March 17, 1925. 1,530,012

J. H. RAND

CARD INDEX

Filed March 2, 1923

Fig. 1

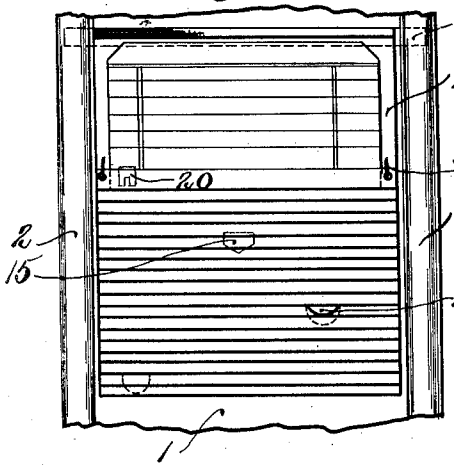


Fig. 2

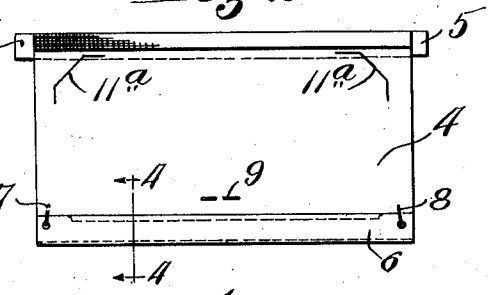


Fig. 3

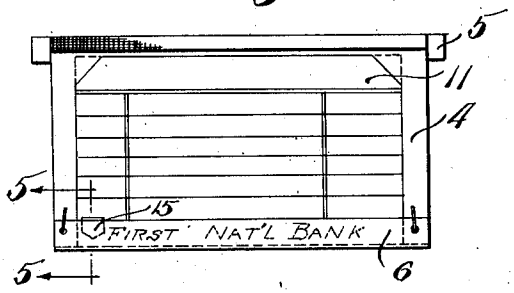


Fig. 4

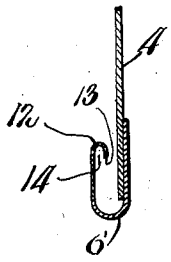


Fig. 5

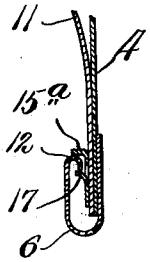


Fig. 12

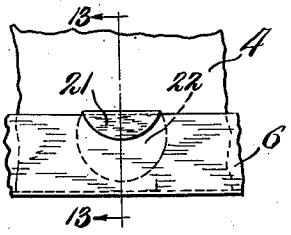


Fig. 11

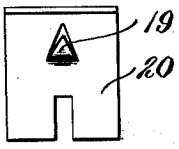


Fig. 6

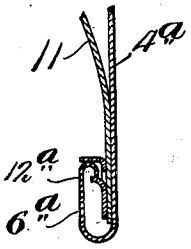


Fig. 13

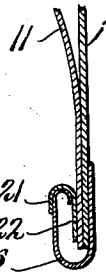


Fig. 7

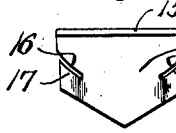


Fig. 8

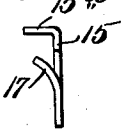


Fig. 9

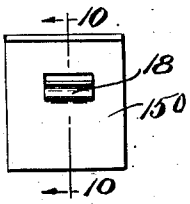


Fig. 10

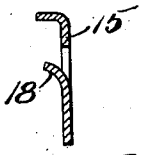


Fig. 14



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James H. Rand,
by Roberts, Roberts & Cushman,
Attys.

Patented Mar. 17, 1925. 1,530,012

UNITED STATES PATENT OFFICE.

JAMES H. RAND, OF NORTH TONAWANDA, NEW YORK.

CARD INDEX.

Application filed March 2, 1923. Serial No. 622,412.

To all whom it may concern:

Be it known that I, JAMES H. RAND, a citizen of the United States of America, and resident of North Tonawanda, in the county of Niagara and State of New York, have invented new and useful Improvements in Card Indexes, of which the following is a specification.

This invention pertains to indexes of the so-called "visible" index type comprising a frame in which a series of cards are held in overlapping relation with their free edges projecting one beyond the other, and consists in improvements hereinafter described and particularly pointed out in the claims.

