

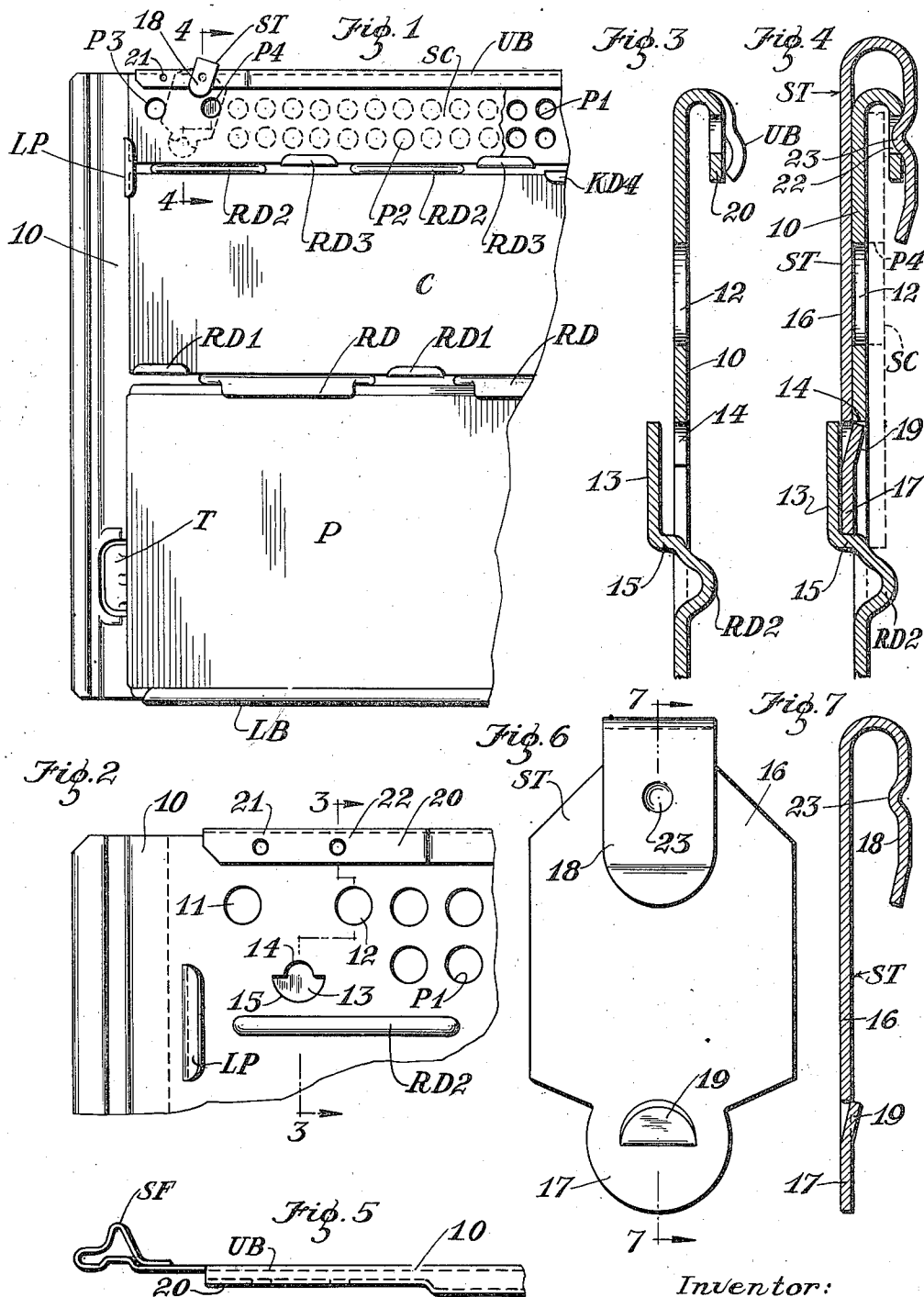
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TAB SHIFTING MEANS ON A PRINTING DEVICE

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TAB SHIFTING MEANS ON PRINTING
DEVICES

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1 Claim. (Cl. 101—369)

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This invention relates to printing and control and like devices of the character adapted to be passed through printing and like machines to have operations performed thereon or under control thereof and which are customarily stored in drawers when not in use in printing and like machines.

