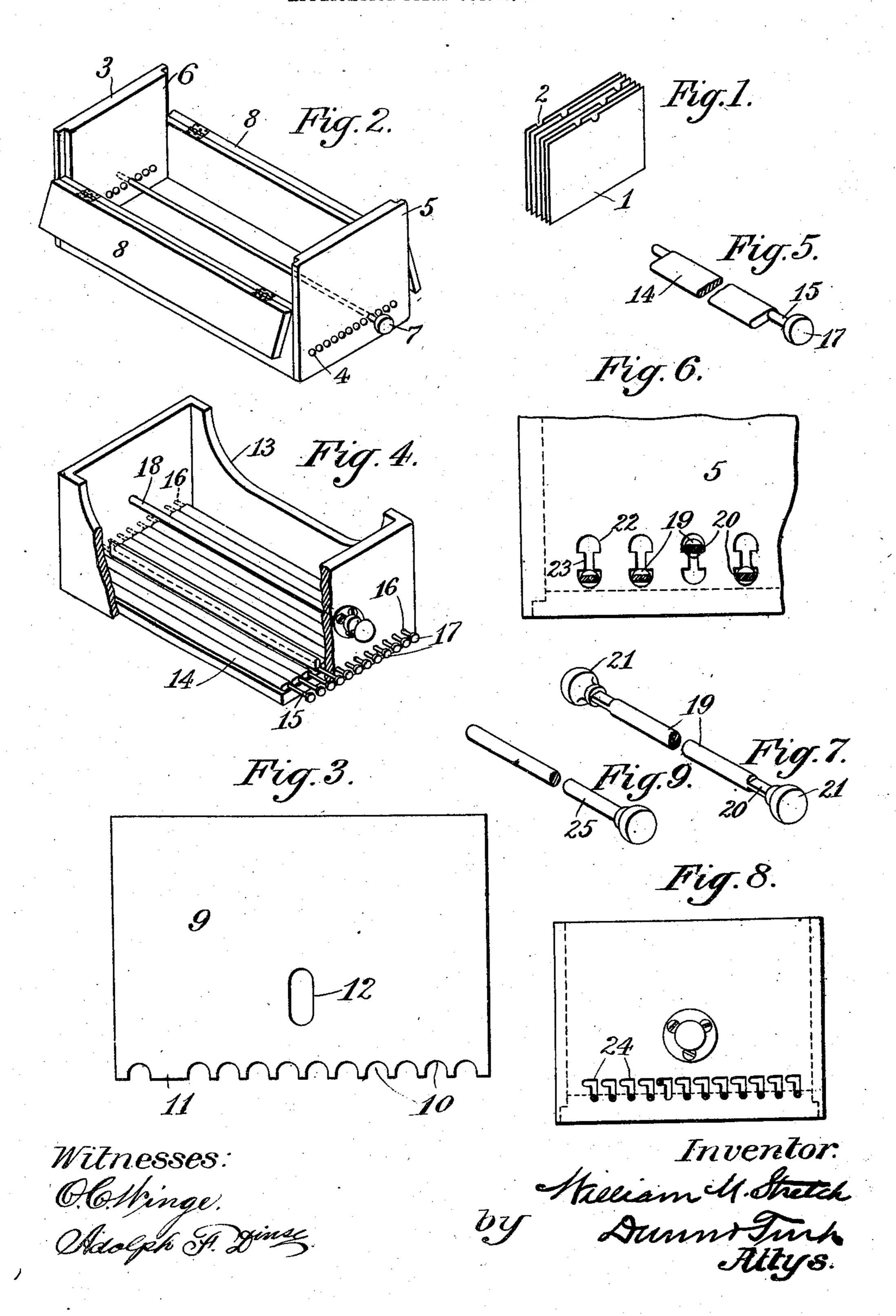
## W. M. STRETCH. CARD INDEX SYSTEM. APPLICATION FILED OCT. 19, 1904.



## UNITED STATES PATENT OFFICE.

WILLIAM M. STRETCH, OF MOUNT VERNON, NEW YORK.

