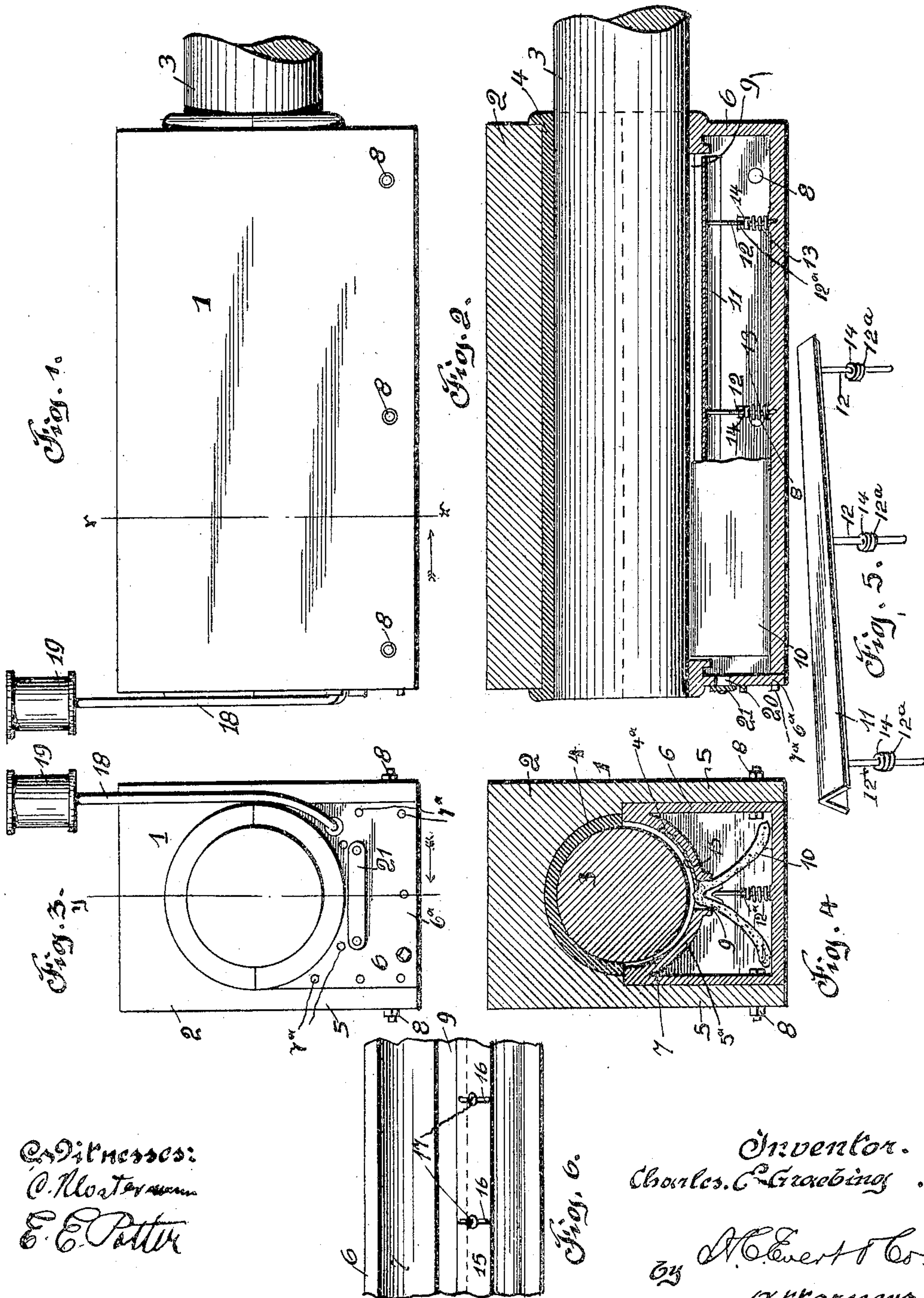


No. 818,160.

PATENTED APR. 17, 1906.

C. E. GRAEBING.
LUBRICATOR.

APPLICATION FILED SEPT. 25, 1905.



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UNITED STATES PATENT OFFICE.

CHARLES EDWARD GRAEBING, OF FREEDOM, PENNSYLVANIA.

LUBRICATOR.

No. 818,160.

Specification of Letters Patent.

Patented April 17, 1906.

Application filed September 25, 1905. Serial No. 280,048.

To all whom it may concern:

Be it known that I, CHARLES EDWARD GRAEBING, a citizen of the United States of America, residing at Freedom, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Lubricators, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in self-lubricating journal-boxes.

The invention belongs to that type in which the lubricant is contained in a receptacle formed in the journal-box and is fed to a rotary shaft by capillary attraction.