The printing and control and like devices which are passed through printing and like machines usually embody an arrangement whereby particularity may be imparted to the respective devices. For example, those printing and control and like devices which are used by insurance companies and similar institutions are usually so arranged that each particular device pertains to a particular policy and policy holder and each device is so arranged that usually the name and address of the policy holder, the policy number and kindred more or less permanent data may be printed from the device during the course of movement thereof through a suitable printing machine. Moreover, such printing and control and like devices oftentimes include an area in which perforations or other data representing means may be afforded to indicate, for example, the amount of the premium due from the particular policy holder on the particular policy to which the particular printing and control or like device pertains. Yet further, such printing and control or like devices also include an arrangement whereby it may be readily determined whether the policy to which the particular device pertains is, for example, a whole-life policy, a twenty-payment policy or an endowment policy, and also an arrangement is provided, for example, to indicate whether the premiums are to be paid annually, semi-annually, or quarterly, and it is arrangements of this character on the printing and control and like devices that impart particularity to a particular device.

Moreover, printing and control and like devices of the aforesaid character often embody means effective to indicate, for example, whether or not a particular payment has been paid, as for example, in the case of a printing and control device allocated to a particular insurance policy, an arrangement is afforded to indicate whether or not a particular premium due on the policy has been paid and the present invention primarily has to do with such an arrangement in printing and control and like devices.

Heretofore particularity has been imparted to printing and control and like devices by attaching removable tabs to the printing and control and like devices in such a way that at least a

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portion of each such tab is extended beyond an edge of the device at a particular position along such edge to thereby be indicative of a particular condition, one arrangement of this character being disclosed in my Patent No. 2,049,436, patented August 4, 1936.

Yet further, in the copending application of Carl J. Hueber, Serial No. 596,991, filed June 1, 1945, now Patent No. 2,425,324, issued, August 12, 1947, a printing and control or like device is disclosed which includes a portion in which perforations may be formed at selected of predetermined positions to thereby impart particularity to the particular device, and the present invention is particularly useful in a printing and control or like device of the character disclosed in this copending application.

Among the objects of the present invention are to afford on a printing and control or like device, including an area or portion in which perforations may be afforded at selected of predetermined positions, an arrangement whereby one or the other of the positions whereat perforations may be selectively formed may be rendered effective while the other of such positions is rendered ineffective; to associate with at least two positions whereat perforations may be selectively formed in a printing and control device a member movable on the device that will be effective to cover a perforation formed at one of such positions while at the same time disclosing the other of such positions and which may be moved from one such position to an alternative position to thereby disclose the previously covered position and at this time cover the previously disclosed position; to extend a portion of such movable member over an edge of the printing and control device so as to thereby afford a visible indication of the position of the member on the particular printing and control device on which it is included and also to afford access thereto so as to thereby enable the member to be quickly moved from one to the other of the alternate positions that may be assumed thereby; to effectively retain such a member in one or the other of the alternate positions into which it may be moved; and to effectively retain a movable member of the aforesaid character against undesired displacement from the printing and control device on which it is mounted.

Printing and control devices of the character to which this invention pertains usually include an area or portion in which perforations may be formed at selected of predetermined positions and a card or the like is often releasably retained

over such area so that only selected of the perforations formed in the aforesaid area will be effective, this being realized by forming perforations in the card in alignment with selected of perforations in the area so that only aligned perforations in the area and card will be effective to impart particularity to a printing and control or like device on which such an arrangement is included. An arrangement of this character is also disclosed in the aforesaid copending application of Carl J. Hueber and the present invention is particularly adaptable for use in a printing and control or like device embodying such an arrangement, and among further objects of this invention are to provide a member movable relative to at least two perforations in an area of the aforesaid character so as to thereby be effective to cover one such perforation and disclose the other such perforation; to provide such a member on the printing and control or like device and yet enable a card to be disposed over the area; to utilize a part of the arrangement effective to retain the card or the like over the aforesaid area, to retain the movable member on the printing and control or like device; and to provide an arrangement of the aforesaid character on a printing and control or like device which will be of simple and economical construction and efficient and positive in operation.

Other and further objects of the present invention will be apparent from the following description and claim and are illustrated in the accompanying drawing which, by way of illustration, shows a preferred embodiment and the principle thereof and what I now consider to be the best mode in which I have contemplated applying that principle. Other embodiments of the invention embodying the same or equivalent principle may be used and structural changes may be made as desired by those skilled in the art without departing from the present invention and the purview of the appended claim.

In the drawings,

Fig. 1 is a fragmentary elevational view of a printing and control device embodying my invention;

Fig. 2 is another fragmentary elevational view showing the face of the frame or carrier of the printing and control device shown in Fig. 1 and on which the movable member with which the present invention has to do has not been mounted;

Fig. 3 is a transverse sectional view taken substantially on the line 3—3 on Fig. 2;

Fig. 4 is a transverse sectional view taken substantially on the line 4—4 on Fig. 1;

Fig. 5 is a fragmentary view of the device looking down on the upper edge thereof as illustrated in Fig. 2;

Fig. 6 is an elevational view of the movable member to which the present invention pertains; and

Fig. 7 is a sectional view taken substantially on the line 7—7 on Fig. 6.

