Jan. 8, 1929. 1,698,329

J. L. GARFIELD

VISIBLE CARD INDEX

Filed May 22, 1926 3 Sheets-Sheet 1

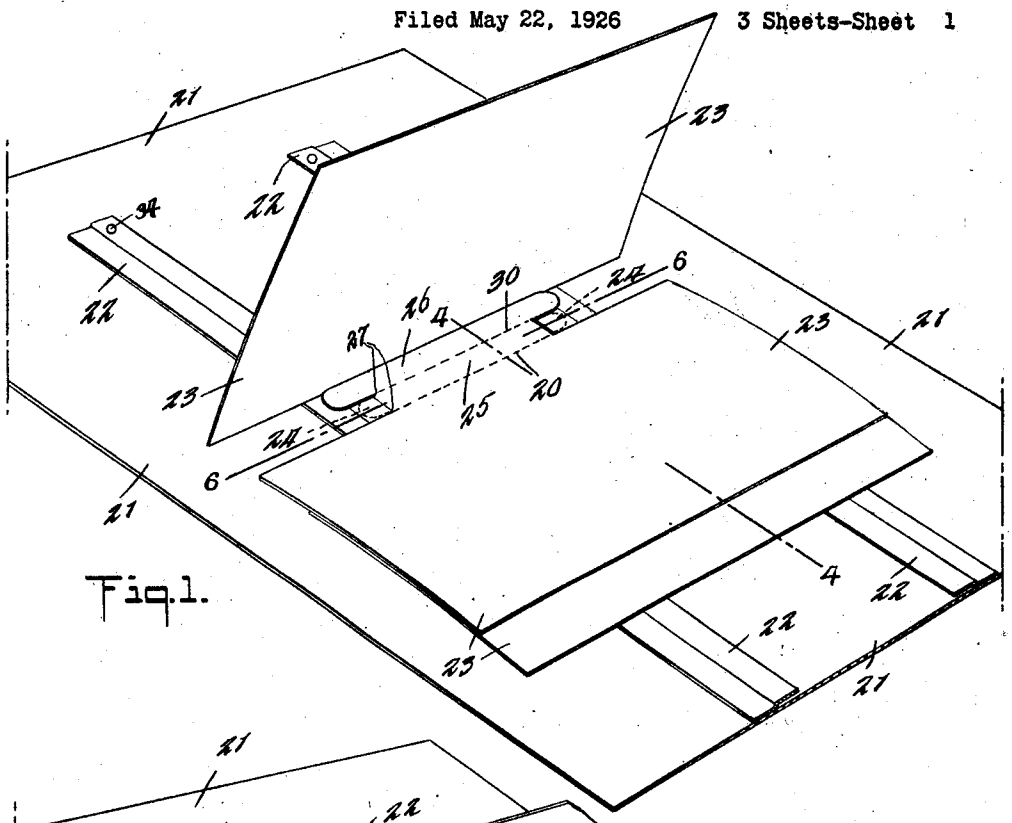


Fig. 1.

