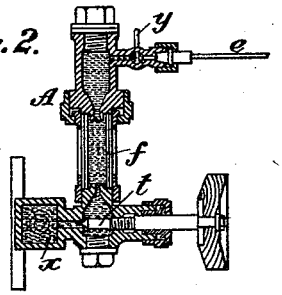
(No Model.)

J. JÖRGENSEN.

LUBRICATOR.

No. 454,999. Patented June 30, 1891.

Fig. 2.



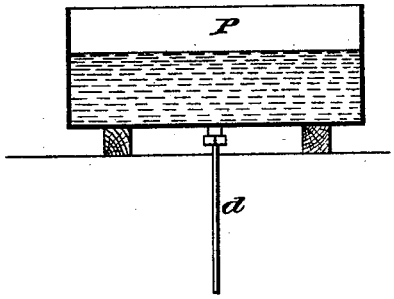
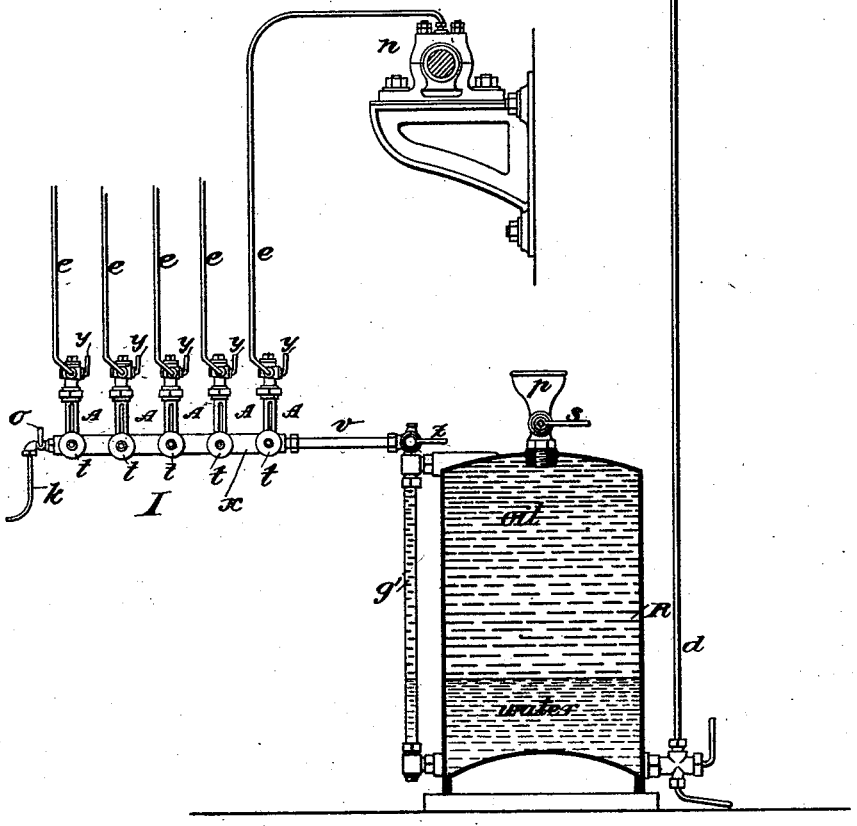


Fig. 1.



Witnesses:-
D. H. Hayward
Fred'k Haynes

Inventor:
Jorgen Jorgensen
by his attorneys
Thomas Howard

UNITED STATES PATENT OFFICE.

JÖRGEN JÖRGENSEN, OF HAMBURG, GERMANY.

LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 454,999, dated June 30, 1891.

Application filed May 29, 1890. Serial No. 353,547. (No model.)

To all whom it may concern:

Be it known that I, JÖRGEN JÖRGENSEN, a subject of the Emperor of Germany, and a resident of Hamburg, in the German Empire, have invented a new and useful Improvement in or Relating to the Lubrication of Shafting and other Machinery, of which the following is a specification.

The object of this invention is to provide the shafting or other machinery of a factory or of a steam-vessel with the necessary lubricators, all collected for convenience of control and operation in one place.

The lubricators may be at some distance from the journals or machine parts to be lubricated and suitably arranged in sets at places which can be reached easily, so that one can control their correct and regular working in a proper manner.

This invention is represented in the accompanying drawings, in which—

Figure 1 represents an elevation, partly in section, of lubricating apparatus embodying my invention, and Fig. 2 shows a vertical section of one of the lubricators employed with the apparatus.

Similar letters of reference designate corresponding parts in both the figures.

The lubricators A, each of which has a tube *e* connecting it with its respective journal *n* or machine part to be lubricated, are arranged in this instance in a set or group I. The lubricant is supplied to the lubricators A from a common tightly-closed central oil-tank R, the same being a pressure-tank, which can be filled with oil at the supply-funnel *p*. After said tank is filled the supply-cock *s* is closed. The tank is suitably provided with a gage-glass *g'* to show the quantity of oil therein.

The working of the lubricators takes place by introducing water under pressure into the tank R. This water is taken from an elevated cistern P, and, passing to the bottom of the tank R through the pipe *d*, forces the oil out of the tank R as soon as the oil can pass to the lubricators A by opening the cock *z*. The cistern P should be of such a size that the pressure upon the lubricant in the tank R may be considered in practice as constant.

The lubricators are represented in Fig. 2 as each provided with a glass tube *f*, containing water, so that drops of oil passing through them may be seen to facilitate the control of the supply. These lubricators may be of known construction as regards their main features. The oil passes from the tank R through the pipe *v* into a chamber *x*, from which the whole set or group of lubricators is supplied. Each lubricator may be brought into communication with the oil-chamber *x* by a valve *t*, and by this valve the working of the apparatus A may be regulated.

An upper cock *y* is provided on each lubricator A to shut off the lubricating-tubes *e* from their respective lubricators A when the apparatus is to be placed out of working.

To enable the channels and all the lubricating-tubes of a set of lubricators to be cleaned, the chamber *x* may be provided with a cock *o* and a connecting-pipe *k*, by which steam can be blown through the apparatus.

Having now particularly described and ascertained the nature of my said invention, what I claim is—

The combination, in an apparatus for lubrication of several shafts or separate parts of machinery, of a collected set or group of lubricators A A, an oil-chamber *x*, common to all of said lubricators and upon and in communication with which they are severally arranged for the reception of oil therefrom, a closed pressure tank or reservoir R for supplying oil to said chamber *x*, a water-pressure cistern P in communication with the lower part of said tank or reservoir, separate pipes *e e* from the lubricators to the parts to be lubricated, regulating-valves *t t* between the said chamber and lubricators, and stop-cocks *y y* between said lubricators and said pipes *e e*, all substantially as herein described.

JÖRGEN JÖRGENSEN.

Witnesses:
F. ENGEL,
H. WITT.