The invention particularly aims to provide novel means for maintaining the lubricant-feeder in contact with the revolving shaft.

The detail construction will appear in the course of the following description, in which reference is had to the accompanying drawings, forming a part of this specification, like numerals designating like parts throughout the several views, in which—

Figure 1 is a side elevation. Fig. 2 is a central longitudinal section. Fig. 3 is an end elevation. Fig. 4 is a transverse section on line X X of Fig. 1 looking in the direction indicated by the arrow. Fig. 5 is a perspective view of the device employed for maintaining the lubricant-feeder in contact with the shaft. Fig. 6 is a fragmentary top plan view of the lubricant-receptacle.

Referring specifically to the accompanying drawings, the journal-box 1 is formed with a thick upper portion 2, the underneath surface of which is cut away in a semicircular form to receive a shaft 3. Interposed between the shaft 3 and the enlarged portion 2 of the journal-box is a brass 4, which constitutes the upper bearing for the shaft 3. The journal-box 1 is formed with depending side walls 5, between which are secured a lubricant-receptacle 6, which is formed with a concaved upper surface 7 of semicircular contour to receive the shaft 3 and which constitutes the lower bearing therefor, cooperating in this function with the brass 4. The upper concave surface is provided with a plurality of longitudinally-disposed grooves 4^a, in which is mounted a lubricant 5^a.

The lubricant-receptacle 6 is of course hollow throughout and is secured to the journal-box 1 by bolts 8, passing through the side walls 5 thereof and the side walls of the re-

ceptacle 6. The receptacle 6 is formed with an open end which is closed by a door 6^a, that may be secured to the lubricant-receptacle by bolts 7^a or the like fastening means.

The longitudinal slot 9 is formed centrally in the receptacle 6 along its upper face and affords a passage-way through which projects the lubricant-feeder embodying a sheet of coarse fabric 10, of conventional construction, which is employed in this use, which is suspended or supported at a central point upon a thin strip of light metal 11, of inverted-V shape, extending the entire length of this slot 9.

The supporting-strip 11 is resiliently mounted upon the floor of a lubricant-receptacle 6, said strip being formed with depending vertical legs 12, which have concentric relations to expansive spiral spring 13, sleeved thereupon, and having their one end bearing against a flange 14, retained upon the legs 12 by nuts 12^a and having their other end bearing against the floor of the receptacle 6.

For the purpose of regulating the width of the slot 9 I have provided an arch-shaped plate 15, slidably mounted in a curved recess in the concave top 7 of the receptacle 6. A plate 15 is formed with transverse slots 16, arranged at regular intervals along the length thereof, through which project set-screws 17, extending into the body of the receptacle 6 and which are designed to lock said plate in any position in which it may be set in relation to said slot 9. The oil is admitted into the end of the receptacle 6 through a pipe 18 in communication therewith and which leads from a tank 19, disposed thereabove and in which a supply of lubricating material is stored. For the purpose of affording an overflow-vent I have formed in the end of receptacle 6 an opening 20, which is closed by a removable strap 21.

In practical use the oil is fed from the tank 19 into the receptacle 6 and by capillary attraction through the sheet of fabric 10 to the revolving shaft 3, said sheet being held against said shaft by means of the resilient supporting-strip 11 under pressure of the springs 13.

Having fully described my invention, I claim—

1. A lubricating journal-box, embodying an enlarged body portion formed with a cut-away surface, a brass mounted in said body portion, a lubricant-chamber, secured in said

journal-box, and coacting with said brass to form a bearing for a shaft extending there-
through, said chamber being formed on its
face adjacent said shaft, with a longitudinal
5 slot, a sheet of fabric adapted to be held be-
tween said slot and against said shaft, expan-
sive resilient means for holding said fabric in
said position, and a lubricant-storage tank,
in communication with said lubricant-recep-
10 tacle.

2. A journal-box, embodying a body por-
tion formed with a concave upper wall, and
depending side walls, a brass mounted in said
upper wall, a lubricant-container, formed with
15 a concave upper wall and held between said
depending side walls, said container coacting
with said brass to provide bearings for a
shaft extending therethrough, said container
being formed along its entire length with a

longitudinal slot, a sheet of fabric extending 20
through said slot and being held against said
shaft, an inverted-V-shaped metallic sup-
porting-plate, resiliently supported in said
lubricant-chamber, and adapted to hold said
sheet of fabric against said shaft, an adjust- 25
able metallic plate, mounted upon the upper
face of said lubricant-chamber, for regulating
the width of the slot therein, means for ad-
justably locking said plate in any set posi-
tion, and the storage-tank in communica- 30
tion at all times with said lubricant-chamber.

In testimony whereof I affix my signature
in the presence of two witnesses.

CHARLES EDWARD GRAEBING.

Witnesses:

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