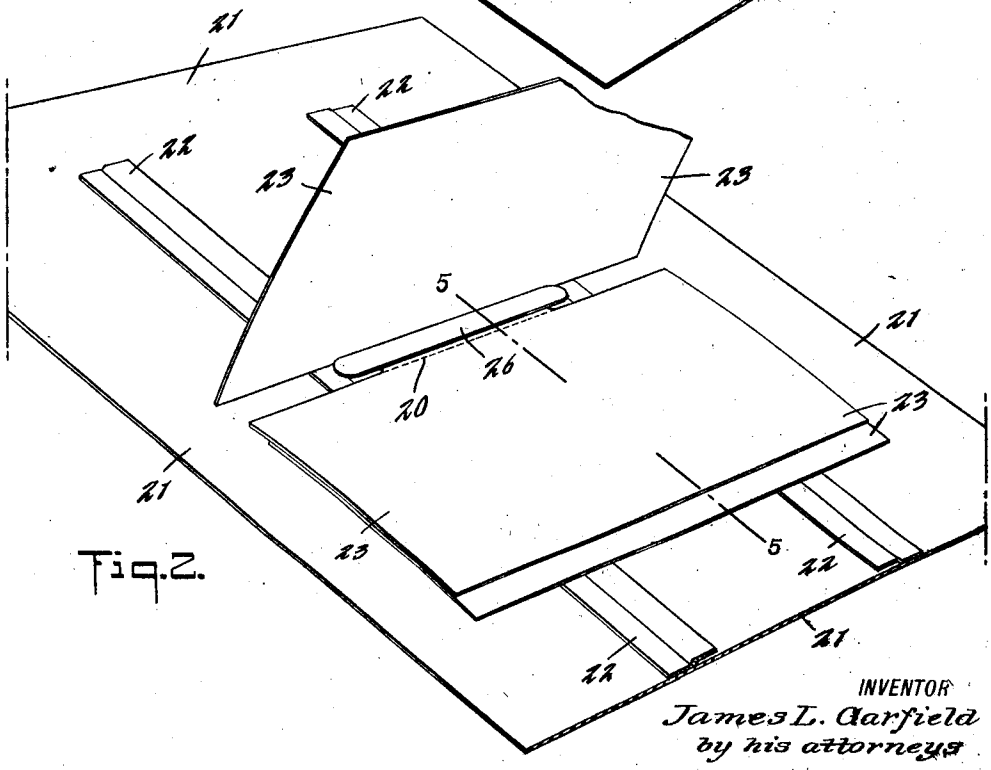


Fig. 2.

INVENTOR
James L. Garfield
by his attorneys
Howson and Howson

Jan. 8, 1929. 1,698,329

J. L. GARFIELD

VISIBLE CARD INDEX

Filed May 22, 1926 3 Sheets-Sheet 2

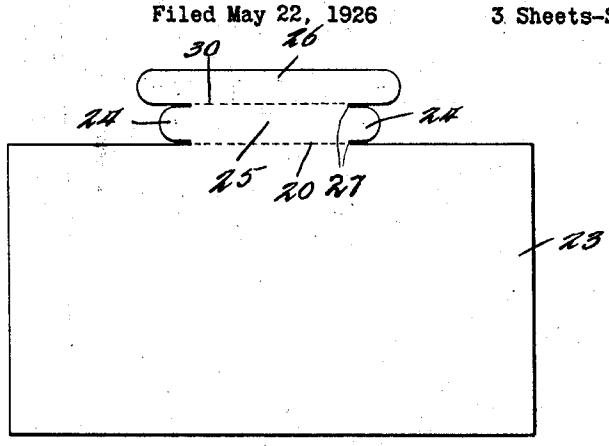


Fig. 3.

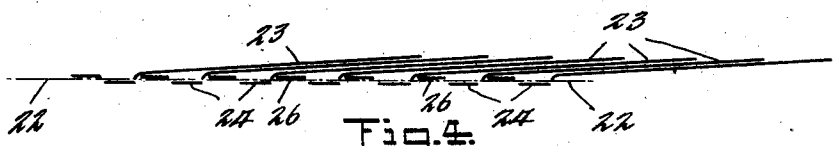


Fig. 4.

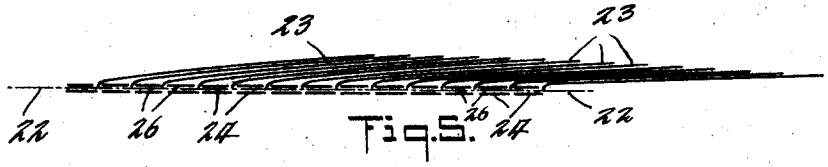


Fig. 5.

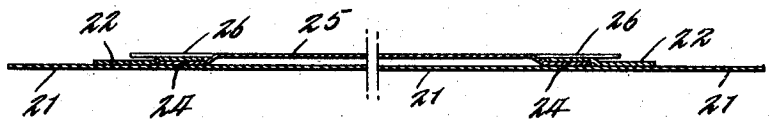


Fig. 6.

