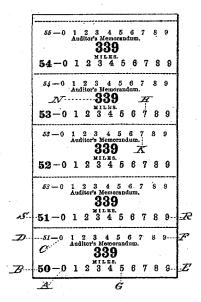
(Model.)

C. W. REIFF. MILEAGE TICKET.

No. 303,048.

Patented Aug. 5, 1884.



Witnesses-

Um. Henry Jorr

Inventor

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT

CHARLES WESLEY REIFF, OF PHILADELPHIA, PENNSYLVANIA.

MILEAGE-TICKET.

SPECIFICATION forming part of Letters Patent No. 303,048, dated August 5, 1884.

Application filed November 30, 1883. (Model.)

To all whom it may concern:

Be it known that I, CHARLES WESLEY REIFF, a citizen of the United States, residing at No. 2,200 Mount Vernon street, in the 5 city and county of Philadelphia and State of Pennsylvania, have invented a new and aseful Improvement in Transportation Mileage-Tickets, of which the following is a specifica-

My invention is designed to cover any number of miles of transportation by the employment of consecutively numbered, perforated, and detachable coupons, each covering a specified number of miles by unit representation, 15 and bearing an additional series of units, which, when canceled identically with the mile-units on the following coupon, serve as a continuous memorandum of actual distance traveled.

The objects of my invention are, first, to 20 afford ticket representation for the greatest number of miles by the least number of coupons, thus increasing the ease of computation and affording a material corresponding reduction in the bulk of ticket and cost of produc-25 ing the same; second, to facilitate conductors' ticket-collections by increased size and decreased number of coupons to be lifted, insuring greater legibility of mile numbers and ease of locating any specified one; third, to lessen the labor of audit by substituting an indicating punch-mark of distance traveled on the last coupon returned by conductor, in lieu of an enumeration of coupons. I attain these objects by the combination illustrated in the 35 accompanying drawing, representing a sample page of proposed ticket, which is adapted to cover one thousand miles in conformity with the standard mileage-ticket in current use on the different railroads.

The one-thousand-mile ticket, sample page (eleventh) of which is represented in drawing, comprises twenty pages of five coupons each, or one hundred coupons, detachable by perforation, per ticket. Each coupon is designed to cover ten miles of travel, excepting the first and last coupons, which will cover nine and eleven miles, respectively. The center of each coupon will bear the number of the ticket N. Each coupon will bear along the lower marso gin thereof the units $0, 1, \overline{2}, 3, 4, 5, 6, 7, 8,$ and 9, A E, in prominent type, for cancellal sponding (K) figure 7 in the auditor's memotion by conductor, immediately preceded by randum on the preceding coupon, (fifty-third,)

other numerals, B, in heavier type, and connected therewith by a hyphen, which represents tens and hundreds. This row of figures 55 B E will be designated as "Miles," by the word being printed centrally above it. Each coupon will also bear along the upper margin thereof an additional row of units, from 0 to 9, inclusive, in reduced-sized type, for cancellation purposes; also, immediately preceded by connecting numerals representing tens and hundreds, exceeding by ten the value of the similarly arranged numerals, representing miles on the same coupon. This row of figures 65 D F will be designated as "Auditor's Memorandum," the words being printed centrally beneath it. The following coupons will bear similar rows of figures, representing miles, and auditor's memorandum of a numerical 70 value exceeding by ten the corresponding figures on the preceding coupon. The mile-numbers on the first coupon will be from 1 to 9, inclusive, representing nine miles, and the canceling-number 100-0, representing the one- 75 thousandth mile, will be substituted for the auditor's memorandum on the last or onehundreth coupon. The numbers representing the tens and hundreds in the auditor's memorandum of each coupon will also indicate the 80 consecutive number of that coupon. The unitfigure canceled, when joined to the figures representing tens and hundreds, indicates the number of miles traveled, thus invalidating the preceding figures. The corresponding 85 units on each coupon are arranged in a vertical line for precision in cancellation. In the printing of a ticket covering more than one thousand miles, the same principle will be continued throughout by the addition of a 90 preceding numeral representing thousands.

This ticket is manipulated as follows: Supposing that the passenger has ridden five hundred and five (505) miles, which number, G, bears the last conductor's punch-mark, and pre- 95 sents the ticket for a passage of thirty-two (32) additional miles—that is, up to the five hundred and thirty-seventh mile, inclusive, the conductor looks for the coupon (fifty-fourth) bearing the indicating-number 53, and can- 100 cels the figure 7, representing the five hundred and thirty-seventh mile, H, and the corresponding (K) figure 7 in the auditor's memo-

which is the last coupon collected by conductor | on account of the two unused miles remaining on the last coupon canceled, (fifty-fourth.) Upon the next presentation of ticket for passage, the conductor calculates his mileage from the previous conductor's punch-mark and follows the same form of procedure. The canceled number at the top of the last coupon returned by conductor indicates to the auditor $_{\rm IO}\,$ the number of miles traveled on the ticket. In cases of miscalculation the punch-mark on the first and last coupon collected identifies both conductors honoring ticket. Where a passenger rides less than ten miles, and there is at 15 times no coupon to collect on account of the unused miles remaining thereon, the conductor punches the miles traveled and makes a note thereof on his train slip, which is verified by auditor upon the next coupon collection.

The tickets will be bound and covered, the preface-pages being printed in accordance with the requirements of the railroad using the same. By the application of the same principle, the coupons may be made to represent

any number of miles, with a corresponding 25 variation in size of pages.

I therefore do claim as my invention and

desire to secure by Letters Patent—

A combination of detachable coupons, each coupon bearing a series of numbers, B E, rep-30 resenting miles of transportation for the cancellation of distance traveled, together with an additional series of numbers, D F, of higher numerical value, representing, when canceled, an auditor's memorandum of distance traveled, K, as indicated by the corresponding cancellation of duplicate number, H, on the following coupon, the series of numbers on each coupon D F representing auditor's memodum, being a duplication of the series of numbers representing miles, S R, on the following coupon.

November 23, 1883.

CHARLES WESLEY REIFF.

Witnesses:

W. E. SWIFT, WM. HENRY TORR.