

March 29, 1932.

F. D. POWELL

1,851,645

VISIBLE INDEX

Filed June 17, 1925

2 Sheets-Sheet 1

Fig. 1.

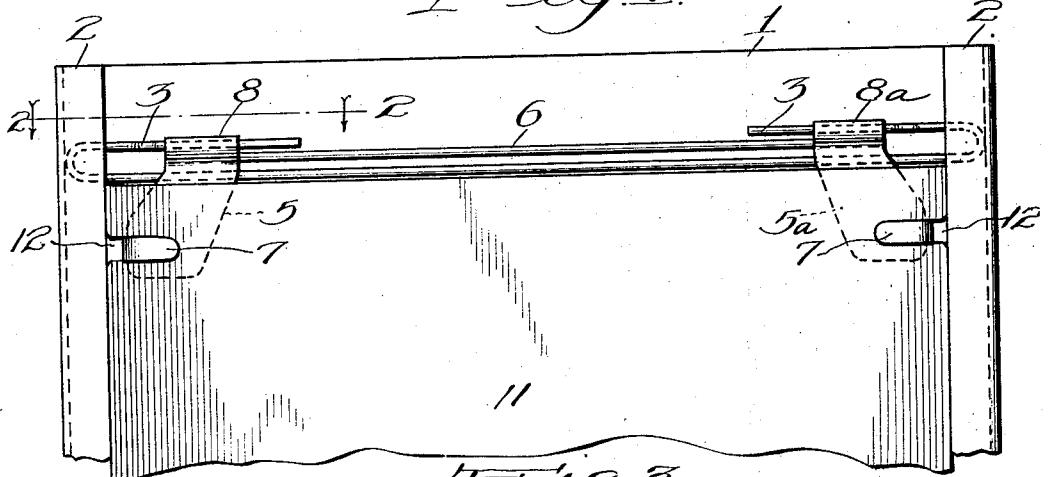


Fig. 2.

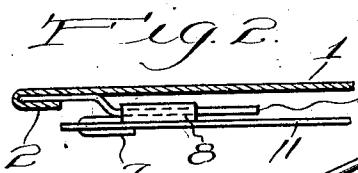


Fig. 3.

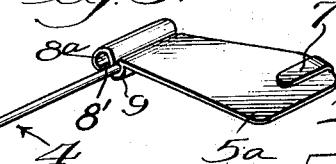
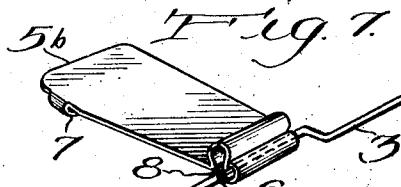
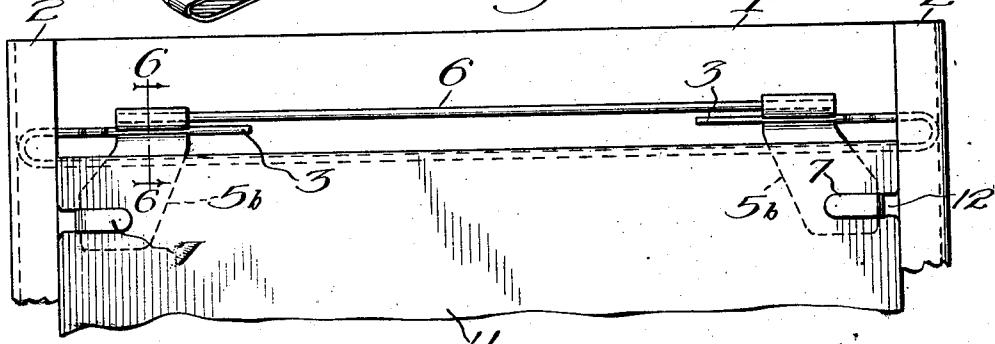


Fig. 5.



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UNITED STATES PATENT OFFICE

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VISIBLE INDEX

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This invention relates to visible indexes, and refers more particularly to visible index cards mounted in overlapping relation on a frame.