The printing and control device illustrated in the accompanying drawings is of the character disclosed in the aforesaid copending application of Carl J. Hueber and embodies a frame or carrier 10 that is formed from sheet metal or like material and which is substantially rectangular in outline. Spacing flanges as SF of the character disclosed in the copending application of Carl J. Hueber, Serial No. 450,320, filed July 9, 1942, now Patent No. 2,425,323, issued August 12, 1947, are provided on the rear face of the frame

or carrier 10 along the shorter edges thereof for the purpose well understood in the art. Moreover, a lower bead LB is provided along one of the longer edges of the frame or carrier 10 and this bead in cooperation with the retaining device as RD is effective to retain a rectangular printing plate as P on the front face of the carrier 10, the printing plate in the present instance being of the kind on which type characters may be embossed and particularly of the character disclosed in the copending application of Carl J. Hueber and William J. Hampton, Serial No. 450,318, filed July 9, 1942, abandoned. The printing plate P is slid into the lower bead LB and the retaining devices RD from one of the shorter edges of the frame or carrier 10 and is retained against displacement from these retaining devices and this bead by yieldable tongues as T which engage the shorter edges of the plate as P.

Moreover, retaining devices as RD1 and RD4 are provided on the face of the frame or carrier 10 and a card C is slid into these retaining devices from the shorter edge of the frame or carrier 10 not illustrated in Fig. 1 so as to have the leading edge of the card C passed under the retaining lip LP, a somewhat similar retaining lip being provided for cooperation with the opposite edge of the card C. These lips function to retain the card C against displacement from the retaining devices as RD1 and RD4.

An upper bead UB is formed along the longer edge of the frame or carrier 10 opposite that along which the bead LB is formed, and a retaining device as RD3 is arranged in spaced relation with this bead LB. A card as SC is adapted to be slid into the bead UB and the retaining device RD3 from the shorter edge of the frame or carrier 10 not illustrated in Fig. 1 to have the leading edge thereof disposed beneath the retaining lip LP, a somewhat similar retaining lip being provided to cooperate with the other edge of the card SC and these retaining lips are effective to retain the card SC against displacement from the bead UB and the retaining device as RD3. Rails as RD2 are disposed between the cards C and SC and serve to guide these cards into the retaining devices adapted for cooperation therewith and these rails also serve to retain an edge of the card SC under the bead UB.

A plurality of perforations as P1 are formed at predetermined positions in the portion of the frame or carrier 10 over which the card as SC is adapted to be disposed and by forming one or more perforations as P2 in the card as SC in alignment with selected of perforations P1 aligned perforations are thereby afforded in the card and carrier which are effective to impart particularity to the particular printing and control device as, for example, for the purposes as explained hereinabove. Moreover, such aligned perforations are adapted for cooperation with detector pins or the like provided at a predetermined position in the machine through which the printing and control devices are adapted to be passed so that when such a pin, upon movement toward aligned perforations as P1 and P2, passes through such aligned perforations such a detector pin will be effective to control the operation of means included in the machine which in turn control or determine selected of the operations of the machine, such aligned perforations as P1 and P2 therefore affording what is known in the art as selection.

As best shown in Fig. 2, two perforations 11

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and 12 are formed in the carrier 10 in the portion thereof over which the card as SC is adapted to be disposed, these perforations 11 and 12 being spaced one from the other and in the present instance being aligned one with the other. Moreover, a lip 13 is struck from the frame or carrier 10 at a position spaced from but disposed between the aligned perforations 11 and 12, this lip being disposed to extend in parallel but spaced relation with the rear face of the frame or carrier 10 as best shown in Figs. 3 and 4. The web of material through which the lip 13 is joined to the frame or carrier 10 is of rounded configuration so that this web, in cooperation with the adjacent portion of the lip 13, affords a rounded pocket, the purpose of which is explained presently.

A movable or shiftable member ST is provided which is formed from sheet metal or the like and includes a body 16 at one end of which a substantially circular boss 17 is formed. A tongue 18 is formed at the end of the body 16 opposite that at which rounded boss 17 is formed and this tongue 18 is bent into substantially U-shaped configuration as shown in Fig. 7. The distance between the lower portion of the rounded boss 17 and the interior of the bite of the substantially U-shaped tongue or clip 18 is slightly greater than the distance between the upper edge of the web 15 and the outer edge of the upper bead UB. Moreover, the face of the lip 13 adjacent the rear face of the frame or carrier 10 is spaced from the rear face of the carrier 10 in an amount slightly greater than the thickness of the shiftable member ST so that the body portion 16 of the shiftable member ST may be engaged with the rear face of the frame or carrier 10 and then the rounded boss 17 may be passed into the pocket afforded by the lip 13 and the web 15 to thereby be mounted on the frame or carrier 10. The rounded configurations imparted to web 15 and to the boss 17 are complementary so that the boss 17 may rock on the web 15 in the aforesaid pocket.