In the accompanying drawings which illustrate the invention,

Fig. 1 is a fragmentary front elevation of an index device embodying the present invention;

Fig. 2 is a front elevation of one of the movable elements of the index device shown in Fig. 1;

Fig. 3 is a view similar to Fig. 2 but showing the movable element as provided with an insert card;

Fig. 4 is a fragmentary cross-section to larger scale on the line 4—4 of Fig. 2;

Fig. 5 is a fragmentary vertical cross-section to larger scale on the line 5—5 of Fig. 3;

Fig. 6 is a vertical cross-section similar to Fig. 5, but illustrating a modification;

Fig. 7 is a front elevation to large scale, and

Fig. 8 is a corresponding edge elevation of a signal device constituting an important feature of the present invention;

Fig. 9 is a front elevation of a modified form of signal device;

Fig. 10 is a vertical cross-section on the line 10—10 of Fig. 9;

Fig. 11 is a front elevation of a still further modified form of signal device

Fig. 12 is a fragmentary front elevation to large scale showing a further modified form of signal device applied to a movable index element such as shown in Fig. 2;

Fig. 13 is a vertical cross-section on the line 13—13 of Fig. 12; and

Fig. 14 is an end elevation of the signal device of Figs. 12 and 13 removed from the index element.

The invention is particularly applicable, though by no means limited, to index devices of that kind in which an upright frame supports a series of cards, card holders or other movable index elements in overlapping spaced relation with their margins exposed to display indexing or other characteristics or inscriptions.

For purposes of illustration the invention is herein shown as embodied in an index of well-known construction consisting of a frame comprising the back plate 1 and the forwardly and inwardly directed lateral flanges 2, 3, which as usual are integral with the plate 1. A series of movable index elements 4, preferably made of paper or cardboard, and hereinafter referred to as "cards", are arranged in overlapping, spaced relation between the flanges 2, 3 of the frame and are so retained in position as to permit them to swing forwardly and upwardly about their upper edges to expose the data inscribed upon them. One convenient method of holding the cards in the frame is to attach each card along its upper edge to a bar 5 made of Bristol board or other suitable material whose opposite ends project beyond the sides of the card and engage the respective flanges 2, 3, thus holding the cards in the frame and defining pivotal axes about which the respective cards may be swung.

Preferably the lower edge of each card is protected by a sheath 6 made of sheet celluloid or other transparent and resilient material doubled or folded to receive the lower edge of the card between its folds. As herein shown the sheath is retained in position upon the card by means of wire staples or clips 7, 8 arranged near opposite ends of the sheath and passing through both of its folds and through the card, a third staple 9 being provided if desired, intermediate the ends of the sheath, the latter staple passing through the card and the rear fold only of the sheath.

A removable insert card 11 is slipped into the sheath 6 and is retained therein by engagement of its upper corners with slits 11^a in the card 4. This insert card 11 covers the major part of the card 4 which in this case, with the sheath, serves merely as a holder or movable support for the insert card upon which the entry will ordinarily be made, although if desired, entries may be made directly upon the card 4 omitting the insert card 11. The identifying in-

scription or character is placed upon the exposed margin of the card 11 when used, or on the margin of the card 4 if the insert card is omitted, and is visible through the transparent front fold of the sheath 6.

The upper edge 12 (Fig. 4) of the front fold of the sheath is given a finished appearance by bending its marginal portion rearwardly and downwardly to produce a rolled edge effect. The provision of this rolled edge not only gives a finished appearance to the front fold of the sheath and provides a flaring entrance to facilitate slipping the insert card into the sheath, but also has a desirable cooperative relationship to certain signal devices hereinafter more fully described. For the latter purpose it is preferred slightly to space the extreme marginal portion 13 of the rolled edge from the inner face of the front fold of the sheath, as indicated at 14, the rolled edge thus constituting a substantially tubular structure extending along the edge of the sheath and having a slit in its under side. This thickened tubular edge preferably stops short of the ends of the sheath in order to permit the end portions of the front fold of the latter to be secured directly against the front face of the card 4, thus limiting lateral movement of the insert card.

The signal devices employed are in general of the same character and for the same purpose and function as those described in my prior Patent No. 1,317,643, September 30, 1919, but whereas in the patented arrangement the signal devices are illustrated as interlocking with the lower edge of the insert card they are designed in accordance with the present invention to interlock or engage with the rolled-over edge of the sheath. As shown for example in Figs. 7 and 8 the signal device comprises a piece 15 of thin sheet celluloid, Bristol board or other suitable resilient material which may be of any desired color, contour or other differentiating visual appearance, having its upper edge bent forwardly to provide a combined handle and supporting flange 15^a and having one or more forwardly projecting tabs or tongues formed by slitting the material at a point or points below the flange 15^a and bending a portion of the material adjacent to the slit out of its normal plane. As shown in Figs. 7 and 8 the piece 15 is provided with a downwardly and inwardly extending slit 16 at its opposite edges and the material at the lower edge of each slit is bent forwardly to provide a tab 17 whose free extremity is directed upwardly toward the flange 15^a. When the signal device thus constructed is slipped into the sheath 6, the tab or tabs snap beneath the free lower margin 13 of the rolled edge 12 and into the space 14 while the flange 15^a engages the upper portion of the rolled edge so that the signal device is securely retained in operative position from which, however, it may be removed if desired, by springing the forward fold of the sheath outwardly and lifting up on the flange 15^a.

