Nov. 26, 1935.

W. T. GOLLWITZER PRINTING DEVICE Filed Nov. 21, 1931

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Patented Nov. 26, 1935

UNITED STATES PATENT OFFICE

2,022,195

PRINTING DEVICE

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Application November 21, 1931, Serial No. 576,496

7 Claims. (Cl. 129-16.8)

This invention relates to printing devices which are usually arranged in accordance with a classification system and stored in drawers when not in use and which are sequentially fed through 5 printing machines to print addresses and the like. The printing devices are provided with keepers for securing removable index tabs at determined positions to classify the printing devices and it is important that the tabs be firmly retained to prevent accidental disengagement or displace- 10° ment during handling and use of the printing devices. But it is likewise important that the tabs be insertable and removable easily so that the classification of the printing devices may be 15 changed by transferring the tabs from one position to another.

The primary object of my invention is to provide a novel detachable index tab that may be secured firmly in the keepers on the printing de-20 vice to prevent accidental disengagement or displacement and which may be easily engaged with and detached from the printing device. Another object is to provide a novel retaining device on the body of the tab adapted to engage a cooperating retaining means on the printing 25° device to firmly secure the tab against accidental displacement while affording easy detachment upon manual manipulation of the tab. Another object is to provide a novel and substantial retaining device on the tab which will not be deformed in the insertion or removal of the tab so that a tab may be used repeatedly without reducing the effectiveness of the retaining device. 35° Another object is to provide novel retaining means which will hold a tab securely in place on a printing device and which can be manipulated easily to release the tab from the holding device by deflecting the tab to disengage the retaining 40.means and permit removal of the tab from the frame.

Fig. 5 is a front elevation of a typical printing device with which the tab of my invention is used.

2,022,195

Referring to the drawing generally, 17 is the frame of the printing device, 18 is the printing 5 plate, and 19 is the information card. Beads 20 and 21 are formed along the top and bottom edges of the frame and retaining devices 22 and 23 are struck up from the frame on the face thereof. The information card is detachably secured on 10 the face of the frame by the bead 20 and the retaining devices 22. The printing plate is slidably mounted on the face of the frame between the bead 21 and the retaining devices 23 and is held against endwise displacement by the yield- 15 able retaining tongues 24 formed on the frame. The frame is slit and struck up to provide sets of aligned keepers 25, 26, and 27 to receive the tabs and preferably as many sets of keepers are formed as can be conveniently provided on the 20 frame. The keepers 25 are downwardly extending lips struck up on the front of the frame. The retaining devices 26 are provided by a panel struck up on the back of the frame and this panel is connected to the frame intermediate the sets 25 of keepers by legs 26'. The keepers 27 consist of oppositely extending lips struck up on a front of the frame and the portion intermediate the lips is in the plane of the frame. The tab is preferably formed of hardened re- 30 silient material and includes a head and a stem. The head of the tab projects beyond the upper edge of the frame when the tab is properly installed. The stem of each tab is inserted into a set of keepers by first being passed below the 39 keeper 25 and through the slit at the lower end thereof, then under the keeper panel 26 on the back of the frame, and then through the slits at the ends of the lips of the keeper 27 so that the end of the stem of the tab lies on the face of 40 the frame, and the shoulders 28 on the edges of the tab engage the adjacent legs 26' at the upper edge of the panel 26 to limit the movement of the tab inwardly on the frame. To prevent accidental outward movement of the tab in the keep- 45 ers to prevent accidental disengagement and displacement of the tab, I provide retaining means which consists of a retaining device on the tab and a cooperating means on the frame. The tab illustrated in Fig. 4 has a retaining ou device which cooperates with a perforation formed in the frame in alignment with the set of keepers into which the tab is inserted. This embodies a head 39 and a stem 49. A boss or nub I is formed on one face of this tab inwardly of 55the edges and intermediate the end portions thereof and above the shoulders 28. This nub seats in an opening 42 aligned with the set of keepers into which the tab is inserted, one such opening being provided in alignment with each "

The invention can be used with a variety of printing devices including those embodying a frame carrying one or more printing plates having type characters embossed thereon, as shown, for example, in Patent No. 1,677,449, July 17, 1928, and one-piece printing devices as shown, for example, in Patent No. 1,790,717, February 3, 1931. In the selected embodiment of the invention illustrated in the accompanying drawing 50

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Fig. 1 is a fragmentary front elevation of a printing device having the index tab of my invention secured thereon;

Fig. 2 is a fragmentary elevation of the back 55 of the printing device illustrated in Fig. 1;

Fig. 3 is a sectional view taken substantially on the line 3----3 of Fig. 1 and drawn to an enlarged scale;

