Nov. 12, 1929. G. W. SCHAEFER 1,735,214

INDEX TAB

Original Filed Oct. 1, 1925

Fig. 1

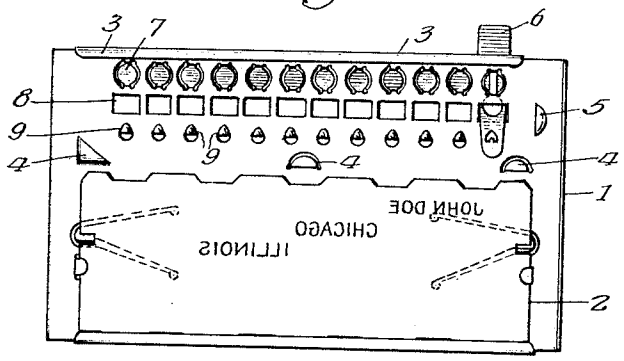


Fig. 2

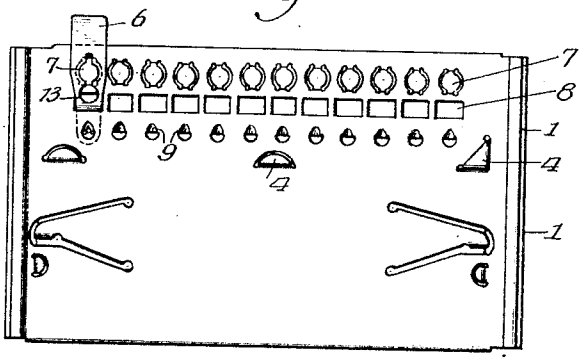


Fig. 3

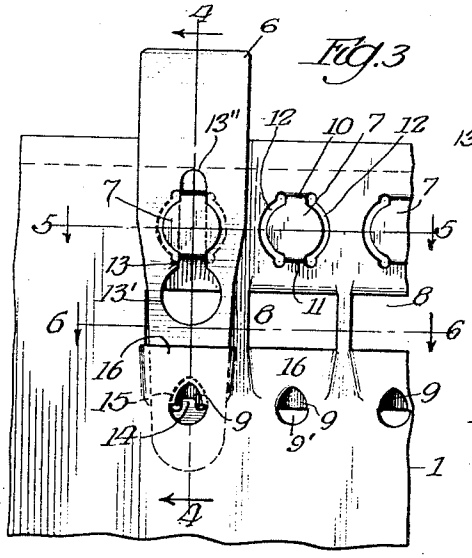


Fig. 4

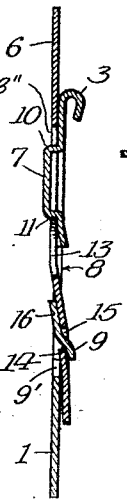


Fig. 5



Fig. 6

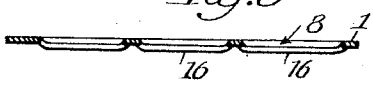
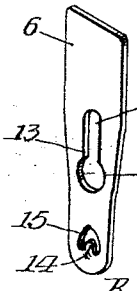


Fig. 7



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UNITED STATES PATENT OFFICE

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Original application filed October 1, 1925, Serial No. 59,825. Divided and this application filed May 8, 1928. Serial No. 276,054.

This application is a division of my application Serial No. 59,825, filed October 1, 1925.

This invention relates to printing devices having a printing form and which are 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. These printing devices have been made in various forms, including a frame having a printing plate with embossed characters detachably mounted on the frame, and also including a one-piece device with printing characters embossed thereon. These devices have also been provided with index tabs suitably marked and adapted to be detachably engaged with the device for indexing or classifying the device. Some difficulty has been experienced in making these tabs so that they can be readily engaged with and disengaged from the device by those not specially skilled in doing work of this kind, and sometimes the tabs become worn and are accidentally detached from the device while they are being run through the machine or in handling.

The object of this invention is to provide novel and simple means for securely holding a detachable tab on a printing device.

And a further object of the invention is to provide means for locking a detachable tab to a printing device in such a way that it may be readily detached by manual manipulation when desired. The invention may be embodied with printing devices of many different kinds and for the purposes of this application, I have shown it embodied in that type of printing device which comprises a frame and a detachable printing plate.

In the accompanying drawings;

Fig. 1 is a front elevation of a printing device embodying the invention.

Fig. 2 is a rear elevation of the printing device shown in Fig. 1.

Fig. 3 is an enlarged fragmentary view of a portion of the printing device shown in Figs. 1 and 2.

Fig. 4 is a sectional view on the line 4—4 of Fig. 3.

Figs. 5 and 6 are sectional views on the lines 5—5 and 6—6 of Fig. 3.

Fig. 7 is a detail perspective view of a detached tab.

Referring to the drawings, 1 is a frame, and 2 is a printing plate detachably secured on the frame by any suitable retaining means. The frame may also be provided with a bead 3, lips 4, and a stop 5 for retaining a card, but I have omitted the card from the drawings because it forms no part of my present invention and it would obscure certain features of my invention, if shown.

