No. 828,896. PATENTED AUG. 21, 1906.

J. MUIR.

OIL DRIP CUP.

APPLICATION FILED MAR. 27, 1906.

Fig. 1.

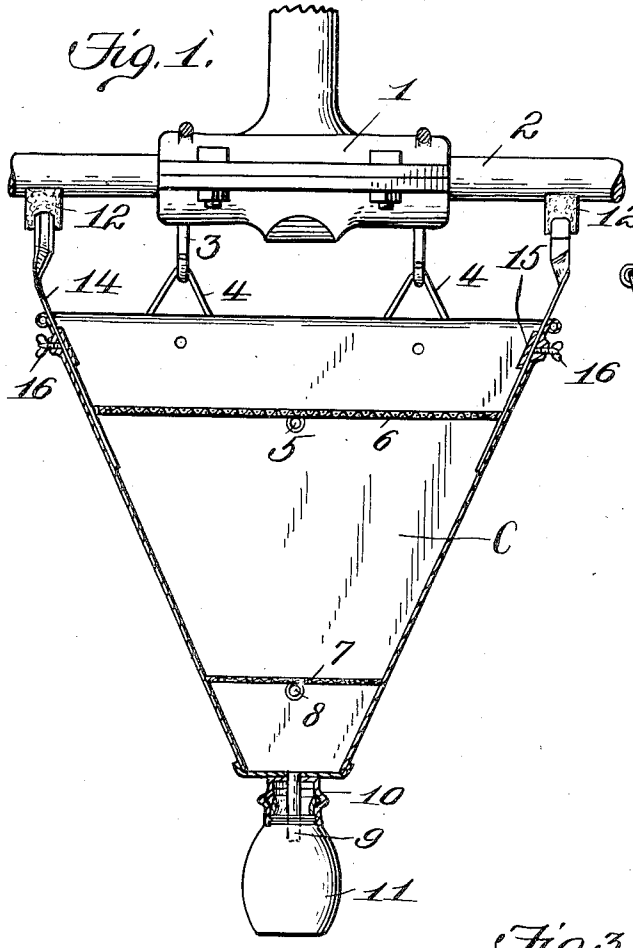


Fig. 2

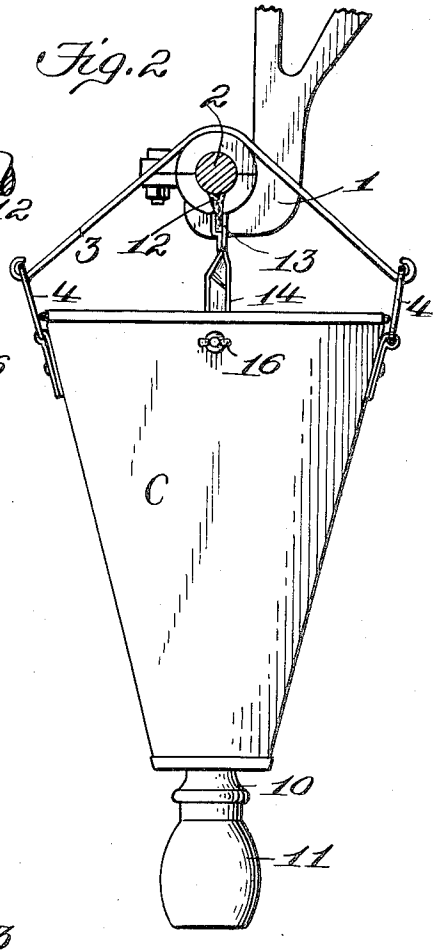
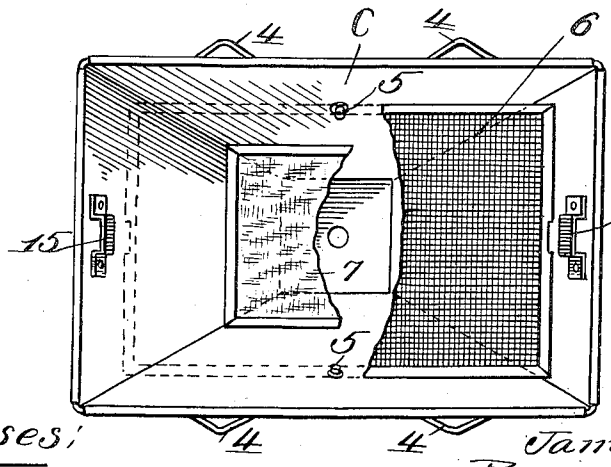


Fig. 3



Witnesses:
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UNITED STATES PATENT OFFICE.

JAMES MUIR, OF NORTH ADAMS, MASSACHUSETTS.

OIL DRIP-CUP.

No. 828,896. Specification of Letters Patent. Patented Aug. 21, 1906.

