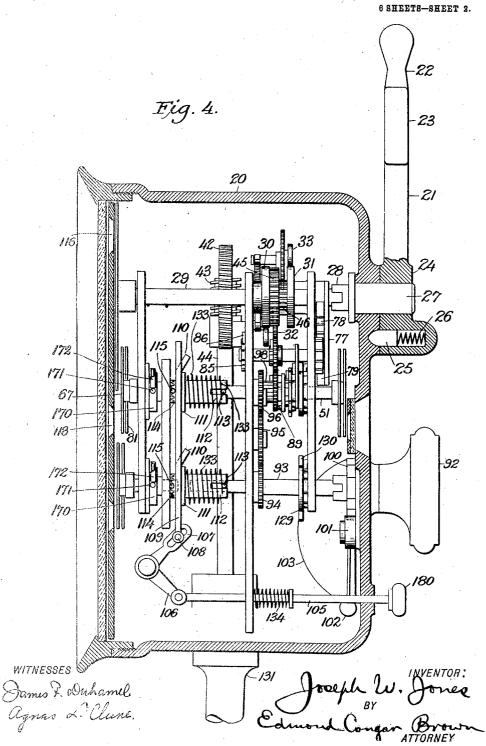
J. W. JONES.
TAXIMETER.
APPLICATION FILED DEC. 16, 1907.

951,077. Patented Mar. 1, 1910.
6 SHEETS-SHEET 1. 8 WITNESSES Damus T. Duhamil Agnes L. Cline

J. W. JONES. TAXIMETER. APPLICATION FILED DEC. 16, 1607.

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Patented Mar. 1, 1910. 6 SHEETS-SHEET 2.



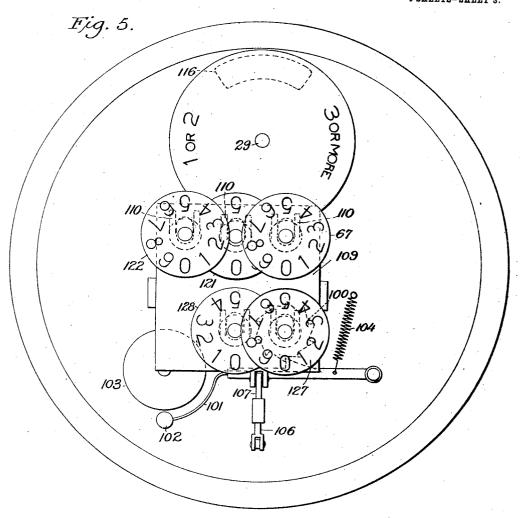
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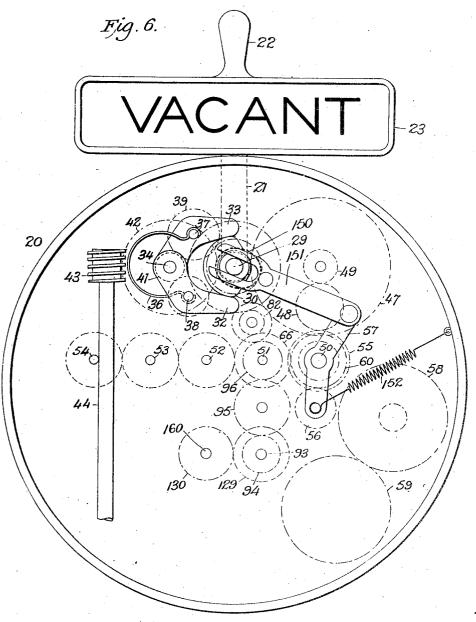
WITNESSES James P. Duhamel. Agnes L. Clune.

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## J. W. JONES. TAXIMETER. APPLICATION FILED DEC. 16, 1907.

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Patented Mar. 1, 1910. 6 SHEETS—SHEET 4.