INVENTOR

James L. Garfield

by his attorneys

Howson and Howson

Jan. 8, 1929. 1,698,329

J. L. GARFIELD

VISIBLE CARD INDEX

Filed May 22, 1926 3 Sheets-Sheet 3

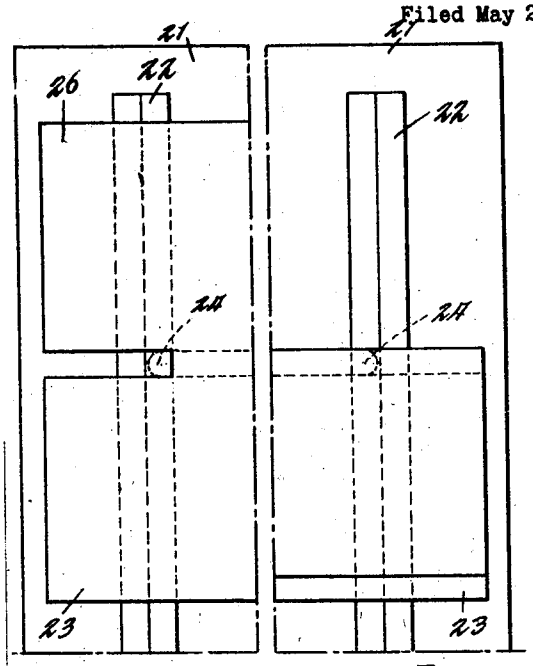


Fig. 2.

Fig. 8.

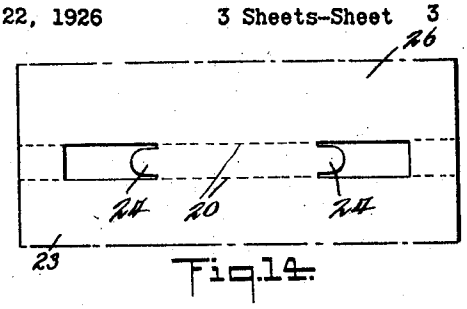


Fig. 14.

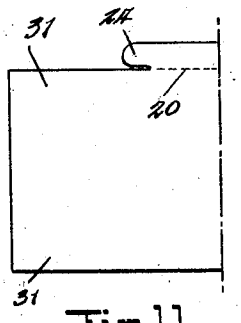


Fig. 11.

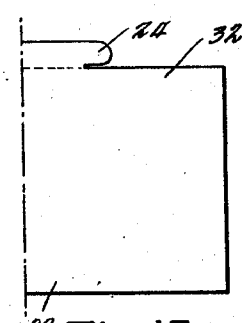


Fig. 12.

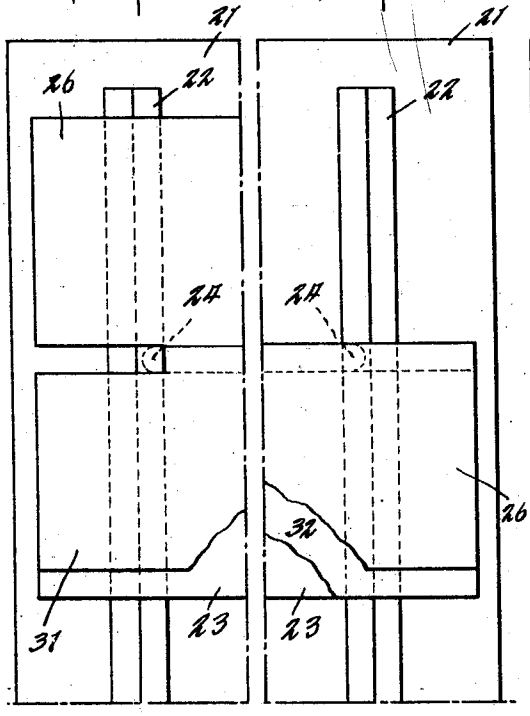


Fig. 9.

Fig. 10.

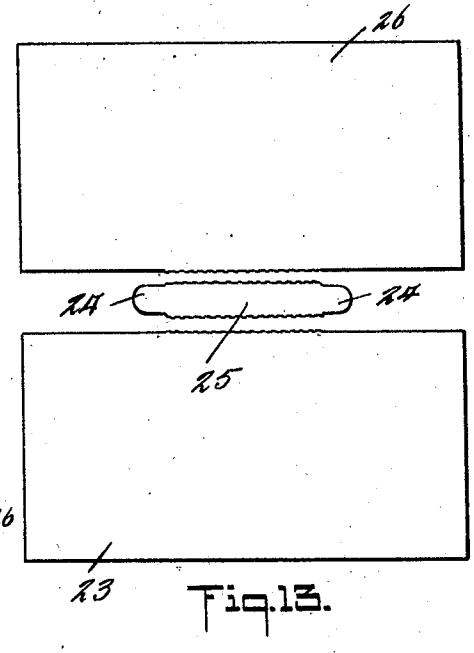


Fig. 13.