## CARD-INDEX SYSTEM.

No. 867,618.

## Specification of Letters Patent.

Patented Oct. 8, 1907.

Application filed October 19, 1904. Serial No. 229,189.

To all whom it may concern:

Be it known that I, William M. Stretch, a citizen of the United States, residing in Mount Vernon, West-chester county, and State of New York, have invented certain new and useful Improvements in Card-Index Systems, of which the following is a full, clear, and exact specification.

This invention relates to card records or card indexes which are well known and largely used for the purpose of recording, in a readily accessible form, a large number of items of information. Such cards are usually arranged in a systematic manner, according to the data on them, and are frequently sub-divided geographically.

ally. It is often necessary to separate from the mass of cards 15 a certain number of them which may be scattered indiscriminately throughout the mass. For instance, when such cards are used, as they frequently are, by publishers for the purpose of entering thereon a list of 20 their subscribers, it is of importance to the publisher, for instance, of a monthly publication, that he should be able each month to select or separate from the mass of cards all of those containing the names of subscribers, whose subscription is about to expire. The cards con-25 taining this information may be arranged alphabetically, according to the names of the subscribers, or geographically, according to the town or city where they live, or a combination of these two. Therefore the cards desired will be scattered indiscriminately throughout 30 the mass. The usual manner of selecting such cards has been to go through the entire mass and pick out the desired cards one at a time. This is objectionable by reason of the time consumed and the liability of error, and to the fact that reliance has been placed wholly 35 upon the alertness of the operator. Other methods have been tried, such as the use of various colored cards, the color of the card indicating the class to which it belonged. Cards have also been used with portions projecting from the upper ends of the cards, the posi-40 tion of which indicates to the eye the character of the card; such projecting portion is in the way of the operator and is liable to become broken off in use. Both these methods are objectionable for the reasons above noted and the use of the colored cards for the further 45 reason that they require that it should be known at the time the card is filled out precisely to what class it belongs, or in the case supposed that it should be known at the time the card is filled out when the subscription will expire. This information is frequently not attain-50 able at the time the card is first filled out and yet it is desirable that the card should be embodied in the mass.

The result has been that confusion results and no means

has heretofore, so far as I am aware, been used in con-

nection with the cards whereby the cards may be classi-

fied according to the data and then be simultaneously 55 and rapidly separated by mechanism without liability of error.

The object of my invention is to provide an improved system of cards and means to be used in connection therewith, whereby such cards as are desired may be 60 simultaneously and infallibly separated from the mass of cards and brought into position for handling, which will accomplish the desired object irrespective of the arrangement or sub-division of the cards. To effect uate this object I provide the cards with a series of distin- 65 guishing characteristics, which are the same in like cards, and the position of which upon the card determines the classification of the card and provides in connection therewith a receptacle which retains the cards and to which I have applied means by the operation of 70 which any group of cards having like distinguishing characteristics may be simultaneously separated from the mass of cards and brought into a position where they may be easily consulted or removed.

In the drawings Figure 1 represents, in perspective, 75 cards which may be used in carrying out my invention; Fig. 2 a perspective view of a box which may be used in connection with the cards illustrated in Fig. 1; Fig. 3 a plan view of a card forming part of my invention, showing a different form; Fig. 4 a perspective view, 80 partly broken away, of a box which may be used in connection with the cards of Fig. 3; Fig. 5 is a perspective view, broken, of one of the rods used in connection with Fig. 4; Fig. 6 is a partial end view of a card containing receptacle showing another form of card select- 85 ing means; Fig. 7, a perspective view partly broken, of a rod used in connection with Fig. 6; Fig. 8 an end view of a card containing receptacle showing still another form of card separating means; and Fig. 9, a perspective partly broken, of a rod which may be used in connec- 90 tion with Fig. 8.

