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 64 A, 78; 346/104; 273/149

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[54] **METHOD AND APPLIANCE FOR RECORDING**
INFORMATION STORED ON PUNCHED CARDS
12 Claims, 3 Drawing Figs.

[52] U.S. Cl..... **225/93,**
35/48, 40/78
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ABSTRACT: The appliance consists of a storage tray spaced to one side and slightly above a punch table. From a stack of cards on the tray the top card is moved through a first passage on to the punch or marked then moved through a lower passage to the bottom of the cards on the tray.

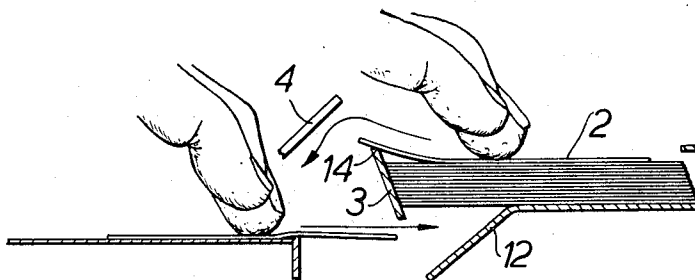


FIG.1.

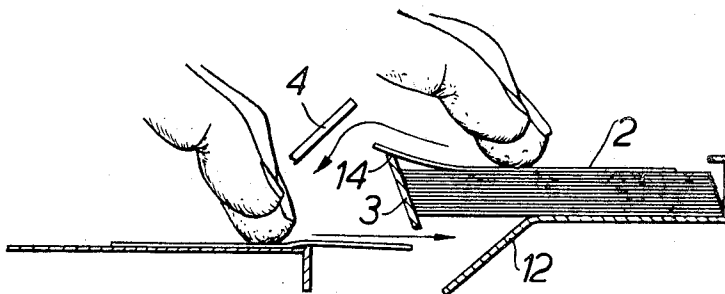


FIG.2.

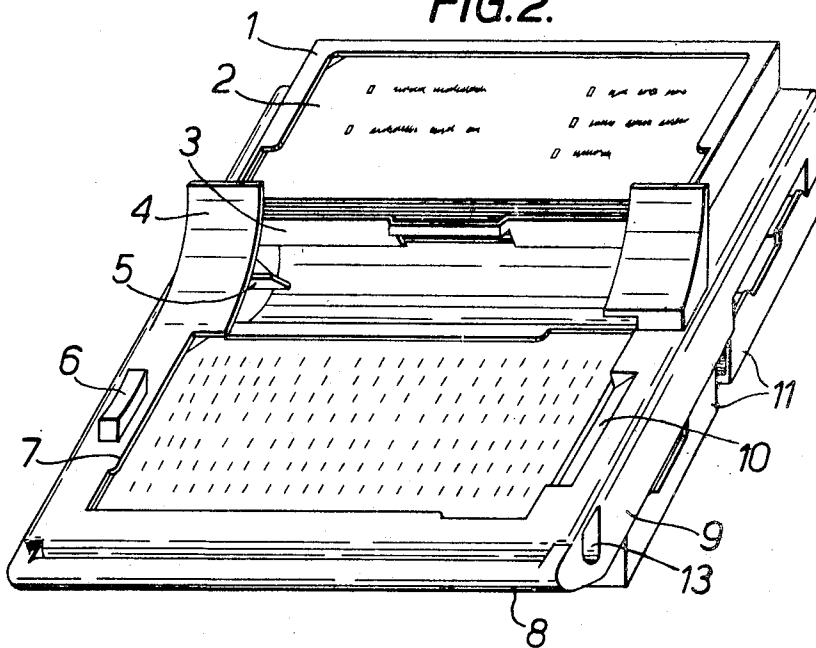
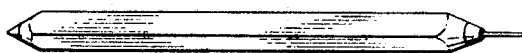


FIG.3.



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METHOD AND APPLIANCE FOR RECORDING INFORMATION STORED ON PUNCHED CARDS

SUMMARY

The appliance involved in the invention consists of a box containing, first, a storage tray holding a series, or pile, of master cards, and equipped with a system for presenting these cards one after another, and, second, a presentation table, on which each master card is placed in turn, the said table being positioned in such a way in relation to the storage tray that, after recording of the information on the receiving card, the master cards are returned to the storage tray behind the last card or the previous card used in the said recording.

