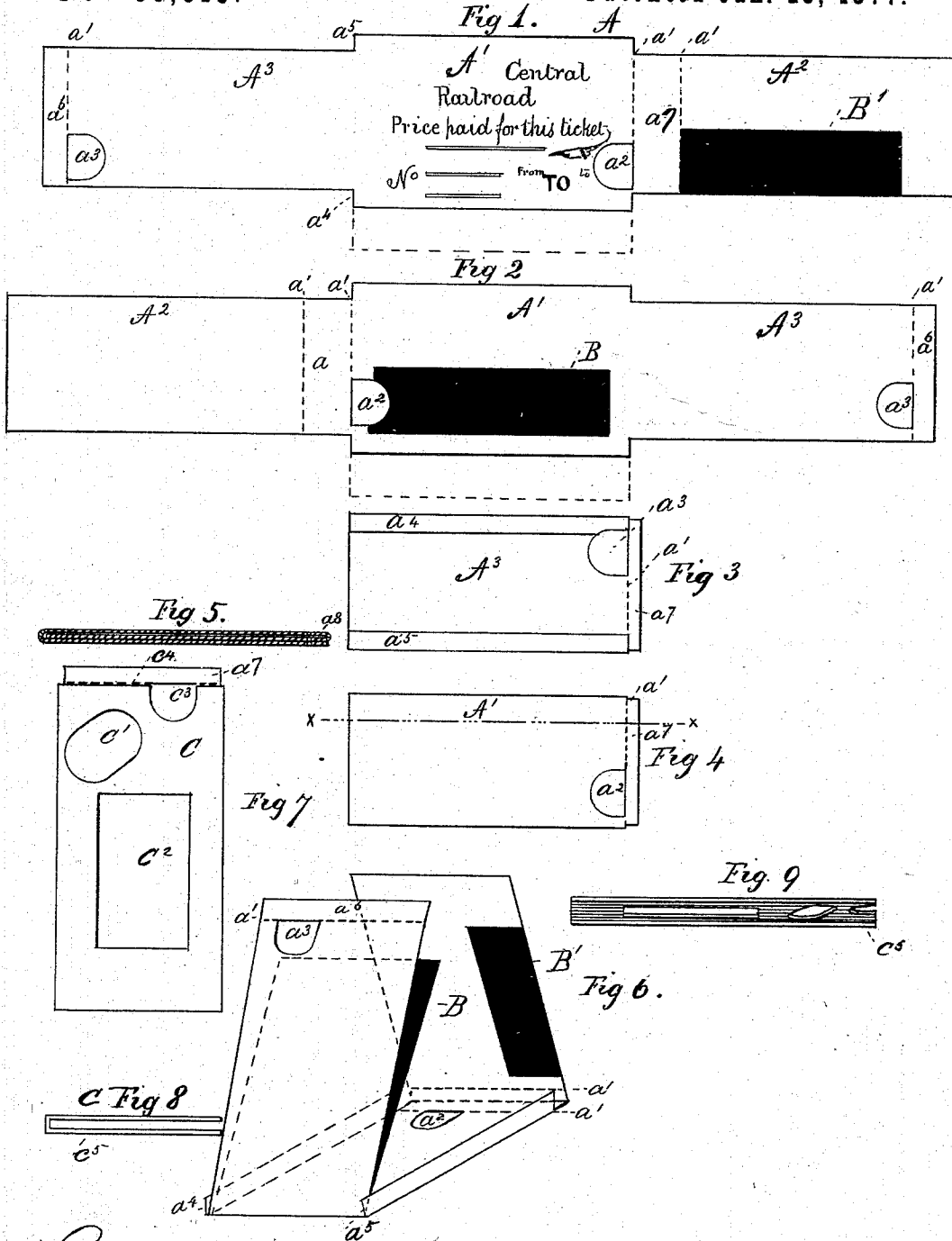


B. C. POLE.  
RAILROAD TICKET.

No. 186,613.

Patented Jan. 23, 1877.



Witnesses  
Lem. Bacon  
or E. Chaffee

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RAILROAD TICKET.

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Fig 10.

