

(No Model.)

J. W. WINNINGHAM.
MILEAGE TICKET.

No. 586,347.

Patented July 13, 1897.

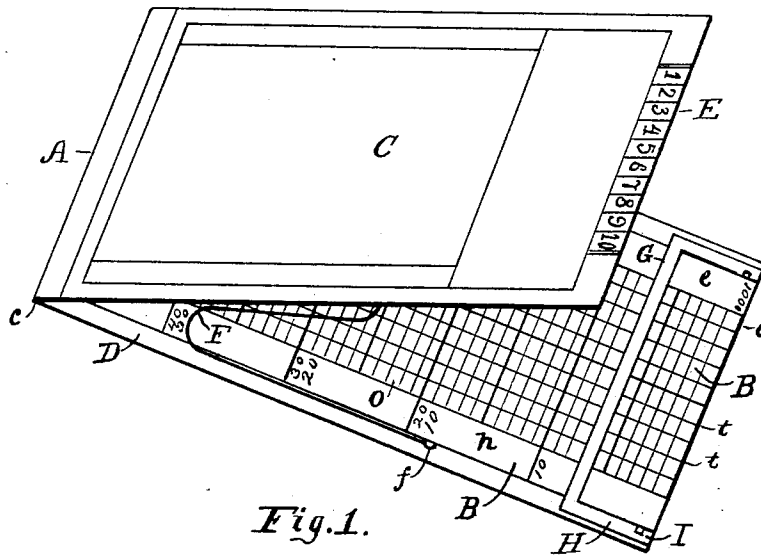


Fig. 1.

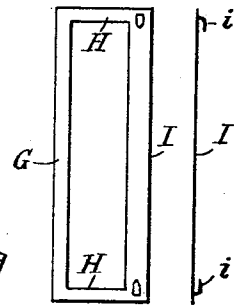


Fig. 2.

Fig. 3.

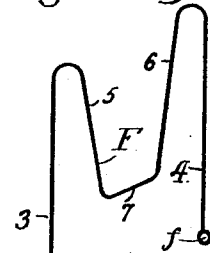


Fig. 4.



Fig. 5.

N, e, m																			
326	326	326	326	326	326	326	326	326	326	326	326	326	326	326	326	326	326	326	326
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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1441	1442	1443	1444	1445	14														

UNITED STATES PATENT OFFICE.

JESSE W. WINNINGHAM, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO THE
WINNINGHAM MILEAGE TICKET COMPANY, OF SAME PLACE.

MILEAGE-TICKET.

SPECIFICATION forming part of Letters Patent No. 586,347, dated July 13, 1897.

Application filed March 2, 1897. Serial No. 625,786. (No model.)

To all whom it may concern:

Be it known that I, JESSE W. WINNINGHAM, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Mileage-Tickets; and I do declare the following to be a full, clear, and exact description of the invention, such as 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 the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to that class of mileage-tickets that are used more particularly on railways and steamboat-lines, commonly known as "one-thousand-mile" tickets; and it consists in a mileage strip or ribbon of a certain peculiar design in combination with a suitable retaining-cover provided with an indicator, strip-clamp, strip-guide, and shearing-plate, as will be more fully described hereinafter and particularly pointed out in the claims.

The object of my invention is to provide a mileage-ticket in which fractional portions are detached of such character and design as shall facilitate the problem of determining at what point the portion should be detached and obviate the evils and objections of detaching at the wrong point.

In mileage-strips heretofore used the ticket-taker is required to perform a mental or written problem, which, under the unfavorable conditions, is liable to error, or in other cases he measures the portion to be detached, which is also liable to error.

In my invention the process of ascertaining the amount of mileage-strip to be detached is simplified and liability to error is reduced to the minimum, and the devices for holding in place and guiding the strip are a great advantage.

My objects are fully attained in my invention, which is, furthermore, cheaply constructed and is durable and economical in use.

Referring to the drawings, Figure 1 represents my mileage-ticket in perspective; Fig. 2, a plan view, and Fig. 3 a front edge view, of combined shearing and guide plate; Fig.

4, a perspective of the strip-clamp; Fig. 5, a side view of ticket; Fig. 6, a plan view of a portion of strip, and Fig. 7 a detail plan view of portions of strip and indicator.

In the drawings, A designates the cover, and B the strip, of the ticket; E, the indicator; F, the strip-retaining clamp; G and H H, the strip-guides, and I the shear-plate.

