

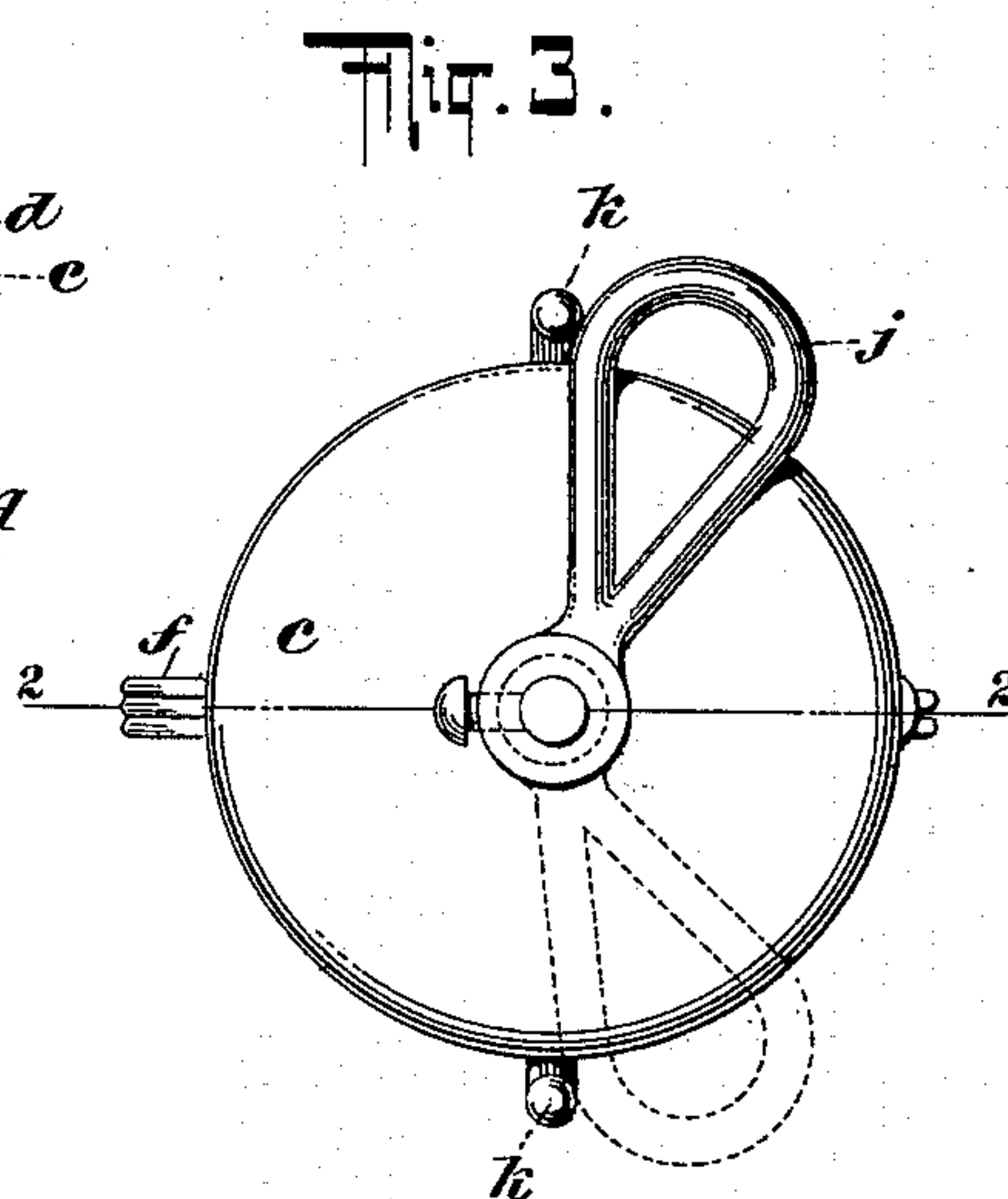