In order to insure against undesired displacement of the boss 17 from the aforesaid pocket and frame 10, an inclined lip 19 is struck from the boss 17 and this lip is of a configuration complementary to the configuration of the recess 14 formed in the frame 10 by striking the lip 13 therefrom. When the body portion 16 is engaged with the rear face of the frame or carrier 10, in the manner shown in Fig. 4, the lip 19 springs into the recess 14 and thereby the shiftable member ST is latched to the frame or carrier 10. Inasmuch as the boss 17 is complementary to the web 15, and since the lip 19 is complementary to the recess 14, the shiftable member ST may be moved relative to the adjacent portions of the frame or carrier 10.

The movement that may thus be imparted to the member ST is such that the member may be disposed in either of two alternate positions. When the member ST is disposed in the position thereof shown in Fig. 1, the body portion 16 thereof covers the opening P4, corresponding to 12, Fig. 2 but discloses the opening P3, Fig. 1, corresponding to opening 11, Fig. 2. When, however, the member ST is disposed in another position, to the left of the position thereof shown in Fig. 1, the body portion 16 thereof covers the opening P3, Fig. 1, or 11, Fig. 2 but discloses the opening 11. Suitable means are provided for retaining the shiftable member ST in one or the other of the aforesaid two positions in which this member is adapted to be disposed.

Thus by referring to Fig. 5 it will be seen that

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the end portion of the upper bead UB in the region of the carrier 10 whereat the openings 11 and 12 are formed is flattened as indicated at 20, and openings 21 and 22 are formed in the face of this flattened portion 20. An inwardly projecting embossure 23 is formed on the free limb of the tongue or clip 18 and this embossure is desirably medially located on this tongue. Furthermore, the openings 21 and 22 are respectively disposed adjacent to the openings 11 and 12 and in such position that when the shiftable member ST is disposed to cover the opening 11 the embossure 23 will be seated in the opening 21, the opening 22 being so disposed that when the member ST is disposed to cover the opening 12 the embossure 23 will be seated in the opening 22. The clip 18, being somewhat resilient, is held in either position by frictional engagement of an embossure as 23 with an opening as 21 or 22.

In use perforations as P3 and P4 will be formed in the card SC respectively in alignment with the openings 11 and 12. When the shiftable member ST is disposed to cover the aligned openings P3 and 11, the aligned openings P4 and 12 will be disclosed and the embossure 23 will be seated in the opening 21. When, however, the embossure 23 is seated in the opening 22 the aligned openings P4 and 12 will be covered and the aligned openings P3 and 11 will be disclosed.

By referring to Fig. 4 it will be seen that the bite of the substantially U-shaped tongue 18 is desirably spaced to lie above the free edge of the bead UB. Hence a portion of the shiftable member ST extends above the upper edge of the frame or carrier 10 of the printing and control or like device on which it is included and this affords a visual indication of the position in which the shiftable member ST is disposed. Moreover, by reason of the extension of a portion of the shiftable member ST slightly beyond the edge of the printing and control or like device on which it is included, easy access thereto is afforded so as to thereby facilitate shifting of the member ST from one to the other of the alternate positions in which it may be disposed.

While I have illustrated and described my invention with reference to a printing and control or like device comprising a frame or carrier on which one or more printing plates and one or more cards may be releasably retained, it will be understood that my invention is such that it may be used in any device of this character where it may be desirable to selectively render at least one opening effective or ineffective, as for example, in a printing or like device embodying a frame on which type characters may be embossed directly and which is arranged to have at least one selection or like perforation formed therein.

It will be manifest in the foregoing description that the arrangement of a shiftable member as ST on a printing and control device enables the hereinabove set forth and kindred objects of this invention to be realized. However, while I have illustrated and described a selected embodiment of my invention, it is to be understood that this is capable of variation and modification and I therefore do not wish to be limited to the precise details set forth but desire to avail myself of such changes and alterations as fall within the purview of the following claim.

I claim:

A printing and control or like device comprising a frame having a pair of openings therein, a shiftable member having a rounded portion

thereon and also having a substantially U-shaped portion thereon, means providing a pocket on said frame having a portion complementary to said rounded portion and relative to which said member may be moved into position to cover one of said openings and disclose the other or into position to cover said disclosed opening and disclose said covered opening, said U-shaped portion having a part thereof extended beyond an edge of said frame and also including a free limb portion extended over the face of said frame opposite that on which said pocket is afforded, a latching element on said free limb portion, and said frame having a pair of latching openings therein respectively positioned to receive said latching element to thereby retain said member in the respective position into which it may be moved.

WALTER T. GOLLWITZER.

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