

April 7, 1931.

W. T. GOLLWITZER

1,799,418

PRINTING DEVICE

Filed May 3, 1928

Fig. 1

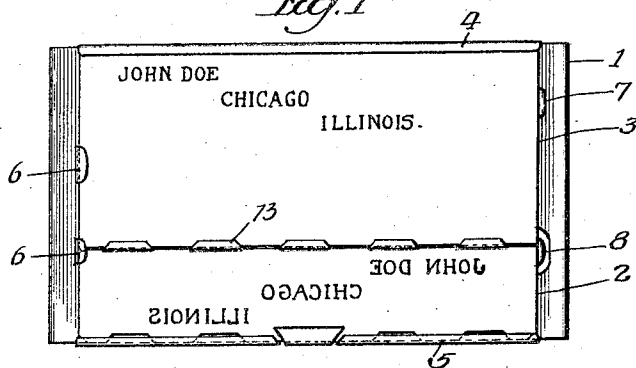


Fig. 2

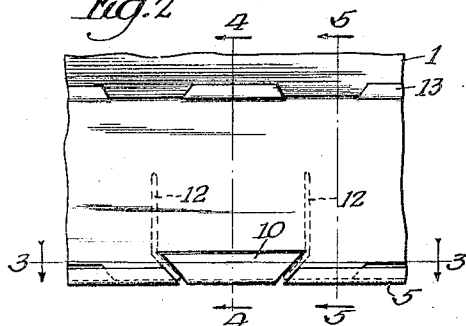


Fig. 3

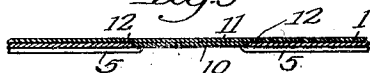


Fig. 4

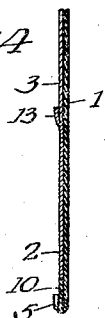


Fig. 5



Fig. 6

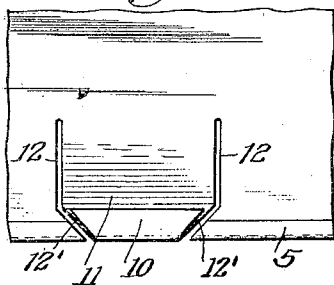


Fig. 7

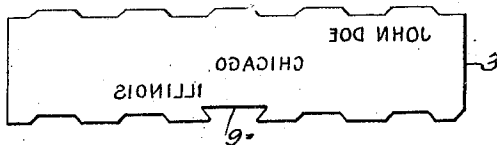
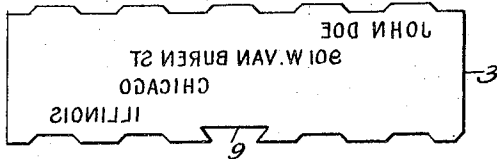
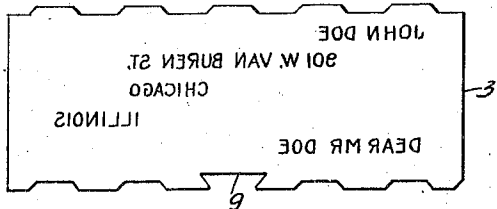
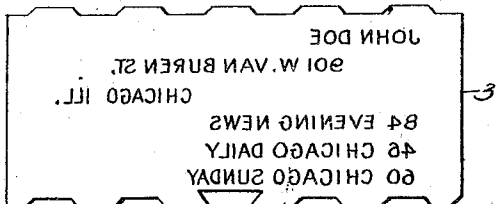
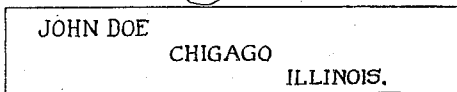


Fig. 8



Inventor
By Walter J. Hollinger
Wm. C. Bell, Atty.

UNITED STATES PATENT OFFICE

WALTER T. GOLLWITZER, OF CHICAGO, ILLINOIS, ASSIGNOR TO ADDRESSOGRAPH COMPANY, OF WILMINGTON, DELAWARE, A CORPORATION OF DELAWARE

PRINTING DEVICE

Application filed May 3, 1928. Serial No. 274,734.

This invention relates to printing devices of that class which comprise a frame, a printing plate bearing printing characters and an information card detachably mounted on the frame, the complete device adapted to be stored in accordance with a card index system or in a stack and to be run through an addressing or other suitable machine for taking impressions from the form on the plate. It has been customary in the past to provide the frame with retaining devices for holding a plate of a certain size and a card of a certain size.

The primary object of this invention is to provide novel and simple means for retaining the plate on the frame so that plates of different widths may be used on a standard frame and cards of different widths may be used in conjunction with the plates.

And a further object of the invention is to facilitate the mounting of a plate in the frame and removal of the plate from the frame by providing easily operated means for interlocking the plate with the frame.

With these and other objects in view I have shown the invention in a selected embodiment in the accompanying drawings in which,

Fig. 1 is a front elevation of a printing device embodying the invention and showing a narrow plate and a wide card.

Fig. 2 is a fragmentary enlarged view of a portion of Fig. 1 showing the interlocking means.

Fig. 3 is a sectional view on the line 3—3 of Fig. 2.

Figs. 4 and 5 are sectional views on the lines 4—4 and 5—5 of Fig. 2.