In the drawings, 1, represents cards to different ones of which, as shown in Fig. 1, I have applied at one edge, a series of recesses 2. Each card, 1, is provided with one recess and the recesses in like cards are in 95 alinement. In this view it will be noticed that the second and fifth cards, counting from the face, have recesses in alinement. These cards, 1, may be used in connection with the card containing receptacle box 3, shown in Fig. 2. This box is provided with a series 100 of openings 4, on the front and back walls, 5 and 6 of the same. These openings are in alinement and capable of receiving the card selecting rod 7. When it is desired to select a certain series of cards from the group, the rod 7 will be inserted in that pair of holes, 4, which 105 corresponds in position to the recesses upon the cards which it is desired to select. For instance, in case it is desired to select from a series of cards containing a

publisher's subscription list, all those cards which would expire in February, the rod 7 would be placed in the second pair of holes, 4, counting from the left in Fig. 2, and the cards would be placed with the re-5 cessed side down in the box.

All of the cards which presented a straight edge to the rod 7, would lie on top of said rod, but those cards which had a recess at this point would permit the rod 7 to enter said recess and the top of said cards would 10 therefore fall below the top of the remaining cards, to an extent equal to the depth of the recess and said cards would also project slightly to the side. The desired cards would therefore be separated from the mass and could be easily consulted and extracted if desired. For convenience in use I have provided the box 3, with hinged side pieces 8 which facilitate the inspection and extraction of the separated cards. In this form in which my invention is embodied it will be perceived that the separation of the cards is accom-20 plished by allowing the desired cards to drop below the mass and for certain uses this may be desirable, as each card has only one recess punched into it and the box is simple in construction.

I have shown in Fig. 3 another form of card which 25 may be used in connection with my invention, by the use of which those cards which are desired to be separated from the mass shall be so separated by being raised above the rest. This form of card, which I have designated, 9, is provided on its under side with a se-30 ries of recesses, 10, at all those parts excepting at the point where it is designed the character of the card Should be indicated, where a straight edge is presented as at 11. 12 is a hole through which passes a rod for retaining the cards in the case, which in this instance, 35 as the card has a vertical movement is slightly elongated so as to form a slot. In Fig. 4, 13 is one form of a card containing receptacle which may be used for receiving the cards 9. It is shown as broken away in front for convenience in inspecting the card selecting 40 bars 14, which are situated adjacent to the bottom of the box of this receptacle, and present a substantially flat surface to support the cards. The said bars 14 are shown in detail in Fig. 5 and are constructed with a shaft like portion 15, arranged eccentric with relation 45 to the longitudinal axis of the main body portion of the said bars. Each bar is journaled in openings 16 in the front and rear walls of the card containing receptacle, 13, and is mounted so as to revolve therein, and each bar is provided with a rounded head 17, as shown. 50 The cards 9, are placed in the card containing receptacle 13 with the recessed edges down or toward the bottom of the box. All of the bars 14 will be flat when the cards are so inserted. The rod 18 may then be placed in position to securely hold the cards or other 55 means may be employed should these means be objectionable by reason of the necessary perforation in the card to receive said rod 18. If it is desired to select that group of cards such as cards 9, which have the straight edge 11, the second bar, counting from the left 60 of Fig. 4, will be turned and the eccentric body portion of said bar will be brought into the vertical position in which one of the bars in Fig. 4 is shown. All of the cards having recesses at the point indicated by 11 in the cards 9, will be unaffected by the turning of the 85 said bar 14 which will enter the said recesses. Those

cards having a straight portion, as 11, at this point will be raised and projected above the mass of cards and they may then be easily consulted or if desired may be extracted, by the removal of rod 18.

Fig. 6 illustrates still another form of box which may 70 be used in connection with cards 9, and wherein the rod may be locked in its raised position, so that the cards will be securely held in such position.

Fig. 7 illustrates a rod 19 for use in connection with the box Fig. 6. This rod has a rounded body portion 75 and a flattened shank 20 and one of the usual form of rounded heads 21 is provided at each end. The end of the box Fig. 6 is provided with a series of dumb-bell shaped slots 22, through which pass the flattened shanks 20 of the rods 19. When it is desired to raise 80 any particular group of cards the rod 19 is turned so as to bring its flattened portion 20 in alinement with the straight part 23 of the slot when it will easily pass through it and the rod may then be raised and turned and locked in its upper position as shown in Fig. 6.

