Jan. 3, 1928. 1,654,555

R. A. PICARD

CARD INDEX

Filed June 11, 1923

Fig. 1

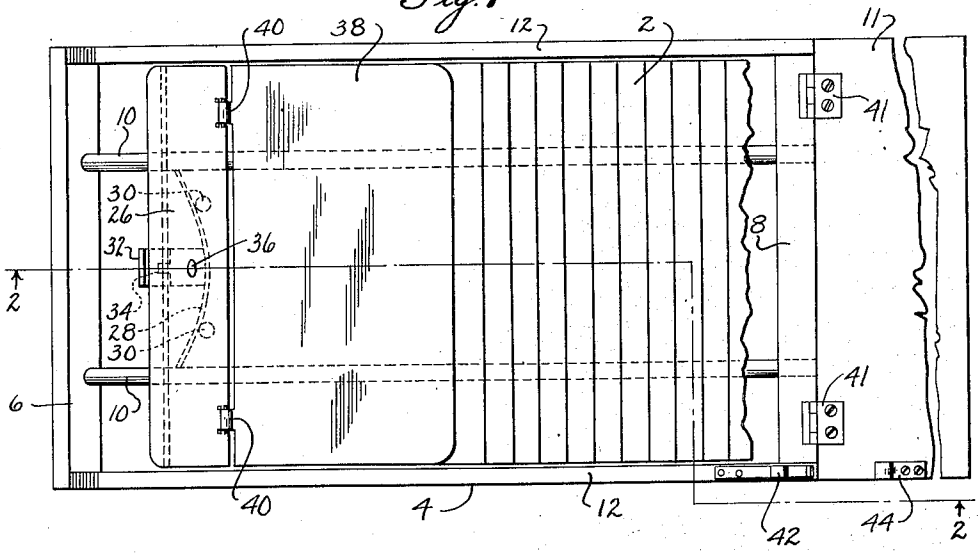


Fig. 2

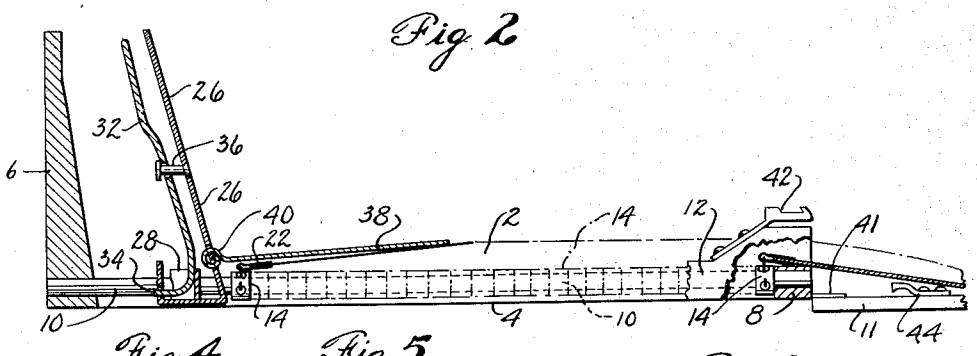


Fig. 4

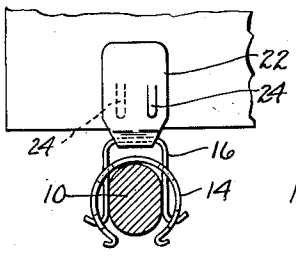


Fig. 5

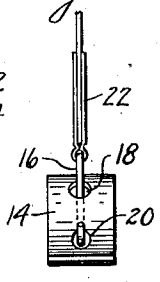


Fig. 3

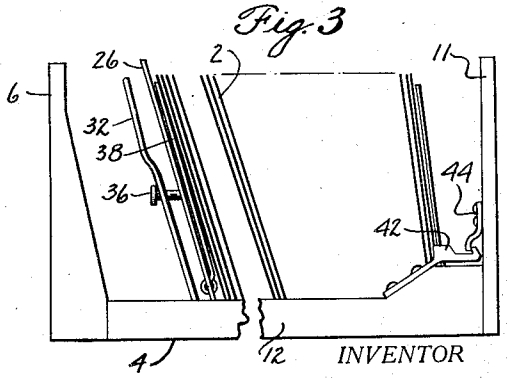


Fig. 6

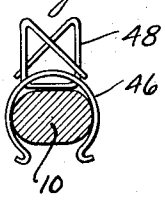
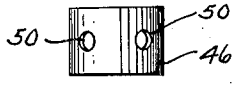


Fig. 7



INVENTOR

Richard A. Picard

BY

Newell & Spencer

ATTORNEYS

Patented Jan. 3, 1928. 1,654,555

UNITED STATES PATENT OFFICE.

