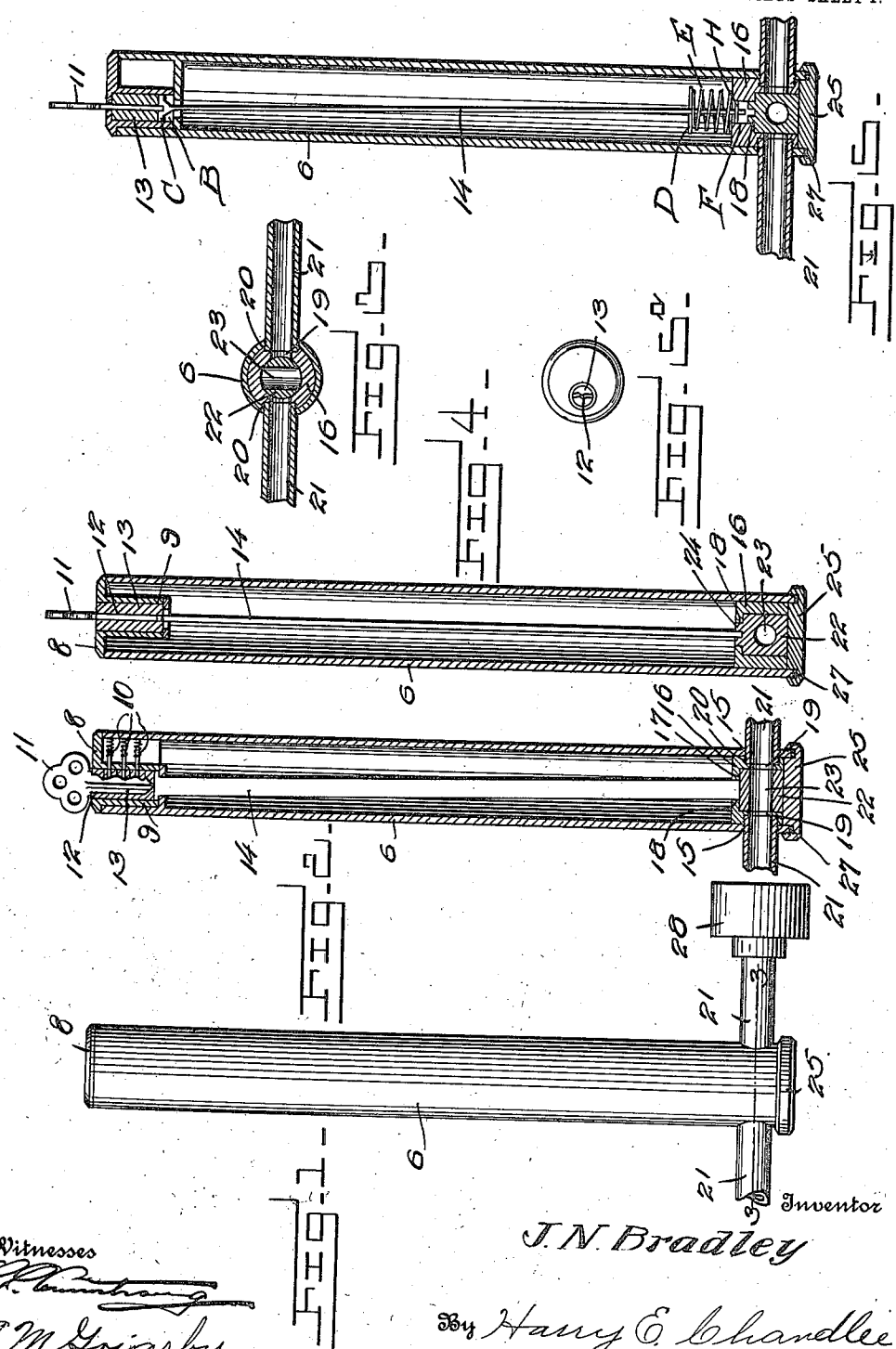


1,059,590.