Application filed March 27, 1906. Serial No. 308,209.

To all whom it may concern:

Be it known that I, JAMES MUIR, a citizen of the United States, residing at North Adams, in the county of Berkshire and State of Massachusetts, have invented new and useful Improvements in Oil Drip-Cups, of which the following is a specification.

My invention relates to improvements in oil drip-cups intended to catch the drip of oil from bearings of shafting and the like, and has for its object to provide a device in which is combined means for filtering the oil to free it of dust or other foreign matter and make it fit for reuse and means for collecting the filtered oil.

The invention has also for its object to provide the device with means to prevent oil escaping from the bearing passing along the shafting and to collect such oil and direct it into the oil-cup.

With the foregoing objects in view the invention consists in an oil-cup constructed and having the features hereinafter described and illustrated.

That which is regarded as new will be set forth in the accompanying clauses of claim.

In the drawings illustrating that which I regard as the best known embodiment of my invention, Figure 1 is a vertical sectional view of the invention shown in one convenient manner of use and attachment; Fig. 2, an end elevation; Fig. 3, a top plan, parts being broken away.

In illustrating my invention in one manner of its use the reference-numeral 1 designates conventionally a shaft-bearing, and 2 a shafting. Suspended from the bearing and disposed beneath the same is the oil drip-cup or catcher C. The means of suspension shown consists of loops 4 and hangers 3, so that the cup or catcher may with facility be attached and detached. The catcher C comprises a cup preferably rectangular and approximating an inverted frustum of a hollow cone in form, the wide mouth of which is uppermost, covering the desired area to receive all the oil dripping from the bearing. Intermediate the mouth and the bottom of the cup are supports shown as consisting of studs 5 to support a filter 6, which rests upon said supports, so that it may be readily introduced into and removed from the cup when desired for the purposes of cleaning or otherwise. Preferably, also, near the bottom of the cup is arranged a fine-mesh wire screen or filter 7, which may be supported upon studs 8 in a manner similar to that described with respect to filter 6.

As shown, the bottom of the cup is provided with a passage 9, leading through a coupling or socket 10, fitted with means such as screw-threads for connection of a transparent receptacle, such as a glass oil-cup 11, provided with complementary means whereby it may be removably connected to the coupling. By the provision of this transparent oil-receptacle and which may and preferably does consist of an oil-cup of a form adapted to be utilized for automatically supplying oil to the bearing the attendant can readily see when the filtered oil-drippings have accumulated in the receptacle sufficiently to require the removal of the latter and the substitution of a new receptacle therefor. The receptacle when filled and removed will contain filtered oil suitable for reuse and may be combined with an automatic lubricator of any known type to lubricate a bearing or other part of machinery desired.

Combined with the oil-drip catcher are means for preventing oil working out from the bearing passing along the shaft, an occurrence which is found objectionable, and by the utilization of such means the shaft is kept clean and free from the oil. This means, one of which is shown in the drawings, consists of wipers 12, which work against the shaft adjacent the bearing and collect any oil which may pass from the bearing and direct it into the oil-catcher, where it may be filtered and collected, as has been described. The wipers shown may be of any suitable material, such as felt pieces, and are preferably detachably held in clips 13 at the ends of standards 14, which are fitted in loops 15 in order that they may be adjusted accurately to work against the shafting for the purpose described, and may be held in adjusted position by means of a suitable keeper, such as a screw 16. One of these wipers may be employed where the local conditions require but one, or a plural number thereof may be used when desired.

Having thus described my invention, what I claim is—

1. A drip-cup consisting of a vessel having a relatively wide open mouth, walls converging toward the bottom, means having communication with the cup and fitted to receive an oil-collector, means for connecting said drip-cup for use, and a filter removably supported within the interior of said cup.

2. A drip-cup consisting of a vessel having a relatively wide open mouth, walls converging toward the bottom, means having communication with the cup and fitted to receive an oil-collector, means for detachably connecting said drip-cup for use, and a filter removably supported within the interior of said cup.

3. A drip-cup consisting of a vessel provided with means whereby it may be readily suspended in position beneath a shaft-bearing, and provided with wipers adjustably combined therewith and adapted to engage the shafting, and means for maintaining the adjusted position of said wipers.

4. A drip-cup consisting of a vessel provided with means whereby it may be readily suspended beneath the shafting, a filter removably supported within the interior of said vessel, and wipers combined with said vessel for the purpose described.

5. A drip-cup consisting of a vessel provided with means whereby it may be readily suspended beneath the shafting, a filter removably supported within the interior of said vessel, means having communication with the vessel and fitted to receive an oil-collector, and wipers combined with said vessel for the purpose described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JAMES MUIR.

Witnesses:
HUGH P. DRYSDALE,
JERRY WALL.