This appliance is used for the recording of information on media such as, in particular, precut receiving cards.

The invention relates to an improved process and appliance for recording information on media such as, in particular, precut receiving cards.

The appliance involved in the present invention makes possible the carrying out of the improved data-gathering process described in an earlier application made by the same applicant, and which consists of superimposing, on a receiving card, a master card bearing a number of questions or answers, each matched by a guide hole with a given position, and of punching the said receiving card by an suitable device, which is inserted into the hole facing the question or answer required.

The invention is intended to solve the problem of storing the master cards and presenting them on the punch table. The cards are generally kept in a sort of holder, and the operator takes them one after another manually and lays them on the punch table. This operation not only causes time to be wasted, but also involves certain risks, in cases where the master cards have to be presented in a particular order, since in handling the cards, to remove them from the holder or replace them in it, the operator can change their order or position of presentation. In addition, the storage of cards in such a holder, separate from the rest of the installation, is hardly practical.

The invention concerns an improved process for recording information, involving the presentation and superimposing of a series of master cards in turn on a receiving card, and possibly the storing of the master cards, after recording of the information on the receiving card, without the order of succession of presentation of the master cards being altered.

According to one method performing the process covered by the invention, the first of a series of master cards is placed on top of a receiving card, and after the recording of the information on the said receiving card, the said master card is stored behind the last card or the previous card used in the said recording.

The appliance involved in the invention consists of a box containing, first, a storage tray holding a series, or pile, of master cards, and equipped with a system for presenting these cards one after another, and, second, a presentation table, on which each master card is placed in turn, the said table being positioned in such a way in relation to the storage tray that, after recording of the information on the receiving card, the master cards are returned to the storage tray behind the last card or the previous card used in the said recording.

According to one method of constructing the appliance involved in the invention, the storage tray is on a higher level than the presentation table, is separated from it by means of a partition, and one or more slides link the storage tray to the said table, facilitating the sliding of the master card and its placing on top of the receiving card.

According to another method of constructing the appliance involved in the invention, the partition separating the storage tray from the presentation table is equipped with a system for distributing the cards one after another, preferably consisting of a longitudinal groove at the top of the partition, inside the tray.

According to yet another method of constructing the appliance involved in the invention, a longitudinal slit beneath

the said partition, connected with a sloping strip, enables the master card to return to the tray, after the recording of the information on the receiving card; the said longitudinal slit and sloping strip are arranged in such a way that the card returned to the tray comes behind the last of the master cards contained in the said tray, and preferably at the bottom of the tray.

According to one method of constructing the appliance involved in the invention, the bottom of the storage tray, at the end next to the partition, forms the said sloping strip.

According to another method of constructing the appliance involved in the invention, the said appliance includes, preferably beneath the presentation table, a reserve of cards, generally receiving cards, held in a container in the form of a drawer sliding or not.

According to yet another form of the invention, the appliance is equipped with a path or housing holding a pointed instrument, which can be inserted in a hole on the master card and used to punch a hole in the corresponding position on the receiving cards.

According to one method of constructing the appliance involved in the invention, the pointed instrument has a pen at its other end.

Other purposes and advantages of the invention will become clear from reading the description below and the accompanying figures, which are not intended to be restrictive.

FIG. 1 gives a detailed view which shows how the master cards are brought on to the presentation table and then returned to the storage tray.

FIG. 2 gives a view of the invention perspective.

FIG. 3 shows the pointed instrument outside its housing, with a pen at its far end.

The appliance involved in the invention consists of a box containing a storage tray 2, in which the master cards are piled, and a punch table, or presentation table 9.

A rim 1, at the back of the side edges of the tray, keeps the master cards in the tray 2. A partition 3 separates the tray 2 from the table 9. This partition should preferably be tilted, forming an angle of between 100° and 150° with the plane of the cards, for example; the top of it has a distributor groove 14, inside the tray 2. This groove allows the master cards to be brought out one after another.

Sloping slides 4 help the master cards to slide down and be positioned on top of the receiving cards. A rim 7 keeps the master card in position on the presentation table.