In constructing my invention I form the cover A in the usual manner, preferably of strawboard, the part C being the top or front side and the part D being the bottom or back side of the cover, the two parts being hinged together by a binding-piece c of flexible material. Both sides of the top and outside of the bottom of the cover may be suitably printed upon, giving name of railway company, directions for using the ticket, and other desirable information.

At the front edge upon the outside C of the cover I apply the indicator E, which may be printed on the cover or be stamped upon suitable material and attached to the cover.

The indicator consists of numerals from "1" to "10," set in spaces between dividing-lines and reading from left to right, as shown.

The clamp F is preferably composed of spring-wire formed of members 3, 4, 5, 6, and 7, joined integrally, and is provided at the extremities with eyes f, by which the clamp is secured to the inside of the bottom D by suitable rivets, so that when the folded mileage-strip is placed in position in the cover the spring-clamp shall retain it in position, but will permit the strip to be drawn out when desired.

The combined guide and shearing-plate is formed integrally of the members G, H, H, and I. The mileage-strip passes under the member G and between the guides H H and over the shearing-plate I, the guide G having a spring-pressure downward upon the strip and preventing the latter from being drawn over the top of the guides H H as the strip is drawn out. At each end of the shear-plate a lip is turned down by a suitable die or punch, forming, when inserted in suitable openings in the cover and turned over at the opposite side, clench-hooks i i, by which the combination shear and guides are secured.

The mileage-strip is preferably made of pa-

per and is continuous in length, representing by means of transverse divisional lines, as *u s*, printed on the face thereof, any desired number consecutively—as, for instance, from one up to one thousand miles—each space O between two transverse lines representing one mile. The strip is slightly narrower than the cover and is adapted to pass neatly between the guides H H. Centrally on the face of the strip are also a series of eleven longitudinal lines *t*, extending the whole length of the strip and crossing the transverse lines, forming square spaces, as well as continuous columns, as *a b d*, the square spaces having numerals inserted therein, as hereinafter described. At the sides of the series of lines are margins *e h*, upon which, at certain points, are numerals, such as at *k k'*, on the left-hand margin *h*, indicating ten miles opposite the tenth space from the beginning and twenty miles opposite the twentieth space from the beginning of the strip. These numbers continue consecutively by tens to the end of the strip, and on the margin *e*, beginning at the end, are like numerals, ending at the beginning of the strip, as “1,000,” at *m*. The middle longitudinal line and every fifth transverse line are preferably heavier or printed in different color than the other lines. The transverse line after every tenth space from the beginning is extended across the margins. Upon the left-hand margin are also the initials M of the road issuing the ticket, and on the right-hand margin are numerals N, indicating the serial number of the ticket, both being preferably printed in color differing from the other characters. The columns *a b d*, &c., are designed to be of the same width as the numbered spaces on the indicator E, the number of spaces in each coinciding. The squares formed by the crossed longitudinal and transverse lines form blocks of one hundred squares, which being subdivided by the heavy lines form blocks of twenty-five squares each. Each column is numbered from one to ten consecutively and is repeated continuously throughout the length of the strip, there being a numeral in each square space, except in the left-hand corner of the block beginning the strip, as shown in Fig. 6. The column *a* begins with number “1” in the first space, column *b* with number “1” in the second space, each column following to the left having the number “1” in the space next advanced from the preceding column, as shown in Fig. 6. In the second block from the eleventh to the twentieth mile, inclusive, the spaces or squares are all filled with numerals, and it will be observed that the numerals, besides being read from “1” to “10” and by tens up the columns, are also read from “1” to “10” in each of the tenth-mile space from left to right across the strip and from “1” to the right-hand edge in the other cross-spaces. Thus the numeral “1” appears in each longitudinal column in each block in a line diagonally across the block. Each succeeding block is

a duplicate of the second block represented between the tenth and twenty-first miles. On the margin *h* are numerals *n*, opposite the ninth space in each block, indicating “10” in the second block, “20” in the third block, and so on, progressing consecutively by tens in each block. The strip is folded and suitably secured in the cover as described and may be pasted at its terminal end to the cover.

