Dec. 10, 1929. A. PERKINS 1,739,087

CARD AND THE LIKE FOR CLASSIFICATORY SYSTEMS

Filed Sept. 27. 1928

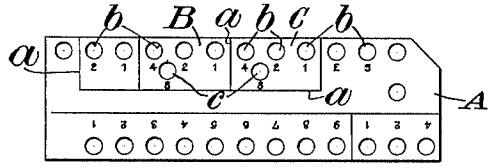


Fig. 1.

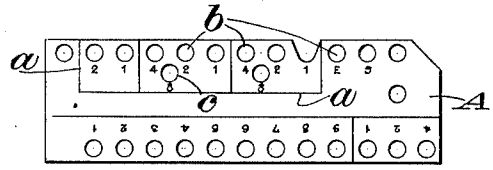


Fig. 2.

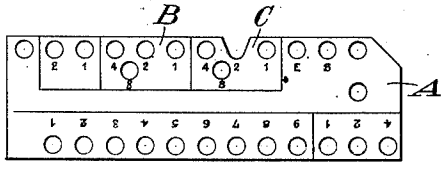


Fig. 3.

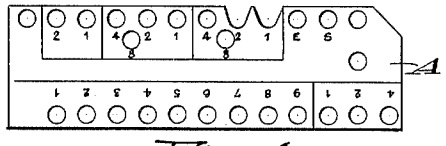


Fig. 4.

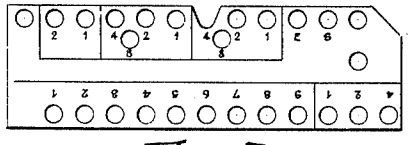


Fig. 5.

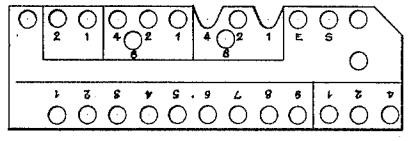


Fig. 6.

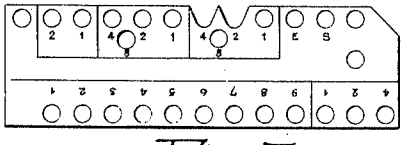


Fig. 7.

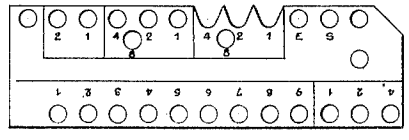


Fig. 8.

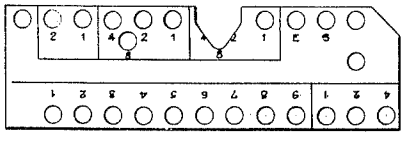


Fig. 9.

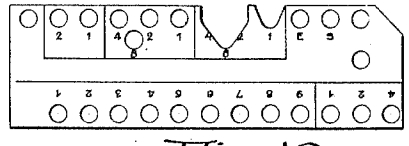


Fig. 10.

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by his Attorney: A. Hall

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UNITED STATES PATENT OFFICE

ALFRED PERKINS, OF BIRMINGHAM, ENGLAND

CARD AND THE LIKE FOR CLASSIFICATORY SYSTEMS

Application filed September 27, 1928, Serial No. 308,867, and in Great Britain October 27, 1927.

This invention relates to the sorting, separation and classification of flat sheets, cards, tallies or the like (hereinafter for the sake of brevity referred to as cards) in which each card is provided adjacent to one or more of its edges with perforations so placed that they may be opened out to the edge of the card, the several perforations on all the cards being so placed as to coincide with one another when the cards are stacked together, so that by stacking said cards and working a rod, wire or other separating implement through any coinciding set of perforations, the cards in which those perforations have been opened out may be separated from the remainder of the cards, the perforations of which have not been so opened out.

The purpose of the present invention is to improve the distribution of the perforations whereby, by use of grouping and appropriate placing of the perforations with regard to one another, the card system may be used more conveniently for a larger classification than has been generally possible with such cards as hitherto made.

According to this invention I arrange the perforations in two or more rows or series parallel to and closely adjacent to the edge of the card but so that the centres of the corresponding perforations of these rows do not all lie on the same lines perpendicular to the edge of the card, the perforations of the inner or innermost row being in staggered relation to those of the one above it. Thus not only can any one or more perforations of the outer row or outer rows be opened directly out to the edge, but if desired this opening may be continued obliquely to the inner or innermost row. By suitable selection of the holes to be opened out in each group or "field" the amplitude of possible classification may be greater than the number of holes.

