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TAXIMETER.

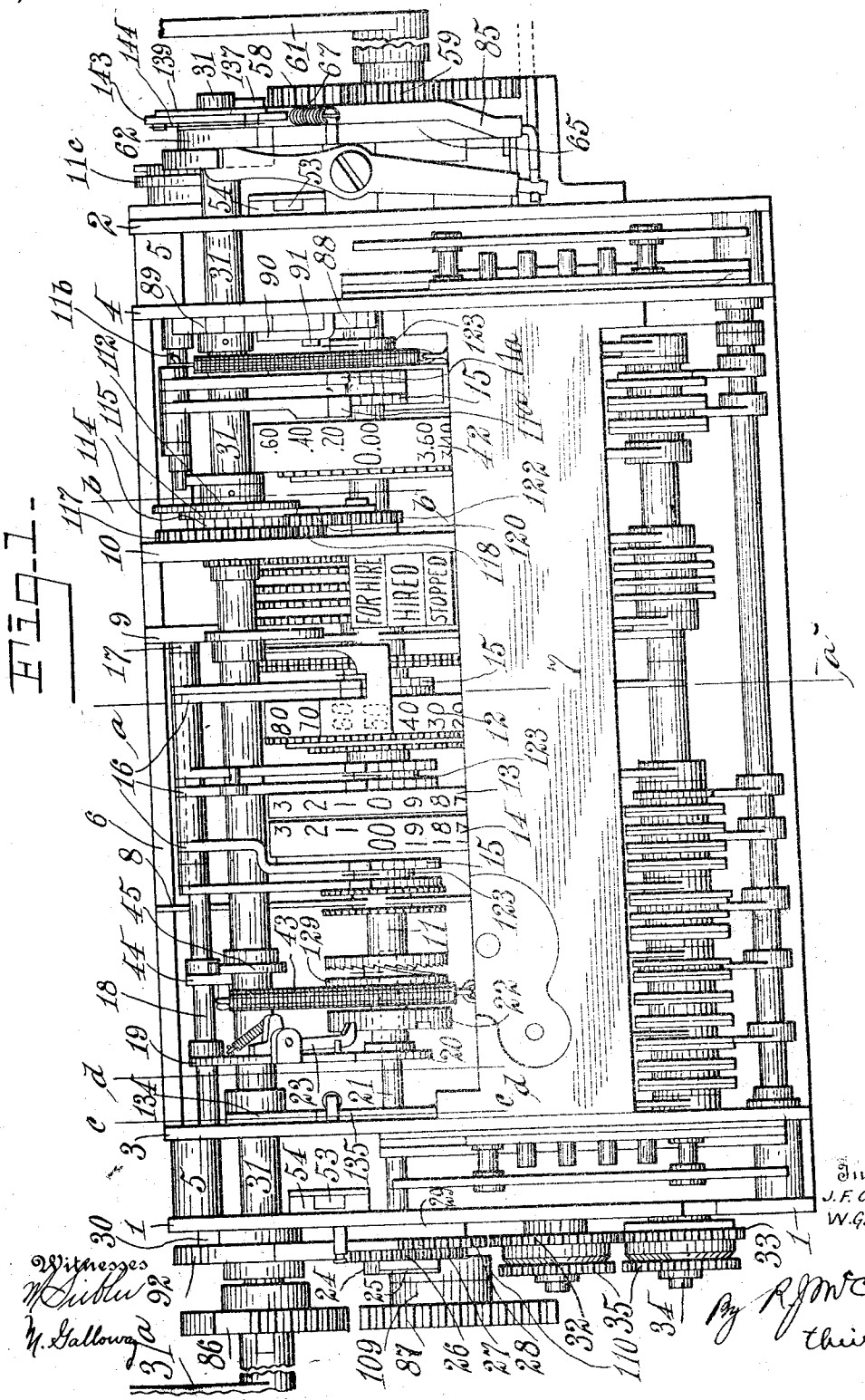
APPLICATION FILED APR. 23, 1914.

1,182,408.

Patented May 9, 1916

6 SHEETS—SHEET 1.

FIG. 1.



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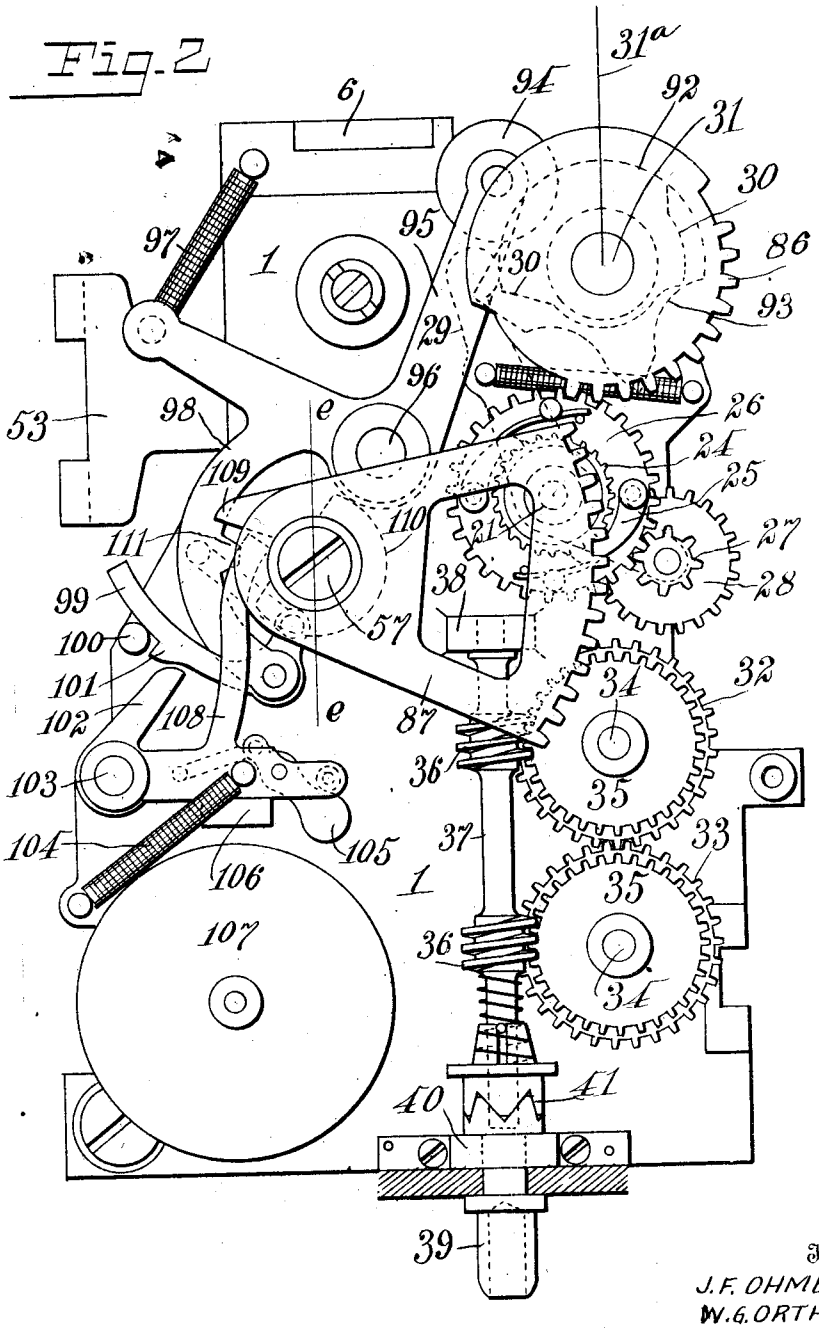
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6 SHEETS—SHEET 2.