Fig. 4 is a perspective view of the tab shown 60 in Figs. 1, 2, and 3; and

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set of keepers and these openings are located on the back of the frame and behind the bead 20. When a tab is inserted into a set of keepers and the shoulders 28 engage the adjacent legs 26' $\mathbf{5}$ at the upper edge of the panel 26, the nub 41 seats in the opening 42 and serves to prevent outward movement of the tab in the keepers. When it is desired to remove the tab, the body 39 thereof is grasped in the fingers and the tab is deflected rearwardly into substantially the broken line position of Fig. 3 and in this way the nub 41 is unseated from the opening 42, and consequently the tab may be easily withdrawn from

2,022,195

4. In a printing device which has a frame provided with a set of aligned keepers adjacent one edge thereof and having an opening therein between said edge and said keepers and aligned with said set of keepers, the combination there- 5 with of a tab having a nub on one face thereof adapted to seat in said opening to prevent accidental displacement of the tab from said keepers when said tab is inserted into said keepers with one end thereof extending beyond said edge of 10 the frame, said nub being positioned on said tab adjacent said end thereof whereby said nub will be unseated from said opening when said end of said tab is deflected away from said frame to thereby permit removal of said tab from said 15 keepers. 5. In a printing device which has a frame provided with a set of aligned keepers, the combination therewith of a tab adapted to be inserted into said set of keepers to have one end thereof 20 extended beyond the adjacent edge of the frame, said frame and tab having a cooperating nub and opening located between said keepers and the edge of the frame to prevent accidental displacement of the tab after it is inserted into said 25 set of keepers, the part of said tab extending beyond the edge of said frame being engageable to permit deflection thereof to thereby disengage said nub and opening to permit withdrawal of said tab from said set of keepers. . 30 6. In a printing device which has a frame provided with a set of aligned keepers adjacent one edge thereof and having an opening therein between said edge and said keepers and aligned with said set of keepers, the combination there- 35 with of a tab having a shoulder on a side edge thereof adapted to limit movement of the tab when it is inserted into said set of keepers and having a nub on one face thereof adapted to seat in said opening to prevent accidental dis- 40 placement of the tab from said keepers when the tab is inserted into said keepers with one end thereof extending beyond said edge of the frame, said nub being positioned on said tab adjacent said end thereof whereby said nub will be 45 unseated from said opening when said end of said tab is deflected away from said frame to thereby permit removal of said tab from said keepers. 7. In a printing device which has a frame pro- 50 vided with a set of aligned keepers adjacent one edge thereof and having an opening therein between said edge and said keepers and aligned with said set of keepers, the combination therewith of a tab having continuous side edges and ss including a shoulder on a side edge adapted to limit inward movement of the tab when it is inserted into said set of keepers and having a nub on one face thereof positioned inwardly of the side edges and intermediate of the end por- 80 tions of the tab and adapted to seat in said opening to prevent accidental displacement of the tab from said keepers when the tab is inserted into said keepers with one end thereof extending beyond said edge of the frame, said 65 nub being positioned on said tab adjacent said end thereof whereby said nub will be unseated from said opening when said end of said tab is deflected away from said frame to thereby permit removal of said tab from said keepers. 70

the keepers. The tab is made of hard metal and the frame is made of soft metal and for this

- reason I prefer to form the nub on the tab and the opening in the frame, but these parts may be reversed without departing from the purview of my invention for a nub on the frame and an 20 opening in the tab are just as effective in retain-
- ing the tab against outward movement as the illustrated arrangement and the tab could be removed by being deflected as described to disengage the opening from the nub.
- The tab may be easily secured to a frame by 25 grasping the head thereof and passing the stem into a set of keepers until the shoulders 28 engage adjacent legs 26' at the upper edge of the panel 26. When this is done the tab is effectively 30 held against accidental disengagement or displacement because a retaining device thereon engages a cooperating means on the frame and this, in cooperation with the engagement of the shoulders 28, prevents longitudinal movement of 35 the tab in the keepers. Upon proper manipulation, that is to say, by bending the tab as described, a disengagement of the retaining device

from the retaining means in the frame is effected and the tab may be removed, but otherwise it is 40 held against displacement.

I have shown and described my invention as used with a printing device embodying a frame and a removable printing plate, but it is to be understood that it is equally adapted for use on a one-piece printing device. Further, I have 45 shown a preferred form of my invention but it is to be understood that it is susceptible of variation and modification and I therefore do not wish to be limited to the precise details set forth but 50 desire to avail myself of such changes and alterations as fall within the spirit and scope of the following claims:

I claim:

1. An index tab including a head and a stem, 55 and a nub embossed on said tab and appearing in relief on one face of the tab and in intaglio on the other face and located inwardly of the edges thereof and adjacent the juncture of the head and stem.

2. An index tab having a shoulder on a side **60** edge thereof, a nub on one face of said tab and positioned inwardly of the edges and intermediate of the end portions thereof, said nub being located on said tab above said shoulder. 3. In a printing device which has a frame pro-65 vided with a set of aligned keepers, the combination therewith of a tab adapted to be inserted into said set of keepers, said frame and tab having a cooperating nub and opening located between said keepers and the edge of the frame for preventing accidental displacement of the tab after it is inserted into said set of keepers.

WALTER T. GOLLWITZER.