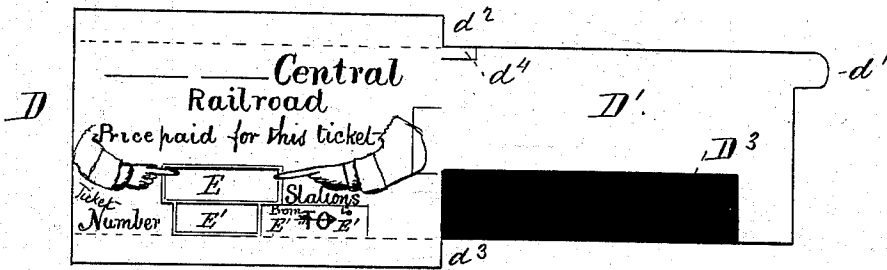


Fig 11.

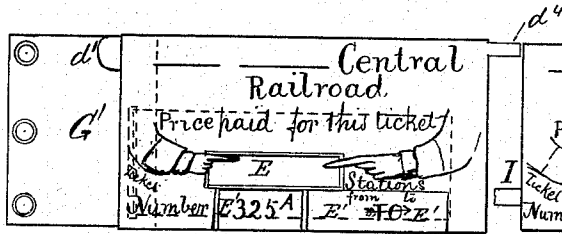


Fig 12.

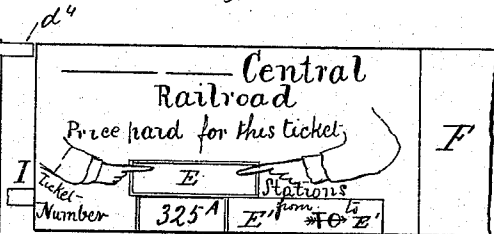


Fig 13.

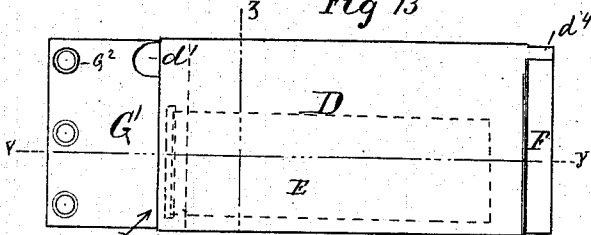


Fig 14.

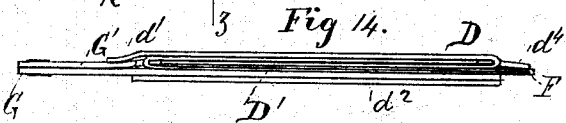


Fig 15.

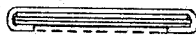
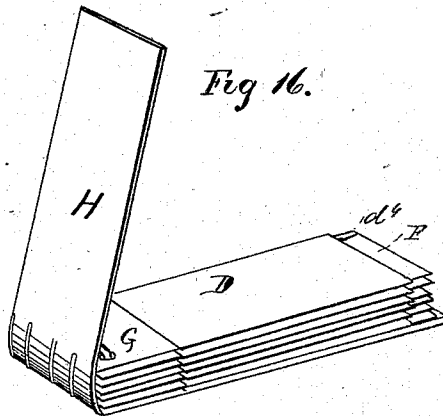


Fig 16.



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Fig 17.

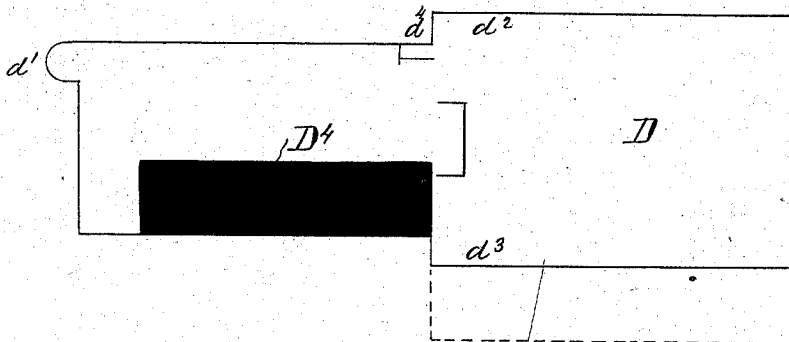


Fig 19.

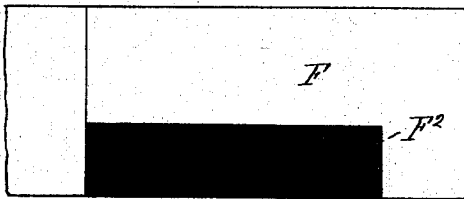


Fig 18.