Fig. 2



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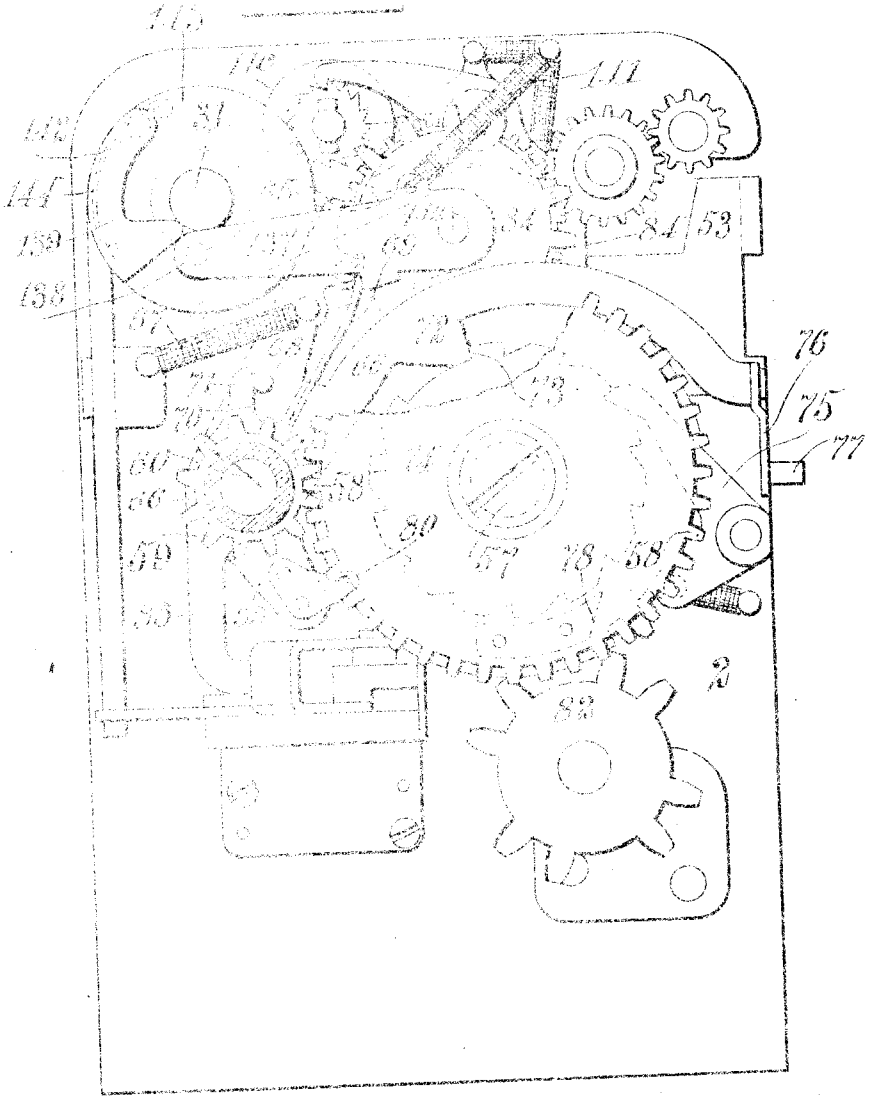
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6 SHEETS—SHEET 3.

Fig. 3.



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6 SHEETS—SHEET 4.