WITNESSES

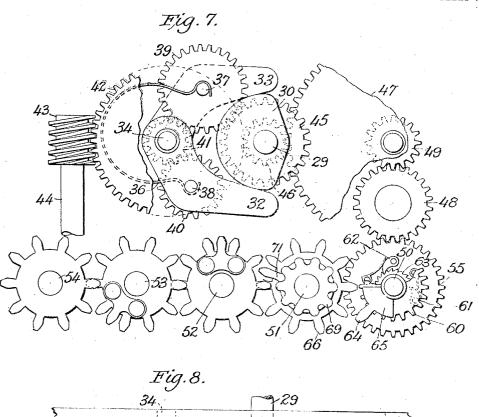
James F. Duhamel. Agnes L. Cline. Joseph W. Jones By Edmond Congar Brown

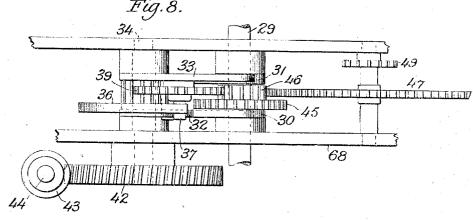
J. W. JONES.
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WITNESSES Dormes F. Duhomil. Ugnas L. Clane.

Joseph W. Jones

By

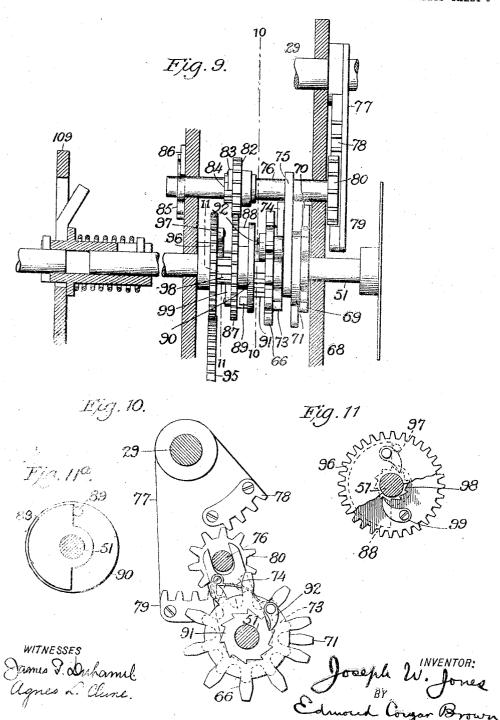
Command Congar Brown

ATTORNEY

J. W. JONES. TAXIMETER. APPLICATION FILED DEC. 16, 1907.

951,077.

Patented Mar. 1, 1910.



## UNITED STATES PATENT OFFICE.

JOSEPH W JONES, OF NEW YORK, N. Y.

## TAXIMETER.

951,077.

Specialcation of Letters Patent.

Patented Mar. 1, 1910.

Application filed December 16, 1907. Serial No. 406,698.

To all whom it may concern:

Be it known that I, Joseph W. Jones, a citizen of the United States, and a resident of the borough of Manhattan, city and State 5 of New York, have invented certain new and useful Improvements in Taximeters or Fare-Recording Devices, of which the fol-

lowing is a specification.

Under the conditions which prevail at 10 present with regard to the transportation of passengers for short distances, especially in large cities, it is desirable that cabs and other public vehicles engaged in the business of transporting passengers for hire, shall be 15 provided with devices which shall register the fare or charge corresponding not only to the distance over which the passenger has been transported but also the time during which the vehicle is remaining stationary, 20 waiting for the passenger or otherwise, and also recording extra charges of any kind. It is necessary also that such an apparatus should be capable of being easily adjusted so as to register at different rates according 25 to the number of passengers being carried; that the dials or other registering devices should be capable of being easily and quickly re-set to the zero point, and various other points of operation provided for.

It is the object of my invention to provide a simple and efficient means for accomplishing all of the objects above indicated.

The invention consists in the novel construction, arrangement and combination of 35 devices, elements and parts, all as hereinafter more particularly set forth and shown in the accompanying drawings.

In the said drawings Figure 1 is a front view of the exterior of a recording device 40 constructed according to my invention; Fig. 2 is a side view and Fig. 3 is a rear view of the same; Fig. 4 is a vertical transverse sectional view; Fig. 5 is a front view of the device showing the face plate removed; Fig. 6 is a diagrammatic view of the mechanism from the front of the apparatus; Fig. 7 is an enlarged view of the train of gears operating the principal dials, and Fig. 8 is a plan view of the same; Fig. 9 is a side view of a portion of the same as hereafter described; Fig. 10 is a sectional view on the line 10—10 of Fig. 9; Fig. 11 is a similar

As will best be seen in Figs. 4, 6 and 7 and 8, the shaft 29 carries two cams, 30 and 31, the inoperative positions of which are shown

sectional view on the line 11-11 of Fig. 9; Fig. 11a is a detail view hereinafter de-

In carrying my invention into effect, I provide a suitable casing 20. This may be of any appropriate construction, but is preferably a cylindrical box, and is adapted to be placed at any point which may conven-iently be reached by the operator of the vehicle and which may be also conveniently inspected by intending passengers who desire to know whether the vehicle is disengaged and ready for use and by the passen- 65 gers who may wish to ascertain what charges are being recorded against them.