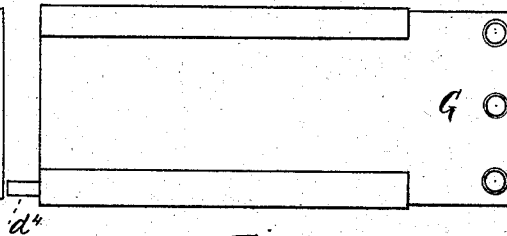


Fig 20.

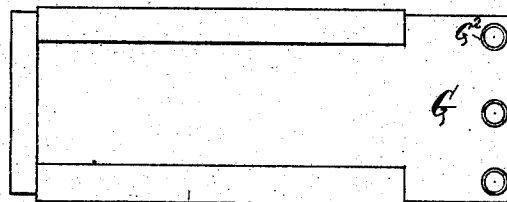
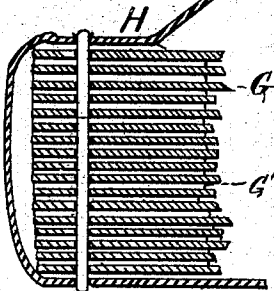


Fig 21.



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Fig 22.

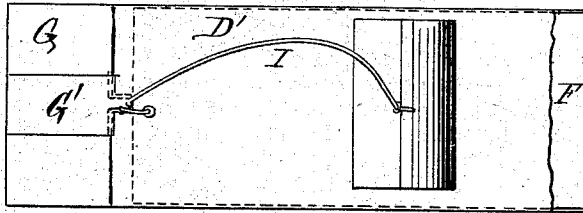


Fig 23.

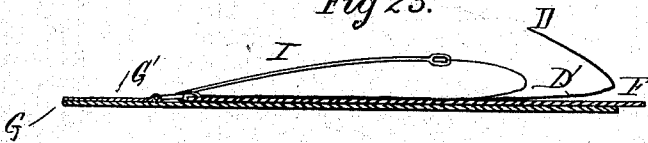


Fig 24.

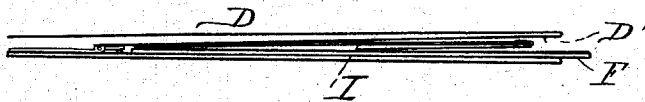


Fig 25.

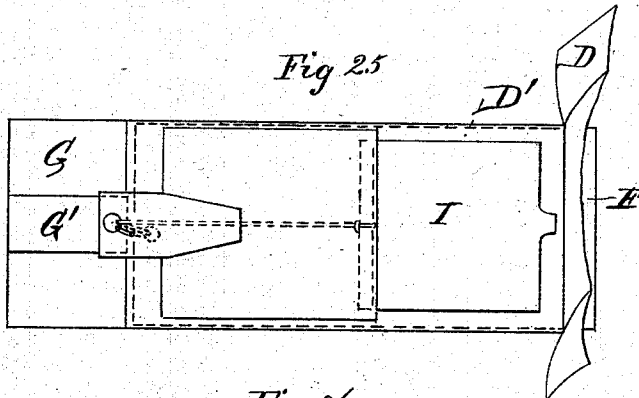
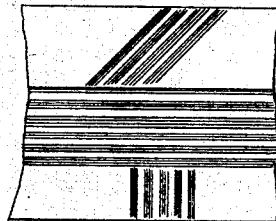


Fig 26.



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M. Gardner.

Inventor.  
Benjamin C. Pole

# UNITED STATES PATENT OFFICE.

BENJAMIN C. POLE, OF WASHINGTON, DISTRICT OF COLUMBIA.

## IMPROVEMENT IN RAILROAD-TICKETS.

Specification forming part of Letters Patent No. **186,613**, dated January 23, 1877; application filed October 9, 1876.

### *To all whom it may concern:*

Be it known that I, BENJAMIN C. POLE, of Washington, District of Columbia, have invented certain new and useful Improvements in Ticket-Registers for Collectors and Conductors; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to produce a sealed-up registering-ticket, so arranged that there shall be a registration of any action of writing, marking, or stamping done by a collector or conductor upon the surface thereof, accomplished by a certain hereinafter described system of colored, striped colored, and movable transferring composition on the sheets thereof, compiled or built together one above another, so that the action of writing, marking, or stamping upon the outside of said case, cover, or sheath is transferred up backward to the back of the same, and is transferred downward from the same to a ticket-receipt when the same is in place; and, at the same time, a third transfer of another color is also made to the back of the registering-ticket case, so that when a passenger pays a fare, or a collector or conductor collects money, he shall, by operating this ticket-register, be compelled to give a ticket-receipt, with the amount of money received marked thereon in colored letters, which said ticket-receipt is withdrawn from its case, cover, or sheath, it having first been written, marked, or stamped in the presence of the payer of the said money, thereby compelling him to give an account of the same to his employer or employers, all of which is hereinafter more fully set forth and described, reference being had to the accompanying drawings, in which—