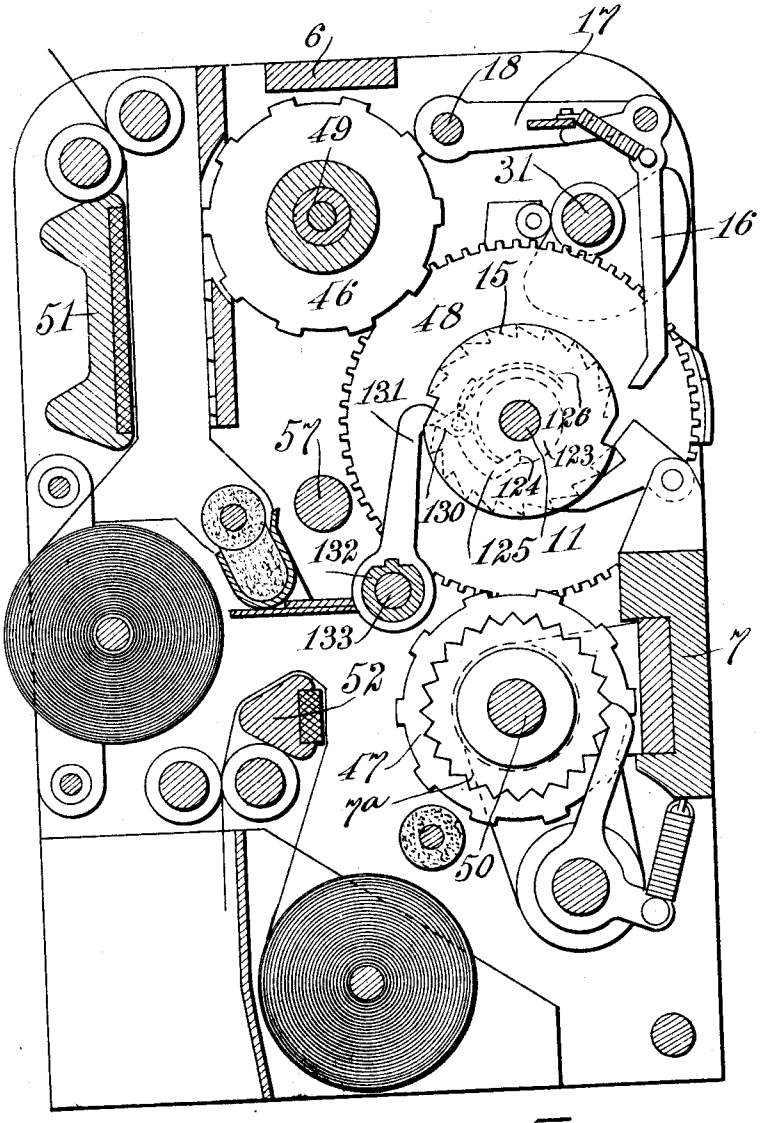


Fig. 4.

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Patented May 9, 1916.

6 SHEETS—SHEET 5.

Fig. 5.

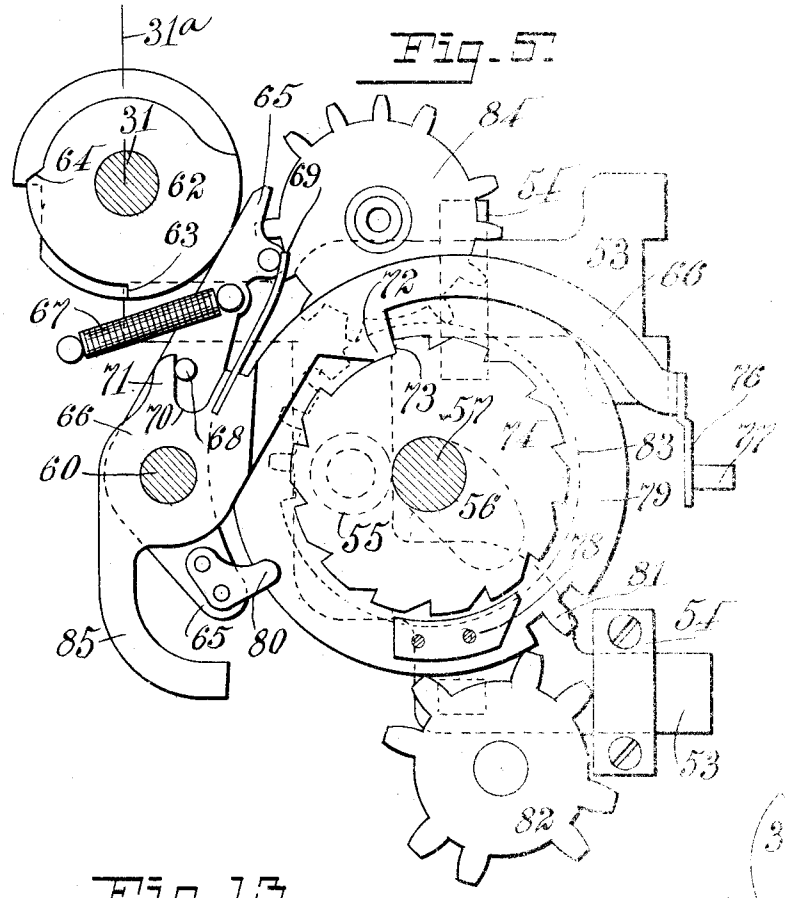
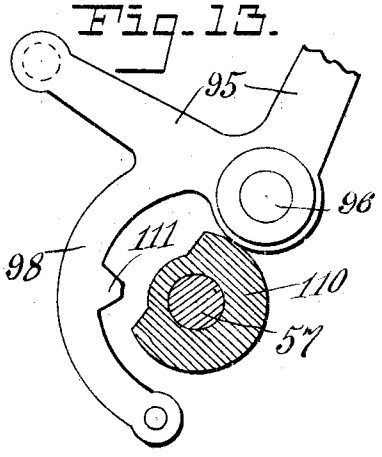


Fig. 13.



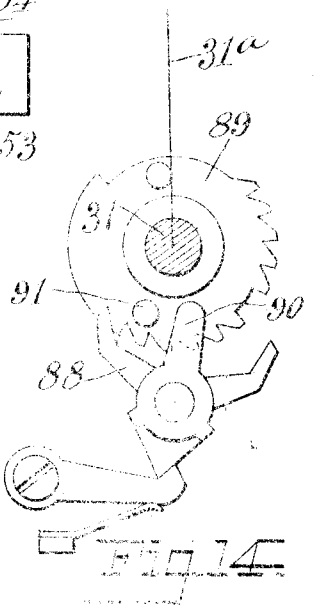


Fig. 14.

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APPLICATION FILED APR. 23, 1914.

1,182,408. Patented May 9, 1916.

6 SHEETS—SHEET 6.

Fig. 6.

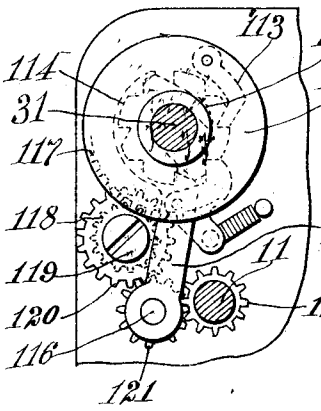


Fig. 7.

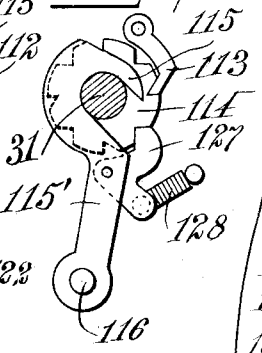


Fig. 8.