When the vehicle is not in use but is awaiting hire, a lever 21, provided at its upper end with a handle 22 for its opera- 70 tion, stands in an upright position. When in this position the lever displays a sign 23, bearing the word "vacant" or some other suitable indicating notice. When the lever 21 is turned either to the right or to the 75 left, however, the sign 23 disappears behind the casing 20. When the vehicle is hired and it is desired to begin the registration of charges against a passenger this lever 21 is moved either to the right or to 80 the left, depending upon the number of passengers to be carried, and the registering devices thereupon begin to operate, but when the lever is in the upright position and the sign 23 displayed, no registration of charges 85 or other operation of the recording devices takes place notwithstanding that the vehicle may be moving and time passing.

The construction and operation of the apparatus controlled by the lever 21 is as follows: The lever is provided with a hub 24 (see Fig. 4) having a detent 25 which is adapted to be forced into a socket for the purpose of holding the lever in a predetermined position, by the spring 26, and the 95 hub is secured to a stud 27 rotating in an opening in the rear of the casing, the stud being coupled at 28 with a shaft 29 and the two being caused to rock in unison by the lever 21 when the same is turned either to 100 the right or the left.

As will best be seen in Figs. 4, 6 and 7 and

in those views, which are adapted to operate the levers 32 and 33 respectively, when the lever 21 is thrown over to the right or to the left as the case may be. These levers 32 and 33 are pivotally attached to the shaft 34, and their free ends bear upon the cams 30 and 31, being held in contact therewith by the spring 36, which is of approximately semi-circular shape, and the ends of which bear upon stude 37 and 38 located upon the levers 32 and 33. These stude 37 and 38 also carry the gear wheels 39 and 40, both of which gear with a pinion 41 secured to the shaft 34 and on this shaft is keyed the worm 15 wheel 42 driven by the worm 43 on a vertical shaft 44 passing out of the casing at its lower side and being connected by means of flexible shafting with some appropriate moving part of the vehicle or its engine. It will 20 be seen therefore that the lever 21 controls the connection between the motive parts of the vehicle and the recording or registering devices. The construction of these devices is as follows: The shaft 29 bears the pinions 45 25 and 46, they being in position to be operated by the wheels 40 and 39 respectively. This operation is brought about for one or the other by the throw of the lever 21 to the right or the left. If the lever as shown in 30 Fig. 1 is thrown to the right, the cam 30 allows the lever 32 to swing inward, permitting the pinion 40 to mesh with the wheel 45, and a record price for one or two passengers set up. When the lever 21 is thrown to 35 the left, however, the lever 33 is permitted to swing downward and the gear wheel 39 engages the pinion 46. It will be seen that the direction of the swing of the lever 21 governs the rate at which the registering 40 devices shall operate, the more rapid operation being employed when three or more passengers are taken aboard and a registra-tion of a greater sum is needed. The pinion 46 and the gear wheel 45 are secured to-45 gether and the pinion meshes with and drives a gear wheel 47 and this wheel is obviously driven with greater or less speed according to whether the pinion 46 is driven directly by the wheel 39, or indirectly by the wheel 50 38 through the wheel 40.

The mechanism just described is adapted to drive, through the medium of the gear wheel 48 and pinion 49, a train of wheels on the shafts 50, 51, 52, 53 and 54, the shaft 50 being provided with a gear wheel 55 which is driven by the wheel 48. The wheel 55 is loose on the shaft 50, but it is provided with a pawl 62 (see Fig. 7) which acts upon a ratchet wheel 63 which is fast on the shaft 60 50, so that when the wheel 55 is revolved in the proper direction for registering, it turns the shaft, but when it is revolved in the contrary direction, (as when the vehicle is moved backward,) the wheel can move with-

out moving the shaft, and this arrangement 65 also permits the shaft 50 and the registering devices connected therewith to be moved forward by time-recording clockwork as hereinafter described when the vehicle and consequently the wheel 55 are stationary.