Figure 1 is a front view of the envelope ticket-register paper before being folded. Fig. 2 is the reverse side of Fig. 1. Fig. 3 is the rear view of the envelope ticket-register when folded. Fig. 4 is the front, or conductor or collector's writing side. Fig. 5 is a section on line *x x* of Fig. 4. Fig. 6 is a view of the

envelope ticket-register when folding. Fig. 7 is a view of the ticket-receipt when placed in the holder. Fig. 8 is an end view of the holder. Fig. 9 is a side view of the holder. Fig. 10 is a modified ticket-register when unfolded. Fig. 11 is a view of Fig. 10 when folded upon the hard back or binding-piece. Fig. 12 is the transfer-passenger's ticket-receipt drawn out. Fig. 13 is the same as Fig. 11, with the ticket-receipt in position. Fig. 14 is a section on line *y y* of Fig. 13. Fig. 15 is a section on line *z z* of Fig. 13. Fig. 16 is a view of ticket receipts when bound in book form. Fig. 17 is a rear view of Fig. 10. Fig. 18 is a rear view of Fig. 11. Fig. 19 is a rear view of Fig. 12. Fig. 20 is a rear view of Fig. 13. Fig. 21 is a section through binding-cords when the receipts are bound in book form. Fig. 22 is a ticket-register when the movable color-check is drawn back by a string attached to the ticket-receipt. Fig. 23 is a side elevation of Fig. 22. Fig. 24 is a side elevation of a ticket fully built, as on plan of Fig. 22. Fig. 25 is a plan of a modified ticket-register, in which the movable color-check is drawn back under a color-check seal. Fig. 26 is a view of the various plans for laying the color-composition in stripes.

In all, the same letters refer to the same parts.

The envelope ticket-register consists of paper and card-board, arranged in certain order, so that when built or made up they lie one above another. The main piece A, upon which is printed any railways or conductors' receipts, is provided with perforations *a*<sup>1</sup>, and is gapped out at *a*<sup>2</sup> and *a*<sup>3</sup>, and also has the overlapping paper *a*<sup>4</sup> and *a*<sup>5</sup>, or more, as shown in dotted lines, Fig. 2. This piece is divided into three divisions, A<sup>1</sup>, A<sup>2</sup>, and A<sup>3</sup>—speaking of the whole piece as A—and is folded down so that the pieces A<sup>1</sup> and A<sup>3</sup> become the covers for the piece A<sup>2</sup>, and the overlaps *a*<sup>4</sup> and *a*<sup>5</sup> are folded over and made to adhere to the piece A<sup>3</sup>, and the piece *a*<sup>6</sup> is made to adhere to the piece *a*<sup>7</sup>. The perforations *a*<sup>1</sup> and the gapped out parts *a*<sup>2</sup> and *a*<sup>3</sup> are all brought one over the other, upon the piece *a*<sup>7</sup>. Interposed between the strips A<sup>1</sup> and A<sup>2</sup> is a transfer composition-strip, B, or upon the back of A<sup>1</sup> a composition of any color—say, black, or

colors in stripes—and between the strips  $A^2$  and  $A^3$ , or upon the back of  $A^2$ , is an additional transfer-composition,  $B^1$ , of a different color, or stripes of color, from that interposed between  $A^1$  and  $A^2$ ; and the operation of the foregoing is as follows:

The conductor or collector writes the fare he received from the passenger upon the surface of  $A^1$ , and by the medium of the transfer composition  $B$  the same writing, marking, or stamping is transmitted to the surface of  $A^2$ , and from  $A^2$ , by a different color, to the piece  $A^3$ .