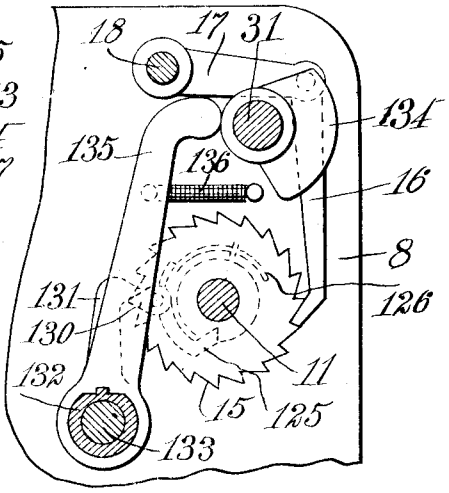


Fig. 9.

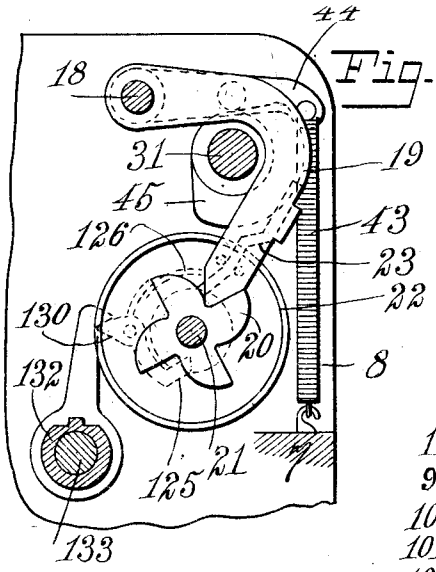


Fig. 10.

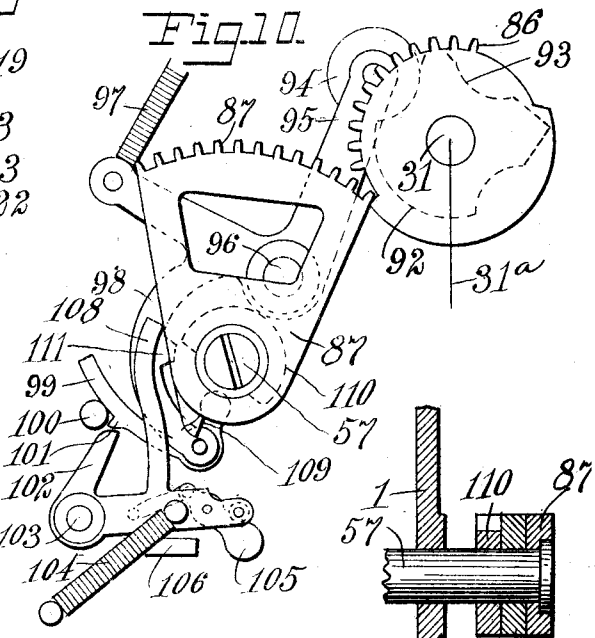
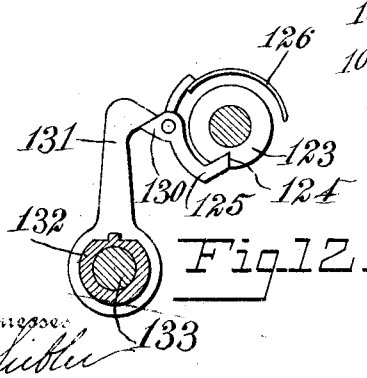


Fig. 11.

Fig. 12.



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TAXIMETER.

1,182,408. Specification of Letters Patent. Patented May 9, 1916.

Application filed April 23, 1914. Serial No. 834,002.

To all whom it may concern:

Be it known that we, JOHN F. OHMER and WILLIAM G. ORTH, citizens of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Taximeters; and we 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.

This invention relates to new and useful improvements in taximeters and is an improvement of the device shown and described in the co-pending application of Ohmer and Bridenbaugh, filed June 3, 1912, Serial No. 701,208.

The objects of the present invention are several, principally; to provide means whereby the flag shaft and setting mechanism are returned to a normal position during the operation of taking the printed statement from the machine thereby dispensing with one of the manual operations of the machine of the application above referred to; to provide means whereby the printing mechanism can only be operated when the flag shaft and setting mechanism is in the "stopped" position; to provide an improved form of bell-ringing mechanism which eliminates the possibility of the operator becoming confused when operating the device; to provide new and improved means for resetting the counters to zero; and to provide means which prevents the possibility of the machine becoming disorganized when a printed record is taken by the inspector.

These and other objects of the invention will be more particularly described and pointed out in the specification.

Referring to the accompanying drawings Figure 1 is a front elevation of a taximeter of the type shown and described in the above referred to application some parts thereof being eliminated and only those are shown which are essential to a proper understanding of the present invention. Fig. 2 is an elevation of the mechanism at the left end of the machine as seen from Fig. 1, Fig. 3 is an elevation of the mechanism at the right end of the machine as seen in Fig. 1. Fig. 4 is a section on the line *a*—*a* of Fig. 1, Fig. 5 is a view similar to Fig. 3 with some of the parts removed. Fig. 6 is a detail view of the resetting to zero mechanism on the line *b*—*b* of Fig. 1, Fig. 7 is a detail view of the cam, ratchet and pawl devices of the resetting to zero mechanism, Fig. 8 is a detail view of the movable stops and their actuating means for holding the counting wheels in their normal positions, the same being approximately a section on the line *c*—*c* of Fig. 1, Fig. 9 is a section approximately on the line *d*—*d* of Fig. 1 showing in detail a portion of the initial counter actuating means, Fig. 10 is a detail of a portion of the mechanism shown in Fig. 2, the parts being in a different position, Fig. 11 is a sectional view approximately on the line *e*—*e* of Fig. 2, Fig. 12, Sheet 6, is a detail view of one of the stops, ratchets and pawls of the resetting to zero mechanism, Fig. 13, Sheet 5, is a detail view of the flag shaft, locking cam and lever, part of which is broken away. Fig. 14, Sheet 5, is a detail view of the full stroke mechanism.