As shown more particularly on Fig. 6, 59 represents a time-ineasuring clock-work of any approved construction, the details of which are not shown. This clockwork is operatively connected in any appropriate man- 75 ner with a gear wheel 58. On the lower end of a lever 57, which is pivotally supported upon the shaft 50, is a gear wheel 56. When the lower end of the lever 57 is swung to the right (in Fig. 6) the wheel 56 gears with 80 the wheel 58 and thereby communicates motion to the gear-wheel 60 on the shaft 50. This wheel 60 is also loose on the shaft, but it is provided with a pawl 61 which acts upon the ratchet wheel 63 above described 85 which is fast on the shaft 50, so that when the wheel 60 is revolved by the clockwork in the proper direction it communicates mo-tion to the shaft 50, but if the shaft is turned by the wheel 55, independently of and faster 90 than the wheel 60, it does not interfere with the clockwork 59.

The means by which the clockwork is thrown into operative connection with the wheel 60 are as follows: When the lever 21 95 is thrown over in either direction, as hereinafter described, and the shaft 29 rocked, the cam 150 which is fast on said shaft 29 is moved so as to allow the link 151, one end of which is forked so as to straddle the shaft 100 29 and the other end of which is pivotally attached to the upper end of the lever 57, to move to the left, this motion being produced by the spring 152 attached to the lower end of the lever 57. The motion of the lever 21, 105 therefore, as it will be readily seen, throws into operative connection with the shaft 50, not only the means by which the same is revolved according to the distance traveled by the vehicle, but also the means by which 110 same is revolved according to the time which passes while the vehicle is standing still and which is measured by the clockwork 59. It will be obvious, however, that when the vehicle is awaiting a passenger, and the lever 115 21 is in the upright position and the sign 23 displayed indicating that the vehicle is "vacant", the shaft 50 does not operate, whether the vehicle is moving or is standing still.

The means by which the shaft 50 causes 120 the fare to be registered, are as follows: Fast on the shaft 50 is a disk 65, provided with a tooth 64. This single tooth 64 meshes with the teeth of a ten-toothed wheel 66 on the shaft 51, so that for each complete revolution of the shaft 50, the wheel 66 is moved one-tenth of a revolution. The wheel 66 also operates a single tooth 71, which in like

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manner acts upon the wheel on the shaft 52, and this in turn bears a tooth which operates the wheel on the shaft 53; and the latter bears a tooth which operates the wheel on 5 the shaft 54. The shafts 51, 52 and 53 bear at their front ends dials of the well known type, provided with figures, and these dials are located so that as they revolve the figures they bear appear at openings 118, 119 10 and 120 (see Fig. 1) on the front of the ap-paratus. The shaft 54 does not bear a dial on its front end, for the reason that such a dial would register up to nine hundred dol-lars, and there could never be the need of 15 this registration on the front of the apparatus, which is re-set after each use of the vehicle, though the corresponding dial is desirable for the permanent record at the rear of the apparatus. Therefore all four 20 shafts 51, 52, 53, and 54, bear dials at their rear ends which appear at openings at the rear of the apparatus (see Fig. 3). shaft 50 does not bear a dial at either end, as that dial if present would register only 25 units (cents) which is not necessary, so instead of a dial there is placed behind the opening 117 (Fig. 1) and the corresponding opening 155 at the rear (Fig. 3) a dummy or stationary dial, which shows always the fig-30 ure 0. The wheels on the shafts 52, 53 and 54 are fast, but the wheel 66 on the shaft 51 is loose, and communicates motion to said shaft 51, by means of a series of devices which will be hereinafter more particularly 35 described.