In Figs. 9 and 10 the signal device 150 is shown as provided with a centrally disposed tab 18 of substantially rectangular outline integrally united at its lower edge with the main body of the material of which the device is formed and having its upper edge deflected out of its normal plane for interlocking engagement with the rolled edge of the sheath in the same manner as in the preceding form. In Fig. 11 a centrally disposed tab of substantially triangular form is shown at 19 as projecting from the body of the signalling device 20.

Referring to Figs. 12, 13 and 14 a somewhat different form of signal device is shown, consisting of a piece of celluloid or other similar resilient sheet material folded upon itself to provide the forward leaf 21 and the rear leaf 22. The forward leaf 21 is rearwardly deflected at its free extremity toward the rear leaf so as to provide a restricted entrance passage 23 leading to the space within the fold. This device is snapped over the rolled edge of the sheath with the leaf 22 lying within the sheath and the leaf 21 lying upon the front face of the forward fold of the sheath, the resiliency of the material of which the signal device is formed serving to retain it in position. This device may be removed when desired by springing the forward leaf 21 outwardly, whereupon the device may be lifted from off the rolled edge of the sheath.

In Fig. 6 the sheath is illustrated as integral with the movable index element 4^a, the latter in this case being made of sheet celluloid which is bent at its lower edge to form the upwardly extending forward fold 6^a which terminates at its upper edge in an inwardly and downwardly rolled margin 12^a cooperating with the signal devices in the same manner as previously described.

While in most instances an insert card such as 11 will be employed with the movable index device 4 or 4^a, it is manifest that the signal device and that portion of the movable index device or card which cooperates therewith function in substantially the same manner whether such insert card be employed or not. It is also clear that the retaining elements of the signal device are independent of its contour or other distinguishing characteristics, so that the signal device may be made of any desired shape and size, a few of the many shapes which may be employed having been illustrated herein. While it is preferred to form the tongue or tab of the signal device as an integral element, it is contemplated that such tongue or tab, as well as the flanged portion

of the signal device may be formed as a separate part secured to the main body of the device, and it is likewise possible to form the retaining element of the sheath, consisting as herein shown of the inwardly and downwardly rolled edge, from other material and as a separate member suitably secured to the sheath.

I claim:

1. An index device comprising a sheath for the reception of a card, said sheath having a thickened edge portion, and a signal device extending into the sheath and having a retaining element engaging said thickened edge portion to prevent accidental displacement of the signal device.

2. An index device comprising a sheath for the reception of a card, said sheath having an inwardly turned edge, and a signal device extending into the sheath and having a projecting element engaging said edge to prevent accidental withdrawal of the signal device from the sheath.

3. An index device comprising a sheath having front and rear folds, the free edge of the front fold being turned inwardly and downwardly, and a signal device extending between the folds of the sheath and having a projecting tab interlocking with the downwardly turned edge of the sheath.

4. An index device comprising a sheath having front and rear folds, the free edge of the front fold being rolled inwardly to provide a downwardly directed margin spaced from the inner surface of the front fold, and a signal device extending between the folds and having an integral tab projecting upwardly into the space between the inner surface of the front fold and the margin of the rolled edge of the latter.

5. A signal device for use with indexes of the class described comprising a piece of thin resilient sheet material having slits extending inwardly from its opposite edges, the material at the lower edges of the slits being deflected out of its normal plane to form diverging retaining tabs.

6. A signal device for use in card indexes of the class described comprising a piece of thin sheet material bent at one margin to provide an outstanding flange, and a tab struck from the body of the piece and having its free extremity directed substantially toward the flange.

7. An index device comprising a sheath for the reception of a card, said sheath having an elongate, signal-retaining element, and a signal device extending into the sheath and having struck-up members normally disposed upon opposite sides of said retaining element to prevent accidental displacement of the signal device.

8. An index device comprising a sheath for the reception of a card, said sheath having a free edge portion, and a signal device consisting of a piece of thin sheet material extending into the sheath and having a forwardly directed flange resting upon the free edge portion of the sheath.

Signed by me at Boston, Mass., this 23rd day of February, 1923.

JAMES H. RAND.