5 The specific embodiment of the present invention resides in having the cards removably attached to hinges, which latter may themselves constitute hangers, or which may be auxiliary to and removably mounted on the hangers. The hinge element of the present invention is provided with means whereby the cards are supported on or adjacent their side edges. Each hinge element per se takes the form of two opposite side card supporting plates provided with card holding means and connected by means of a substantially rigid connecting piece. In other words, the connecting link between each pair of side plates is constructed of non-flexible metal.

10 Various advantages and objects of the present invention will be brought out more particularly in the following description:

In the drawings, Fig. 1 is a face view of a visible index construction in normal position, to which my invention is applied.

Fig. 2 is a cross-sectional view taken on lines 2—2 of Fig. 1.

Fig. 3 is a perspective view of the hinge element.

15 Fig. 4 is a fragmentary face view of one upper corner of an index card provided with a notch to engage the hinge.

Fig. 5 is a view similar to Fig. 1 illustrating a slightly modified method of uniting the side plates to the rigid connecting piece.

Fig. 6 is a cross-sectional view taken on line 6—6 of Fig. 5.

Fig. 7 is a fragmentary perspective view of a section of the hinge shown in Fig. 5 in reverse position ready for attachment to the hanger.

Fig. 8 is an elevational view of a modified form of construction.

Fig. 9 is a cross-sectional view taken on line 9—9 of Fig. 8.

Fig. 10 is a perspective view of the hinge element shown in Fig. 9.

Fig. 11 is a cross-sectional view taken on line 11—11 of Fig. 8.

50 Referring now more particularly to Figs.

1 to 7 of the drawings, 1 designates the central web, and 2 the flanged or channelled side guides of a metal frame of standard construction now in extensive use. The flexible hanger 3 may take the form of resilient lengths of wire extending across the central web 1 of the frame and having spaced return-bent ends upon which the hinge elements designated as a whole 4 are placed.

55 The hinge elements may comprise two substantially flat metal plates 5 and 5a connected by means of connecting rod 6 which in the present instance is constructed of a substantially non-flexible material. On opposite outer edges of each pair of plates 5 is a spaced 60 return-bent lip 7 forming the means for locking the cards in place. As shown best in Figs. 1, 2 and 3, each plate 5 may be bent at one end to form a bead 8 and each plate 5a may be bent at one end to form a bead 8a provided 65 with a longitudinal opening 8'. A second closed bead 9 may also be formed adjacent the beads 8 and 8a. The beads 8 and 8a may comprise the means for removably attaching plates 5 and 5a to hanger 3, while the closed beads 9 may constitute the means for permanently attaching plates 5 and 5a to rod 6. As shown best at 10 in Fig. 6, the outer bent 70 end of the plate 5b may be closed and may be permanently attached to the rod 6 whereas 75 the intermediate bead 10' may be open and may be adapted to snap over the ends of the rod 3.

80 In this form, to mount the hinges upon the hanger 3, one plate 5' may be threaded upon one hanger 3. The opposite plate 5a' may be snapped on to the opposite hanger 3 in a manner similar to the mounting of the plate 5a upon the hanger 3 in the modification shown in Fig. 1.

85 Index cards 11 may be provided with notches 12 on their upper side edges, said cards being readily mountable on or removable from each hinge element by being bent centrally, the cards of course, being flexible 90 enough to permit this being done.

95 In one of the standard structures now in use, hinges having pintle eyes may be attached on the upper edge of the cards. These hinges are more or less permanently 100

attached to the cards, which is of course, very desirable in certain instances. However, at other times, it has been found necessary to remove the card from the hinge, for instance, to allow the card to be rolled around the platen of a typewriter. The present invention was perfected to facilitate the removal of cards from hinges, and the arrangement described herein, accomplishes this purpose very readily. The cards are instantly mountable on, or removable from, the hinge element without disturbing in any way the position of the hinge.

I have shown one card and hinge element in Figs. 1 and 5. It is understood of course, that the cards are mounted in overlapping relation, spaced by the return-bent ends of the hangers.

