Nourse, J. A. Bayless.