Previous to writing, and to prevent the further transfer from the back of  $A^3$ , the envelope ticket-register is slipped into the metal holder  $C$ , which is provided with the thumb-opening  $c^1$  and writing-opening  $c^2$ , the mouth of the same having the gap  $c^3$  and tearing-edge  $c^4$ . This before named to be written upon envelope ticket-register is allowed to enter the holder  $C$ , and project therefrom, so as to expose the tearing-piece  $a^1$ . The conductor or collector, with his thumb in its position at  $c^1$ , holds the ticket-register firmly. He then writes, stamps, or marks the amount of fare, money, and service for which he is about to issue the ticket-receipt, and, having performed this duty, with the other hand he tears off the piece  $a^1$ . This permits the piece  $A^2$  to be freely withdrawn from between  $A^1$  and  $A^3$ . The ticket receipt  $A^2$  has upon it the transfer of the writing, marking, or stamping done on  $A^1$ , being the sum of money paid, and distance for which the ticket  $A^2$  is issued, and is handed to the passenger as a receipt for money paid. Where separate strips having on them the composition are employed they take the place of  $B$  and  $B^1$ . To prevent the conductor's altering the register after the ticket  $A^2$  has been withdrawn, should he write on  $A^1$  the transfer to  $A^3$  would be of the wrong color, besides showing up backward on  $A^1$  that he had done so. The gaps  $A^2$  and  $A^3$  permit the whole piece  $A^2$  to be readily taken hold of for delivery.

In the foregoing, the holder  $c$  and its back  $c^5$  is used for preventing the transferring materials being operated entirely through the envelope ticket-register, to one which would be underneath it.

The next modification of this invention is in providing a hard back to the ticket-register itself, and in providing a ready means of binding the same into book form. The piece  $D$ , which is equivalent to the pieces  $A^1$  and  $A^2$  of the before-mentioned construction, but which is printed only at  $D$ , the piece  $D^1$  being clear, and having the ear  $d^1$ , or equivalent, is prepared with a transfer composition on both sides at  $D^3$  and  $D^4$ , in stripes of color, if desired. This exactly corresponds to the parts  $E$  and  $E^1$  designated to be written, stamped or marked, or transferred upon. The part  $D$  is larger, or  $D^1$  is cut down, forming the laps  $d^2$   $d^3$ . There is provided a separate ticket-receipt,  $F$ , which, for convenience in printing,

may be printed on one piece of paper beside  $D$ , and afterward detached. There is also a card-back,  $G$ , for preventing transferring entirely through to a ticket that should be underneath it, and is the equivalent to the back of the holder  $C$ , and is provided with holes  $G^2$  for readily binding one card-strip to another, forming a book. The piece  $D^1$  is cut or perforated at  $d^4$  for the purpose of forming a seal or equivalent for holding the ticket-receipt in position. This receipt-piece  $F$  is made sufficiently large to admit of its being doubled—that is, two thicknesses of paper, which are folded one over the other, upon one half, and upon the inner side between the folds is spread a fatty resisting substance—gelatine or albumen. This prevents the transfer composition from coming through, and keeps the ticket-face clean. Upon the other outward side of the ticket is rubbed the transfer composition  $F^2$ , of any color, and this again is covered in with a coating of albumen. This operates so that the surface  $E$  and  $E^1$  of the ticket-receipt  $F$  readily receives the transfer, and is not dirty or greasy, and the transfer from the back of  $F$  by  $F^2$  is clean and distinct, the albumen keeping the transfer composition from readily rubbing off, to the discomfort of the passenger.

The albumen or equivalent substance may be put upon the surface of the ticket  $F$  only, in which instance the transfer  $F^2$  is upon the back thereof, and covered in with albumen, as before stated.

The piece  $D^1$  is bent under the piece  $D$ , and sealed at or near  $d^1$ . The transferring end of the strip  $I$  is interposed between  $D$  and  $D^1$ , and is led around  $G^1$  to the ticket-receipt  $F$ , to which it is attached, and the laps  $d^2$  and  $d^3$  are bound over the edges of the card-piece  $G$ , being sealed or gummed in position. The ticket-receipt piece  $F$  is between the bent-in piece  $D^1$  and card back  $G$ , and this is sealed by the sealing-piece  $d^4$ .

In the operation of this ticket, the conductor or collector writes, marks, or stamps on the surface of  $D$ , at  $E$  and  $E^1$ , which is transferred up backward to the back of  $D$ , through the medium of the color-transferring composition provided to be on or operated by strip  $I$ , and is again transferred through  $D^1$  to the ticket-receipt  $F$ ; this again, by another transfer of different color,  $F^2$ , upon the back, or by an additional sheet of transfer, is transferred to the surface of the card back  $G$ , and it will be readily understood that the thickness of this back  $G$  prevents farther transfer to or on the ticket that may be bound underneath, as shown in Fig. 16.