Referring now more particularly to the slightly modified construction shown in Figs. 8 to 11 both inclusive, the index cards 11 instead of being provided on their upper side edges with notches such as shown at 12 in Fig. 4 may be provided with the internal notches 13, which notches take the form of a slightly enlarged circular opening 14 and an elongated narrow slot 15 extending inwardly from the opening 14. The plates 5' instead of being provided with locking lips 7, as are the plates 5, 5a and 5b may be provided with the locking lips 16, the construction of which is clearly shown in Fig. 11. To mount a card 11 in place on the hinge element shown in this modified form of construction, it is only necessary to contract the card temporarily at its center and cause each enlarged aperture 14 to register with the locking lips 16, the width of the aperture 14 being sufficient to allow the locking lips 16 to project upwardly therethrough. The card is then flattened out, and the under surfaces of the locking lips 16 register with the slots 15 and form a locking connection.

In this form the rod 6' connecting the plates 5' is made of flexible material instead of being rigid as in the first form, and to mount the hinges upon the hanger 3, one plate 5' may be mounted upon one end of the hanger, the rod 6' connecting the two plates 5' may then be flexed to permit the insertion of the opposite plate 5' upon the opposite end of the hanger.

I claim as my invention:

1. A visible index, comprising in combination a supporting frame having side flanges, an index card, means for detachably supporting said index card on said frame, comprising a hanger adapted to have engagement with said frame in said side flanges; card-supporting elements adapted to have engagement with said hanger; comprising spaced hinge elements, and means whereby said index card may be mounted on or removed from said hinges without disturbing the position of the hinges relative to the hanger.

2. A visible index, comprising in combi-

nation a supporting frame having side flanges, an index card, means for detachably supporting said index card on said frame, comprising a hanger adapted to have engagement with said frame in said side flanges, card-supporting means adapted to have detachable engagement with said hanger, comprising spaced hinge elements, and means whereby said index card may be mounted on or removed from said hinges without disturbing the position of the hinges relative to the hanger.

3. A visible index, comprising in combination a supporting frame having side flanges, an index card, means for detachably supporting said index card on said frame, comprising a hanger adapted to have detachable engagement with said frame in said side flanges, card-supporting means adapted to have detachable engagement with said hanger, comprising spaced hinge elements, and means whereby said index card may be mounted on or removed from said hinges without disturbing the position of the hinges relative to the hanger.

4. In a visible index, in combination, a supporting frame having side flanges, a flexible hanger having return-bent ends engaged by said side flanges, index card supporting means adapted to have detachable cooperative engagement with the return-bent ends of the hanger, comprising spaced hinges connected into a unitary structure by a non-flexible connecting strip, and an index card adapted to be removably supported on said hinges.

5. A visible index, comprising in combination a supporting frame having side flanges, an index card, means for detachably supporting said index card on said frame, comprising a hanger adapted to have engagement with said frame in said side flanges, card-supporting elements adapted to have engagement with said hanger, comprising spaced hinge elements, and means whereby said index card may be mounted on or removed from said hinges without disturbing the position of the hinges relative to the hanger, said card-supporting means being adapted to pivot as a unit with a card relative to said hanger, whereby said unit acts as a hinge between the card and frame.

6. A visible index, comprising in combination a supporting frame, an index card, means for detachably supporting said card relative to said frame, comprising a resilient support adapted to cooperatively engage said frame, card-supporting means adapted to have engagement with said resilient support comprising spaced hinge elements, and means whereby said index card may be mounted on or removed from said hinge elements without disturbing the position of the hinge elements relative to the hanger.

7. A visible index, comprising in combi-

tion a supporting frame, an index card, means for detachably supporting said card relative to said frame, comprising a resilient support adapted to cooperatively engage said frame, card-supporting means adapted to have detachable engagement with said resilient support comprising spaced hinge elements, means whereby said index card may be mounted on or removed from said hinge elements without disturbing the position of the hinge elements relative to the hanger.

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