Fig. 6 is a fragmentary view of a part of the frame showing the plate locking device.

Fig. 7 shows a plurality of plates of different widths.

Fig. 8 is a fragmentary view of a card.

Referring to the drawings 1 is a frame preferably made of thin sheet metal cut and stamped to provide retaining devices for the plate 2 and the card 3. These retaining devices may comprise a bead 4 at the top of the frame, a bead 5 at the bottom of the frame, lips 6 at one end of the frame, and a fixed stop 7 and a yielding stop 8 at the other end

of the frame. The printing plate is a flat strip of sheet metal having printing characters embossed thereon and it is adapted to lie flat against the body of the frame and be detachably engaged with the frame. The printing plate has a dovetail recess 9 in its lower edge to receive a dovetail projection 10 on the frame for interlockingly engaging the plate with the frame. The projection 10 is formed on the face of a yielding tongue 11 which is made by slitting the frame at 12 through the bead 5, Fig. 6. The slits preferably extend angularly at 12' through the beaded portion of the frame and they extend in parallel relation sufficiently into the frame to provide a yielding tongue. The dovetail projection 10 may be conveniently made by flattening the bead 5 upon the tongue. In mounting the plate upon the frame the tongue is depressed sufficiently to enable the plate to be slid down on the frame into the bead 5, whereupon the tongue is released to project the dovetail 10 into the recess 9. This dovetail connection between the plate and the frame locks the plate to the frame and holds it rigidly in position during printing and other operations. The lips 6 and the stop 8 constitute guides for sliding the plate into the bead 5 and in proper position for interlockingly engaging the dovetail 10. The stop 8 may be a rigid stop like 7 or a lip like 6 if desired.

Since the plates are secured to the frame at their lower edges only, it will be apparent that plates of different widths may be used in a standard frame and a plurality of plates of different widths are shown in Fig. 7. The frame may be made according to previous practice with retaining devices positioned for a card of standard width, but I may provide the plate with projections 13 to engage the lower edge of the card 3, as shown in Fig. 1 so that cards may be used to fill the space on the frame between the plate 2 and the bead 4, as more particularly described and claimed in my application Serial No. 274,733 filed concurrently herewith.

I am aware that changes in the form, construction and arrangement of my invention may be made to satisfy different condi-

tions and I reserve the right to make all such changes as fall within the scope of the following claims:

I claim:

1. A printing device of the character described comprising a frame, and a plate having printing characters thereon and detachably mounted flatly on the frame, said frame and plate having dovetail interengaging means in the plane of the plate and securing the plate on the frame.

2. A printing device of the character described comprising a frame, and a plate having printing characters thereon and detachably mounted flatly on the frame, said plate having a dovetail recess and said frame having a dovetail projection engaging said recess in the plane of the plate for securing the plate on the frame.

3. A printing device of the character described comprising a frame, and a plate having printing characters thereon and detachably mounted on the frame, said plate having a dovetail recess and said frame having a yieldable dovetail projection engaging said recess and securing the plate on the frame.

4. A printing device of the character described comprising a frame, and a plate having printing characters on its front face and detachably mounted on the frame with its back to the frame, said plate and frame having dovetail interengaging means at adjacent edges securing the plate on the frame.

5. A printing device of the character described comprising a frame, and a plate having printing characters thereon and detachably mounted on the frame with the end edges thereof abutting stop portions on the frame, said frame having yielding means engaging the plate at the bottom thereof and retaining the plate on the frame, said yielding means engaging the plate at the bottom thereof to permit substitution of a plate of different width for the first named plate without alteration of the yielding means.

6. A printing device of the character described comprising a frame, and a plate having printing characters thereon and detachably mounted on the frame, said frame having dovetail yielding means engaging the plate at an edge thereof and retaining the plate on the frame.

7. A printing device of the character described comprising a frame, and a plate having printing characters thereon and detachably mounted on the frame, said plate having a dovetail recess in its lower edge and said frame having retaining devices engaging said plate and a dovetail projection engaging said recess.

8. A printing device of the character described comprising a frame, and a thin metal plate having printing characters embossed on the front face thereof and detachably mounted on the frame with its back to the

front of the frame, said frame having a dovetail projection on the front face thereof engaging a dovetail recess in the plate and lying in substantially the plane of the plate and securing the plate on the frame.

9. A printing device of the character described comprising a frame, and a thin metal plate having printing characters embossed on the front face thereof and detachably mounted on the frame with its back to the front of the frame, said frame having a dovetail projection yieldably supported on the front face thereof and said plate having a dovetail recess to receive said projection in substantially the plane of the plate.

10. A printing device of the character described comprising a sheet metal frame having a bead at its lower edge, said frame being cut on parallel lines and on diverging lines through the bead to form a yielding tongue, that portion of the bead on the tongue being flattened to provide a dovetail projection on the front face of the frame, and a thin metal plate having printing characters embossed on the front face thereof and detachably mounted on the frame with its back to the front of the frame, said plate having its lower edge engaged with the bead on either side of the tongue and provided with a dovetail recess to receive the flattened portion of the bead on the tongue to hold the plate on the frame.

WALTER T. GOLLWITZER.