INVENTOR
James I. Garfield
by his attorneys
Howson and Howson

Patented Jan. 8, 1929. 1,698,329

UNITED STATES PATENT OFFICE.

JAMES LYON GARFIELD, OF DREXEL HILL, PENNSYLVANIA.

VISIBLE CARD INDEX.

Application filed May 22, 1926. Serial No. 110,997.

This invention relates to the so-called overlapping type of visible index in which each card is hinged by individual means leaving both sides of each card completely accessible for reading or writing without removal from the backing or panel. All separate individual carrier or support members can be eliminated by this invention and the cards slidably hung, "tumbler" fashion, directly on the panel or backing by novel additions to the edge of the ordinary plain card. In the type of index to which this invention relates the mounting relation for giving the necessary overlap is a direct one between each card and the panel, thus eliminating all nesting or other connections between one card and the adjacent cards, as well as all adjustment of the other cards when removing or inserting a single card.

One of the objects of this invention is to provide an index in which the cards have a hinged slidable mounting on the panel in such manner that self-spacing and free adjustment of the cards in the direction of length of the overlapping series is obtained in an extremely simple and efficient manner. Another object of the invention is to provide a form of card which eliminates the necessity for any metal carrier and spacing elements, for each card, and yet keeps the hinged mounting which makes both sides of each card accessible. Another object of the invention is to produce a visible index which is not only strong and easily manipulated but is compact and flat, permitting use of the panels as leaves of a loose leaf binder. Still another object of the invention is to provide a card which can be kept in overlapping relation with its neighbors on the visible index panel, or transferred to an ordinary non-overlapping vertical card index at will. Another object of the invention is to provide the maximum amount of record-keeping surface in a panel and provide it in such form that the amount of overlap of any one or all of the cards can be changed at will.

In the embodiment of the invention shown in the drawings,

Fig. 1 is a perspective view of an overlapping index with one card turned upwardly to show how the cards engage with the panel and abut on each other;

Fig. 2 is a similar view showing the anti-nesting section folded over to reduce the amount of overlap;

Fig. 3 is a plan view of the new card;

Fig. 4 is an exaggerated section along the line 4—4 of Fig. 1 with additional cards in place, the flange being shown by a dot and dash line;

Fig. 5 is a similar section taken along the line 5—5 of Fig. 2;

Fig. 6 is a section taken along the line 6—6 of Fig. 1;

Fig. 7 is a plan view of one flange of the panel showing the improved double card attached thereto with the upper record section opened out;

Fig. 8 is a similar plan view of the other flange, showing the improved double card with the upper card folded down;

Fig. 9 is a view similar to Fig. 7 showing part of a non-overlapping insert card attached within the double card and

Fig. 10 is a view similar to Fig. 8 with an overlapping insert card attached within the double card;

Fig. 11 is a plan view of half of a non-overlapping insert card;

Fig. 12 is a similar view of an overlapping insert card; while

Fig. 13 shows the two record sections of a double card cut apart from the tongue section, preparatory to filling in the ordinary vertical card index.

Fig. 14 is a plan view of a modified form of double card.

To provide the highly novel hinged suspension of the cards, referred to, the cards are mounted directly on a pair of parallel inwardly facing flanges 22 fastened on or formed from a support, backing or panel 21 at such a distance apart that the grooves thus formed are intermediate the sides of the cards. More than two flanges can be employed if desired. The panel can be made of cardboard, light metal or may actually be another card in turn to be mounted on a panel.

In the drawings the flanges 22 on which the cards are mounted are shown formed by means of longitudinal strips glued or stitched on the surface of the panel 21, the strips being formed of cloth, cardboard or metallic material as desired, but pressed upwardly along their inner edges to form inwardly facing

parallel grooves. If desired the ends of these grooves can be closed by stitching the strips to the panel at the ends or by rivets 34. The necessary grooves can be formed in many other ways.