RICHARD A. PICARD, OF NEW YORK, N. Y.

CARD INDEX.

Application filed June 11, 1923. Serial No. 644,608.

This invention relates to card indexes.

In an application Ser. No. 596,577, filed October 24th, 1922, applicant has illustrated and described a card index which is constructed and arranged so that the cards may be supported in a substantially vertical position and used as a vertical index and that the cards may be shifted to a substantially flat position, the cards then assuming a relatively overlapping relation so that the cards may be used as a visible index. Certain features of the present invention relates particularly to a card index of the type shown and described in this application.

The principal objects of the present invention are to improve the construction and mode of operation of card indexes of the type referred to above and to produce an index of this character which is simplified in construction and highly convenient and efficient in use and in which a card may be quickly and easily inserted in or removed from any desired point in the index.

Certain features of the invention are not limited to an index of the type shown in this application but may be employed with advantage in an index in which the cards are intended to be used only as a visible index.

In visible indexes, it is often desirable to insert a new card or to remove a card at a certain point in the index, or to shift a card from one point to another. In the visible indexes heretofore produced, the shifting of a card or the insertion or removal of a card are comparatively complicated operations, requiring some skill and take a great deal of labor and time. This of course reduces considerably the efficiency of the index system.

Another object of the invention is to improve the construction and mode of operation of the card-holding devices for visible indexes and to produce card-holding devices so constructed and arranged that a card may be inserted in or removed from any given point in the index or transferred from one point to another much more easily and readily than can be done in the indexes of this type heretofore produced.

With these and other objects in view, the invention comprises the novel and improved constructions, arrangements and combinations of parts hereinafter described and particularly pointed out in the claims, the advantages of which will be readily understood and appreciated by those skilled in the art.

The invention will be clearly understood from the accompanying drawings illustrating the invention in its preferred form and from the following detailed description of the constructions therein shown.

In the drawings, Fig. 1 is a plan view of an index embodying the invention illustrating the same when arranged as a visible index;

Fig. 2 is a sectional view taken substantially on the line 2—2 of Fig. 1;

Fig. 3 is a view in side elevation showing the index with parts arranged for use as a vertical index;

Fig. 4 is a detail view partly in front elevation and partly in section, illustrating particularly one of the card-holding devices;

Fig. 5 is a view in side elevation of certain of the parts shown in Fig. 4;

Fig. 6 is a view similar to Fig. 4 illustrating a somewhat different construction, and

Fig. 7 is a plan view of one of the parts shown in Fig. 6.

In the form of the invention illustrated in Figures 1 to 4 inclusive of the drawing, the index comprises a series of cards indicated at 2 contained in a suitable holder indicated as a whole at 4. The holder preferably consists of a drawer arranged to slide in a suitable casing, not shown. In the present construction, the drawer comprises a rear wall 6 and a cross-piece 8 at the forward end of the drawer and a pair of parallel rods 10 connecting the cross-piece 8 and the rear wall 6 of the drawer, the ends of these rods being inserted in suitable holes in the cross-piece and in the rear wall. The drawer also comprises a forward end wall 11 which forms the front of the drawer and side pieces 12 connecting the end walls.

The cards 2 consist of plain sheets of card material preferably of such a character that

they may be inserted in a typewriter so that the matter to be indexed may be typed thereon. These cards are mounted on suitable holders carried by the rods 10 and arranged to space the lower edges of the cards at a predetermined distance from each other. These holders are so constructed that the cards are arranged to swing about axes adjacent to and substantially parallel with their lower edges. Thus the cards may be placed in a substantially vertical position and the index used as an ordinary vertical index, or the cards may be shifted to a substantially flat position in overlapping relation to enable the index to be used as a visible index.