Fig. 8 illustrates a simple manner of constructing the card containing receptacle for use in connection with the cards 9. In this form of box a simple rod as in Fig. 9 may be used. Here the box is provided at one end with a series of L-shaped slots 24. The rod 90 25 has a round body and the usual rounded head. This head is only desirable to present a neat appearance as the rod 25, does not require to be turned and can easily be lifted by the fingers pressing the ends of the rod at the front and rear of the box, the rod pro- 95 jecting through the rear wall for that purpose. Both the rear and the front walls of the boxes illustrated in Fig. 8 as well as in Fig. 6 will be equipped with slots of the same character as are shown in these figures. In the form shown in Fig. 8 the rods will be raised and pushed 100 sidewise on the horizontal part of the slot; raising with them the cards having the straight portion 11 adjacent to the particular rod that is raised. Those cards in the group not equipped with such straight portions 11, will remain in their original position undisturbed. The 105 rounded heads of the rods have the function of firmly holding the rod against longitudinal displacement during use.

The operation of my invention is fully described in the foregoing description of the apparatus.

The form of box which I have illustrated in Fig. 1 may be used especially as a separating box or it may be one of the regular receptacles in which cards are kept.

Fig. 4 is intended to represent a permanent card containing receptacle.

It is obvious that the recesses as shown may be applied to the cards at the time that the cards are manufactured, or should the character of the use to which the said cards are put, render this undesirable, from the fact that it may not be known until after the said 120 card is filled out to what particular class it will eventually belong, the recesses may be formed therein as soon as this information is obtained and for this purpose it may be desirable to indicate by printing or otherwise the position of such recess.

Should an error be made in applying to the card the distinguishing characteristics by which the same is separated, or should for any reason a change be desired it may be easily corrected. In case it is an error in forming a recess a slip of paper may be pasted over it 130

110

115

125

and a fresh recess cut. Such added piece should be the full depth of the card to prevent catching.

It is obvious that by the use of my invention certainty in the separation of the desired card can be had, 5 and that the liability of error due to the fallibility of the operator is overcome. It is conveniently arranged so that the operator may make certain that all of the cards separated are withdrawn for reference, for by lifting the cards from the box a glance along the line 10 of recesses will clearly indicate if any cards remain.

The cards used in connection with my invention may obviously be made of any suitable material, such as card board, aluminium or thin sheet metal of any desired kind.

The differences in contour, by means of which in con-15 nection with my apparatus, I am enabled to select the desired cards, are not to be applied to the top edge of the cards for two reasons: First, because that edge is constantly exposed to handling and if projections are 20 used they are extremely apt to be broken off and so produce the very thing they are designed to obviate: Second, because it is much simpler and surer to embody such differences in contour at the lower edges, and the bars or rods are better concealed and may al-25 ways be in place.

Although I have shown recesses as the means by which the different groups of cards are distinguished, because I regard them as the most advantageous from several points of view, it is obvious that other distin-30 guishing characteristics might be formed in the cards which in coöperation with the separating means in the receptacles would produce the result. I therefore do not wish to limit myself to the use of recesses as shown, nor is it essential that the particular form of 35 card separating means illustrated by me should be used, as my invention might easily be produced in other forms, but

What I claim and desire to secure by Letters Patent is:

1. In a card indexing system, a series of cards distinguished by groups, each card having distinguishing characteristics on the lower edge thereof, cards belonging to the same group having said characteristics in line, means for holding said cards in mass normally in uniform position, 45 a plurality of card separating rods, permanently secured in said card holding means, underlying the mass of said cards and separately controlling each group and adapted to operate upon the lower edges thereof, means for operating said separating rods extending outside of said card holder, the said separating rods so arranged as to be ineffective until operated and upon operation to simultaneously separate all of the cards of any desired group, substantially as described.