The novel form of card to be mounted on the panel takes the place of both the individual metal carrier and the ordinary card. This card comprises certain highly novel elements attached to and outside one edge of the ordinary plain record card and it can be made out of one integral piece of material, if desired. My co-pending applications Serial Nos. 110,995, and 110,996, filed of even date herewith disclose and claim certain subject matter referred to in the present application, but not claimed herein. There are a plurality of outwardly directed opposed tongues 24 attached to one edge of the plain card, which card is hereinafter called a record section 23, though it may itself in turn be used to carry other cards, etc. In the drawings these tongues 24 are single lobed and are attached to the top or upper edge of the record section, but it will be obvious that any edge may be considered the "upper edge". The tongues terminate at points intermediate the sides of the card and are adapted to slide in the grooves formed between the flanges and the panel, while the record section lies on top of the flanges. The juncture of the tongue with the record section—or other neighboring material—at the base of the cut between them, may be termed a base point of the tongue and in the drawings the base points bear the reference numeral 27. In the examples shown in the drawings both the base points of each tongue are so located as to engage the flange 22. While one base point of each tongue may equally well be located some distance inwardly of the corresponding flange, the other base point should preferably be substantially in engagement with the flange to prevent too much side play of the card on the flanges. The tongues 24 are hinged to the record section 23, along a line 20, which preferably touches the lower base point of each tongue. This line may be merely a weakened line when the material of the tongues is integral with the record section. The record section is thus suspended in hinged relation to the panel, and is available for reading or writing on either side by simply turning, i. e., tumbling it over.

In the form shown in the drawings the tongues 24 are part of a tongue section 25. This tongue section may be either "die-cut" as shown in Figs. 1 to 13, i. e., cut away until the tongues become part of the external shape of the section, or "shear-cut" in which case there is material outside the tongues and the tongues are merely severed from the remainder of the tongue section down to their base points 27 leaving some or all of the material outside the tongues which therefore do not become part of the external shape of the section. Examples of the shear-cut form of tongue section are shown in Fig. 14 and in my co-pending application for patent, Serial No. 110,995, filed of even date herewith,—the tongues in Figs. 1 to 13 of the present application being shown die-cut.

As can be seen from the drawings, there is material above the tongues joined to the latter at their base points and extending outwardly beyond these tongues. This material is adapted to lie on top of the flanges 22 and can be termed a "spacing" or "anti-nesting" section. The tongues 24 being joined on both sides at their base points to material adapted to lie on top of the flanges while they lie underneath, nothing can nest with the card or destroy its overlap. This is a fundamental feature of the invention. Each tongue 24 and the record section 23 straddle the flange 22 in one direction, while the same tongue 24 and the anti-nesting section straddle the flange in the other direction (see Figs. 1 and 4). The card below therefore abuts against the junctures of the tongues 24 with the record section and cannot nest with the tongues. The record section of each card tends further to assist the maintenance of the overlap of that lower card by holding the top edge of the anti-nesting section of that card down in engagement with its own hinge line 20. In the drawings, the anti-nesting section is shown in the form of a strip 26 providing a second pair of outwardly directed opposed tongues. The anti-nesting section can be of any size as long as it extends outwardly beyond the base points of the tongues 24, and thus can overlie the flanges. The anti-nesting section can, if desired, even be large enough to constitute another record section in itself as is shown in Figs. 7 to 10. It is believed that the employment of an anti-nesting section in a visible index having grooves intermediate the sides of the cards is broadly new and of great value. The card can be mounted on the panel either by turning the card sideways till the tongues 24 come inside the flanges 22 and then turning it back, or by flexing or bending the card, in the manner of the narrow card type of index, till the tongues 24 can be put under flanges and then flattening the card out. The simplicity and effectiveness of this hinged suspension will now be apparent.

The amount of overlap between one card and the card above it ordinarily equals the aggregate depth of the tongue section and the anti-nesting section, but in Figs. 2 and 5 is illustrated another application of this invention in which the overlap equals the depth of the tongue section alone. When the card is manipulated in the manner shown in these two figures, the anti-nesting section is folded down over the tongue section, the line 30 which joins two sections being hinged for

this purpose. The upper base points of the tongues 24 of the tongue section intersect this hinge line 30 in a manner similar to that already described in connection with the lower base points and the hinge line 20 between the tongue section and the record section. When the anti-nesting section is folded down, as just described, the card below touches the lower base-points 27 by abutting against the junctures between the tongues 24 underlying the flanges and the edge of the record section joined thereto, as usual. In addition the card above abuts against the upper base points, i. e., the junctures between these same tongues 24 and the anti-nesting section, thus making the overlap of the cards equal to the depth of the tongue section.