As an example, evenly spaced holes in a line parallel to and closely adjacent to the edge of the card may be divided by printed lines or other indications into groups or "fields" of three holes in each, and on an inner line closely adjacent to the former line a single hole may be made for each group in a staggered position with regard to the first and second holes of the former row in the group. The group then consists of four holes, one of which is inwards of the others and obliquely placed. By suitably selecting, for cutting out, combinations of these four holes, ten classes may be distinguished.

These four holes in each group or "field" may be severally marked 1, 2, 4, 8, for a purpose hereinafter described.

The annexed drawing illustrates in Fig. 1, one of such cards having by way of example two "fields" as above described as well as others in which the holes are not arranged in the same manner.

Figs. 2 to 10 illustrate by successive representations the aspect of such card after it has been cut to correspond to the several numbers "1" to "9", only one of the fields being so cut.

A represents the card, having two fields B, C thereon divided from one another and from the rest of the card as by printed lines *a*. Each of these fields B, C has four perforations adjacent to which are preferably printed designations 1, 2, 4, 8 respectively. Three of these perforations marked *b* are aligned parallel to the edge of the card and comparatively close thereto, and the fourth perforation *c* numbered "8" is placed inwardly of the outer row of holes and on a line midway between the two first holes marked "4", "2".

In using a stack of cards cut in the specific ways illustrated in the drawing, it is possible to sort the stack of cards into numerical order of one "field" by passing the sorting needle through the stack four times only.

To sort the stack of cards into numerical order for any one field, pass the needle through the four holes 1, 2, 4 and 8 of that field, in turn lifting the stack by means of the needle whereby those cards of which the corresponding hole has been cut out will fall from the stack. The cards which fall are placed at the back of the stack before passing the needle through the next hole, also after needling through the 8 hole. The cards will then be arranged in numerical order of that field with the "0's" at the front. The zeros

are represented by those cards in which none of the holes of that field have been cut out.

It is essential that the cards which have fallen from the needle be retained in this relative position prior to the similar needling of the next field. This can easily be done when needling by hand a stack of cards not exceeding 500; larger quantities up to three or four thousand can be sorted simultaneously in this manner by using a sorting box.

The sorting can be carried on in the same manner through as many "fields" representing respectively tens, hundreds, thousands, etc. as may be provided on the cards, four "needlings" only being required to arrange each "field" in order.

It will be understood that cards provided with the fields B, C of this invention may also have other holes for other classifications. The specific card illustrated can be used for a classification of 9 and another classification of 3 by use of the holes along the lower edge, a classification of two in the field to left of field B and a classification of three on the right of field C. Other holes may serve only for passage of a staple, or staples to hold a stack together for filing purposes. These, other than the fields B and C are not claimed as part of this invention.

What I claim as my invention and desire to secure by Letters Patent of the United States is:—

1. Cards for classification purposes comprising a row of holes closely adjacent to the margin thereof and other holes inward of the aforesaid row and so individually placed that they are staggered with respect to the holes in the aforesaid row for the purpose set forth.

2. Cards for classification purposes comprising a row of holes closely adjacent to the margin thereof and other holes inward of the aforesaid row and so individually placed that they are staggered with respect to the holes in the aforesaid row, and division marking whereby the holes are divided into a plurality of groups along the length of the row.

3. Cards for classification purposes comprising a row of designated holes closely adjacent to the margin thereof and other holes inward of the aforesaid row and so individually placed that they are staggered with respect to the holes in the aforesaid row, division marking whereby the holes are divided into a plurality of groups along the length of the row and numerals adjacent to the several holes respectively.

4. Cards for classification purposes comprising rows of holes closely adjacent to the margin thereof and closely adjacent to each other and other holes inward of the aforesaid rows and so individually placed that they are staggered with respect to the holes in the aforesaid rows for the purpose set forth.

5. Cards for classification purposes comprising rows of holes closely adjacent to the margin thereof and closely adjacent to each other and other holes inward of the aforesaid rows and so individually placed that they are staggered with respect to the holes in the aforesaid rows and division marking whereby the holes are divided into a plurality of groups along the length of the rows.

6. Cards for classification purposes comprising rows of holes closely adjacent to the margin thereof and closely adjacent to each other and other designated holes inward of the aforesaid rows and so individually placed that they are staggered with respect to the holes in the aforesaid rows, division marking whereby the holes are divided into a plurality of groups along the length of the rows and numerals adjacent to the several holes respectively.

7. Cards for classification purposes comprising a row of holes within and closely adjacent to the margin thereof and staggered holes closely adjacent to the former and so disposed that the holes form groups of four, each group comprising a single staggered hole.

8. Cards for classification purposes comprising a row of holes within and closely adjacent to the margin thereof and staggered holes closely adjacent to the former and so disposed that the holes form groups of four, each group comprising a single staggered hole with division marking separating said groups.

In witness whereof I have signed this specification.

ALFRED PERKINS.