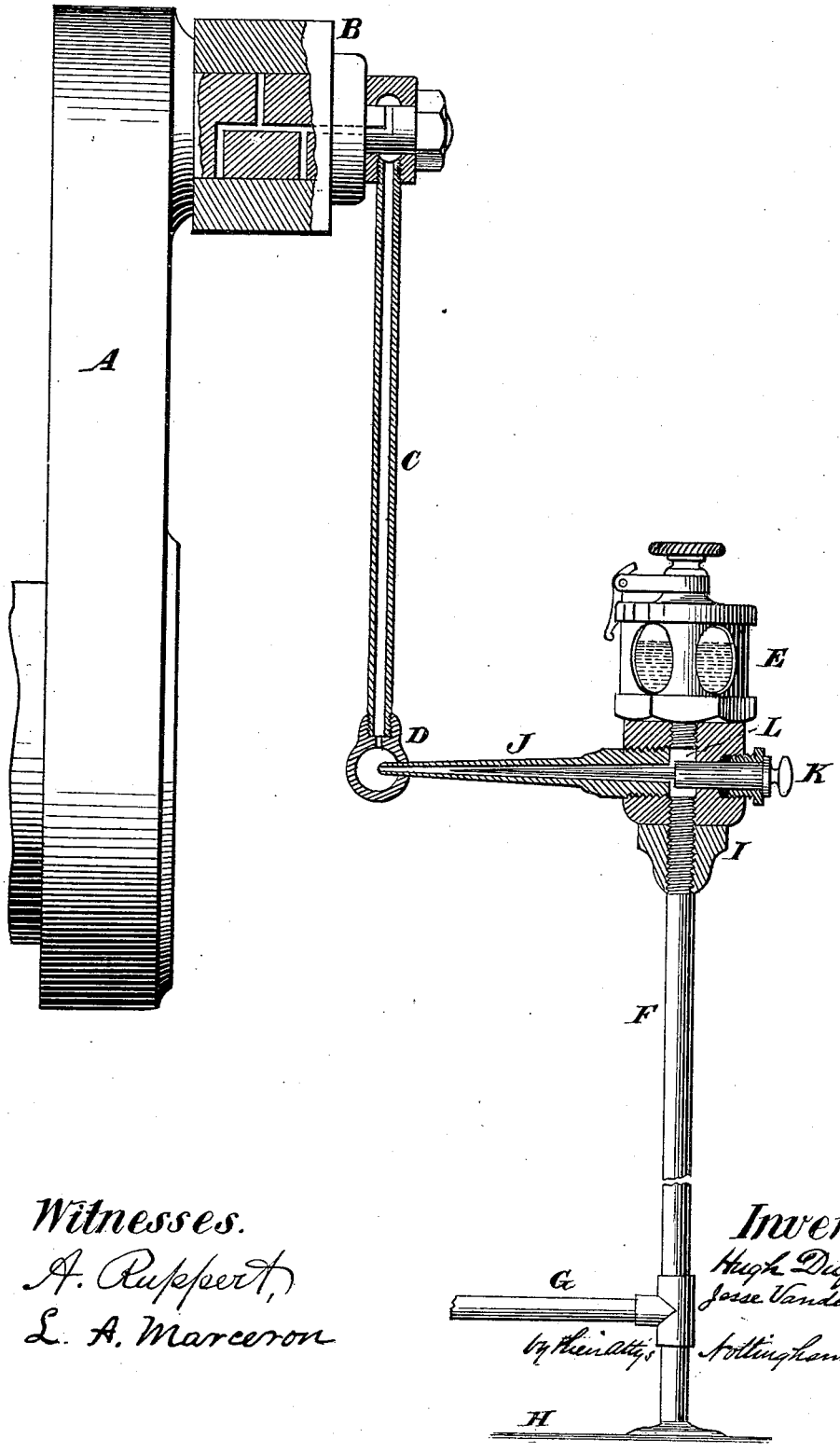
(No Model.)

H. DUFFEY & J. VANDENBURGH.

CRANK PIN AUTOMATIC OILER.

No. 262,654. Patented Aug. 15, 1882.



Witnesses.
A. Ruppert,
L. A. Marceron

Inventors.
Hugh Duffey
Jesse Vandenburgh
by their Attys
Nottingham & Leggett.

UNITED STATES PATENT OFFICE.

HUGH DUFFEY AND JESSE VANDENBURGH, OF CORTLAND, NEW YORK.

CRANK-PIN AUTOMATIC OILER.

SPECIFICATION forming part of Letters Patent No. 262,654, dated August 15, 1882.

Application filed April 17, 1882. (No model.)

To all whom it may concern:

Be it known that we, HUGH DUFFEY and JESSE VANDENBURGH, citizens of the United States, residing at Cortland, in the county of Cortland and State of New York, have invented certain new and useful Improvements in Crank-Pin Automatic Oilers; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the letters or figures of reference marked thereon, which form a part of this specification.

The object of our invention is to supply oil continuously and automatically to crank-pins, particularly of stationary engines running at a high rate of speed; and our invention consists mainly in the method and means, herein shown and described, whereby the above purpose is accomplished.

The drawing shows a side view of the devices and appurtenant mechanism, a part being in section.

In the drawing, A represents the crank of a stationary engine. B represents the crank-pin with connecting-rod attached. C represents a tube — such as is now ordinarily used — connected rigidly to the crank-pin and terminating in the center-line of the axis of the crank produced as shown. D represents a globe or bulb on C. E represents an automatic or regulating oil cup or vessel, such as are in use. F represents a standard or support for E, which is braced by the rod or tube shown at G. H represents the floor. I represents a jam-nut for adjusting E to proper height. J represents a tapering tube for conducting the oil to D. J enters D with a loose joint to about the center. K represents a solid piston, which can be pushed in or out to force the oil through J and remove any obstructions.

The operation is substantially as follows: The oil in E passes down into L, and then through J into the bulb D, and then runs down C, and from there into and through the small holes in the crank-pin. The oil, after entering C, is forced by gravity and centrifugal force to the desired points or places.

In case the tube J becomes clogged or stopped, or an extra quantity of oil is desired in D, the piston K can be worked and the desired purposes accomplished.

So far as we know, the oil has heretofore been squirted into the bulb D by an ordinary hand-oiler, which wasted time and was not continuous or reliable, particularly on high-speed engines.

Our devices also overcome the use of wicks for high speed.

We find that in the use of our devices the crank-pin is kept cool and at all times well oiled, and the extra labor of a person to oil the crank-pin is dispensed with.

What we claim as new, and desire to secure by Letters Patent, is—

1. The stationary vessel E, chamber L and open connections therewith, and the hollow spindle J, combined with a bulb operating loosely upon said spindle and having open connection with a tube, C, which moves with the crank-pin, and which is adapted to feed the oil thereto by means of the centrifugal force, substantially as specified.

2. The grooved or recessed crank-pin B, tube C, moving therewith, the hollow bulb B, having open connection with said tube and with the spindle J, upon which it revolves, the stationary vessel E, chamber L, jam-nut I, and reciprocating piston K, all combined and arranged to serve as and for the purposes set forth.

HUGH DUFFEY.
JESSE VANDENBURGH.

Witnesses:
J. W. SUGGETT,
W. D. TISDALE.