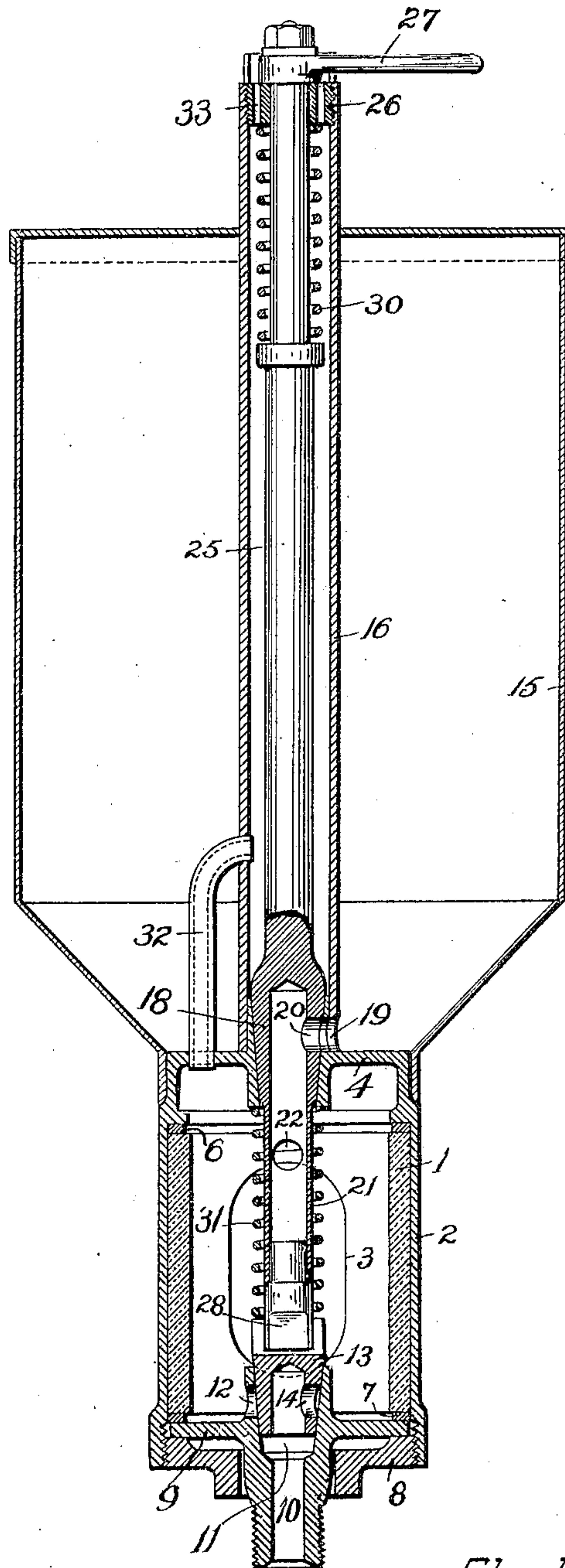


No. 887,090.

PATENTED MAY 12, 1908.

C. J. GUSTAFSON.
LUBRICATING DEVICE.
APPLICATION FILED OCT. 15, 1906.



Charles J. Gustafson,
Inventor

Witnesses
D. M. Stewart
Caleb J. Pipher

by *[Signature]*
Attorney

UNITED STATES PATENT OFFICE.

CHARLES J. GUSTAFSON, OF READING, PENNSYLVANIA, ASSIGNOR, BY MESNE ASSIGNMENTS,
TO READING STANDARD COMPANY, A CORPORATION OF PENNSYLVANIA.

LUBRICATING DEVICE.

No. 887,090.

Specification of Letters Patent.

Patented May 12, 1908.

Application filed October 15, 1906. Serial No. 339,035.

To all whom it may concern:

Be it known that I, CHARLES J. GUSTAFSON, a subject of the King of Sweden, and a resident of the city of Reading, in the county of Berks, State of Pennsylvania, United States of America, have invented certain new and useful Improvements in Lubricating Devices, of which the following is a specification.

My invention relates to an improved lubricating device adapted more particularly for lubricating internal combustion engines though applicable to other uses.

It is fully described in connection with the accompanying drawing and the novel features are pointed out in the claims.

The drawing is a sectional elevation of a preferred embodiment of my invention.