In the form of the invention illustrated in Figures 1 to 4 inclusive, each of the card-holding devices comprises a clip 14 slidably mounted on one of the guide rods 10. Each of these clips is preferably made of resilient sheet metal and is bent to the shape illustrated in Fig. 4. Upon each of the spring clips 14 is mounted a pivot member 16 preferably made of wire and bent in U-shape, as shown in Fig. 4. The arms of the pivot member 16 pass through suitable openings 18 and 20 formed in the spring clip 14, and the outer ends of these arms are bent outwardly to prevent the pivot member from being withdrawn from the spring clip. The rods 10 are somewhat flattened in cross-section, as shown in Fig. 4, and the arms of the pivot member embrace the rod so that the contact of said member with the lateral faces of the rod will prevent each of the card-holding devices from turning about the rod. Upon the transverse portion of the U-shaped pivot member 16 is pivoted a card clamp or holder 22. Each of these card clamps is preferably made of resilient spring metal and may be arranged to hold a card by the frictional engagement of the opposite sides of the clamp, between which the card is inserted, with the card. As shown in the drawing, the opposed portions of the card clamp are each provided with inwardly extending projections 24 stamped up from the sheet metal to assist in securely holding the card in the clamp.

It will be noted that in the present construction two independent holding devices are provided for each card, each of the holding devices being independently mounted and slidable upon the respective guide rods 10. The free ends of each of the clips 14 are normally spaced from each other a distance less than the transverse diameter of the guide rod 10 upon which it is mounted, and the ends of the clip are bent outwardly, as shown. The guide rod is of rounded formation so that a clip may be placed upon one of the guide rods by placing the clip with its free ends engaging the upper surface of the rod and forcing the clip downwardly. The free ends of the clip will be spread by their engagement with the rod and will be restored to their normal position when the clip is forced sufficiently far over the rod. In a similar manner, the clip may be removed from the rod merely by grasping the clip or the card-holding clamp and forcing the same upwardly. Thus the card-holding devices may be readily removed from or placed on the guide rods 10, either together or independently.

In the use of this device, a card is inserted in two of the card-holding clamps 22 respectively mounted upon the opposed guide rods 10. The pivotal connection between the clamps and the pivot member 16 allows the cards each to swing about an axis adjacent to, and substantially parallel with, its lower edge. The lower edges of the cards are spaced from each other by the engagement of the spring clips 14 with each other, as shown in Fig. 2. Thus the cards may be placed in a substantially vertical position to allow the index to be used as a vertical index, or the cards may be placed in a substantially flat position for use as a visible index. When the cards are located in the latter position, the margin of each card projects a substantially uniform distance beyond the margin of the card immediately to the rear of the same on account of the spacing of the lower edges of the cards. The pivot member 16 is preferably mounted in the spring clip 14 so that it can have a certain amount of vertical play therein, thereby allowing the cards to assume a more nearly flat position.

To support the cards when the index is used as a vertical index, a support 26 is slidably mounted on the guide rods 10 and is arranged to support the rear card of the series. This support is bent to the shape in cross section clearly illustrated in Fig. 2. The support is held in position on the guide rods by means of a bent leaf spring 28 interposed between two pins 30 mounted on the base of the support 26 and a lever 32 carried by said support. The ends of the spring-plate 28 are arranged to engage the guide rods 10 when the spring is in a released condition. The lever 32 is bent to the shape clearly shown in Fig. 2 and the lower end thereof is provided with a relatively small projection 34 engaging in a suitable opening in the rear part of the support 26. The lever is held in position on the support by means of the stud 36 mounted on said support and loosely engaging in an opening in the lever. The upper part of the lever is normally spaced from the corresponding part of the support, as clearly shown in Fig. 2. When it is desired to release the spring-plate 28 from the rods 10 to allow the support to be moved along the rods, the operator grasps the upper part of the lever 32 and swings the same forwardly. The engagement of the lever with the central part of the spring-

plate 28 during this movement will bend the spring-plate sufficiently to release the ends thereof from the rods 10. When the support 26 has been located in the desired position, the lever 32 is released, allowing the ends of the spring-plate to again engage the rods.

In order to assist in holding the cards in position when the index is used as a visible index, a plate 38 is pivoted at 40 to the support 26 and is arranged to rest upon the rear card of the series, as shown in Fig. 2. When the index is used as a vertical index, the plate 38 is swung upwardly to the position close to the upper part of the support 26.