J. N. BRADLEY.
 AUTO LOCK.
 APPLICATION FILED MAR. 28, 1911.

Patented Apr. 22, 1913.

2 SHEETS—SHEET 1.



Witnesses
A. M. Grigsby

Inventor
J. N. Bradley
 By *Harry C. Chandler*
 Attorney

J. N. BRADLEY.

AUTO LOCK.

APPLICATION FILED MAR. 28, 1911.

1,059,590.

Patented Apr. 22, 1913.

2 SHEETS-SHEET 2.

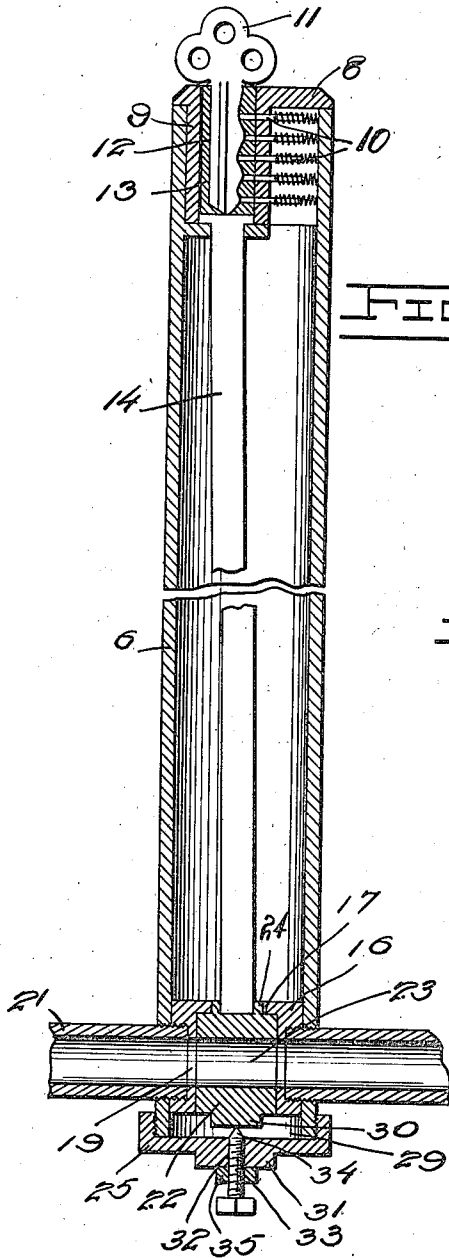
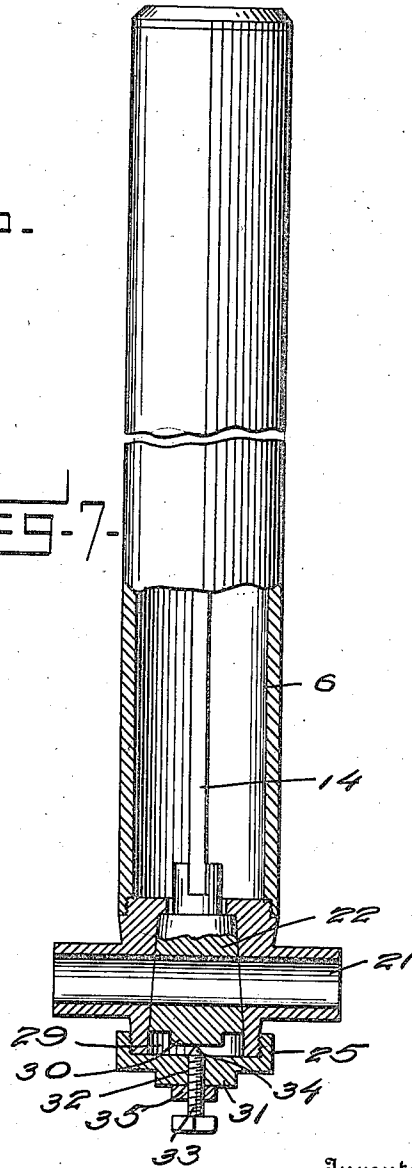


FIG. 6.