The presentation table 9 is flanked by a side passage 10, for the introduction of the receiving cards and their removal, and possibly the removal of a master cards.

The bottom of the tray is curved to form a strip 12, helping to position the master cards coming from the presentation table beneath the last card in the pile, so that there is no change in the order of the cards.

The appliance may also include a reserve container 11 for receiving cards, beneath the presentation table 9, and possibly a second reserve container 11, beneath the tray 2. A housing or passage 13 is provided to hold a pointed instrument (FIG. 3), intended for the punching of the receiving cards. This instrument may have a pen or pencil at its other end.

The appliance operates as follows. A series of master cards is piled in a given order inside the storage tray 2. These cards are held in the tray by means of the rim 1. The operator, keeping his fingers as far as possible from the partition 3, removes the cards from the tray 2, along a passage provided between the upper end of the rim 3 and the slides 4; the grooves 14 allows only one master card to pass at a time.

The movement of the master card towards its position on top of a receiving card placed on the table 9 is assisted by the sloping slides 4; it reaches the receiving card previously placed on the table 9, and is held in position by the rim 7.

The questions or answers contained on the master card are reproduced on the receiving card by means of the pointed instrument, which is inserted in the relevant holes on the master card and perforates the receiving card at the matching points.

When the questions or answers on one master card have been recorded, the operator pushes the card in the opposite direction to the original one, returning it in this way to the tray 2, beneath the last master card contained in the tray, by passing under a guide 5 (not shown in FIG. 1), which acts in conjunction with the strip 12, helping to position the master card against the last card in the tray.

Naturally, the invention is not restricted to the method illustrated, and is intended to cover many variants possible for those skilled in the art, without betraying the spirit of the invention. For instance, one could include any system involving automatic movement of the master cards from the storage tray to the presentation table, or vice versa. In particular, the series of cards may take the form of a continuous strip, wound on to a bobbin, for instance, which is inserted in a suitable tray, allowing the master strip thus formed to unwind, be superimposed on the receiving cards, and then be rewound on to another bobbin, such as a receiving bobbin.

What is claimed is:

1. An appliance for recording information stored on a stack of master cards, comprising:
 - means for holding said stack;
 - a presentation table;
 - a first passage extending from one side of said stack-holding means to said presentation table; and a second passage extending from said presentation table to the other side of said stack holding means, whereby when a plurality of master cards stacked in a predetermined order are held in said stack-holding means, the card adjacent said one side can be moved through said first passage means to said presentation table and subsequently moved from said presentation table through said second passage means to the position in said holding means adjacent said other side of said stack to thereby maintain said master cards in said predetermined order.
2. The appliance of claim 3, wherein said stack-holding means is for holding a plurality of substantially vertically

stacked substantially horizontal cards, said stack-holding means is horizontally offset from said presentation table; and said one side of said stack holding means is above said presentation table, whereby the top master card is moved off said stack through said first passage to said presentation table and a master card moved off said presentation table through said second passage becomes the bottom master card in said stack.

3. The appliance of claim 4, wherein said stack-holding means includes a partition separating it from said presentation table, and said first passage is defined by a downwardly sloping slide.

4. The appliance of claim 4, wherein said partition is provided with an elongated groove adjacent its top for permitting movement of cards off the top of said stack one at a time.

5. The appliance of claim 4, wherein said stack-holding means includes a partition separating it from said presentation table, and said second passage is defined by an elongated slit in the bottom of said partition.

6. The appliance of claim 6, wherein said second passage is defined by an elongated slit in the bottom of said partition.

7. The appliance of claim 7, wherein said second passage means comprises an upwardly sloping slide on the opposite side of said partition from said presentation table and terminating at the bottom of said stack-holding means.

8. The appliance of claim 8, wherein said second passage means comprises an upwardly sloping slide on the opposite side of said partition from said presentation table and terminating at the bottom of said stack-holding means.

9. The appliance of claim 4, further comprising a second card holding means.

10. The appliance of claim 4, further comprising means for holding an elongated pointed instrument.

11. The appliance of claim 10, further comprising a second card holding means.

12. The appliance of claim 10, further comprising means for holding an elongated pointed instrument.

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