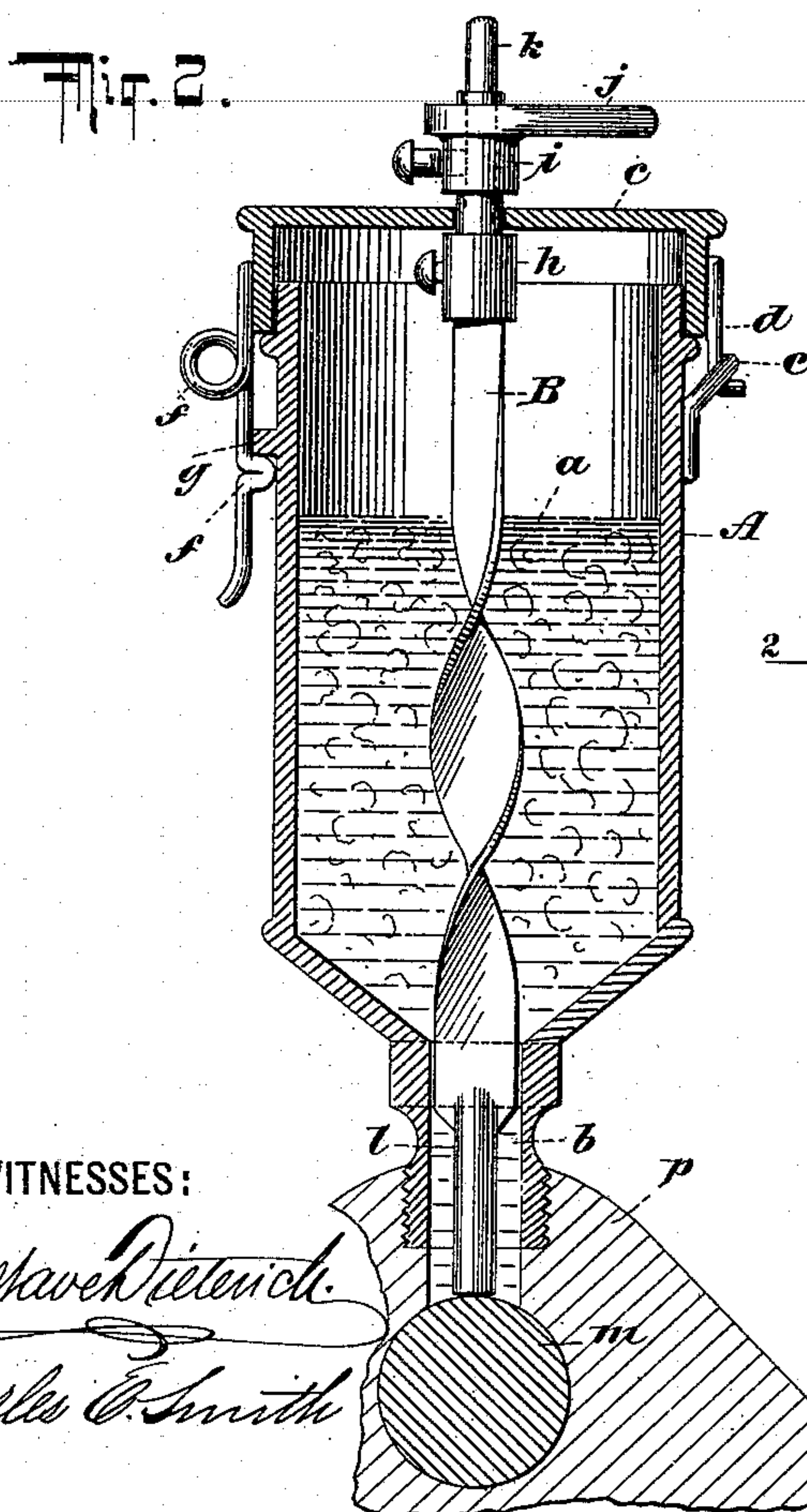