Inventor
J. N. Bradley

Witnesses
L. A. Cunningham
Harry M. Test.

By *Harry E. Chandler*,

Attorney

UNITED STATES PATENT OFFICE.

JAMES N. BRADLEY, OF IDAHO SPRINGS, COLORADO.

AUTO-LOCK.

1,059,590.

Specification of Letters Patent.

Patented Apr. 22, 1913.

Application filed March 28, 1911. Serial No. 617,470.

To all whom it may concern:

Be it known that I, JAMES N. BRADLEY, a citizen of the United States, residing at Idaho Springs, in the county of Clear Creek and State of Colorado, have invented certain new and useful Improvements in Auto-Locks, of which the following is a specification.

This invention relates to locks, and more particularly to locks for automobiles, trucks and motorcycles, and has for its object to provide a lock including a valve which may be turned into and out of position to close the supply to the motor, the lock being only operable by a key of a specific nature.

A special object of the invention is to produce a lock of this kind which will be simple and which may be easily assembled, thus producing a cheaply manufactured article.

Other objects and advantages will be apparent from the following description, but it will be understood that changes in the specific structure shown and described may be made within the scope of the claims, without departing from the spirit of the invention.

In the drawings forming a portion of this specification and in which like numerals of reference indicate similar parts, in the several views, Figure 1 is a side elevation of the lock. Fig. 2 is a longitudinal section. Fig. 3 is a horizontal section on line 3-3 of Fig. 1. Fig. 4 is a section taken at right angles to Fig. 2. Fig. 5 is a view showing a modified form of the invention. Fig. 5^a is a detail of the structure shown in Fig. 5. Fig. 6 is a view similar to Fig. 2 showing the means for adjusting the valve to compensate for the wear. Fig. 7 is a vertical section showing a further modification in the construction of the valve.

Referring now to the drawings, the present invention comprises a section of relatively large brass, or other tubing 6, which, at its upper end, receives a locking element 7 including a face plate 8, having a downwardly extending barrel extension 9 which contains suitable tumblers 10 arranged to permit the introduction of a specific key 11 through the key-slot 12. The locking element includes a revoluble member 13, to which there is connected a downwardly extending flat bar 14, which may thus be turned with the key.

At the lower end of the tube 6 are a pair

of diametrically opposite threaded openings 15, and within the lower end of the tube there is a seat block 16, having a valve seat 17 in its lower surface, and having a reduced central stem passage 18 in its upper face communicating with the valve seat. Diametrically opposite passages 19 are formed in the block 16 and communicate with the valve seat, these passages having their outer ends enlarged, as shown at 20, and interiorly threaded, these threaded enlargements registering with the openings 15. A pair of pipe nipples 21 are screwed into the openings 15 and into the enlargements 20, thus extending oppositely beyond the tube 6 at the lower end thereof, and holding the block 16 in position. Disposed in the seat 17 is a turn-plug valve 22, having a passage 23 which may be brought into registration with the two openings 19, thus connecting the nipples for the passage of fluid therethrough, and this valve has a bifurcated stem 24 lying in the passage 18, and receiving the lower end of the bar 14 between its furcations. A cap plate 25 is screwed upon the lower end of the tube 6 and holds the valve in position. A washer 27 may be used if necessary to prevent leakage. It is of course understood that each of the nipples is provided with a union 28, by means of which the device is connected with the supply line to the motor.

In use, the structure is located in a convenient position, preferably within easy reach of the driver's seat, and, as will be understood, the valve may be turned and locked in closed position when the car is not in use.