2. In a card indexing system, a receptacle for the cards wherein said cards are normally held in uniform position and separating means in said receptacle extending throughout the lower part thereof and operating in connection with the lower edges of said cards, a connection to said separating means outside of said receptacle for operating the same whereby all the cards will be held in the same position until said separating means are operated whereupon all cards whose lower edges are affected by said separating means will be simultaneously separated and held in separated position to permit the removal of a part or all thereof, substantially as described.

3. In a card indexing system, a series of cards distinguished by groups and provided with distinguishing characteristics on the lower edge thereof, the position of which on each card determines the character of the card, cards in 70 the same group being similarly distinguished, a receptacle adapted to contain said cards and to hold the same nor-

mally in uniform position irrespective of the arrangement thereof, a plurality of permanent means in said receptacle underlying the mass of said cards and coöperating with said distinguishing characteristics, and separately con- 75 trolling each group whereby the cards of any desired group may be simultaneously separated, means outside of said receptacle for controlling said separating means, means for holding either of said separating means in separating position the said parts so arranged that said cards will be 80 unaffected by said separating means until the same are operated, substantially as described.

4. In a card indexing system, a series of cards provided with distinguishing characteristics on an edge thereof, a receptacle adapted to receive said cards, and bars in said 85 receptacle operating in connection with the distinguishing characteristics in said cards, each bar extending across the entire mass of said cards and adapted to select therefrom all cards having like distinguishing characteristics, substantially as described.

5. In a card indexing system, a series of cards distinguished by groups and provided with distinguishing characteristics on the lower edge thereof, cards of the same group having like characteristics, a receptacle adapted to receive said cards and to hold the same normally in uni- 95 form position, and a bar in said receptacle underlying all of said cards and operating in connection with the distinguishing characteristics in the lower edges thereof and adapted to separate any desired group of said cards from the mass, means for holding said bar in separating posi- 100 tion, a projection on said bar outside of said receptacle for operating the same, upon the operation of which all of the cards whose distinguishing characteristics are adjacent to said bar, will be simultaneously separated from the remaining cards, súbstantially as described.

6. In a card indexing system, a series of cards distinguished by groups each of which is provided with a distinguishing characteristic on an edge thereof at a predetermined point to determine its character, cards of the same group being similarly distinguished, and a card containing, 110 receptacle adapted to hold said cards normally in uniform position, and a plurality of card separating rods extending across the entire mass of such cards, separately controlling each group and adapted to select any desired group from the mass and in contact with but disconnected therefrom, 115 operating means outside said receptacle, connected to said separating means, upon the operation of which means all of the cards having like distinguishing characteristics will be simultaneously separated from the mass, and means for locking either of said rods in separating position substan- 120 tially as described.

7. In a card indexing system, a card receiving receptacle provided with a series of openings in its front and back walls, a series of cards each of which is provided at a predetermined point upon its lower edge with a distinguish- 125 ing characteristic to determine its character, like cards having distinguishing characteristics in alinement, and rotary means underlying all of said cards and journaled in said openings, co-acting with the said distinguishing characteristics for simultaneously selecting all cards whose distin- 130 guishing characteristics are adjacent to the particular selecting means operated, substantially as described.

8. A series of record cards, distinguished in groups by differences in the contour of the lower edges, a receptacle for said cards wherein the distinguishing portion of cards 135 in the same group are held in alinement and said cards are normally maintained in uniform position, and a separating rod underlying all of said cards and co-acting therewith whereby all of the cards of any desired group may be simultaneously selected, and means for locking said rod in sepa- 140 rating position substantially as described.

9. A series of record cards, comprising a plurality of groups distinguished from each other by distinguishing contours, a receptacle for said cards adapted to hold the same normally in uniform position, and a plurality of sepa- 145 rating rods in said receptacle cooperating with said cards but disconnected therefrom whereby all of the cards of the same group may be simultaneously selected, and 'means outside of said receptacle for operating said selecting means, and means for locking any of said rods in its sepa- 150 rating position substantially as described.

10. A series of record cards, comprising a plurality of groups, distinguished by differences in contour, cards of the same group having the same contour, and a card containing receptacle provided with a series of bars, each bar extending across the entire mass and controlling a group of cards and adapted in operation to select all of the cards comprised in said group from the mass, substantially as described.