In vehicles of the character referred to, it is customary to make a certain minimum charge to any passenger or passengers who may employ the same, even though the use 40 of the vehicle may not be sufficient to earn such minimum charge according to the time or distance schedule. This minimum charge may be, for instance, 50 cents, and it is desirable that when the passenger employs the 45 vehicle this charge may be registered on the recording devices, and that thereafter, although the vehicle may move and though time may pass, and consequently the initiatory registering devices may be set in opera-50 tion, still no record of such travel or time shall be made until such time or travel shall have been sufficient to earn such minimum charge of, in this case, 50 cents. The means by which this result is attained are as fol-55 lows: When the lever 21 is swung over from its upright position, in either direction, as above explained, and the shaft 29 thereby rocked, a segmental disk 77 (see Figs. 9 and 10) fast on said shaft is correspondingly 60 moved. This disk 77 bears two racks, 78 and 79, located in such relation to a gear wheel 80, fast on a shaft 76, that whichever way the shaft 29 and disk 77 is moved, the wheel 80 and shaft 76 are moved forward a lively, which both act upon the ratchet 98,

portion of a revolution. Farther along on 65 the shaft 76 is another gear wheel 82, loose thereon, which bears a pawl 83 (Fig. 9) which acts upon a ratchet 84 fast on shaft 76. The wheel 82 gears with the wheel 87 on the shaft 51. At the end of the shaft 76 70 is also an index of stop wheel 85 which with its pawl 86 serves to hold the shaft steady in the usual way. In vehicles of the character referred to provision must also be made for the registration of extra charges, as for the 75 carriage of baggage and the like, and the devices by means of which this is accomplished in my invention will now be described.

At the back of the apparatus is a knob 92, 80 operatively connected with the shaft 93, which shaft bears a one toothed wheel 129 which operates a ten-toothed wheel 130 fast on a shaft 160, the operation being similar to that of the wheels 65 and 66 above de- 85 scribed. At the front end of each of these shafts 93 and 160 are registering dials, similar to the dials upon other shafts above mentioned, and all of which are to be hereafter described. On the shaft 93 is also fixed 90 the gear wheel 94 (see Figs. 4 and 6) which gears with the wheel 95 which gears with the wheel 96, which last named wheel is loose on the shaft 51 but which engages with it by means of the pawl 97 which acts upon 95 the ratchet 98 which is fast upon the shaft 51. The shaft 93 also bears an index or stop wheel 100 which also operates a cam 101 bearing a hammer 102 which rings a bell 103 when the shaft 93 is rotated.

100 The arrangement of the various wheels and other devices borne by the shaft 51, is best shown in Figs. 9, 10 and 11 and will now be described. By reference especially to these figures it will be seen that just within the supporting frame 68 is the stop or index wheel 69, fast to the shaft 51, and having ten teeth to be engaged by a spring 70 to center and hold the wheel at one of the ten points at which it is to be stopped. 110 With each revolution of this shaft 51 the single toothed disk 71 is brought into operation with a ten toothed wheel 72 on the shaft 52, as hereinabove described. Secured to the wheel 66 is a similar stop or index 115 wheel 73 with its locating spring 74 adapted to secure the gear 66 and borne by an arm 75 loosely mounted on the shaft but prevented from turning by being forked to engage the shaft 76. The wheel 66 is, as above 120 explained loose on the shaft 51, and it engages by means of its pawl 92, the ratchet 91 which is fast on a disk 90, also loose on said shaft, and which is provided with a pin or stud 89. The wheels 87 and 96 are also 125 both loose on the shaft, but engaged indirectly by means of pawls 99 and 97 respecwhich is fast on the shaft 51. The wheel 87 bears a shouldered disk 88 (see Fig. 11a) which is adapted to engage with the pin 89 on the disk 90, as hereinafter described. At 6 each end of the shaft 51 is a registering dial, as hereinafter described.