In Fig. 5 there is shown a different form of the invention in which the revoluble member 13 of the lock element may be used without tumblers, the slot 12 being of a tortuous type, as indicated in the small detail, 5^a. This slot receives a fluted key, as will be understood, and the revoluble member 13 of the lock element terminates short of the lower end of the barrel extension 9, to leave a space B therebelow. The bar 14 has a flanged upper end C lying in the space B and, adjacent to its lower end, has a lateral pin D, beneath which there is engaged a helical spring E, which rests against the upper face of the block 16, and thus holds the bar 14 normally raised and with its lower end disengaged from between the furcations of the stem 24. In this form of the

invention, the passage 18 is extended above the stem 24, as shown at F, and thus acts as a guide for the bar 14, this bar being provided with a second transverse pin H, which lies within the extension and prevents lateral movement of the bar in the plane of its short dimension. The space B is of such a length that, when the flanged end C of the bar is against the lower end of the revoluble member, the lower end of the bar is in the portion F of the passage 18. The upper end of the bar 14 has a slot G therein, to receive the lower end of the key for rotation of the bar therein. From the foregoing it will be seen that when the key is inserted, it will engage the upper end of the bar, and, upon further introduction of the key, the bar will be forced down to engage the valve, when rotation of the key will open or close the valve as the case may be. In this form of the invention it will be seen that it will be impossible to operate the device by inserting a small nail, or other similar article, in the outer end of the slot 12, by means of which the revoluble member might be shifted, as this member is free to turn independently of the bar.

As shown in Fig. 6 the lower portion of the valve terminates a slight distance above the bottom of the tubing 6, and has formed centrally a boss 30. The cap 25 has a centrally threaded opening 32 to receive a screw 33 having on its inner end a point 34 adapted to engage the boss 30 to vertically adjust the valve to its seat and provide a close joint.

In the form shown in Fig. 7 there is screwed on to the end of the tube 6 a casing comprising a tubular tapered body portion 36 in which is seated a turn-plug valve 37 and extending in opposite directions from the sides of the body portion are the nipples 38 for connection with the pipe. The lower portion of the valve is similar to that shown in Fig. 2, its bottom portion, being provided with the central boss 30, terminating a short distance above the lower threaded end of the body portion of the casing. A cap 25' is screwed on to the lower end of the casing, and is provided with a threaded opening to receive the threaded adjusting plug 33'. The upper end of the turn-plug is provided with a bifurcated central lug to receive the lower end of the bar 14 as in the other forms:

What is claimed is:

1. A lock of the class described comprising a casing, a seat block located in one end of the casing, nipples screwed into the casing and into the seat block, said seat block having its seat in its outer face and having a passage communicating with the seat and

opening through the inner face of the block, said seat block also having passages communicating with its seat and with the nipples, a valve located in the seat and shiftable to establish and break communication between the nipples, a cap engaged at the end of the casing in position to close the outer end of the seat, said valve having a bifurcated stem lying in the first named passage of the seat block, a lock element in the opposite end of the casing arranged to receive an actuating key, and a bar connected with the valve stem for movement of the valve when the lock element is actuated.

2. A lock of the class described comprising a tubular casing, a seat block engaged in one end of the casing, nipples screwed into the casing and into the seat block, said seat block having a seat formed in its outer face and having lateral passages communicating with the seat, a cap engaged with the end of the casing and lying in position to prevent removability of the valve, means on the cap for engagement with the valve for adjusting the same, a lock element in the opposite end of the casing and actuating means connected with the lock element and the valve.

3. A lock of the class described comprising a tubular casing, a seat block engaged in one end of the casing, nipples screwed into the casing and into the seat block, said seat block having a seat formed in its outer face and having lateral passages communicating with the seat and with the nipples; a valve located within the seat for movement to establish and break communication between the nipples, a cap engaged with the end of the casing and lying in position to prevent removability of the valve, a boss on said cap having a central threaded opening, a lock element in the opposite end of the casing, actuating means connected with the lock element and the valve and a pointed screw in said boss for engagement with the valve boss for holding said valve to its seat.

4. A valve locking device comprising a tubular casing, a lock in one end of the casing, a seat block arranged in the opposite end of the casing, a valve in the seat block, operative connections between the lock and valve, a cap removably mounted on the casing below the seat block, and means carried by the cap for engagement with the valve, whereby the valve is held snugly in the seat block.

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

JAMES N. BRADLEY.

Witnesses:

WARREN A. HAGGOTT,
EDWARD M. SABIN.