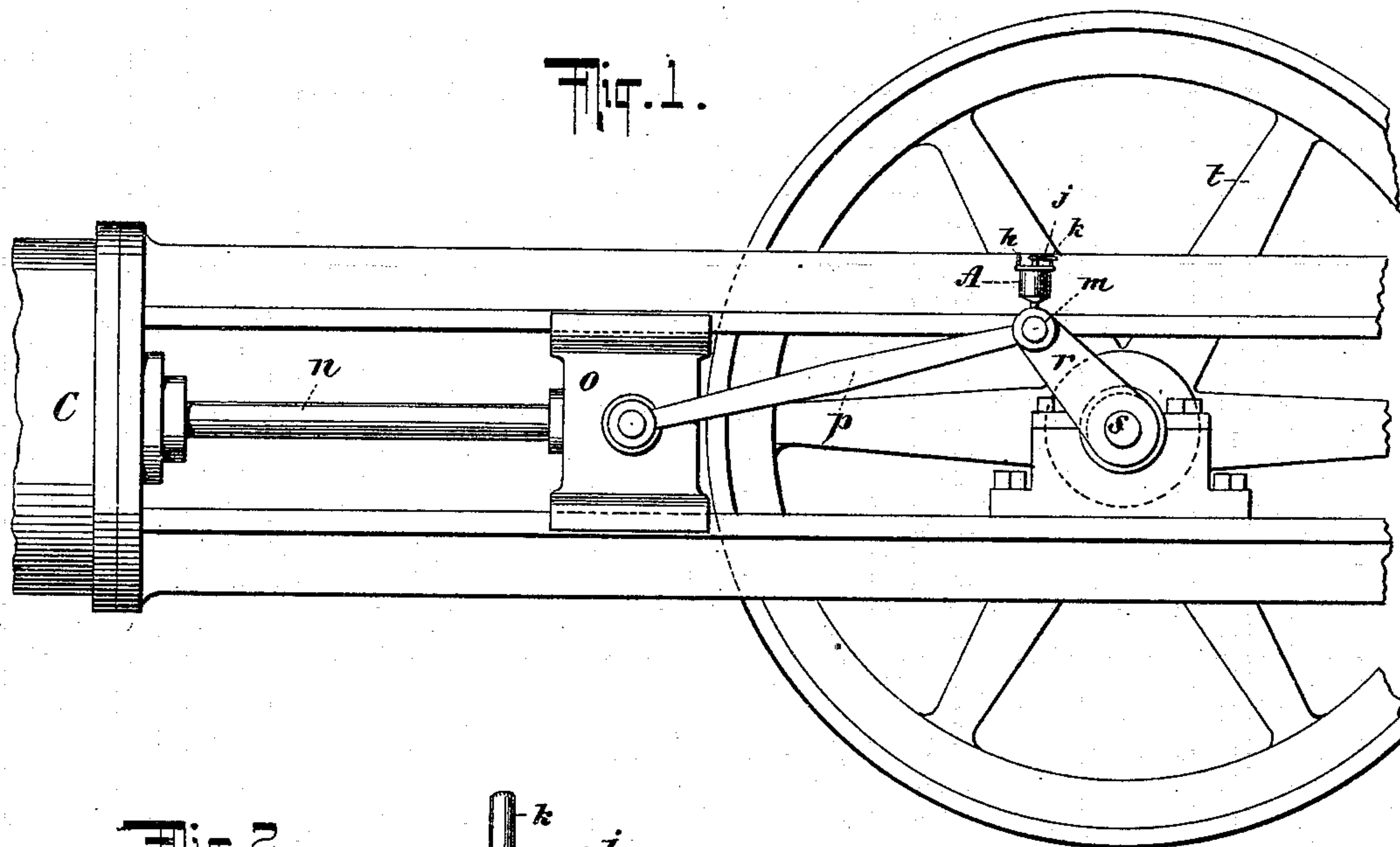
No. 612,075.