It will be seen from what has been above said that while the dials, and the index or stop wheel 69, are fast upon the shaft 51, 10 all of the other devices thereon, being the operative or registering devices, are loose with the exception of the ratchet 98, which is fast upon the said shaft 51. Consequently, all motion which is imparted to the shaft 51 and the dials is by means, ultimately, of this ratchet wheel 98. The operation of the shaft 51 by the "extra" recording device is through the shaft 93, gear wheel 94, gear wheel 95, gear wheel 96, pawl 97 and 20 ratchet 98; the operation of the "minimum charge" recording device is by means of the shaft 29, segmental disk 77, racks 78 and 79, gear wheel 80, shaft 76, ratchet 84, pawl 83, gear wheel 82, gear wheel 87, pawl 99 25 and ratchet 98; the operation of the "time" recording device is by means of the clock work 59, gear wheel 58, gear wheel 56, gear wheel 60, pawl 61, ratchet 63, shaft 50, segmental disk 65, tooth 64, ten toothed wheel 30 66, pawl 92, ratchet 91, disk 90, stud 89, shouldered disk 88, gear wheel 87, pawl 99 and ratchet 98; the operation of the "distance" recording devices is by means of the main shaft 44, worm 43, worm wheel 42, pin-35 ion 41, intermediate gears 39 and 46 or 40 and 45 as the case may be, acting upon the gear wheel 47, pinion 49, gear wheel 48, gear wheel 55, pawl 62, ratchet 63, shaft 50. segmental disk 65, tooth 64, ten toothed 40 wheel 66, pawl 92, ratchet 91, disk 90, stud 89, shouldered disk 88, gear wheel 87, pawl 99 and ratchet 98. It will be seen that the last element in each of the above chains is the ratchet 98, which, as has already been ex-45 plained, is fast upon the shaft 51. It will also be readily seen that this shaft 51, while it may be driven by either of the four chains of registering devices above specified, is only driven, at any one time, by whichever of 50 these four chains is operating at the greatest speed, the other chains of devices, while still themselves operating, being for the time inoperative upon the shaft 51.

The dials at the rear of the device, shown in Fig. 3, are borne on the rear ends of the shafts 51, 52, 53 and 54, and are shown in the said figure as registering respectively, 5, 7, 4, and 1. The registering device indicated at 117 is, as has been above explained, a dummy dial, representing units or cents, and remains stationary always indicating this number. The dials at the front of the device are shown in Fig. 1. The upper line, near the middle of the apparatus, corresponds

to the row of dials shown in Fig. 3, except 55 that in front there is no dial corresponding to the dial at the right hand end of the row in Fig. 3, the dial showing the numeral "1", that is to say, there is no dial borne on the front end of the shaft 54. As explained 70 above a dial on this shaft would register up to nine hundred dollars, and there could never be need of same on the front of the apparatus, which is re-set after each use of the vehicle, though the corresponding dial 75 is desirable for the permanent record at the rear of the apparatus.

The dials at the front of the apparatus are not attached directly at the ends of the shafts, but are attached to extensions thereof, which will now be described: At the end of each shaft is the pinion or stud 113 which engages with a slotted sleeve 112, the other end of which is serrated as shown at 114 so as to engage with a pin or stud 115 on a further extension of the shaft; it is this latter further extension which bears the dial, as shown at 67 (Fig. 4). The arrangement of the "extra" recording dials is similar and is shown at the lower part of Fig. 4.

After each passenger has finished his use of the vehicle and has paid his fare, it is necessary that the recording dials in the front of the apparatus should be reset or returned to zero, and the devices by which this 95 result is accomplished are as follows: At the lower part of the apparatus is a rod 105 having at the rear end a knob 180 for convenient operation. This rod is provided with a coiled spring 134 which tends to keep it pressed 100 outward, and the front end of the rod is pivotally attached to one end of a crank lever 106, the other end of which is slotted as shown at 107 and engages a stud 108 at the lower end of a plate 109 (shown in front 105 view in Fig. 5). This plate 109 is provided with lateral offsets 110, one for each of the slotted sleeves with which the various recording shafts engage (best shown in Fig. 4). When the rod 105 is pushed forward 110 the operation of the bell crank lever 106 draws the plate 109 downward and causes the offsets 110 to push back the various slotted sleeves, against the pressure of the coiled springs 133, so that their serrated front ends 115 no longer engage with the pins 115 on the shaft extensions which bear the recording dials. As soon as the pins 115 are freed from their engagement with the serrated front ends of the slotted sleeves, a spring which is 120 coiled inside of the spring case 170, fast on the shaft extension, causes the said case 170 and the shaft extension and the dial thereon, to revolve backward until the motion is arrested by the stud 171 striking the pawl 125 172, at which point the dial will again record zero. The inner end of this spring which is inside of the case 170, is fast on the

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shaft extension, and its outer end angages with a circular rack located on the plate adjacent to the spring case, which circular rack projects laterally from said plate into 5 the interior of the case, the said case being open toward said plate. This sliding or dragging contact of the outside end of the spring prevents overwinding of the springs belonging to the dials of the lower denomi-10 nations, since it is obvious that when the extension shaft bearing the dials is rotated, and the spring becomes wound up to a certain tension, the outer end of the spring will commence to slide around on the circular 15 rack, always however maintaining sufficient tension to restore its dial to zero when the slotted sleeve is withdrawn from the pin 115. The pawl 172 is pivotally attached to its plate, so as to permit any number of revolu-20 tions of the spring case 170 and the extension shaft which carries it, in one direction, but does not permit more than one revolution of the extension shaft in the opposite direction when the dials are being re-set, 25 being adapted to stop said shaft and said dial at the zero point. This mechanism is more particularly shown in Fig. 4.