In proof that the ticket-register has been regularly and properly used by the conductor or collector, a paper-knife is inserted at  $K^1$ . This lays the whole of the check-register open, and the marks on the face of  $D$  show up backward on the back of  $D$ , and the exact transfer of the same is in a different color from that on  $D^1$  at  $D^4$ , when the strip  $I$  is

used or interposed. The transfer is upon G in regular color when a ticket, F, is used that transferred through. The transfer composition of I is injured, color changed, or removed, this all showing a regular use of the register and check-register.

That the ticket back may be readily bound the holes G<sup>2</sup> are provided, and these will readily permit the use of one good pocket-book cover, H, to which can be laced a number of ticket-receipts when ready for use, thus saving an entirely new book for each series of tickets.

The tearing-strip, drawing tag, or string I is attached to the ticket-receipt F, and is passed back and around or through an eyelet, G', or equivalent, placed at the back of the ticket, and attached to G, and is brought directly under the place designated for the conductor to write on D, it being in the pocket formed by D and D<sup>1</sup>, that when the ticket-receipt F is withdrawn said strip I shall draw over, injure, or remove the said color-transfer composition, and by so doing the colored composition D<sup>4</sup> comes directly under the surface of D, where the conductor is to or has written; and if the color transfer up backward on the inner surface of D is different from the color transfer D<sup>4</sup> on D<sup>1</sup>, it is clear proof that when the writing, marking, or stamping on the surface of D was performed, the transfer composition of or belonging to the strip I interposed between D<sup>4</sup> and the inner surface of D. Should writing, marking, or stamping be done when the strip I has been withdrawn, then the transfer up and backward upon the inner surface of D will be of the color of D<sup>4</sup>. Should the coloring of D<sup>4</sup> be dispensed with, then there would appear characters upon the surface D, and be blank underneath, proving that strip I, with its coloring, was removed before writing or making said characters; and, again, should strip I be blank, or that to which it is attached to draw, pull, or turn over, then D<sup>4</sup> being color, would be prevented from transferring up backward by said strip I, and there would be no transfer up backward when the ticket was written upon previous to drawing strip I. This coloring matter can be applied in stripes, insuring that any motion of withdrawing ticket-receipt

F before writing thereon will be indicated, as the proper color would have been removed, injured, or changed; and it is obvious that the card back could be added to the first construction of envelope ticket-receipt A<sup>3</sup>; also, the ticket-receipt F can be of card.

Having thus described the construction and operation of my invention, what I claim, and desire to secure by Letters Patent, is—

1. A sealed-up ticket-register, provided upon its interior surface with a coating of transfer composition or its equivalent, in combination with a ticket-receipt inclosed therein, having upon it a coating of transfer-composition of a different color, for recording the action of stamping, writing, or marking, substantially for the purposes set forth.

2. A built-up cover, case, or sheath, D, folded to form a pocket, prepared with transferring-composition, in colors and stripes, secured to a back, G, and provided with a ticket-receipt, F, which has a drawing tag or string, I, to draw, turn over, injure, or remove a color-check, substantially as and for the purpose set forth.

3. A writing ticket-register, provided with manifold paper or transfer composition, for recording the action of writing, marking, or stamping, divided into divisions A<sup>1</sup> A<sup>2</sup> A<sup>3</sup>, or more, having perforations a<sup>1</sup>, with gaps a<sup>2</sup> and a<sup>3</sup>, overlapping paper a<sup>4</sup> and a<sup>5</sup>, folded and sealed, forming a tearing-piece, a<sup>7</sup>, and ticket-receipt A<sup>2</sup>, with color check or checks, substantially as and for the purposes set forth.

4. A writing ticket-register, provided with a double seal, d<sup>1</sup> and d<sup>4</sup>, double transfer composition D<sup>3</sup> D<sup>4</sup>, single or double ticket-register F, with color-changing drawing-strip I, eyelet G' or equivalent, and hard back G, substantially as and for the purposes set forth.

5. A writing ticket-register holder, provided with tearing-edges c<sup>4</sup>, gaps c<sup>3</sup>, openings C<sup>1</sup> and C<sup>2</sup>, as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

BENJAMIN C. POLE.

Witnesses:

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