No. 608,483. Patented Aug. 2, 1898.

M. B. SELLERS.

ENGINE VALVE.

(Application filed June 14, 1897.)

(No Model.)

fig 1.

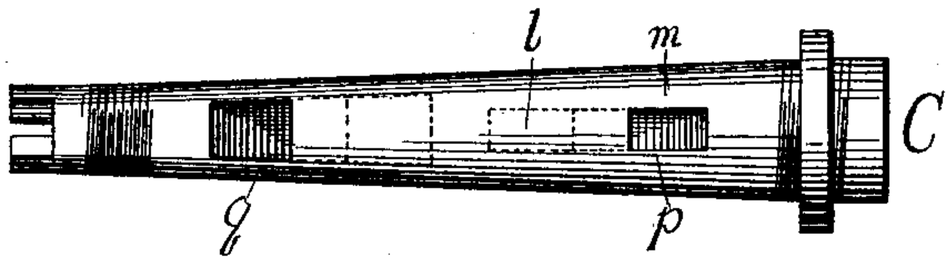
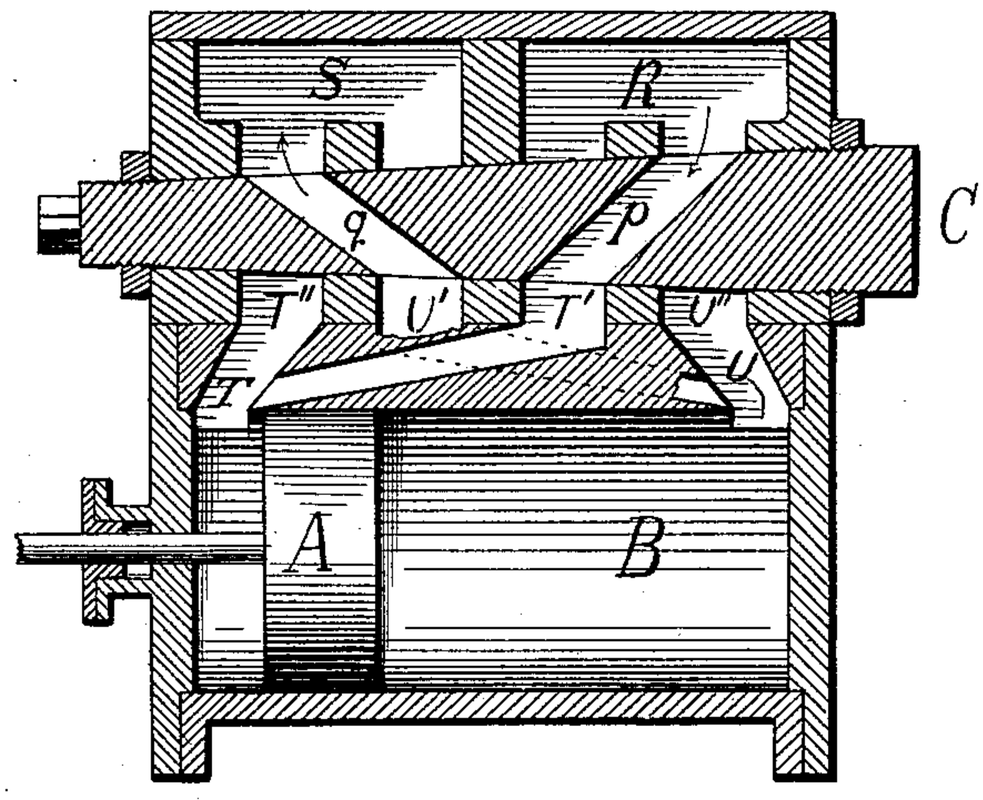


fig 2.



WITNESSES:

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MATTHEW B. SELLERS, OF CARTER COUNTY, KENTUCKY.

ENGINE-VALVE.

SPECIFICATION forming part of Letters Patent No. 608,483, dated August 2, 1898.

Application filed June 14, 1897. Serial No. 640,790. (No model.)

To all whom it may concern:

Be it known that I, MATTHEW B. SELLERS, a citizen of the United States, residing in the county of Carter, State of Kentucky, have invented a new and useful Engine-Valve, of which the following is a specification.

The object of my invention is to produce an engine-valve which shall admit and exhaust the steam during any predetermined part of the stroke. This I accomplish by making my valve cylindrical, with ports passing through it, and by causing it to revolve continuously in one direction.

In the drawings, Figure 1 is a side view of the valve only; Fig. 2, a horizontal section showing the valve in its chest or casing, with a diagram of the steam-passages into the cylinder.

The valve, which is cylindrical and tapering, has two diagonal ports or ways *p* and *q*, Fig. 1, passing diametrically through it. By "diagonal port" is meant such a one *p*, Fig. 1, that if its ends *h* and *m* were joined by a line this line would make an acute angle with the axis of the cylinder C. This valve C, Fig. 2, by a suitable gearing is caused to make one revolution for each double stroke of the piston. Starting with the piston at the end T of the cylinder B the valve-port *p* will connect the steam-chest R with the passage T′, leading to the end T of the cylinder, while the port *q* will connect the exhaust-chest S with the passage V′, leading to the end V of the cylinder. The piston will move toward V. At the end of the stroke the port *p* comes into register with the opening V″, leading to V, and port *q* with the passage T″, leading to the end T of the cylinder. Thus each end of the cylinder is connected alternately with the supply and exhaust chambers, the duration of admission depending on the size of the openings *p*, T′, and V′.

I am aware that prior to my invention engines have been made with cylindrical valves. I therefore do not claim the cylindrical engine-valve broadly; but

What I claim, and desire to patent, is—

In a reciprocating engine, a cylindrical valve, with diagonal ports, passing diametrically through it; together with a valve-casing, having corresponding passages and steam and exhaust chests, so arranged, that the valve, by revolving, shall connect the ends of the cylinder, alternately, with the supply and exhaust chambers as herein described.

MATTHEW B. SELLERS.

Witnesses:
S. E. BAGLEY,
L. N. DAVIS.