

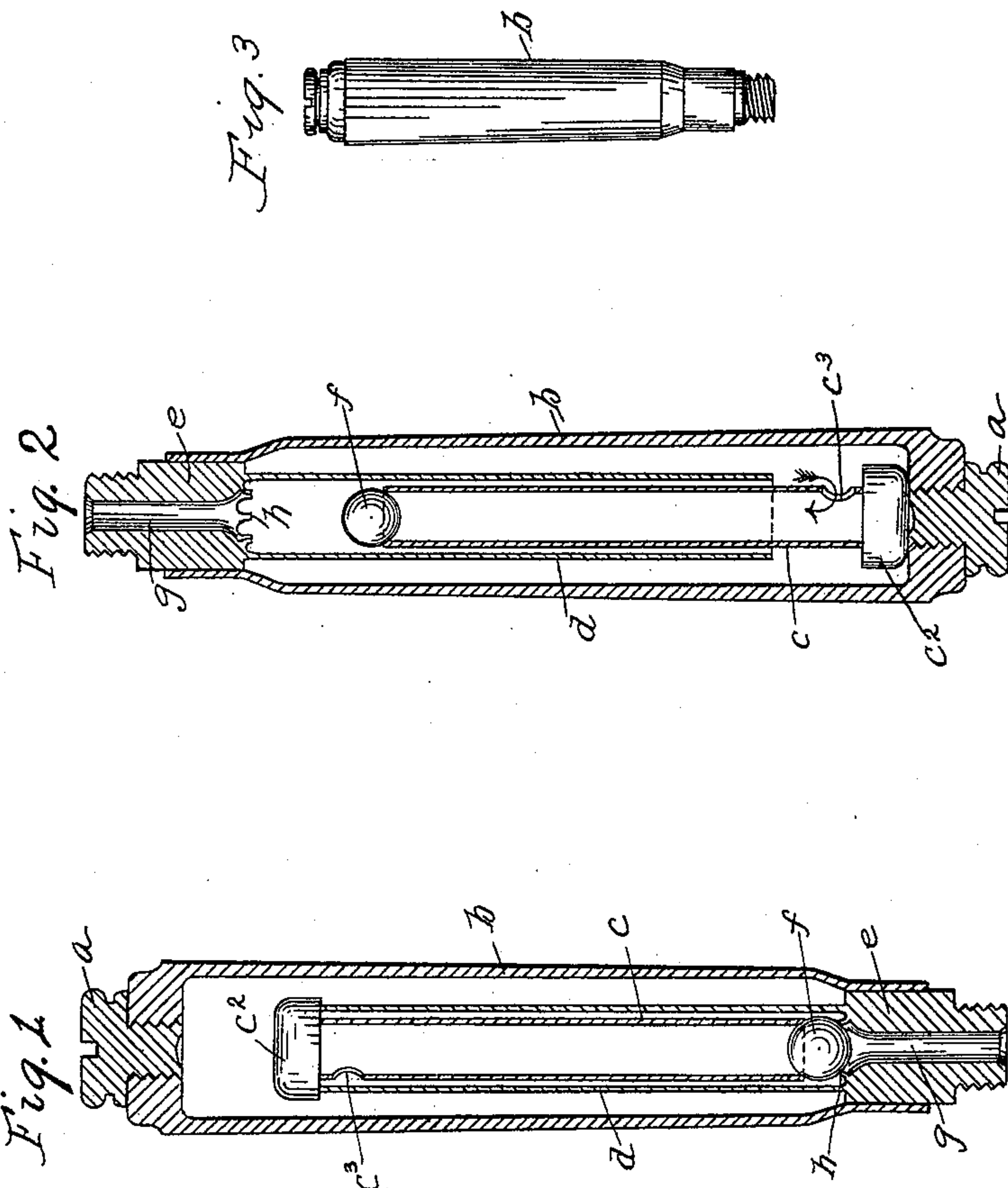
No. 616,270.

Patented Dec. 20, 1898.

