Sept. 3, 1940. T. C. ANDREWS 2,213,184

METHOD OF PREPARING MATERIAL FOR CLASSIFYING

Filed Oct. 17, 1939

FIG. 1

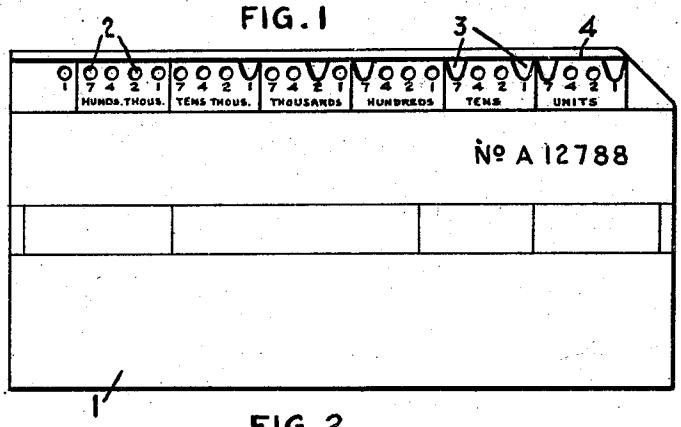


FIG. 2

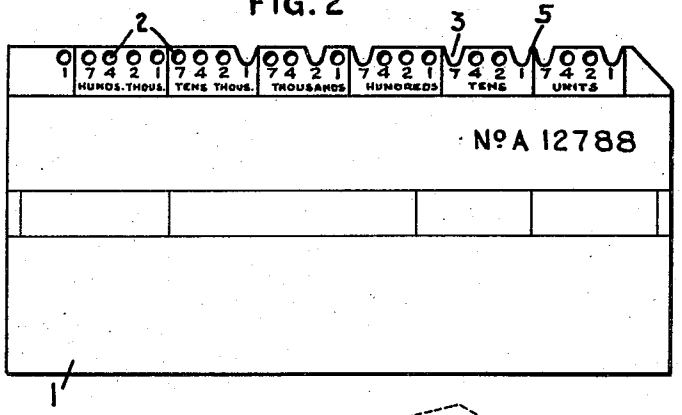
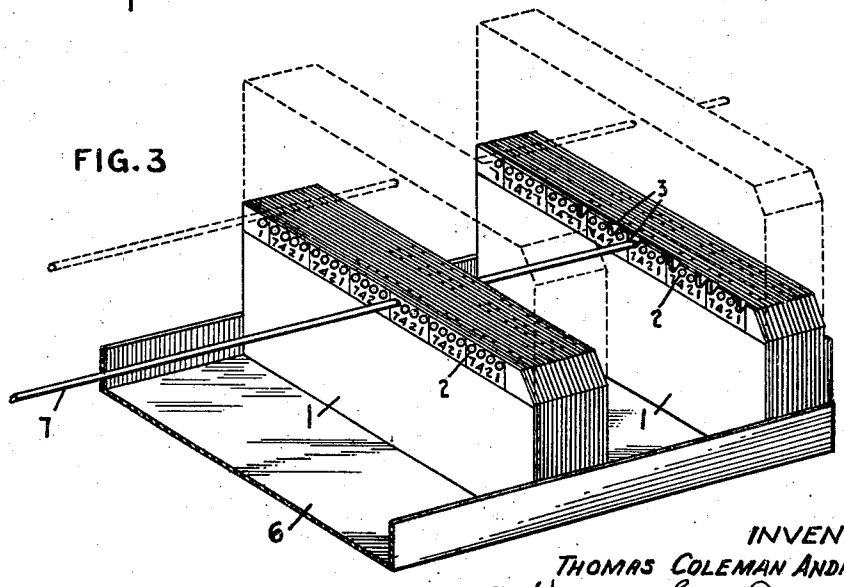


FIG. 3



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METHOD OF PREPARING MATERIAL FOR CLASSIFYING

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Application October 17, 1939, Serial No. 299,815

3 Claims. (Cl. 164—125)

My invention relates to a method of producing a flat sheet of material for classifying purposes, such as checks, cards, or loose leaf records, and is especially desirable in the production of card indexes, work record cards, election records, time cards, cost cards, blank checks, pay checks, etc.

My invention is more particularly designed to provide a method of constructing cards of that type which are eventually to be sorted in the manner described in United States Letters Patent No. 1,544,172, issued to Alfred Perkins.