Throughout the specification and drawings, similar reference characters denote corresponding parts.

The frame work.—Mounted on a suitable base (not shown) looking at Fig. 1 is a left end plate 1, a right end plate 2, a left division plate 3 and a right division plate 4. The end and division plates are joined by lugs 5 while the division plates themselves are joined by an upper bar 6 and a lower frame member 7. Extending between the upper bar 6 and the member 7 are frame plates 8, 9 and 10 which support the counters and the various actuating means therefor.

Counter and their actuating means.—Figs. 1, 2, 4 and 9.—Journaled in the frame plates 8, 9 and 10 is a shaft 11. Mounted on this shaft 11 is a units and tens wheel 12 which represents cents, a dollar wheel 13 and a tens and hundreds wheel 14. These wheels 12, 13 and 14 are the fare-counting wheels and are provided with ratchets 15 which are adapted to be engaged by pawls 16 mounted on a swinging frame 17 attached

to an oscillating shaft 18. The shaft 18 is journaled in the frame plate 9 and the division plate 3 and carries an arm 19 adapted to engage a four arm cam 20 mounted on a shaft 21 journaled in the end plate 1, division plate 3 and the end of the shaft 11. The shaft 21 carries a timing drum 22 in operative relation with a pawl 23 carried by the arm 19 and shown in dotted lines in Fig. 9 and in Fig. 1. The drum 22 permits the cam 20 to actuate the arm 19 when the vehicle on which the taximeter is mounted has traveled a sufficient distance or has consumed time equivalent to the minimum fare charge. This expedient is well known in taximeter construction and needs no further description here. The shaft 21 is the main drive shaft for the counter and may be driven from a clock, as shown and described in the application hereinbefore referred to, or it may be driven from the wheels of a vehicle as follows: As will be seen from Fig. 2, the end of the shaft 21 on the outside of the end plate 1 is provided with a ratchet 24, adapted to be engaged by pawls 25 mounted on a gear 26 freely journaled on the same axis as the shaft 21. The gear 26 is in mesh with a pinion 27 attached to a gear 28 mounted on a lever 29 the pivot or axis of which is alined with shaft 21. The said lever 29 is adapted to be rocked by a cam 30 carried by shaft 31 of the setting mechanism hereinafter described. When the cam 30 rocks said lever 29, the gear 28 is placed in mesh with a gear 32 which in turn meshes with a gear 33. The gears 32 and 33 are mounted on pivots 34 and carry worm gears 35. The worm gears 35 mesh with worms 36 on a shaft 37 journaled in top and bottom bearings 38 and the end of a shaft 39 journaled in a bearing 40. The connection between the gears 32 and worms 36 form no part of the present invention. It constitutes means whereby the counters are driven irrespective of the direction of travel of the vehicle and is more completely described in the application above referred to. The shaft 37 is connected to the shaft 39 through clutch members 41 which form part of an obstruction indicator mechanism more fully shown and described in the application hereinbefore referred to. The shaft 39 is connected in a well known manner to the wheel of the vehicle on which the taximeter is placed by means of a flexible shaft (not shown). When said vehicle wheel is rotated, the counting wheels 12, 13 and 14 will be actuated in accordance with a predetermined rate of fare which is determined by the ratios of the gears in the train previously described. Also mounted on the shaft 11 is a counting wheel 42 for indicating the amount of extra charges. This counting wheel and its actuating mechanism are more fully described in the application hereinbefore referred to. Referring briefly thereto, the said wheel is operated by a pawl 11^a pivoted on a shaft 11^b on the end of which shaft is located a cam 11^c. The cam 11^c is operated by a one revolution turn to count one digit on said wheel 42, see Fig. 1. The pawls 16, mounted on the frame 17, are reciprocated by the cam 20, before referred to, through the aid of a spring 43 which depresses said pawls after having been previously elevated by the cam 20, said spring 43 being connected to one end of an arm 44 on the oscillating shaft 18. The said pawls 16 are elevated out of an operative relation with the ratchets 15 of the counting wheels by a cam 45 carried on the shaft 31 of the setting mechanism and which is adapted to engage the end of the arm 44. See Fig. 9.

It will be understood that the term "setting mechanism" includes the means whereby the operative relation is established between the counters and the actuating mechanism thereof. The counting wheels 12, 13, 14 and 42, which are of the indicating type, are geared to two sets of printing wheels 46 and 47 through the agency of gears 48. The wheels 46 are adapted to print the ticket, while the wheels 47 are adapted to print the record. The wheels 46 are mounted upon the shaft 49, while the wheels 47 are mounted on a shaft 50, see Sheet 4. The shaft 49 is mounted in the frame plates 8, 9 and 10, and shaft 50 is mounted in counter frame 7^a, see Figs. 1 and 4, frame 7^a being shown in dotted lines in Fig. 4. The type wheels 46 coöperate with the platen 51 in printing the tickets, while the type wheels 47 coöperate with the platen 52 in printing the record. The platens 51 and 52 are mounted on frames 53 slidably mounted in bearings 54 on the end plates 1 and 2, as will be seen from Figs. 1, 4 and 5. The frames 53 are provided with rollers 55 adapted to be engaged by cams 56 carried upon a printing shaft 57 journaled in the end plates 1 and 2 and the division plates 3 and 4, see Fig. 5. The printing shaft 57 carries a gear 58 in mesh with a pinion 59 mounted on a pivot 60, as is shown in Fig. 3. The gear 59 is provided with a crank 61 by means of which the printing mechanism is actuated, see Fig. 1.

The setting mechanism, which is more fully described in the before mentioned application, has three positions; first, a normal position in which the parts are shown in the drawings, Fig. 5, and in which position the machine is placed when the vehicle is for hire; second, a position when the shaft 31 of the setting mechanism has been given a quarter of a revolution from said first position, and in which position the cam 30 has placed the gear 28 in mesh with the gear

32 thereby permitting the wheels of the vehicle to actuate the counters, the setting means being placed in this position when the vehicle is hired; see Fig. 2; third, a position when the shaft 31 has been given a full one-half revolution and in which position the machine is placed when the vehicle has been "stopped" for the purpose of making repairs to the same or for any other reason and during which time the taximeter records the time thus consumed.