Patented Oct. 11, 1898.

R. B. WEBENDORFER.
LUBRICATING DEVICE.

(Application filed Mar. 28, 1898.)

(No Model.)



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RUDOLF B. WEBENDORFER, OF JERSEY CITY, NEW JERSEY.

LUBRICATING DEVICE.

SPECIFICATION forming part of Letters Patent No. 612,075, dated October 11, 1898.

Application filed March 28, 1898. Serial No. 675,427. (No model.)

To all whom it may concern:

Be it known that I, RUDOLF B. WEBENDORFER, a resident of Jersey City, Hudson county, State of New Jersey, have invented certain new and useful Improvements in Lubricating Devices, of which the following is a specification.

My invention relates to lubricating devices; and the object of said invention is to provide a simple, cheap, and efficient lubricating device which will automatically operate to feed a lubricant, such as hard oil or grease, to the bearing or part to be lubricated.

To these ends my invention consists in the novel arrangement and combination of parts hereinafter described and claimed.

In the accompanying drawings, Figure 1 illustrates a side view of a portion of an engine, showing the application of my automatic lubricating device. Fig. 2 is a vertical or longitudinal sectional detail view of my improved automatic lubricating device on the line 2 2 of Fig. 3. Fig. 3 is a plan view of the same.

In the drawings, A represents the container for the lubricant, which is preferably hard oil or grease, and said container may be filled to any desired height with the lubricant, as indicated at *a*. The container is provided with an outlet or discharge opening *b*, and a cap *c* may be secured upon the container in any desired manner. In the present instance I have illustrated a hook or catch *d*, which is secured to the cover and is adapted to pass under a staple *e*, secured to the body of the container. The opposite side of the cover is provided with a spring-catch *f*, which is adapted to engage under a lug or shoulder *g* upon the container. A feeding device B, which in the present instance consists of a worm, is loosely connected to the cover by means of a sleeve *h*, which is carried at the under side of said cover, and a second sleeve *i*, which is carried above the cover. These sleeves may be adjusted to provide for a slight longitudinal play of the worm B. The sleeve *i* carries a weighted arm *j*, which projects at substantially right angles to the length of the worm, as indicated in Fig. 2. Secured to each side of the container is an arm or abutment *k*, against which the arm *j* is adapted to strike

to limit the movement thereof. The lower end of the worm B is loosely seated within the discharge-opening *b* of the container and is provided with an extension *l*, which is adapted to rest upon the crank-pin *m* or other part to be lubricated. It will be observed that by this arrangement the crank-pin *m* or part to be lubricated supports the weight of the movable worm B. The object of allowing the extension *l* to rest upon the crank-pin in the manner described is to produce a slight frictional contact upon the extension, so as to slightly heat it in order that the lubricant may be more readily conveyed or fed to the part to be lubricated. The container as a whole is mounted upon a moving part—such, for instance, as the pitman-rod *p* of an engine, as indicated in Figs. 1 and 2—and the abutments *k* are mounted in line with the movement of the container, so that as the part which supports the container is reciprocated the weighted arm *j* will be vibrated between the abutments *k* to move the worm, and thereby feed the lubricant to the part to be lubricated.

In Fig. 1 I have illustrated a portion of an engine, wherein C represents the cylinder, in which operates the piston *n*, carrying a slide *o*, to which is pivoted the pitman *p*, which is connected at its opposite end to a crank-pin *m* of the crank *r* of the crank-shaft *s*, to which the fly-wheel *t* is secured. By placing the abutments *k* in the manner described the weighted arm is prevented from coming in line with the direction of movement of the container, so as to prevent the arm from attaining a dead-center position, and a movement of the arm at each reciprocation of the part is assured.

It is obvious that the lubricating device may be mounted upon any reciprocating portion of an engine or other device to be lubricated and that the lubricant will be constantly and automatically fed during the operation of the engine or device to which the lubricating device is attached.

While I have shown and described with some particularity one form of device embodying my invention, I would have it understood that I do not desire to limit myself to the specific means shown and described,

as I am aware that various changes may be made without departing from the spirit of my invention.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a lubricating device, the combination of a container for the lubricant, a worm turning freely in its bearings for forcing the lubricant from said container and an arm connected to said worm for turning it said arm being oscillated by the movement of the machine element upon which the container is mounted.

2. In a lubricating device, the combination of a lubricant-container, having a discharge-opening therein, a worm operating within said container and extending to the discharge-opening thereof and means for automatically turning said worm.

3. In a lubricating device, the combination of a lubricant-container, having a discharge-opening therein, a worm operating within said container and extending to the discharge-opening thereof, a weighted arm connected to said worm and located at the outside of the container and means for automatically vibrating said arm.

4. In a lubricating device, the combination of a lubricant-container, having a discharge-opening therein, a worm operating within said container and extending to the discharge-opening thereof, a weighted arm connected to said worm and located at the outside of the container, stops for limiting the movement of said weighted arm and means for automatically vibrating said arm.

5. In a lubricating device, the combination of a lubricant-container, having a discharge-opening therein, a worm operating within said container and extending to the discharge-opening thereof and having an extension which is adapted to project through said opening and bear upon the part to be lubricated and means for turning said worm.

6. In a lubricating device, the combination of a lubricant-container, having a discharge-opening therein, a worm operating within said container and extending to the discharge-opening thereof and having an extension which is adapted to project through said opening and bear upon the part to be lubricated, and a weighted arm connected to and adapted to turn said worm, the said weighted arm being located outside of the container.

7. In an automatically-operated lubricating device, the combination of a lubricant-container having a discharge-opening therein, a feeding-worm for forcing the lubricant from said container through the discharge-opening, a weighted arm connected to said worm, the feed movement of said arm being controlled by the movement of the container and means for moving said container.

8. In an automatically-operated lubricating device, the combination of a lubricant-container having a discharge-opening therein, a feeding-worm for forcing the lubricant from said container through said discharge-opening, a weighted arm connected to said worm at the outside of the container, the feed movement of said arm being controlled by the movement of the container, means for limiting the movement of said arm and means for moving said container.

9. In an automatic lubricating device, the combination of a movable lubricant-container, having a discharge-opening therein and a removable cover therefor, a freely-movable feed-worm operating in said container, said worm being loosely carried by the cover of the container and adapted to seat itself in the discharge-opening thereof, a weighted arm connected to said worm at the outside of the container and stops for limiting the movement of said arm.

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