E. W. ROGERS & T. C. RIEBE.

LOCKING VALVE.

APPLICATION FILED NOV. 4, 1916.

**1,238,944.**

Patented Sept. 4, 1917

Fig. 1.

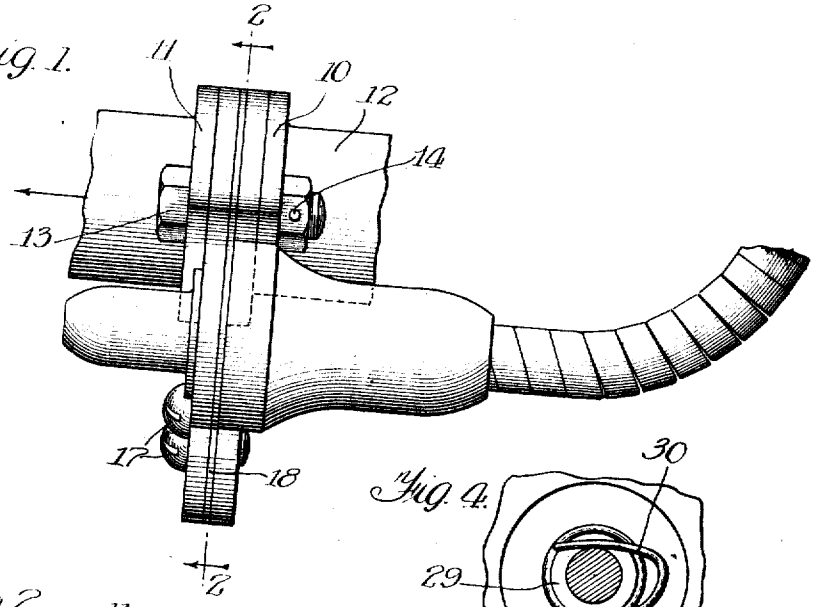



Fig. 4.




Fig. 2.

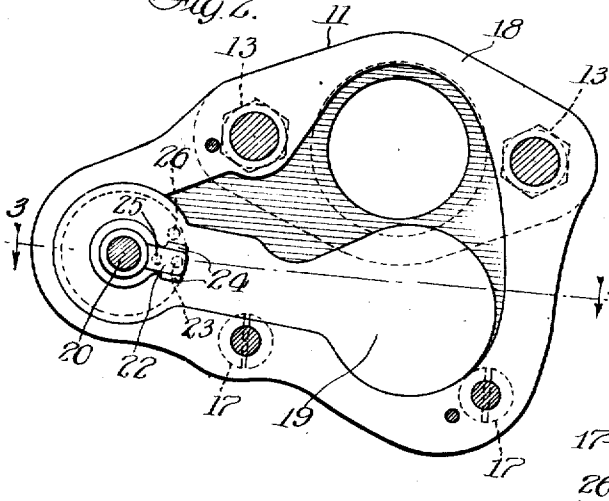
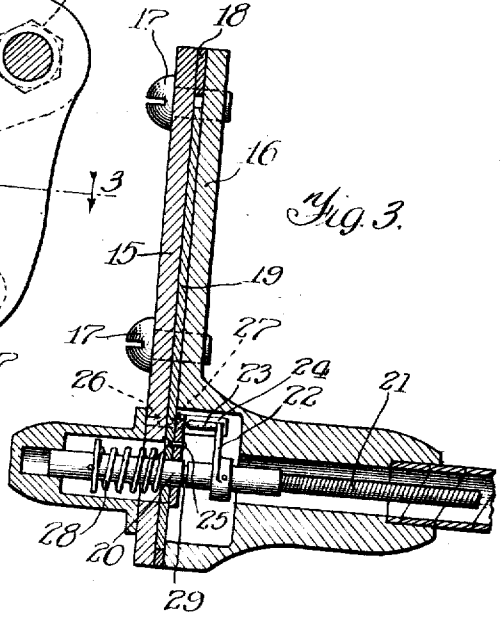



Fig. 3.




Witnesses:

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# UNITED STATES PATENT OFFICE.

EDWIN WILLIAM ROGERS AND THEODORE C. RIEBE, OF CHICAGO, ILLINOIS, ASSIGNORS TO ROGERS MOTOR LOCK COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

## LOCKING-VALVE.

1,238,944. Specification of Letters Patent. Patented Sept. 4, 1917.

Application filed November 4, 1916. Serial No. 129,486.