Interlocking mechanism. Figs. 3 and 5.—To compel certain operations of the setting mechanism and of the printing mechanism to be performed consecutively, the following interlocking means is provided. Mounted on the right end of the setting shaft 31 is a flag crank (represented in Figs. 2, 5 and 10 by the line 31^a) and a disk 62 provided with shoulders 63 and 64. The disk 62 is in operative relation with a pawl 65 mounted on the pivot pin 60. The pawl 65 normally moves in unison with a pawl 66 controlling the printing mechanism also mounted on the pivot pin 60. The pawl 65 is partially controlled by a spring 67, while the connection between the pawl 65 and the pawl 66 consists of a pin 68 on pawl 65 and a leaf-spring 69 on pawl 66 and engaging a stud on the upper end of the pawl 65, shown clearly in Fig. 5. The pin 68 lies in a recess 70 and is adapted to normally engage a projection 71 extending from the pawl 66. This arrangement permits the pawl 66 to be elevated independently of the pawl 65. Pawl 66 carries a tooth 72 adapted to engage a shoulder 73 on a ratchet 74 attached to the printing shaft 57. The ratchet 74 cooperates with a pawl 75 to prevent retrograde movement of the printing shaft 57. The pawl 66 is further provided with an extension 76 having a finger member 77. The purpose of these elements is to permit the inspector to elevate the tooth 72 out of the path of the shoulder 73 and to thereby allow the printing mechanism to be actuated independently of the setting mechanism. When said setting mechanism has been moved to a "hired" position by giving the shaft 31 a one-fourth revolution from the position shown in Fig. 5, the pawl 65 will move under the shoulder 63 under the influence of the spring 67. This movement of the pawl 65 will not be sufficient to elevate the tooth 72 a sufficient distance out of the path of the shoulder 73 to permit the printing mechanism to be actuated. The shoulder 63 lying in the path of the pawl 65 prevents the setting mechanism including the shaft 31 being returned to a normal position directly from the "hired" position but compels said setting mechanism to be moved to a "stopped" position before it can be returned to normal position. When the setting mechanism is moved to a "stopped" position by giving the shaft 31 a complete half revolution from normal or that position shown in Fig. 5, the pawl 65 falls under the shoulder 64 thereby permitting the spring 67 to move the tooth 72 out of the path of the shoulder 73, thus allowing the printing mechanism to be actuated by rotating the crank 61. The angularity of the shoulder 64 permits the setting mechanism to be moved indiscriminately between the "hired" and the "stopped" positions, but the depth of the shoulder 64 is such that the setting mechanism must be moved to a "stopped" position to unlock the printing mechanism. The pawl 65 is moved out of the path of the shoulder 63 to permit the setting mechanism to be returned to normal position by a cam 78 carried by printer drive gear 58 secured to the printing shaft 57. The cam 78 is adapted to engage a projection 80 on the lower end of the pawl 65. The disk 79 is provided with one or two teeth 81 adapted to mesh with a Swiss gear 82, correspondingly toothed. Also mounted on the shaft 57 is a segment gear 83 adapted to mesh with a Swiss gear 84. The gears 82 and 84 are part of the paper feeding mechanism more fully described in the before mentioned application and form no part of the present invention. The pawl 66 is provided with an arm or extension 85 which coöperates with the identification key mechanism which is also fully described in said former application.

Referring to Figs. 2 and 10, the setting mechanism is returned to a normal position at the end of the operation of the printing mechanism by the following devices. Mounted on the left end of the setting shaft 31 is a segment gear 86 and mounted on the left end of the printing shaft 57 is a segment gear 87. When the setting mechanism is in the "stopped" position, the gear 86 occupies the position shown in Fig. 10 and sometime before the printing mechanism completes its operation, the gear 87 occupies the position shown in Fig. 10 and is in initial engagement with the gear 86. At about the same time or slightly previous to the time that the gear 87 initially meshes with the gear 86, the cam 78 on disk 79 engages the projection 80 on pawl 65 and moves said pawl from under the shoulder 64 thereby unlocking the setting mechanism. When the operation of the printing mechanism is completed, the gear 87 will rotate the gear 86 thereby returning the setting mechanism to a normal position or that shown in Fig. 2. The movement of the setting mechanism is also controlled by a full stroke mechanism fully shown and described in the before mentioned application consisting of a double pawl 88 and a ratchet 89, as is shown in Fig. 14. The pawl 88 is provided with an arm 90 while the ratchet 89

is provided with a pin 91. The pin 91 engages the arm 90 at about the time the setting mechanism reaches the normal position, thereby throwing the pawl 88 into engagement with the ratchet and limiting the return movement of said setting mechanism.

Bell ringing mechanism. Figs. 1, 2, 10, 11 and 13.—The setting shaft 31 is provided on its left end, looking at Fig. 1, with a disk 92 provided with three recesses 93 which correspond with the three positions of the setting mechanism. The recesses 93 are adapted to receive a roller 94 mounted on one arm of a bell-crank lever 95 pivoted at 96 and under the influence of a spring 97. Whenever the setting mechanism is moved from one position to another, the roller 94 rides in and out of the recesses 93 and said setting mechanism is thus maintained in any one of its set positions, the spring 97 holding the roller 94 in one or the other of the recesses 93. Whenever the setting mechanism is moved from normal position to a "hired" position, or from a "hired" position to a "stopped" position, an audible indication is given as follows. The bell-crank lever 95 is provided with a third arm 98 to the lower end of which is pivoted a spring-controlled latch 99 which is guided by a pin 100. The latch 99 is provided with a projection or shoulder 101 which is adapted to pick up and release one end of a bell-crank lever 102 pivoted at 103. The lever 102 is under the influence of a spring 104 and carries a spring-controlled bell tapper 105. The downward movement of said bell-crank lever 102, under the influence of the spring 104, is arrested by a projection or stop 106 thus causing the bell tapper 105 to strike the bell 107. The bell 107 will, therefore, be sounded each time the lever 95 is rocked upon its pivot 96, it being understood that said lever 95 is rocked from the setting shaft 31 when said shaft is moved to set the mechanism, see Fig. 2. To prevent the bell 107 being sounded when the setting mechanism is being returned to a normal position by the printing mechanism, the lever 102 is provided with a third arm 108 adapted to be engaged by a cam 109 carried by the segment gear 87. The position of the cam 109 is such that the tapper 105 will be held in an elevated position when the roller 94 rides out of the recess 93 of the disk 92, corresponding to the "stopped" position, into the recess 93, corresponding to the "hired" position. When the setting mechanism reaches its normal position, the cam 109 releases the lever arm 108 and permits the bell tapper 105 to fall under the influence of the spring 104, thereby indicating to the operator that the setting mechanism has returned to normal position and the printing operation has been completed. The spring 104 and the arm 108, therefore, prevent an audible indication being given during the printing operation. To prevent the setting mechanism being returned manually to normal position during the operation of printing mechanism, the following means is provided. Mounted on the printing shaft 57 adjacent to the cam 109 is a segment drum 110 in operative relation with a projection 111 carried by the arm 98 of the bell-crank lever 95, see Figs. 2, 10 and 13. When the printing mechanism is in a normal position, the segment drum 110 lies out of the path of the projection 111 thereby permitting the roller 94 to ride in and out of the recesses 93 of the disk 92. When the printing mechanism is actuated, the drum 110 is moved into the path of the projection 111 thereby preventing the lever 95 being rocked the roller 94 riding in and out of the recesses 93 and thereby locking the setting mechanism. However, at or about the time the segment gear 87 meshes with the segment gear 86, the drum 110 rides out of the path of the projection 111 thereby unlocking the setting mechanism. The drum 110, therefore, prevents the setting mechanism being returned to a normal position by any means other than the printing mechanism.

