To all whom it may concern:

Be it known that I, KARL GAMMEL, a citizen of the United States, and resident of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Oil Catch-Basins, of which the following is a specification.

My invention relates in general to a liquid trap and particularly relates to an oil catch basin adapted to be positioned beneath machines to receive the lubricating oil dripping therefrom. In devices of this character it is usual to suspend an open top pan beneath the line of oil drip from the machine but these devices are open to the air and the oil therein rapidly becomes charged with dirt and dust which prevents its re-use. Should these pans be struck accidentally as when shifting the belts on the shaft pulleys the oil is spilled and even the vibration of the machinery sets up a swinging of the pan which causes the oil to surge over the edge.

One of the objects of my invention is to provide a simple form of dust-proof receptacle designed to direct the oil drip into the same and to prevent splashing therefrom when subjected to the vibrating action of the machinery or to accidental knocks.

Various other objects and advantages of the invention will be in part obvious from an inspection of the accompanying drawings and in part will be more fully set forth in the following particular description of one form of mechanism embodying my invention, and the invention also consists in certain new and novel features of construction and combination of parts hereinafter set forth and claimed.

In the drawings the figure is a vertical section view through a preferred embodiment of my invention shown attached in position on a shaft hanger.

There is illustrated a receptacle 1 of any suitable configuration in one view shown to be somewhat semi-spherical as this design may be readily stamped to shape and possesses an attractive appearance. The receptacle includes an inclosing side wall 2 the upper edge of which is inwardly flanged, as shown at 3, to overlap a cover 4 fitting within the side wall. Where the side wall is designed to converge toward the bottom of the receptacle the edge of the cover may fit within the angle formed by the flange and the side wall thus eliminating any necessity for soldering or otherwise fastening these parts together. The cover, or at least the upper surface thereof, is concaved and is provided with an opening 5 at its lowest point to drain the oil falling thereon into the receptacle. The opening preferably has a cross-section of the least possible area that will freely admit the oil so that the receptacle will be closed as far as possible. The cover is provided with an outlet 6 adjacent its outer raised edge to drain the oil from the receptacle when desired. This outlet may be formed by punching through the cover to press a conical throat 7 for the stopper 8 which normally closes the same.

A supporting hanger 9 extends through the opening 5 and has a hook 10 at the upper end and a head 11 at the end within the receptacle. A channel plate 12 is disposed between the head of the supporting member and the underside of the cover about the opening, and extends beyond the edges of the opening. This channel plate is preferably curved downward from the opening lengthwise of the channel to direct the oil falling thereon into the receptacle. The central portion of the upper edge of the flanges forming the channel member may be shaped to fit the underside of the cover thereby to provide an extensive bearing between the supported plate and the receptacle.

The cover may be arranged to be sprung into and from its position beneath the flange of the side walls whereby the parts may be readily demounted for cleaning and for inserting the supporting member in place. The relatively large sump formed by the concaved cover intercepts the fall of oil over a large area and any oil falling thereon will splash, if at all, toward the center of the cover from which position it will be drained into the receptacle. The cover acts as a baffle to prevent splashing of the oil from the receptacle even when swinging or knocked and the channel plate acts to prevent the oil from splashing out through the inlet opening.

As the receptacle is free to swing relative to the supporting hanger 8, the weight of the oil therein will tend to maintain the receptacle level with the oil receiving cover 4 always facing the line of oil drip even though the machinery be vibrating or rocking.

A device of this character is simple in construction, can be readily stamped to shape from sheet metal and does not require any refined interfitting of parts nor the use of
complicated fastening means. It may be securely suspended in position with the use of but one hook and even this hook supports the device without the necessity of providing any special attachment therefor to the receptacle.

While I have shown and described, and have pointed out in the annexed claims, certain novel features of my invention, it will be understood that various omissions, substitutions and changes in the form and details of the device illustrated and in its operation may be made by those skilled in the art without departing from the spirit of the invention.

Having thus described my invention, I claim:

1. An oil catch basin including a receptacle provided with a cover having a concave upper edge receiving surface and having an inlet opening for the oil at the lowest point of said surface, a supporting member positioned in said inlet opening and extending above the cover to support the basin in position, a channel member disposed between the inner end of said supporting member and the underside of said cover about said inlet opening, said channel member facing the opening and adapted to receive the oil flowing therefrom and to direct the same into the receptacle, said channel member constituting a baffle to prevent the oil splashing from the receptacle through said opening.

2. An oil catch basin comprising a receptacle having a cover provided with means for directing the oil falling directly thereon into the receptacle at the lowest point of the cover whereby said cover is entirely drained, said receptacle having a normally closed outlet adjacent the top thereof for pouring the oil therefrom and means passing through said cover centrally thereof for suspending said basin in place.

3. An oil catch basin adapted to be supported below machine parts to catch the oil drip therefrom and comprising a substantially closed receptacle having a concave cover fitting within the outlines of the receptacle and adapted to prevent the oil from splashing therefrom, said cover being provided with an opening into the interior of the receptacle and having the entire upper face thereof sloping toward said opening to direct the oil falling thereon directly into the receptacle and means carried by the receptacle to support the same in place.

4. An oil catch basin adapted to be positioned below the oil drip from machinery and comprising a receptacle having a cover provided with means for directing the oil falling thereon into the receptacle, a hanger supporting the same centrally thereof, said receptacle being free to move relatively thereto held by gravity substantially in fixed position whereby said receptacle will tend to maintain a level position with the cover facing the line of oil drip when the support for the hanger is vibrating.

5. An oil catch basin adapted to be supported beneath machine parts to catch the oil drip therefrom and comprising a receptacle for receiving the oil and a hanger therefor, said hanger having means at its upper end for supporting the same in place and provided with a lateral extension for underlapping a portion of the receptacle to support the same, said receptacle being freely movable relative to said hanger.

6. An oil catch basin comprising a receptacle and a hanger extending centrally therefrom and pivotally connected thereto for relative universal movement.

Signed at Cleveland in the county of Cuyahoga and State of Ohio this 5th day of August A. D., 1914.

KARL GAMMEL

Witnesses:

Geo W. Dore,
E. M. Holmgren.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."