The resetting spring and over-winder preventer is not shown, this being a device of 30 well-known form, an over-winder preventer spring of this general character being shown for instance in Letters Patent No. 899,055, issued to me on September 22, 1908.

The dials at the rear of the machine, 35 shown in Fig. 3, cannot be re-set as these are intended to go on registering indefinitely until the number 10,000 (corresponding to \$100 when taken in connection with the dummy dial 155) has been reached, where-40 upon the dials will commence to register over again in a manner which will be well understood. It will be obvious that these dials at the rear of the machine are to be read backward, that is to say units or cents 45 will be on the left, but as these figures are only intended for the observation of the owner or superintendent of the machines and as a check upon his employes or as a permanent record, this circumstance is of 50 no importance. It will also be observed that there are no dials at the rear of the apparatus corresponding to the "extra" recording dials shown in the lower part of Fig. 1; it is unnecessary that these figures 55 be shown at the rear of the machine since the amounts which they represent are included in the registration shown on the regular dials, both at the front and at the back of the apparatus; the object of having the 60 "extra" dials at the front of the apparatus in addition to the regular dials is so that the passenger may observe the amount of extra charge which has been registered against him.

It will be observed that after a "minimum 65 charge" operation of the recording dials has been effected, the recording dials register no further charge until a greater sum than the minimum charge has been earned either by distance or time. The "minimum 70 charge" devices shown and described in this application contemplate, as has been said, a minimum charge of fifty cents, corresponding to one-half of a revolution of the shaft 51; it will be obvious, however, that the devices may be adapted to register any other minimum charge by modifications of the segmental disk 77 and the racks 78 and 79, and the shouldered disk 88, in a manner which will be readily understood.

It will be understood that after the dials are reset as above described and the vehicle is ready for another passenger, the lever 21 must be returned to its operative position, this has the effect of throwing the "dis- 85 tance" and "time" recording devices out of operative connection with the registering dials and the devices by which they are rotated, so that notwithstanding that time is passing or that the vehicle may be traveling 90 from place to place, no operation of the recording dials occurs.

It will be obvious that many changes in detail in the apparatus above described may be required in order to meet special circumstances, and which can be readily effected by any one skilled in the art to which this invention relates, without departing from the spirit and score of my invention.

spirit and scope of my invention.

One of the principal advantages of my invention is the simplicity of the operative parts in an apparatus constructed as hereinabove set forth, compared with the manner in which apparatuses for the like purpose have been heretofore constructed. Partly 105 because of this comparative simplicity, and partly on account of various novel features which are comprised in my invention, a taximeter constructed according thereto is more reliable and efficient than those which have 110 hitherto been in use.

Many points of advantage will be obvious to those skilled in the art upon reading the foregoing description, but I desire to particularly call attention to the arrangement 115 and combination of the various elements on the shaft 51. By reason of that construction, arrangement and combination, which I believe to be new in the art, it becomes possible for the various chains of charge registering devices—that is to say the devices for charging for the distance traveled, the time which passes while waiting, the "extras" and the "minimum charge"—to each operate in common upon a single set of registering dials which then obviously show at any time the total charge which has been incurred, without the necessity of consulting

a number of different series of dials each representing some particular component of the total charge.

Having thus described my invention, what 5 I claim as new and desire to secure by Let-

ters Patent, is as follows:

1. In a taximeter or similar device, the combination with a main shaft adapted to be operated by a vehicle or other object as 10 to which a registration is to be made, of indicating or registering devices; devices adapted to operatively connect said main shaft and said indicating or registering devices; devices adapted to disconnect said in-15 dicating or registering devices, comprising a plate 109 provided with lateral offsets 110 adapted to push back the slotted sleeves 112 and disengage the same from the said indicating or registering devices; and means for 20 re-setting or restoring to zero the said indi-cating or registering devices after an indication or registration made by the same has been ascertained.