To enable the card index to be used as a visible index, the front 11 of the drawer is pivoted to the base by hinges 41 so that it can swing forwardly to the position shown in Fig. 2. The drawer front is held in a vertical position by means of a latch 42 secured to one side of the drawer and arranged to engage the latch plate 44 secured to the drawer front.

In the construction shown in Figs. 6 and 7, the card-holding devices comprise a spring clip 46 similar to the spring clip 14 shown in Figures 1 to 4 inclusive. In the latter construction, however, there is no intermediate pivot member corresponding to the pivot member 16 shown in Figures 1 to 4 but the card holder or clamp indicated at 48 is pivoted directly to the clip 46. The card clamp in this construction consists of a wire bent to the shape shown in Fig. 6, the wire passing through suitable openings 50 formed in the clip 46. The card is inserted between the two adjacent parts of the card-clamp and that part of the clamp between the openings 50 in the clip 46 forms a pivot for the clamp. In this case the guide rod 10 is flattened as shown in Fig. 6, so that the engagement of that part of the card-clamp between the openings 50 with the rod will prevent turning of the card-holding devices about the rod.

Having explained the nature and object of the invention and having specifically described a construction embodying the invention in its preferred form, what is claimed is:

1. A card index having, in combination, a support having spaced guides arranged substantially parallel, independent card-holding devices for each card slidably mounted on the respective guides, and arranged to allow the cards to lie substantially flat in superposed relation, and spacing means for spacing said card-holding devices to cause a portion of the margin of each card to be exposed sufficient to contain material to be indexed when the cards are located in superposed relation.

2. A card index having, in combination, a support having spaced guides arranged substantially parallel, independent card-holding devices for each card removably mounted on the respective guides and arranged to allow the cards to lie substantially flat in superposed relation and to slide thereon, and spacing means for spacing said card-holding devices to cause a portion of the margin of each card to be exposed sufficient to contain material to be indexed when the cards are located in superposed relation.

3. A card index having, in combination, a support having spaced guides arranged substantially parallel, independent carriers slidably mounted upon said guides and card-holders pivotally mounted on said carriers and arranged to allow the cards to lie substantially flat in superposed relation and spaced from each other by the contact of the carriers.

4. A card index having, in combination, a support having spaced guides arranged substantially parallel, independent carriers removably mounted on said guides to slide thereon, and card-holders pivotally mounted on said carriers and arranged to allow the cards to lie substantially flat in superposed relation and means for spacing the cards from each other to cause a portion of the margin of each card sufficient to contain material to be indexed to be exposed when the cards are located in superposed relation.

5. A card index having, in combination, a support having spaced guides, independent card-holding devices for each card mounted upon said guides, and arranged to allow the cards to lie substantially flat in superposed relation, and means for spacing the margins of the cards adjacent said guides to cause a portion of the margin of each card sufficient to contain material to be indexed to be exposed when the cards are located in superposed relation.

6. A card index having, in combination, a support having a guide rod, a series of carriers slidably mounted on said rod, and card-holders pivoted to the several carriers and arranged to allow the cards to lie substantially flat in superposed relation, and means to space the inner margins of the cards to cause a portion of the margin of each card sufficient to contain material to be indexed to be exposed when the cards are located in superposed relation.

7. A card index having, in combination, two parallel guide rods, a series of carriers slidably mounted on the rods, and card holders pivoted to the several carriers and arranged to allow the cards to lie substantially flat in superposed relations, and means to space the inner margins of the cards to cause a portion of the margin of each card sufficient to contain material to be indexed to be exposed when the cards are located in superposed relations.

8. A card index having, in combination, a

support having a guide rod, a series of carriers embracing the guide rod and slidably mounted on the same, and a series of cardholders pivoted to the several carriers and arranged to allow the cards to lie substantially flat in superposed relations, and means to space the inner margins of the cards to cause a portion of the margin of each card sufficient to contain material to be indexed to be exposed when the cards are located in superposed relations.

9. A card index having, in combination, a guide member, a sheet metal clip bent about said guide member, and a bent wire cardholder pivoted to said clip.

Signed at New York, New York, this 6th day of June 1923.

RICHARD A. PICARD.