My device comprises a feed cup and a superposed reservoir with coöperating valves operated by successive movements of a single handle to control the filling and emptying of the cup and to effect the entire cutting off of communication with the latter as desired.

The cup, as shown, is formed by inclosing a tubular glass portion 1 in a metal casing 2 having a sight-opening 3, and a rigid top portion 4; the glass portion being clamped in said casing, upon suitable yielding seats 6 and 7, by means of a screw cap 8 carrying an interposed bottom piece 9. This bottom piece has a central discharge opening 10 communicating with a conical valve chamber 11 having an outlet opening 12 in its wall through which lubricant is discharged from the cup under control of a rotary hollow plug valve 13 having a corresponding wall opening 14 adapted to register with the cup outlet 12.

Superposed upon the top 4 of the cup, is a connected reservoir 15 of any convenient form. Passing upward through this reservoir is a vertical tube 16 forming an upward extension from the top 4 of the cup, with which latter it communicates through a central flared opening in said top, adapted to form a seating chamber for a second hollow-plug valve 18. This tubular upward extension 16 of the top 4, instead of being formed integral with the top 4, is shown in the drawing as formed by a separate tube suitably united to the top, but this specific construction is merely indicated as most convenient. The valve 18 con-

trols communication between the reservoir and the cup, through a wall opening 19 near the bottom of the tube 16; said opening being adapted to register with a corresponding opening 20 in the wall of the hollow plug valve, a lower-stem extension 21 of which has an opening 22 in its wall to deliver the liquid to the cup when the valve 18 is set as shown in the drawing.

The valve 18 has an upper stem 25 extending through a bearing plate 26 at the upper end of the tube 4, and provided with a handle 27; while its hollow lower stem 21 is provided with an end piece 28 having an angular cross-section adapted to rotatably engage the plug valve 13. The cup outlet 12 and the tube opening 19 into the reservoir, are located on opposite sides of the valve-stem axis, while the communicating openings in the respective hollow-plug valves are both on the same side of said axis when the parts are in operative engagement as indicated. Separate springs 30 and 31 on the upper-stem and lower-stem respectively, serve to uniformly seat the two valves so as to practically prevent leakage. An air-conduit tube 32 connects the top of the cup with the tube and communicates through a small opening 33 in the top of said tube, with the atmosphere.

The advantage of thus positively effecting the measuring, delivery, and cut-off of the lubricant, by instantaneous movement of the lever 27, is especially advantageous in connection with motor cycles where the operators hands are constantly employed.

What I claim is—

1. A lubricating device comprising a feed-cup having an outlet and a rotary valve controlling the same, a superposed reservoir having a cup-extension tube passing there-through, said tube having an opening through its wall communicating with the reservoir, and a rotary valve controlling said opening and having a handled upper-stem, and a hollow lower-stem communicating with said cup and operatively engaging said first mentioned valve, substantially as set forth.

2. A lubricating device comprising a feed-cup having an outlet and a rotary valve controlling the same, a superposed reservoir having a cup-extension tube passing there-through, said tube having an opening through

its wall communicating with the reservoir, there being a free air-conduit connecting said cup and tube, and a rotary valve controlling said opening and having a handled upper-stem, and a hollow lower-stem communicating with said cup and operatively engaging said first mentioned valve, substantially as set forth.

3. A lubricating device comprising a feed-cup having an outlet and a rotary hollow-plug valve controlling the same, a superposed reservoir having a cup-extension tube passing therethrough, said tube having an opening through its wall communicating with the reservoir, and a rotary hollow-plug valve controlling said opening and having a handled upper-stem, and a hollow lower-stem communicating with said cup and operatively engaging said first mentioned valve, said cup outlet and tube opening being on opposite sides of the valve-stem axis and the communicating openings in the coöperating

hollow-plug valves being on the same side of said axis substantially as set forth.

4. A lubricating device comprising a feed-cup having an outlet and a rotary hollow-plug valve controlling the same, a superposed reservoir having a cup-extension tube passing therethrough, said tube having an opening through its wall communicating with the reservoir, a rotary hollow-plug valve controlling said opening and having a handled upper-stem and a hollow lower-stem communicating with said cup and operatively engaging said first mentioned valve, and separate valve seating springs for the respective valves substantially as set forth.

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

CHARLES J. GUSTAFSON.

Witnesses:

EDW. F. LEINBACH,
D. M. STEWART.