The card of that patent has been highly successful commercially as it can be used to sort a quantity of mixed cards into a numerical, alphabetical, geographical or other desired sequence in a fraction of the time which either machine or manual sorting would require. When the cards are made from relatively stiff manila or rag stock cardboard, they are able to withstand the abuse or rough treatment to which they are constantly subjected in the hands of the users.

As described in that patent, each card is provided with a series of perforations adjacent one or more edges of the card. Each of these perforations are designed so that the material which intervenes between the perforation may be entirely cut away to the adjacent edge of the card forming a notch or slot, the outer end of which is open. This construction permits one to pass a sorting device or needle through the perforations and on raising the needle, the cards which have not been slotted will be raised while those which have been slotted will not be affected by the operation.

I have found in practice that when a comparatively thin paper is used, if the perforations are closely spaced that on slotting or cutting away the material between the edge of the card and adjacent perforations that a relatively thin finger is left and unless considerable care is exercised by the user, these thin fingers may be torn off or bent down, thus making it impossible to sort them in the manner described by Perkins in his patent referred to above.

I have overcome this objection by making a sheet of material in which the perforations and slots are entirely within the body of the sheet or check, as set forth in my copending application, Serial No. 243,055, filed November 30, 1938.

The object of my present invention is to provide a method of preparing the checks, etc. such as are described in that application.

My means of accomplishing that object may be more readily understood by having reference to the accompanying drawing, which is hereunto annexed and is a part of this specification in which:

Fig. 1 is a front view of a card or check having a single row of perforations adjacent its edge, a number of which have been slotted;

Fig. 2 shows the same card after the edge has been cut away; and

Fig. 3 is an isometric perspective view of a container, partly in cross section, showing the operating of the sorting device.

Similar reference numerals refer to similar parts throughout the entire specification.

In practicing my method, the cards 1 are first provided with a plurality of perforations 2 which are punched adjacent one edge as shown in Fig. 1 or 2, or they may, if desired, extend entirely around the card.

The face of the card, as is usual, is provided with a plurality of designations or classifications, as illustrated, they are numerical but obviously they may be of any desired classification and with any desired sub-classifications.

When the desired numerical classification has been selected, a pattern of those holes which indicate the selected classification are enlarged, these enlarged perforations 3 extending nearly but not quite to the edge of the card. These decimals or enlarged perforations are entirely within the body of the card. But their size is such that if the adjacent edge of the card were cut or trimmed away, along the guide line 4, an entirely new edge will be formed and the card will appear as shown in Fig. 2. The enlarged perforations will then form open ended slots which will extend out to the edge of the card.

It will be obvious from this description that when the card is formed as shown in Fig. 1, and before it is trimmed, it may be handled as many times as required, be mailed and folded or bent without the slightest danger of mutilating the fingers, which remain after the pattern of notches is formed, such for example as is indicated by numeral 5 in Fig. 2. But when the strip of material along the edges is trimmed, as above described, the slots 3 will extend to the newly formed edge so that when placed in a container 6 if a needle 7 is passed through the pattern of perforations corresponding to the designated classification, all cards so slotted will, upon elevating the needle, as indicated by the dotted lines in Fig. 3, remain in the container while the unwanted ones will be lifted up and away therefrom.

The ramifications of the use to which my invention may be put are so extensive that it would not be practical to set them forth herein; therefore, although I have described a specific card, check, or sheet, I do not desire to be understood as limiting myself thereto. Also when the term card is employed, it is not to be considered in a limiting sense as my method is useful regardless of the character of the sheet to be sorted or the quality or relative stiffness of the material of which the sheets are formed.

Having described my invention, what I regard as new and desire to secure by Letters Patent is:

1. A method of preparing sheet material for classification comprising perforating said material adjacent an edge thereof but entirely within the body thereof, extending certain of said perforations nearer said edge but still within the confines of said body, and subsequently removing a portion of the material between said edge and said extended perforations so that certain of said perforations will open upon the newly formed edge.

2. A method of preparing sheet material for classification comprising perforating said material along an edge with a plurality of spaced apertures with similar bases entirely within the body of said material, rendering certain of said apertures dissimilar from the others by extending them near said edge, and subsequently forming a new edge by removing a strip from said body wide enough to expose said extended apertures.

3. A method of preparing sheet material for classification comprising forming a plurality of closed perforations within the body of said material and adjacent an edge thereof, enlarging certain of said perforations so as to extend them nearer said edge without intercepting said edge, and subsequently removing a strip of said material along said edge to define a new edge and intercept said enlarged perforations.

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