Counter resetting mechanism. Figs. 1, 6, 7, 8, and 9.—At the end of the returning movement of the setting mechanism to normal, the counters consisting of the wheels 12, 13, 14 and 42 are returned to a normal position. Mounted on the setting shaft 31 is a disk 112 which carries a pawl 113 adapted to engage a ratchet 114, freely mounted on the shaft 31. This mechanism is mounted adjacent to the frame plate 10. The engagement between the pawl 113 and the ratchet 114 is controlled by a cam 115 extending from an arm 115' mounted on a pin 116, see Figs. 6 and 7. The cam 115 surrounds the shaft 31. The ratchet 114 is attached to a gear 117 which is in mesh with an idler pinion 118 mounted on a pivot 119 and attached to an idler gear 120, see Figs. 1 and 6. Said gear 120 is in mesh with an idler gear 121 mounted on the pin 116 and in mesh with a gear 122 secured to the shaft 11 on which the counting wheels are mounted. The shaft 11 is provided with a plurality of ratchets 123 of well known form, one for each counting wheel, see Figs. 1, 4 and 12. Each ratchet 123 is provided with a recess 124 adapted to receive the ends of individual pawls 125 which are under the influence of springs 126. The said pawls 125 are mounted on the ratchets 15 of the counting wheels. When the counting wheels are in a normal position, the pawls 125 lie in the recesses 124, and when said counting wheels are actuated during the process of counting, the said pawls ride out of said recesses, the ratchets 123 remaining stationary. When the setting mechanism and the shaft

31 are moved out of their normal position or to a "for hire" position, the pawl 113 is disengaged from the ratchet 114 by the cam 115. When the shaft 31 is returned to its normal position, the cam 115 permits the pawl 113 to engage the ratchet 114 and to rotate the shaft 11 through the agency of the interposed gear, through one complete revolution. During this one complete revolution of the shaft 11 all of the ratchets 123 will, at one point or another, pick up the pawls 125 and return the counting wheels to normal position. The ratchet 114 may be provided with an alining pawl 127 under the influence of a spring 128, see Fig. 7. At the time the counting wheels are returned to normal position, the timing drum 22 is also returned to normal position by the shaft 11, said shaft 11 being provided on its left end with a ratchet 123 engaged by a pawl 125 which are identical with the ratchets and pawls of the counting wheels. Said pawl 125 of the timing drum is mounted upon a disk 129 on the shaft 21 upon which the timing drum 22 is mounted. See Figs. 1, 9 and 12. The timing drum 22 will, therefore, be returned to a normal position concurrently with the counting wheels. To prevent the resetting mechanism overthrowing the counters and timing drum when returning the same to a normal position and to positively hold said counting wheels and timing drum in their normal position, the following stops are provided. Each of the pawls 125 is provided with a projection 130 adapted to be engaged by movable pawls 131 mounted on a sleeve 132 journaled on a shaft 133, see Figs. 4 and 8. The shaft 133 is journaled in the division plates 3 and 4, which may be the inking mechanism shaft shown and described in the hereinbefore mentioned application. When the setting mechanism is moved from a "for hire" position to a "hired" position and the counters placed in operative relation with their actuating mechanism, the pawls 131 are moved out of the path of the projections 130, thus permitting the counting wheels to be actuated by a cam 134 on the setting shaft 31, see Figs. 1 and 8. The cam 134 is in operative relation with an arm 135 attached to the sleeve 132. The cam 134 moves the pawls 131 out of the path of the projections 130, while the spring 136 attached to the arm 135 moves said pawls into the paths of said projections 130. The timing of the cam 134 is such that the pawls 131 will be moved into the path of the projections 130 some time before the counting wheels and the timing drum reach their normal positions.

It will be noted that if the inspector should inadvertently move the flag crank 31ª to the second or to the "hired" position before he elevates the pawl 66, the setting mechanism will be partially returned to normal position through the agency of the gears 86 and 87 when he actuates the printing mechanism. To prevent the machine thus and otherwise becoming disorganized, the following lock is provided. Mounted on the right end of the shaft 31 is a disk 143 which carries a cam-latch 139, see Figs. 1 and 3. This cam-latch 139 is pivoted to the disk 143 at 142 and is under the control of a spring 144. The said cam-latch 139 cooperates with a pin 138 on a lever 137 pivoted at 140. A spring 141 is provided which exerts an upward influence on the lever 137, which lever is adapted to engage the pawl 66 and to lock the tooth 72 in the recess 73 of the ratchet 74. When the setting mechanism is moved from a normal to "hired" position, the pin 138 on lever 137 rides upon the cam portion of the latch 139 until said pin rests upon the outer edge of the latch. When in this position, the lever 137 locks the pawl 66 thereby preventing the inspector operating the printing mechanism by elevating the finger member 77. When the machine is actuated by the travel of the vehicle upon which it is carried and the setting mechanism is moved to its third or "stopped" position preparatory to taking a printed record, the pin 138 will fall behind the cam-latch 139 and will travel behind the same during the time the setting mechanism is being moved from its third to its normal position.