11. A series of record cards, comprising a plurality of groups, distinguished by differences in contour, cards of the same group having the same contour, and a card containing receptacle provided with means whereby a selected group of said cards may be raised above the mass, comprising a series of bars each bar extending across the 15 entire mass and controlling a group of cards and adapted in operation to select all of the cards comprised in said group from the mass, substantially as described.

12. A series of record cards comprising a plurality of groups, each of said cards having a part of one edge cut away, cards of the same group having the uncut parts of the said edge in line, and out of line with the uncut parts of the edges of cards of other groups, a receptacle for said cards and means cooperating with said edges to simultaneously select all of the cards of the same group, 25 substantially as described.

13. A series of record cards comprising a plurality of groups, each card provided with a plurality of recesses, and with a straight portion, cards in the same group having their straight portions in alinement and means co-30 operating therewith to simultaneously separate all of the cards of the same group from the mass of cards, and a receptacle for said cards, substantially as described.

14. A card containing and separating receptacle provided with a series of separating bars whose upper edges are normally flush with the bottoms of the cards, openings in the front and rear walls of the receptacle in line with each of said bars and operating means for each bar outside of the receptacle, upon the operation of which means the connected bar will rise above the bottom of the box, sub-40 stantially as described.

15. A card containing and separating receptacle provided with a series of separating bars, which control the entire adjacent edge of the cards and whose upper edges are normally flush with the bottoms of the cards, openings in the front and rear walls of the receptacle in line with each of said bars and operating means for each bar outside of the receptacle, upon the operation of which means the connected bar will rise above the bottom of the receptacle, substantially as described.

16. A card containing and separating receptacle provided with a series of separating bars whose upper edges are normally in the same plane, openings in the front and rear walls of the receptacle, in line with each of said bars and operating means for each bar outside of the re-55 ceptacle, upon the operation of which means the connected bar will rise above the bottom of the receptacle, and means for locking said bar in its raised position, substantially as described.

17. A card containing and separating receptacle, provided with a series of grooves, and slots in line with the ends thereof adapted to receive a selecting rod and to allow said rod to move into or out of either of said grooves, and a selecting rod adapted to enter said slots and grooves, substantially as described.

18. A card containing and separating receptacle, provided with a series of grooves, slots in line with the ends thereof, selecting rods in said slots and normally in said grooves, and means whereby said rods may be raised and locked in the raised position, substantially as described.

19. In a card indexing system, a series of cards distinguished in groups by differences of each card in contour below the top edge, cards of the same group having the same contour, a card receptacle adapted to hold all said cards normally in uniform position, means in said receptacle adapted to engage the outer edges of said cards, whereby cards of the same contour may be simultaneously separated from the mass, means whereby said separating means may be locked in the separating position, substantially as described.

20. In a card indexing system, a series of cards having 80 differences in contour, cards of the same class having the same contour, a card receptacle, means in said receptacle adapted to engage the outer edges of said cards, whereby cards of the same contour may be simultaneously separated from the mass, and means whereby said separating 85 means may be locked in the separating position, said separated cards being capable of removal from the mass without disturbing said separating means, substantially as described.

21. A series of record cards distinguished in groups by 90 differences in the contour of the lower edges, cards of the same group having the same contour, a receptacle adapted to receive said cards and hold the same normally in uniform position, separating means permanently held in said receptacle and means for operating said separating 95 means upon the operation of which all of the cards of any one group may be simultaneously separated from the mass, substantially as described.

22. A series of record cards distinguished in groups by differences in the contour of the lower edges, cards of the 100 same group having the same contour, a receptacle adapted to receive said cards and hold the same normally in uniform position, separating means permanently held in said receptacle and controlling the entire length of an edge of said cards and means for operating said separating means 105 upon the operation of a portion of which all of the cards of any one group may be simultaneously separated from the mass, substantially as described.

23. A series of record cards distinguished in groups by differences in the contour of the lower edges, cards of the 110 same group having the same contour, a receptacle adapted to receive said cards and hold the same normally in uniform position, separating means permanently held in said receptacle and means for operating said separating means upon the operation of which all of the cards of any one 115 group may be simultaneously separated from the mass, and means for holding said cards in separated position, substantially as described.