A. STARK.
LUBRICATOR.

(Application filed Mar. 14, 1898.)

(No Model.)



WITNESSES
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AUGUST STARK, OF WEIDEN, GERMANY, ASSIGNOR TO ANDREAS NEHMANN,
OF SAME PLACE.

LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 616,270, dated December 20, 1898.

Application filed March 14, 1898. Serial No. 673,891. (No model.)

To all whom it may concern:

Be it known that I, AUGUST STARK, a subject of the Emperor of Germany, and a resident of Weiden, (Bayern,) Germany, have invented certain new and useful Improvements in Automatic Lubricating Devices; and I 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 drawings, forming a part thereof.

My invention relates to automatic lubricating devices, and particularly to that class of lubricators that are intended to be placed directly upon the machine element to be lubricated; and the object of the invention is to provide a device of this character that is simple in construction, thoroughly reliable, and inexpensive.

The accompanying drawings show a lubricator embodying my improvements.

Figure 1 is a vertical section through the lubricator. Fig. 2 is a similar view, only showing the lubricator reversed or turned at an angle of one hundred and eighty degrees; and Fig. 3 is an elevation of the lubricator.

Like letters of reference designate like parts throughout the several views.

b is an outer cylindrical casing adapted to contain oil or other lubricating material, that is admitted thereto through an opening in the top of the casing closed by a screw-cap *a*. A conduit *d* extends nearly the entire length in said casing and is rigidly secured in the lower end thereof by a neck or enlargement *e*, provided with a bore *g*, preferably of a smaller diameter than that of conduit *d* and having at its upper end upwardly-inclined lugs *h*, upon which is poised a ball *f*. The enlargement *e* is also threaded for attachment to the mechanism to be lubricated.

A tube *c* is adapted to slide freely in the conduit *d*. Said slide-tube *c* is open at its lower end, which is adapted to partially receive the ball *f*, thereby forming a ball-valve, and is closed at the upper end by a weighted cap *c*². An aperture *c*³ is provided in the side wall of the tube contiguous said cap, through which oil is admitted when the tube has moved outward.

The device operates as follows: It is assumed the oil-chamber *b* has been filled, the screw-cap *a* replaced, and the device attached

to a rotatory machine element in the usual manner. Until the latter revolves no oil will be supplied thereto. As soon, however, as the latter has made a turn of one hundred and eighty degrees the slide-tube *c* will fall downward by gravity and a little oil will be admitted thereto through the aperture *c*³. After making another turn of one hundred and eighty degrees the slide-tube *c* returns to its original position in the conduit *d*, thus closing its aperture. The ball-valve *f* opens in the meantime and the oil flows down through the bore *g* upon the parts to be lubricated. This operation repeats itself for every following rotation of the machine.

Having thus described my invention, I claim—

1. In an automatic lubricator such as described, the combination of an outer cylindrical casing adapted to contain oil, its screw-cap, an inner hollow cylindrical body concentric to said outer casing and secured in the base thereof, a slide-tube, carried therein, open at its lower end and closed at the upper end by a weighted cap, and having an aperture contiguous said cap, to admit oil, and a ball-valve formed at the open end of said tube, substantially as described.

2. An automatic lubricator such as described, embodying in its organization an outer cylindrical casing *b*, adapted to contain oil, its screw-cap *a*, a conduit *d* in said casing extending nearly the entire length thereof and having an enlargement *e* at its lower end, closing said outer casing and threaded for attachment to the apparatus to be lubricated, upwardly-inclined lugs *h* near the lower inner extremity of said conduit *d*, a spherical body *f* poised thereon, a tube *c* slidably mounted in said conduit, its lower end adapted to be closed at intervals by said spherical body *f* and its upper end closed by a weighted cap *c*², said tube *c* having an aperture in its side and contiguous said cap, adapted to admit oil when the device has been turned at an angle of one hundred and eighty degrees, substantially as described.

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

AUGUST STARK.

Witnesses:

EDUARD SCHNURING,
OSCAR BOCK.