In practical use the cover C is slightly raised, the end of the strip B is drawn out the desired distance, and the part extending over the edge of the shear-plate detached by pressing the strip down over the edge, starting at one edge to shear. The process of determining at what point for any given mileage the strip should be detached is so positive that the most inexperienced need not err, as the numeral “1” will appear at the head of the strip no matter at what point the preceding mileage may have been detached, and it is only necessary to count from “1” up to the desired distance by tens and add the fractions of ten indicated after the last ten-space. As an example, in Fig. 7 the strip is represented as having five miles, part 1, detached, which is indicated by the numerals in column *a*. Now suppose that seven miles are to be detached from the part 2. The first figure in the right-hand column *a* will indicate in which column number “1” should be found, which in this case is “6.” The strip is then slightly drawn out, the cover C being dropped down so that the indicator E is close to the strip, when we find by the indicator that the numeral “1” is in the sixth column from the right of the strip. Then the strip is drawn out, the eye being kept upon the column below the figure “6” of the indicator until the space or mile “7” is reached at *s*. Had eighteen miles been required, the shearing would have been at *u* by mentally adding “10” and “8,” as shown in the column. Should the strip have been sheared at *s*, the indicator E would show that the computing would occur in the third column from the right, and if sheared at *u* it would begin in the fourth column. For proving accurately the mileage for long trips, as above one hundred, the operation may be written—as, for example, one hundred and thirty-eight miles is required to be taken off the strip which has been sheared at *s*. The figure *n*, whether it be “10,” “20,” or other number, added to the first mileage-numeral in the second column *b* from the right in the same block, will indicate the amount of miles that have been detached. In this case twelve miles would have been removed. Now add “12” to “138” and we have “150,” which would be found in the margin *h* and that space detached. Should one hundred and forty miles have been substituted, after finding the number “150” the additional two miles would be found in column *a*. As shown in Fig. 6, we desire to detach eleven miles, which, added to the twelve

removed, make twenty-three miles. We find "20" at *k'* and "3" in column *a*, which is sheared on the line *u*. Thus it will be seen that no subtracting but only simple addition is required in computing, a rule that may be easily remembered.

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

1. A mileage-ticket consisting of a continuous strip divided by a series of transverse lines into equal spaces throughout its length and by a series of longitudinal lines crossing said transverse lines into square spaces, said square spaces being numbered consecutively from "1" to "10" from left to right on each tenth mile and from bottom to top in series of ten in each column and arranged as shown, and a cover composed of a front and back provided with an indicator at the front edge of said front, a combined shearing and guide plate at the front edge of the back of said cover, and means for retaining said strip within said cover, substantially as shown and described.

2. A mileage-ticket consisting of a continuous strip having on one side thereof a series of transverse and longitudinal lines forming a series of blocks of one hundred square spaces each continuously, numerals in said spaces as shown, marginal spaces at the sides of said blocks, numerals in said margins as shown, a cover for said strip into which it is retained in folds, an indicator on the top of said cover adapted to indicate the column in which the numeral "1" appears, and the guides adapted to retain said strip centrally to said indicator, substantially as shown and described.

3. In a mileage-ticket, the combination of the cover provided with the indicator at the front edge of the outside of the top thereof, the spring-clamp secured to the inside of the bottom of said cover, the combined shearing and guide plate secured to the front inside

edge of the bottom of said cover, and the mileage-strip folded and secured within said covers, said strip having on its upper face columns corresponding in number and width to the spaces on said indicator, transverse lines dividing said columns into continuous series of square spaces, numerals in said spaces disposed consecutively from "1" to "10" from bottom upward and from left to right, and marginal indicating-numerals as shown, substantially as and for the purposes shown and described.

4. In a mileage-ticket, the combination of the cover comprising the hinged front and back, the mileage-strip folded and secured therein, the retaining-clamp *F* secured to the inner side of said back, and the combined guides *G*, *H*, *H*, and shearing-plate *I* secured to the front end of said back at the inner side thereof, substantially as shown and described.

5. In a mileage-ticket, the combination of the cover provided with the indicator at the front edge and the clamps and guides at the inner side of the bottom part, the strip folded and secured therein, the centrally-disposed lines and margins on the face of said strip, said lines being longitudinally continuous and also transversely forming square or rectangular spaces arranged in consecutive blocks of one hundred, the numbers arranged in series of ten consecutively in said spaces, beginning with the number "1" in the corner-space to the right, "1" in the second space to the left and upward and continuing with "1" in each column to the left progressing upward one space for each following column, and the numerals and initials in said margins, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

JESSE W. WINNINGHAM.

Witnesses:

E. T. SILVIUS,
F. M. SILVIUS.