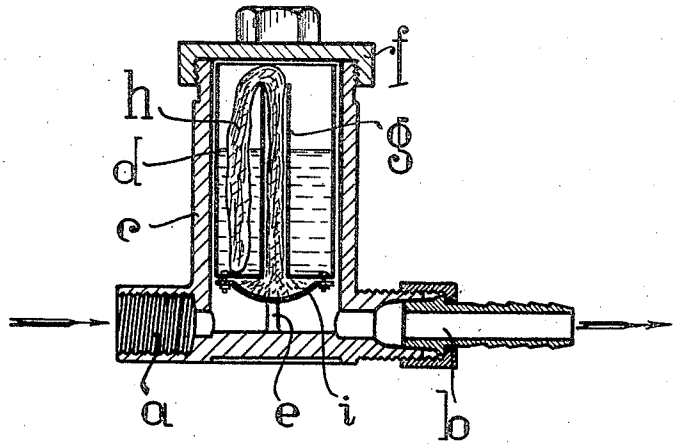
F. SPITZNAS.

MEANS FOR LUBRICATING FLUID DRIVEN TOOLS.

APPLICATION FILED NOV. 7, 1912.

1,091,776. Patented Mar. 31, 1914.



Witnesses:
John Murtagh
Grace Lowe

Inventor:
Ferdinand Spitznas
by Gould & Gorham
Attorneys

UNITED STATES PATENT OFFICE.

FERDINAND SPITZNAS, OF ESSEN-ON-THE-RUHR-WEST, GERMANY.

MEANS FOR LUBRICATING FLUID-DRIVEN TOOLS.

1,091,776. Specification of Letters Patent. Patented Mar. 31, 1914.

Application filed November 7, 1912. Serial No. 730,029.

To all whom it may concern:

Be it known that I, FERDINAND SPITZNAS, a citizen of the German Empire, and residing at Essen-on-the-Ruhr-West, Germany, have invented certain new and useful Improved Means for Lubricating Fluid-Driven Tools, of which the following is a specification.

My invention relates to improved means for lubricating pneumatic tools.

The object of the invention is to provide a lubricator which may be mounted upon the fluid supply pipe instead of upon the tool itself, so that the tool is rendered lighter in weight and the lubricator is subject to less changes of position and less movement, whereby more uniform and economical lubrication is obtained.

The invention is not limited to pneumatic tools, but may be employed in connection with a steam or other fluid-pressure line.

My invention relates to a device whereby the compressed air supplied to the pneumatic appliances and tools, *e. g.* the percussion drill becomes continually mixed with oil supplied in suitable quantities. This device consists of an oil-reservoir mounted on the air-supply pipe, and connected with the passage in said pipe by means of a wick. The current of compressed air continually removes from the end of the wick that quantity of oil which is requisite to lubricate the pneumatic appliance. To prevent with certainty the oil from running directly into the air-supply pipe and to obtain special economy in operation, a tube rises from the bottom of the oil-reservoir to a point above the level of the oil, and this tube guides the wick. Hence only the oil transferred by capillary action through the wick can reach the said air-supply pipe. The supply of oil can moreover be regulated, *e. g.* by varying the thickness of the wick employed.

One illustrative embodiment of my invention is represented by way of example in the accompanying drawing, which shows the lubricator in half-section.

Referring to this drawing, the casing *c* has screwed connectors, one at the inlet *a* and the other at the outlet *b*, but flanges may be employed if desired. This casing *c* contains the oil vessel *d* supported on a rib *e*, and is closed by means of the cover *f*. Since the tube *g* is inserted in the bottom of the vessel *d* and extends upward above the oil-surface, the only oil which will reach the air-supply pipe will be that sucked up by the wick *h*. The place of egress of the wick is preferably covered by a sieve *i*.

In the like manner the apparatus may be used to lubricate steam before entering the engines.

I claim:

1. A lubricator comprising a covered lubricating-box having a pressure-fluid inlet and a pressure-fluid outlet, a lubricator-cup mounted sufficiently high in said box to allow a space between the said inlet and outlet and having a tube rising from its bottom to form a passage through the same, and a wick passing through said tube and connecting the interior of said vessel with said space.

2. A lubricator comprising a lubricating-box having at the bottom a pressure-fluid inlet and a pressure-fluid outlet, a lubricator-cup mounted sufficiently high in said box to allow a space between the said inlet and outlet and having a tube rising from its bottom to form a passage through the same, said cup being adapted to be lifted upwardly out of said box, a screw-top removably fastened to said box, and a wick passing through said tube and connecting the interior of said vessel with said space.

3. A lubricator comprising a covered lubricating-box having a pressure-fluid inlet and a pressure-fluid outlet, a lubricator-cup mounted sufficiently high in said box to allow a space between the said inlet and outlet and having a tube rising from its bottom to form a passage through the same, a wick passing through said tube and connecting the interior of said vessel with said space and a sieve fastened below the bottom of the vessel and containing the end of the wick issuing from said tube.

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

FERDINAND SPITZNAS. [L. S.]

Witnesses:

HELEN NUFER,

ALBERT NUFER.