This application of the invention is very effective, especially in view of its strength. It will be observed that the stress in the tongue section and anti-nesting section occurs across the base points of the tongues, that is to say, vertically across the tongue from one base point to the other, and in folding the anti-nesting section down on top of the tongue section a folded edge rather than a single sharp edge is presented to the card above. In this way the chance of tearing is very materially reduced and at the same time twice as many cards can be put in a given length of panel, as is the case when the anti-nesting section is not folded on top of the tongue section.

If it is desired not to waste the space occupied by the depth of the anti-nesting and tongue sections of the top card in the panel, the anti-nesting and tongue sections of the whole series of cards on the panel can each be folded under their own record sections. The anti-nesting section can still be folded on top of the tongue section even when this form of mounting is used.

The card area for any given panel can be doubled by the simple expedient of enlarging the anti-nesting section 26 until it becomes a record section itself. Such a card is shown in Figs. 7 to 10, the size of the lower or original record section and the anti-nesting section or upper record section being the same in these figures. It will be noted at once that the upper record section being hinged to the upper edge of the tongue section and the original record section being hinged to the lower edge of the tongue section, the two record sections are overlapped with respect to each other when the upper is folded down over the lower. The opened-out position is shown in Fig. 7 and the folded-down position in Fig. 8. This form of card may be termed a double card and has all the advantages of the constructions shown in Figs. 2 and 5, including the presentation of a folded or double edge to the card above.

When the area on the record section of one of these double cards is not sufficient for all the information which it is desired to assemble on one card, the capacity of the double card can be further increased by the insertion of what may be termed an "insert card". Two forms of insert cards are shown in Figs. 11 and 12 from which it will be observed that they are like the single card shown in Fig. 3, except that they lack the anti-nesting section. Such an insert card can be assembled with the double card by placing it over the original or lower record section of the double card and slipping the tongues 24 under the flanges 22, but above the tongues 24 of the double card by flexing the card vertically at the middle in the manner already mentioned in connection with the regular card. The insert card 31 shown in Fig. 11 differs from that shown in Fig. 12 in that it is only deep enough to have its lower edge come even with the lower edge of the upper record section of the double card with which it is assembled and not project below the latter. The position of such an insert card when assembled with a double card is shown in Fig. 9, the double card being shown opened out. The insert card 32 in Fig. 12 however is deep enough to overlap the upper record section of the double card and to have its bottom edge come even with the bottom edge of the lower or original section of the double card. A double card in folded position with such an insert card inside it is shown in Fig. 10.

Among the advantages of a visible card index made according to this invention is the peculiar adaptability of the cards for use in the ordinary vertical card index. When the information on a card in the visible index becomes inactive, the card is easily changed to the ordinary card found in a vertical card index by merely cutting or tearing the tongue section off of the record section (see Fig. 12). The record section thus becomes the complete ordinary card and is then put away in the ordinary vertical card index without any trouble, the record section being of the same shape and, if desired, of the same size as the other cards in the vertical index. The invention makes it unnecessary to make any shear cuts or punchings in the record section or change the shape of the section in any way. The record section is exactly like all other cards in the vertical index and can be handled without any fear of the card not fitting the index or catching on the neighboring cards.

The panel being merely a flat steel of Bristol board or light metal and the cards being of merely flat sheet material, a panel and its cards can be put away in a vertical filing system without taking up too much space, or can be used as a leaf in a loose leaf binder, such for instance as a magazine binder. When used in a magazine binder, these panels are individually detachable, thus giving interchangeability at will, panel by panel, between the loose leaf binder or active

file and the storage file. The panel may also be mounted vertically as a telephone index or be made in the form of a drawer for a filing cabinet.

The compactness of this index makes it peculiarly adaptable for these variable uses. Many variations in the details of construction will occur to those skilled in the art without departing from the scope of the invention.

What I claim is:

1. A card for a visible index panel having parallel opposed flanges, said card comprising a record section and a pair of opposed tongues joined to the upper edge of said record section at points intermediate the sides of the latter, each base point of said tongues being adapted to be substantially in engagement with one of the flanges, in combination with material above the tongues joined thereto at their upper base points and extending outwardly in the direction of the tongues beyond those tongues.

2. A visible index card having a record section, a plurality of outwardly directed opposed tongues outside said record section attached to the upper edge thereof and terminating intermediately of the ends of said edge, in combination with an anti-nesting section joined to the upper base points of said tongues and extending outwardly in the direction of the tongues beyond those base points.