Provision is made for accommodating a tab 6 in a plurality of different positions, or for accommodating a plurality of tabs on the frame, and the means for securing the tab on the frame are spaced apart across the frame adjacent the top edge thereof. Each securing means comprises a stud or button 7 located at the top edge of the frame, an opening 8 below the stud, and a projection 9 below the opening. The stud may be substantially circular in form, connected at its top at 10 and at its bottom at 11 to the body of the frame, and made by cutting the frame at 12 and striking up the circular stud so that the head of the stud will be offset at the back of the frame, Figs. 4 and 5, and side portions thereof will project free from the connections 10 and 11, Figs. 3 and 4.

The tab, Fig. 7, has a keyhole slot 13 therein and a tooth 14 projecting into an opening 15 at its lower end. The circular part 13′ of the keyhole slot is adapted to engage the head of the stud 7 and the elongated part 13″ of the keyhole slot is adapted to engage the parts 10 and 11 which connect the head of the stud to the body of the frame. The tooth 14 of the tab is adapted to engage the projection 9, Fig. 3, and prevent upward detaching movement of the tab relative to the frame.

In practice, the lower end of the tab is inserted through the opening 8 from the rear of the frame and the tab is uprighted to engage the circular part 13′ of the keyhole slot with the head of the stud 7; then the tab is moved downward until the elongated part 13″ of the keyhole slot engages the head of the stud and the upper end of the slot comes to rest against the part 10 which connects the head of the stud to the body of the frame.

The opening 15 at the lower end of the tab engages the projection 9 on the frame and this projection is made in the form of a socket to receive the tooth 14 on the tab. The projection 9 in the form of an over-hanging socket, as shown in the drawings, is made by indenting the frame from the back and providing a relief opening 9′ below the projection. When the tab is engaged with the frame, as just described, the lower end portion thereof rides over the socket projection 9 which enters the opening 15 in the tab and then the lower end portion of the tab springs back into engagement with the front face of the frame. The tooth 14 is then disposed in position to engage the socket projection 9 on any upward movement of the tab and thus the tab is locked against accidental displacement. That part 16 of the frame below the opening 8 is slightly inclined rearward to receive the lower end of the tab which is bent at slight tension, but sufficient to hold it in engagement with the projection 9. To detach the tab from the frame a sharp instrument should be introduced beneath the lower end of the tab to pry it away from the frame sufficiently to clear the projection 9, after which the tab can be pulled up until the circular part 13′ registers with the head of the stud which will permit detachment of the tab from the frame.

The invention is simple in construction and it provides for securely holding the tab on the frame against accidental detachment while, at the same time, it permits the tab to be readily engaged with, or detached from the frame whenever desired.

My invention may be applied to one-piece printing devices, and to other forms of combination frames and printing plates, and to printing devices of many different varieties, and I reserve the right to make all such changes in the form, construction and arrangement of parts as may be necessary or desirable to adapt the invention for different printing devices and for other purposes, within the scope of the following claims.

I claim:

1. A tab having a keyhole slot therein for detachable engagement with a printing device.

2. A tab having a keyhole slot therein and a tooth for detachable engagement with a printing device.

3. A tab having a keyhole slot and an opening therein, and a tooth projecting into the opening for detachable engagement with a printing device.

4. A printing device frame having means for detachable engagement of a tab and comprising a stud having free side portions.

5. A printing device frame having means for detachable engagement of a tab and comprising a headed stud for engagement with a keyhole slot and a projection stamped up from the frame.

6. A printing device frame having means for detachable engagement of a tab and comprising a stud having free side portions, an opening, and a projection all arranged in alignment.

7. The combination of a printing device frame having a stud on one face, a projection on its other face, and an opening between said stud and projection, and a tab adapted to project through said opening and having a slot to engage said stud and a recess to engage said projection.

8. The combination of a printing device frame having an opening therein, a stud on its back face above the opening, and a projection on its front face below the opening, and a tab adapted to project through said opening and having a keyhole slot to engage said stud and an opening to receive said projection.

9. The combination of a printing device frame having an opening therein, a stud on its back face above the opening, and a projection on its front face below the opening, and a tab adapted to project through said opening and having a keyhole slot to engage said stud, an opening, and a tooth in said opening adapted to engage said projection and prevent accidental displacement of the tab from the frame.

10. The combination of a printing device frame having a stud and a projection stamped up therefrom, said stud being connected with the frame at its top and bottom and being free from the frame at its side portions, and a tab having a keyhole slot to engage said stud, an opening to receive said projection and a tooth in said opening adapted to engage said projection and prevent accidental displacement of the tab from the frame.

11. The combination of a printing device frame having a stud stamped up therefrom said stud being connected with the frame at its top and bottom and being free from the frame at its side portions, a tab having a keyhole slot to engage said stud, and means on the frame and tab for holding the tab in locking engagement with the stud.

12. The combination of a printing device frame having a projection thereon, a tab having an opening to receive said projection, means on the frame and tab holding the tab on the frame, and a tooth in said opening arranged to engage said projection upon relative movement of the tab and frame to prevent accidental disengagement of the tab from the frame.

GEORGE W. SCHAEFER.