

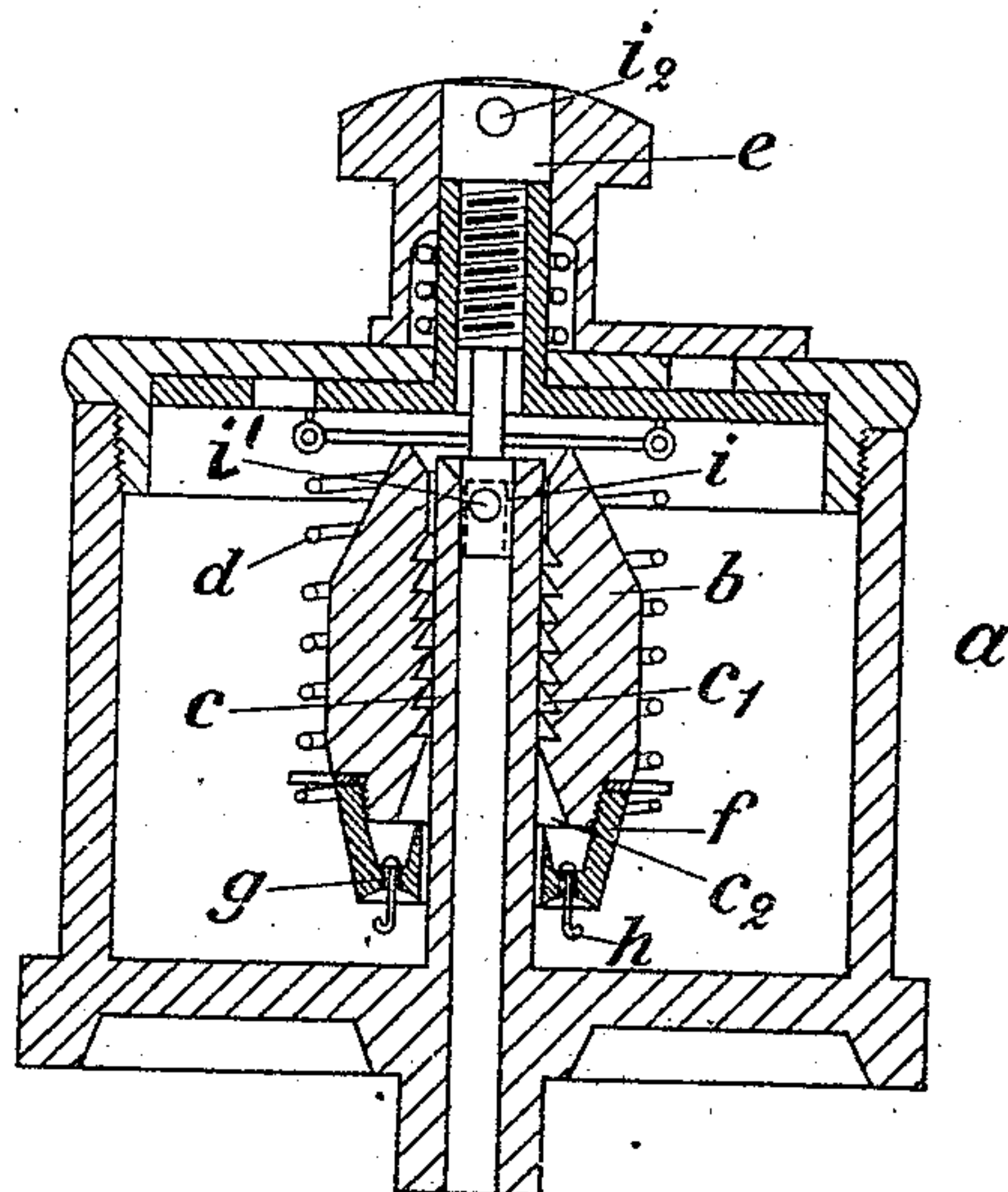
A. MLITZ.

LUBRICATOR.

APPLICATION FILED MAY 12, 1909.

955,420.

Patented Apr. 19, 1910.



