(No Model.)

T. Y. WINTER.

DEVICE FOR OILING SHAFT BEARINGS.

No. 299,096. Patented May 20, 1884.

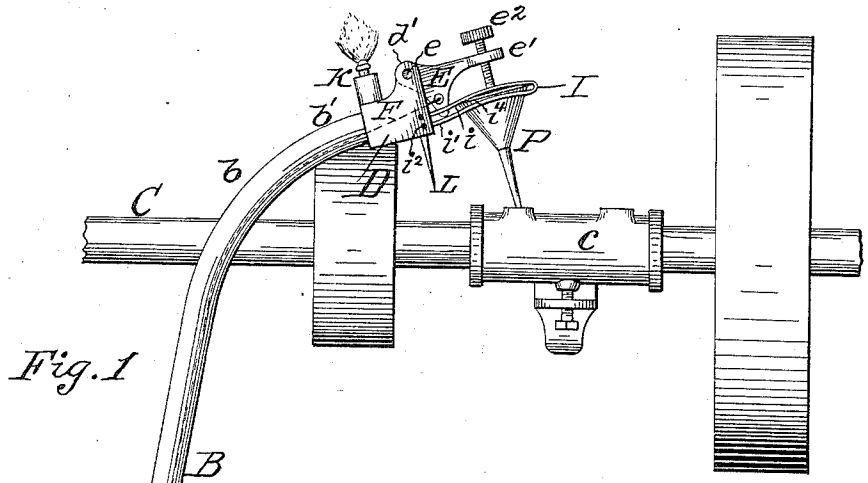


Fig. 1

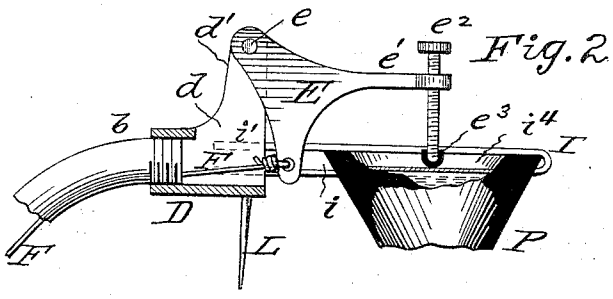


Fig. 2

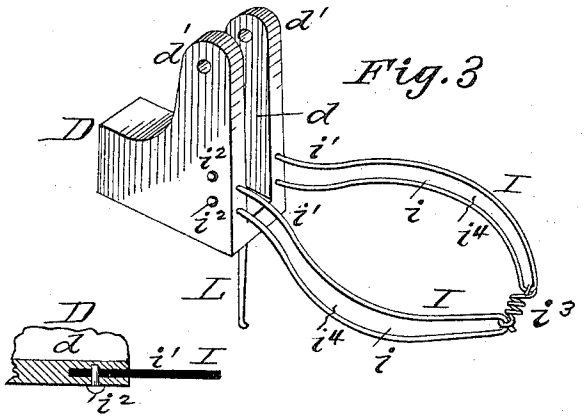


Fig. 3

Fig. 4

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UNITED STATES PATENT OFFICE.

THOMAS Y. WINTER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO ALFRED WHITNEY, OF CAMDEN, NEW JERSEY.

DEVICE FOR OILING SHAFT-BEARINGS.

SPECIFICATION forming part of Letters Patent No. 299,096, dated May 20, 1884.

Application filed February 28, 1884. (No model.)

To all whom it may concern:

Be it known that I, THOMAS Y. WINTER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Oiling Shaft-Bearings, of which the following is a specification, reference being had therein to the accompanying drawings, wherein—

Figure 1 is a broken sectional view, partly in elevation, of my improved oiling device and shaft with bearing or box, showing the manner of oiling the latter. Fig. 2 is a broken detail section. Fig. 3 is a detail perspective, and Fig. 4 is a detail section.

My invention has for its object to provide a manual oiling device for the boxes or bearings of overhanging or other shafts, whereby said boxes are more quickly and effectively oiled or supplied with a lubricant while the shafts are in motion or otherwise, and all danger of injury from the revolving shafts or gear thereon is avoided.

My invention accordingly consists of the combination, construction, and arrangement of parts comprising a portable device holding a supply of oil, or carrying an oil-can of the kind technically known as a "squirt-can," and means for compressing the bottom of the latter to inject the oil in the shaft-bearings.

My invention further consists in providing the oiling device with a lamp and a picker or finger for cleaning out the oil-holes of the shaft boxes or bearings.