3. A visible index card having a record section, outwardly directed horizontal tongues terminating intermediately of the sides of said record section and hinged to the upper edge thereof along a line touching one base point of each tongue, in combination with material joined to the upper base point of each tongue extending sideways beyond those points, for the purpose described.

4. A visible index card comprising a record section, a tongue section hinged to the upper edge of said record section and having two outwardly directed opposed tongues terminating intermediately of the sides of the card, in combination with an anti-nesting section joined to the upper edge of said tongue section and extending outwardly in the direction of the tongues beyond its juncture with the tongue section, for the purpose described.

5. A card for a visible index panel having inwardly facing parallel flanges, said card comprising a record section, a tongue section hinged to the upper edge thereof and having two outwardly directed opposed tongues terminating intermediate of the sides of the record section, in combination with an anti-nesting section joined to said tongue section, each tongue and the record section being adapted to straddle a flange in one direction, and the same tongue and the anti-nesting section being adapted to straddle the same flange in the other direction, as and for the purpose described.

6. A card for a visible index panel having inwardly facing parallel flanges, said card comprising a record section, a tongue section hinged to the upper edge thereof and having two outwardly directed tongues terminating intermediate the sides of the record section and adapted substantially to engage with said flanges, in combination with an anti-nesting section joined to the upper edge of the tongue section and extending outwardly in the direction of the tongues beyond its juncture with the tongue section.

7. A visible index card comprising a record section, a tongue section hinged to the upper edge of said record section and having two outwardly directed opposed tongues terminating intermediately of the sides of the record section, in combination with an anti-nesting section hinged to the upper edge of said tongue section and extending outwardly in the direction of the tongues beyond the base points of said tongues.

8. A visible index card comprising a record section, a tongue section hinged to the upper edge of said record section and having two outwardly directed opposed tongues terminating intermediately of the sides of the record section, in combination with an anti-nesting section hinged to the upper edge of said tongue section, extending outwardly in the direction of the tongues beyond the base points of said tongues, said anti-nesting section being adapted to provide a variable degree of overlap with the adjacent card, the upper edge of said anti-nesting section being parallel to the upper edge of the record section, substantially as described.

9. A card for a visible index panel having inwardly facing parallel grooves, said card comprising a record section and a tongue section hinged to the upper edge of said record section, in combination with an anti-nesting section hinged to the upper edge of said tongue section, said tongue and anti-nesting sections being die-cut to form outwardly directed opposed single-lobe tongues whose base points are intermediate the sides of the record section, the tongues of the tongue section being adapted to underlie the grooves of the panel and terminating intermediate the sides of the record section, and the anti-nesting and record sections being adapted to overlie the grooves of the panel, substantially as described.

10. An integral visible index card made having a record section, a tongue section joined to the upper edge of said record section by a weakened line, in combination with an anti-nesting section joined to the upper edge of said tongue section by a weakened line parallel to the weakened line between the record and tongue sections, said tongue section having outwardly directed tongues terminating intermediate the sides

of the record section, the base points of said tongues touching the two weakened lines, substantially as described.

11. A visible index card comprising a tongue section having horizontal tongues, and two record sections joined to said tongue section along parallel hinged lines, the base points of said tongues each intersecting a hinged line and said tongues terminating intermediate the sides of said record sections.

12. A visible index card comprising a toingue section having horizontal single lobed tongues, and two record sections joined to said tongue section along parallel hinged lines, the base points of said tongues each intersecting a hinged line and said tongues terminating intermediate the sides of said record sections, said record sections being of such depth as to show an overlap between said sections when one is folded down over the tongue section.

13. A card for a visible index panel having inwardly facing parallel flanges, said card comprising a tongue section having two outwardly directed tongues with their base points each adapted to be substantially in engagement with one of said flanges, in combination with two record sections each hinged to one edge of said tongue section and projecting outwardly in the direction of the tongues beyond the tongues.

14. A visible card index comprising a panel, inwardly facing parallel flanges on said panel, and a series of overlapping cards each comprising a record and a tongue section hinged to the upper edge of the record section and having two outwardly directed opposed tongues with their base points each adapted to be substantially in engagement with one of said flanges, in combination with an anti-nesting section joined to the upper edge of the tongue section and projecting outwardly in the direction of the tongues beyond the tongues.

In testimony whereof I have signed my name to this specification.

JAMES LYON GARFIELD.