Witnesses:

August Mlitz  
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Inventor:

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# UNITED STATES PATENT OFFICE.

AUGUST MLITZ, OF CHARLOTTENBURG, GERMANY.

## LUBRICATOR.

955,420.

Specification of Letters Patent.

Patented Apr. 19, 1910.

Original application filed July 17, 1908, Serial No. 444,045. Divided and this application filed May 12, 1909. Serial No. 495,559.

*To all whom it may concern:*

Be it known that I, AUGUST MLITZ, a subject of the German Emperor, and a resident of Charlottenburg, Kingdom of Prussia and Empire of Germany, have invented Improvements in Lubricators, of which the following is a specification.

This invention relates to lubricators, especially for locomotives in which in consequence of the vibration during the working the oil is conducted automatically to the oil-outlet opening, and thus into the conduit which conveys it to the place where it is to be used, while, when the engine stands still, the oil-supply ceases automatically. The oil is fed forward by means of a member surrounding the oil-outlet tube in the interior of the lubricating-vessel, which member is oscillatingly suspended on a spring. The spring is preferably a spiral spring surrounding the member on the outside and fastened to the lid of the lubricating vessel, or in any other suitable manner. According to this invention the member is at the bottom provided with a valve or valves, which open when the member descends and allow the oil to enter the member, whereas when the member ascends they are automatically closed.

On the drawing is illustrated in a section a form of construction of the subject of the invention.

According to the figure there has been provided in the interior of the lubricating-vessel *a*, around the tube *c* through which the oil flows out, an oil forwarding member *b* suspended on a spring *d*, on which it swings up and down, whose inner bore is in the upper part provided with furrows, grooves or threads *c*<sup>1</sup>, and in the lower part as at *c*<sup>2</sup> conically widened in order to improve the oil conveying capacity of the member. In consequence of the widening the oil is better pressed into the bore on the member *b* moving up and down. In this form of construction the oil enters the tube at its upper end, and the quantity of the oil flowing out can be regulated by means of a piston *i*, which projects into the outflow-tube, and can be adjusted from the outside by means of the head *e*. The piston *i* may be hollow, as shown in the figure, and be provided with a lateral bore *i*<sup>1</sup> at any place of its circumference, when the bores *i*<sup>2</sup> in the head *e* of the spindle will at any time show the opening width.

The member *b* is at its lower end, as shown in the figure, provided with a cap *f*, which latter is provided with bores *g*, into which there are inserted valve-pins *h* projecting at the bottom. With this arrangement the valve-pins *h* touch the bottom of the oil-vessel near the lower end of the member *b*, whereby the bores *g* are opened and the oil can enter the interior of the member *b*. Owing to this arrangement also thin-liquid lubricating material is always uniformly forwarded independently of the amount of the lubricating material contained in the oil-reservoir, as, although the quantity of oil in the lubricating vessel may be small, the interior of the member *b* will be entirely filled with oil. Instead of the closing-pins *h* there may also be used any other suitable form of valves.

What I claim as my invention and desire to secure by United States Letters Patent is:—

1. In a lubricating-device with an automatic oil-supply, the combination of an oil-reservoir, an oil-outflow tube in the interior of the oil-reservoir, a lid for the oil-reservoir, a member arranged around the outflow-tube, a spring on which the said member is suspended so that it can move up and down, a cap provided at the bottom of the member and surrounding the oil-outflow tube having openings in its bottom and means for alternately opening and closing these openings during the movements of the member, substantially as set forth.

2. In a lubricating-device with an automatic oil-supply, the combination of an oil-reservoir, an oil-outflow tube in the interior of the oil-reservoir, a lid for the oil-reservoir, a member arranged around the outflow-tube, a spring on which the said member is suspended so that it can move up and down, a cap provided at the bottom of the member and surrounding the oil-outflow tube, having openings in its bottom, and pins projecting at the bottom out of the said openings, substantially as set forth.

In testimony, that I claim the foregoing as my invention, I have signed my name in presence of two subscribing witnesses.

AUGUST MLITZ.

Witnesses:

PAUL SIKORA,  
HEDWIG MLITZ.