Having described our invention, we claim.

1. In a taximeter, the combination of oscillating setting mechanism and printing mechanism, connections between said setting and printing mechanisms including a rotatable gear 86 and an oscillating gear 87 mounted on the setting and printing shafts respectively whereby said setting mechanism is returned to a normal position at the end of the operation of the printing mechanism.

2. In a taximeter, the combination of oscillating setting mechanism and printing mechanism, a rotatable gear and an oscillating gear interposed between said setting and printing mechanisms, means holding said setting mechanism in a locked condition including a pawl 65, and means movable with the printing mechanism and actuating said pawl to unlock the setting mechanism to permit said setting mechanism to be returned to normal position at the end of the operation of the printing mechanism.

3. In a taximeter, the combination of oscillating setting mechanism and printing mechanism, gears 86 and 87 movable from said setting and printing mechanisms respectively, means including a pawl 65 adapted to maintain said setting mechanism in a locked condition, and means including a cam adapted to actuate said pawl 65 to unlock

said setting mechanism substantially simultaneously with the engagement of the gears 86 and 87.

4. In a taximeter, the combination of oscillating setting mechanism and printing mechanism, a gear 86 mounted on the shaft of said setting mechanism, a gear 87 mounted on the shaft of the printing mechanism, a disk 62 mounted on the shaft of the setting mechanism, a pawl 65 coöperating with said disk to lock and unlock said setting mechanism, and a cam 78 movable with the printing mechanism and engaging said pawl to unlock the setting mechanism substantially simultaneously with the initial engagement of the gears 86 and 87, whereby the setting mechanism is returned to normal position when the operation of the printing mechanism is completed.

5. In a taximeter, the combination of oscillating setting mechanism and printing mechanism, connections between said setting and printing mechanisms for returning the setting mechanism to normal position at the completion of the printing operation and including gears 86 and 87, a disk 62 mounted on the shaft of the setting mechanism having surfaces 63 and 64, a pawl 65 coöperating with one of said surfaces to prevent the setting mechanism from being returned to normal until a complete operation thereof has been obtained, a spring 67 normally controlling said pawl, and a cam 78 operated from the printing mechanism and adapted to engage the pawl 65 to release it from engagement with the disk 62 substantially simultaneously with the initial engagement of the gears 86 and 87, whereby the said setting mechanism is returned to normal position at the completion of the printing operation.

6. In a taximeter, the combination of oscillating setting mechanism and printing mechanism, a drum carried by the printing mechanism, a lever controlled by said drum to lock the setting mechanism at the initial operation of the printing operation, and gears 86 and 87 interposed between the setting and printing mechanisms and adapted to return the setting mechanism to normal position at the completion of the printing operation.

7. In a taximeter, the combination of oscillating setting mechanism and printing mechanism, connections between said setting and printing mechanisms including gears 86 and 87 for returning to a normal position the setting mechanism at the completion of the operation of the printing mechanism, a lever 95 adapted to lock said setting mechanism at a predetermined time, and a drum 110 carried by the printing mechanism and adapted to lock said lever during the initial movement of the printing mechanism.

8. In a taximeter, the combination of an oscillating setting mechanism and printing mechanism, means for locking said printing mechanism comprising ratchet 74 and pawl 66, means affected by the setting mechanism for actuating said printing locking means including a pawl 65, a pin 68 on said pawl 65 normally engaging a part of the pawl 66, and means for returning the setting mechanism to normal position and throwing the pawl 66 into locking engagement with the ratchet 74 including a cam 78 engaging the pawl 65.

9. In a taximeter, the combination of oscillating setting mechanism and printing mechanism, means adapted to return the setting mechanism to normal position at the termination of each operation of taking a print from said printing mechanism including gears 86 and 87, means permitting said gears to return the setting mechanism to normal including a pawl 65 and cam 78 said cam being movable with the printing mechanism to release the engagement between said pawl, and a signal device actuated from the setting mechanism to indicate the return of the setting mechanism to normal.

10. In a taximeter, the combination of oscillating setting mechanism and printing mechanism including gears 86 and 87, means enabling said gears to return the setting mechanism to normal position at the conclusion of the printing operation including the pawl 65 and cam 78, an alarm device operated from the setting mechanism to indicate the return of the setting mechanism to normal position including the angular lever 95, and means to prevent the operation of the alarm device before such return of the setting mechanism including the arm 108 and cam 109 carried on the gear 87.

11. In a taximeter, the counters and the actuating mechanism thereof, setting mechanism controlling the operative relation between said counters and their actuating mechanism, positive means actuated by said setting mechanism for returning said counters to a normal position, and movable stops under the control of the setting mechanism adapted to limit the movement of said counters to a normal position.

12. In a taximeter, the counters and the actuating mechanism thereof, setting mechanism controlling the operative relation between said counters and their actuating mechanism, gear and ratchet devices actuated by said setting mechanism for returning said counters to a normal position, and a movable stop actuated by said setting mechanism for limiting said counters to a normal position.

13. In a taximeter, the counters and the actuating mechanism thereof, setting mechanism controlling the operative relation between said counters and their actuating mechanism, gear, ratchet and cam devices

actuated by said setting mechanism for returning said counters to a normal position, and movable stops actuated by said setting mechanism for limiting said counters to a normal position.

14. In a taximeter, counters, actuating mechanism therefor, setting mechanism for establishing an operative relation between said counters and said setting mechanism, printing mechanism for said counters, a connection between the setting and printing mechanisms whereby the setting mechanism is returned to normal at the completion of the printing operation, and a locking device arranged between the setting and printing mechanisms to lock said setting mechanism during the initial operation of the printing mechanism.

In testimony whereof we affix our signatures, in presence of two witnesses.

JOHN F. OHMER.
WM. G. ORTH.

Witnesses:
H. B. OHMER,
R. J. MCCARTY.