*To all whom it may concern:*

Be it known that we, EDWIN WILLIAM ROGERS and THEODORE C. RIEBE, citizens of the United States, and residents of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Locking-Valves, of which the following is a specification.

Our invention relates to automobile locking devices and has particular reference to an improvement in the construction shown in the patent to E. W. Rogers, No. 1,171,980, of February 15, 1916.

One of the principal objects of the present construction is to simplify and improve the operation of the mechanism shown in the patent just referred to. The number of parts is lessened, assembling is made more simple and the parts may be made of such larger size as to make the device strong in service.

In the present device the spring which serves to elongate the shaft acts also as the locking device to prevent the return of the shaft after it has been elongated.

The invention will be more readily understood by reference to the accompanying drawings, wherein—

Figure 1 is a side elevation of a valve such as contemplated by us, the same being located in an engine manifold;

Fig. 2 is a sectional view on the line 2—2 of Fig. 1;

Fig. 3 is a sectional view on the line 3—3 of Fig. 2, and

Fig. 4 is an enlarged fragmentary sectional view showing the form of connection between the spring and the shaft.

Referring more particularly to the drawings, it will be seen that the locking device is intended to be mounted between the flanges 10, 11, of a manifold pipe 12, by suitable holding means such as the bolt 13. Preferably a hard steel pin, indicated at 14, is located after the bolt is in place, thus making necessary the destruction of the bolt to enable the removal of the valve casing.

The casing is preferably formed in two halves 15, 16, which are united by means of the machine screws 17. A shim or spacer 18 is inserted between the two halves and serves to outline a space within which the shutter 19 may operate. This shutter is rotatable on the end 20 of the operating shaft 21 as a center. Pinned to the end of the shaft is an arm or crank 22, having a lateral pin or projection 23, the end of the arm and the pin lying between two lugs or ears 24, which are secured to the shutter by means of the rivet 25. A recess 26 which acts as a stop is formed in the casing, and a similar recess in the shutter, these recesses being in register when the shutter is in closed position. If, when the shutter or valve is in that position the shaft be elongated, the pin 23 will enter the recesses 26, 27, and securely lock the shutter in its closed position. A coil spring 28 is mounted on the end of the shaft and has a tendency to lengthen the shaft and to pull the pin 23 into the recesses referred to. Furthermore, the end 20 of the shaft is provided with a peripheral groove 29, which normally lies to one side of the shutter. If, however, the shaft is moved longitudinally under the action of the spring 20, the elongated and transversely bent end 30 of the spring will occupy the groove 29, as best shown in Fig. 4, and will prevent the return of the shaft until the casing is taken apart and the end of the spring disengaged from the groove. If, therefore, an unauthorized person should attempt to operate the valve by severing the shaft 21, the spring 28 would move the shaft longitudinally, causing the pin to engage the recess 26 and lock the valve against opening movement, while the end of the spring 30 would drop into the groove and prevent the return of the shaft to its original position. By such means it will be seen that the shutter is safe against tampering in that manner.

Obviously other modifications may be made in the construction shown, and necessary modifications will be made to adapt the device to different locations of the valve with relation to the manifold. Such modifications are considered as within the spirit of our invention.

We claim:

1. In a locking device, the combination of a casing, a valve, a valve-operating shaft mounted for limited longitudinal movement in said casing, and a spring tending to cause such movement, said shaft having a groove with which a portion of said spring may

coöperate in an abnormal position of said shaft, substantially as described.

2. In a locking device, the combination of a casing, a shutter mounted therein, a shaft, an arm operatively engaging said shutter, a pin on said arm, said casing having a recess so located as to register with said pin when the shutter is in closed position.

3. In a locking device, the combination of a shutter, a shaft, a crank carried by the shaft, said crank having a projection and being in slidable engagement with the shutter, and means operative upon the severing of the shaft and when the shutter is in closed position for moving said crank and causing the engagement of said projection with a stop whereby said shutter is locked, substantially as described.

4. In a locking device, the combination of a casing, a shutter pivoted therein, a shaft in said casing, an arm on said shaft, a locking pin carried by said arm, said casing having a recess with which said pin is in register in the closed position of said shutter, and a spring tending to move said pin into said recess, said shaft having a peripheral groove with which a portion of said spring may engage when said pin engages said recess, substantially as described.

Signed at Chicago, Illinois, this 2nd day of November, A. D. 1916.

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Witnesses:
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