2. In a taximeter or similar device, the 25 combination with a main shaft adapted to be operated by a vehicle or other object as to which a registration is to be made; of indicating or registering devices; devices adapted to operatively connect said main shaft 30 and said indicating or registering devices; devices adapted to disconnect said indicating or registering devices, comprising a plate 109 provided with lateral offsets 110 adapted to push back the slotted sleeves 112 and 35 disengage the same from the said indicating or registering devices; means adapted to so reset or restore said indicating or registering means to zero, comprising slotted sleeves 112; and other indicating or registering de-40 vices adapted to show a continuous or permanent registration, being not affected or

controlled by the said re-setting devices. 3. In a taximeter or similar device, the combination with a main shaft adapted to 45 be operated by a vehicle or other object as to which a registration is to be made; of indicating or registering devices; devices adapted to operatively connect said main shaft and said indicating or registering de-50 vices; devices adapted to disconnect said indicating or registering devices, comprising a plate 109 provided with lateral offsets 110 adapted to push back the slotted sleeves 112 and disengage the same from the said indi-55 cating or registering devices; means adapted to so reset or restore said indicating or registering means to zero, comprising slotted sleeves 112; and other indicating or registering devices adapted to show a continuous 60 or permanent registration, being not affected or controlled by the said re-setting devices; said re-setting devices comprising means adapted to operatively disconnect the first mentioned series of indicating or registering |

means from the said main shaft, and means 65 adapted to thereupon move said indicating or registering devices in the reverse direc-

tion until they register zero.

4. In a taximeter or similar device, the combination with a main shaft adapted to 70 be operated by a vehicle or other object as to which a registration is to be made, of indicating or registering devices; devices operatively connecting said main shaft and said indicating or registering devices; 75 means adapted to cause said indicating or registering devices to indicate or register to a predetermined extent in advance of the movement of said main shaft, said devices comprising a segmental disk 77 bearing a so rack, a gear wheel 80, a shaft 76, a second gear wheel 82 bearing a pawl 83, a ratchet 84, a gear wheel 87 and a shaft 51; and means adapted to thereupon temporarily op-eratively disconnect said indicating or reg- 85 istering devices from said main shaft so that the former shall not be operated by the latter until the latter has moved to an extent corresponding to the previous advance movement of the former.

5. In a taximeter or similar device, the combination with indicating or registering devices; of devices adapted to operate same according to the distance traveled by the vehicle or other object as to which a registra- 95 tion is desired; devices adapted to operate said indicating or registering devices ac-cording to the time which passes when said vehicle is not in motion; and devices controlled by the operator or attendant adapted 100 to operate said indicating or registering devices in advance of said first named operations and then permit same to remain sta-tionary until either the vehicle has traveled a distance, or until time has passed, corre- 10% sponding to said advance movement; said devices comprising a segmental disk 77 bearing a rack, a gear wheel 80, a shaft 76, a second gear wheel 82 bearing a pawl 83, a ratchet 84, a gear wheel 87 and a shaft 51.

6. In a taximeter or similar device, the combination with indicating or registering devices operatively connected with each other in a series; of a shaft 51 operatively connected with the first of said series; and the following devices operatively connected with the said shaft 51, to wit: a gear wheel 66, provided with a pawl 92; a ratchet 91; a disk 90 integral with said ratchet 91 and bearing a stud 89; a gear wheel 87, integral 120 with a shouldered disk 88 and bearing a pawl 99; a gear wheel 96 bearing a pawl 97; and a ratchet 98 fast on said shaft: all of the same being loose on said shaft except the ratchet 98.

7. In a taximeter or similar device, the combination with indicating or registering devices; of devices adapted to operate the

same according to the distance traveled by the vehicle or other object as to which a registration is desired; and devices controlled by the operator or attendant adapted to adjust or regulate the rate of operation of the indicating or registering devices at a greater or less speed for the same distance traveled according to the number of passengers carried by the vehicle, comprising a segmental 10 disk 77, bearing racks 78 and 79; a gear

wheel 80; a shaft 76; a second gear wheel 82, bearing a pawl 83; a ratchet 84; a gear wheel 87 and a shaft 51.

In witness whereof I have hereunto signed my name this 12th day of December, 1907, in 15 the presence of two subscribing witnesses.

JOSEPH W. JONES.

Witnesses:

Edmond Congar Brown, A. C. Quackenbush.