24. In a card indexing system, a series of cards distinguished in groups by differences in contour of each card 120 below the top edge, cards of the same group having the same contour, a card receptacle adapted to hold all said cards normally in uniform position, and means permanently secured in said receptacle adapted to engage the edges of said cards below the top edge whereby cards of 125 the same contour may be simultaneously separated, and any one or all of said cards removed from the mass, without changing the adjustment of said separating means, substantially as described.

25. In a card indexing system, a series of cards having 130 differences in contour, cards of the same class having the same contour, a card receptacle, means in said receptacle adapted to engage the outer edges of said cards, whereby cards of the same contour may be simultaneously separated from the mass, and means whereby said separating 135 means may be locked in the separating position, substantially as described.

26. In a card indexing system, a series of cards divided in groups by differences in contour, cards of the same group having like distinguishing characteristics, which are 140 in line and are out of line with the distinguishing characteristics of cards in the other groups, a card receiving receptacle provided with a series of openings, in line with said distinguishing characteristics, each of which is adapted to receive a separating rod, a separating rod operable from 145 the outside of the receptacle adapted to cooperate with the said distinguishing characteristics to select all the cards of a desired group and separate them from the mass and maintain them in separated position and permit them to be withdrawn, in part or whole, without changing the 156 position of the separating rod, substantially as described.

27. A series of record cards distinguished in groups by differences in the coutour of an edge, cards belonging to the same group having their said edges similarly shaped and a receptacle for said cards provided with a selecting member 755 extending across the entire mass of cards, and cooperating with said differences in contour, means for controlling said selecting member from the outside of said receptacle,

whereby all of the cards of any desired group may be simultaneously separated from the mass of cards, sub-

stantially as described.

28. A series of record cards, distinguished in groups by 5 distinguishing characteristics on an edge thereof, cards of . the same group having their distinguishing characteristics in line, and a receptacle for said cards provided with a selecting member underlying all of said cards, a connection to said selecting member from without the receptacle 10 whereby all of the said cards belonging to any one group may be simultaneously separated from the mass of cards,

substantially as described.

29. A series of cards distinguished by groups, by distinguishing characteristics on an edge of said cards, cards 15 of the same group having their distinguishing characteristics in line and out of line with those of other groups, a receptacle adapted to receive said cards, selecting means in said receptacle extending across the entire mass of cards and operable from the outside of the receptacle and 20 adapted to engage the adjacent edges of the cards at different points of their width and to simultaneously separate from the mass all the cards of any desired group, by cooperation with the said distinguishing characteristics, substantially as described.

30. A series of record cards distinguished by groups, by recesses on an edge thereof, cards of the same group having their recesses in line, a receptacle for said cards, a selecting member in the lower part thereof extending entirely across the cards and operable from the outside of the receptacle and adapted to engage the adjacent edges of the entire mass of cards at different points in their

width, and to select from the mass all the cards of any desired group by cooperation with the said recesses, substantially as described.

31. A card index system comprising a separating box, 35 a series of cards provided at different points in their width with recesses, the position of which determines the class of the card, cards of the same class having their recesses in line, selecting means in said box underlying the whole mass of cards, adapted, in coöperation with said 40 recesses, to select all the cards of any desired class from the entire mass of cards, and a connection to said selecting means, outside said box, substantially as described.

32. A series of record cards distinguished in groups by differences in the coutour of an edge, cards belonging to 45 the same group having their said edges similarly shaped, and a receptacle for said cards provided with a selecting member extending across the entire series of cards and outside of the same, and adapted to engage different points in the width thereof, a connection to said selecting mem- 50 ber outside said receptacle, said selecting member adapted to simultaneously separate from the mass of cards, all the cards belonging to any desired group wherever located and to enable said group to be removed without disturbing the selecting member, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

WILLIAM M. STRETCH.

Witnesses:

ADOLPH F. DINSY, A. C. FISCHER.