In the drawings, A represents my improved oiling device, which is composed of a suitable length of pipe, B, made of metal or other material, bent at b, as shown, or otherwise configured to admit of passing its end b' above an overhanging shaft, C. To end b' is screwed or coupled a hollow box, D, having slot d and lugs d'. In the latter at e is pivoted a bell-crank lever, E, one arm, e', of which is provided with a screw, stud, or adjustable finger, e^2, and the other arm has an opening or is otherwise formed for attachment of one end of a wire, F, which is inclosed in or passes through the tube B. To the lower end, b^2, of the latter is screwed a hollow box, G, having slot g, ears g', and handle g^2. Between and on the ears or lugs g' at h is pivoted a bell-crank lever, H, one of the arms of which is connected, as shown, to the remaining end of wire F, whereby both levers E and H are connected together, so that when one is moved the other follows. The arm h' of lever H is outside of box G, and forms a handle for moving lever H, wire F, and lever E to vibrate its adjustable screw e^2, for a purpose to be hereinafter described.

The sides or walls of box D are provided with spring-fingers i i, each of which is shown made of a single piece of wire doubled upon itself to form a slot, i^4, and having ends i', which enter openings in the sides of box D, and are fastened therein by means of pins, screws, or studs i^2, which pass through lateral openings in said box and ends, as more plainly shown in Fig. 4. These spring-fingers are semicircular in outline, or otherwise suitably configured to hold an oil-can, P, of the form shown, or which is known as a "squirt-can." It is in an inverted position, with the center of its bottom in line with the end of the screw e^2. Said can is placed between the spring-fingers i in such manner that its chine enters the slots i^4, as illustrated in Fig. 1, so that the frictional contact of said fingers securely holds the can in position and prevents it being displaced.

The operation is obvious: To oil the shaft-bearings the spout of the oil-can P is inserted in the oil-hole of the bearing, and the handle or arm h of lever H is successively depressed to vibrate screw e^2, which moves the bottom of the can P to cause it to inject oil therefrom to the box or bearing. This operation is continued until the requisite amount of oil is supplied to the bearing.

To enable the operator to more readily fill boxes that are located in dark corners of a room or building, I provide the oiling device with a lamp, K, which may be secured to coupling or box D in any suitable manner, as shown in Fig. 1. Said box is also furnished with a fixed picker or stud, L, for removing the sediment, dirt, or other foreign matter from the oil-holes of the boxes before filling them with a lubricant.

I do not limit myself to the precise construc-

tion and arrangement of parts comprising the oiling device, as it is obvious that they may be variously arranged and operated to effect the ejection of the oil from the can. Neither do I confine myself to the form of the can shown, as any other suitably-formed can may be used—for instance, a can, having a self-closing valve, which is opened by the depression of adjustable screw e^2, to permit the oil to flow out of the can to the box or bearing. Again, instead of using a tube, B, for inclosing the wire F, a solid rod may be employed and the wire arranged to follow the course of said rod by passing it through eyes formed on or secured to the latter.

A cord or other flexible connection may be substituted for wire F, or a rigid link or other suitable connection may be used.

If desired, the spring-fingers *i i* may be connected at their outer ends by a spiral spring or other elastic device, to insure retaining of the oil-can in place. Said fingers form a clutch or clasp for the can, which is readily inserted therein or removed therefrom. If desired, however, any other suitable form of clutching device may be substituted for that shown and described.

To prevent wear on the bottom of the oil-can by the impingement of screw e^2, its lower end is furnished with a pad or cushion, e^3, as shown in Fig. 2.

What I claim is—

1. An oiling device comprising a handle or bracket, a clutch, an oil can or receptacle, and means for ejecting oil from said can, substantially as shown and described.

2. An oiling device comprising a handle or bracket, a spring-clutch, an oil can or receptacle, means for ejecting oil from said can, and a picker for cleansing the oil-holes of a shaft box or bearing, substantially as shown and described.

3. An oiling device substantially as herein shown and described, having a lamp, K, and a picker, L, as and for the purpose set forth.

4. An oiling device comprising a tubular handle or bracket with bell-crank levers at each end, one of which is provided with an adjustable screw, means for vibrating said screw, and a clutch with removable oil-can, substantially as shown and described.

5. An oiling device comprising a tubular column, B, having hollow slotted end boxes, D G, pivoted levers E H, connection F, adjustable screw e^2, clutch I, and can P, substantially as shown and described.

6. An oiling device comprising a tube, B, boxes G D, pivoted levers H and E, having, respectively, handle *h* and adjustable stud or screw e^2, connection F, and clutch I, with can P, substantially as shown and described.

7. In an oiling device as shown and described, the adjustable vibrating finger e^2, having pad e^3, as and for the purpose set forth.

8. In combination with stem B, the box D, having lever E, with screw or finger e^2, clutch I, can P, and box G, having lever H, with connection F, substantially as shown and described.

9. In an oiling device as shown and described, the clutch I, composed of slotted spring-fingers *i i*, substantially as and for the purpose set forth.

10. In an oiling device as shown and described, the spring fingers or arms *i i*, having elastic connection i^3, as and for the purpose set forth.

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

THOMAS Y. WINTER.

Witnesses:
S. J. VAN STAVOREN,
CHAS. F. VAN HORN.