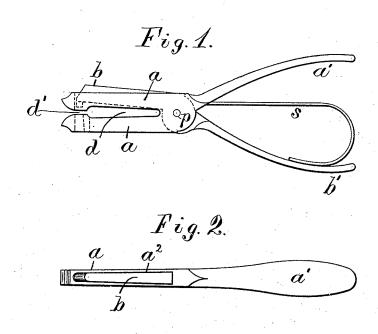
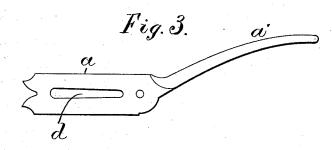
(No Model.)

R. J. KRAUTHEIM. CARD PUNCH.

No. 421,938.

Patented Feb. 25, 1890.





Attest: L. Lee 4 C Fucher Inventor. R. J. Krantheim, per Erane Miller, altys.

UNITED STATES PATENT OFFICE.

, RICHARD J. KRAUTHEIM, OF NEWARK, NEW JERSEY.

CARD-PUNCH.

SPECIFICATION forming part of Letters Patent No. 421,938, dated February 25, 1890.

Application filed July 15, 1889. Serial No. 317,594. (No model.)

To all whom it may concern:

Be it known that I, RICHARD J. KRAUT-HEIM, a citizen of the United States, residing at Newark, Essex county, New Jersey, have 5 invented certain new and useful Improvements in Card-Punches, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

This invention relates to that class of ticket or card punches in which the die-holding jaw is slotted to receive the punching-jaw pivoted therein; and it consists in a blank for the dieholding jaw, formed with a transverse slot closed at both ends, as hereinafter described.

In the annexed drawings, Figure 1 is a side view, and Fig. 2 a plan, of an entire punch constructed in accordance with my invention; and Fig. 3 is a side view of a blank for

the die-holding jaw embodying the invention.

Referring to Figs. 1 and 2, a is the die-holding jaw and b the punching-jaw, each being provided with a handle-piece a' and b', respectively. The jaw a is provided with a 25 slot a^2 in its body portion, in which the jaw b is pivoted by a pin p in the usual manner, and the jaws are separated, when not in operation, by the spring s, attached at one end to the outer end of one hand-piece and its 30 other end pressing against the base of the other hand-piece.

In punches of this class it is necessary to

form a deep transverse recess in the die-holding jaw for the introduction of the card or ticket to be punched. To secure such recess, 35 I cast the blank for the die-holding jaw with a transverse slot d in its body portion, closed as shown in Fig. 3, and it is then necessary in completing the jaw merely to saw a slit d' of the desired width inward from the end of 40 the jaw to the end of the slot. By this means I obviate the labor and expense of sawing a slit the whole depth of the recess, and the slot d allows an increased clearance for the inner edge of the ticket inserted for the 45 punching operation.

The slot \bar{d} is preferably tapered toward its inner end in order to give increased strength to the base of the jaw, and to avoid distorting the latter by a similar taper upon the outer 50 edge to obtain corresponding strength.

Having thus set forth my invention, what

I claim herein is-

The blank for a die-holding jaw, provided with transverse slot d, closed at both ends, 55 as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

RICHARD J. KRAUTHEIM.

Witnesses:

L. LEE,

H. J. MILLER.