(No Model.)

C. W. HART.

OIL CAN.

No. 470,837. Patented Mar. 15, 1892.

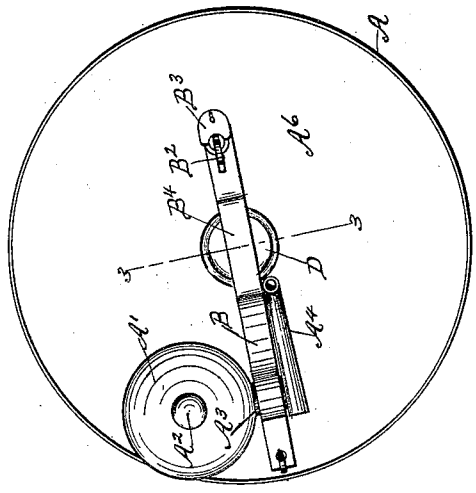

Fig. 2.

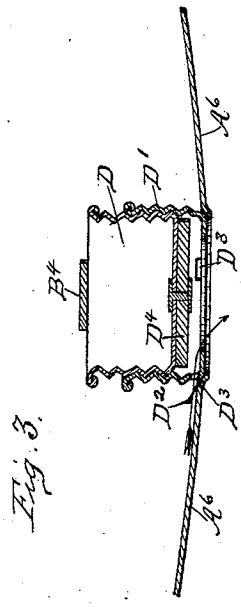

Fig. 3.

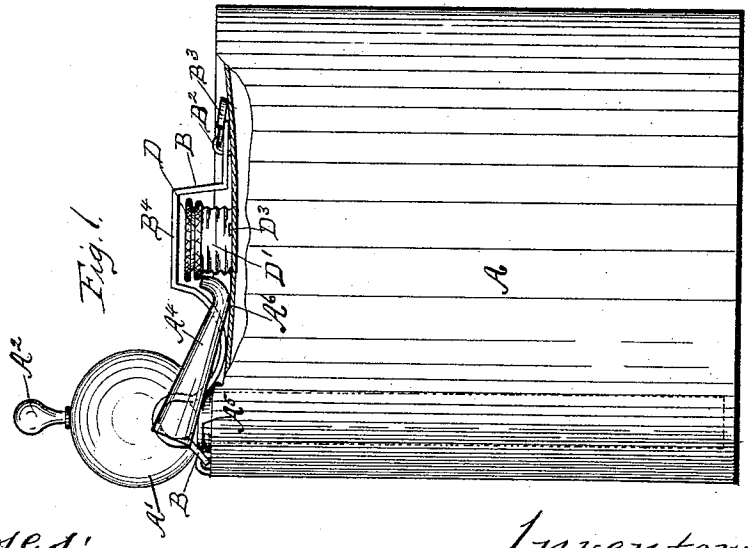

Fig. 1.

Witnesses:
Frank C. Curtis
John T. Booth

Inventor:
Charles W. Hart
by Geo. A. Wooster
atty.

UNITED STATES PATENT OFFICE.

CHARLES W. HART, OF TROY, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS, TO HARRIET A. HART, OF SAME PLACE.

OIL-CAN.

SPECIFICATION forming part of Letters Patent No. 470,837, dated March 15, 1892.

Application filed May 8, 1891. Serial No. 392,022. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. HART, a citizen of the United States, residing at Troy, county of Rensselaer, and State of New York, have invented certain new and useful Improvements in Oil-Cans, of which the following is a specification.

My invention relates to such improvements; and it consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings and the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in the several figures therein.

Figure 1 of the drawings is a view in side elevation of an oil-can embodying my invention, a portion of the can being broken away to better show the novel features. Fig. 2 is a top plan view of same. Fig. 3 is a vertical cross-section of the locking-strap and drip-valve and a portion of the can-top, taken on the broken line 3 3 in Fig. 2, on an enlarged scale.

My invention relates especially to improvements in the oil-can shown and described in United States Letters Patent No. 445,061, granted to M. E. Hart, as assignee of Mathias Jolly, dated January 20, 1891, to which patent reference may be had for a more complete understanding of the nature of my invention.

The object of my invention is to provide a can whose filling-openings are all securely locked and having a drip-valve that can be closed when it is desired to seal the can.

It is customary for merchants who deal extensively in oil for family use to own large numbers of cans, which they loan to their permanent customers on condition that such customers purchase supplies of oil only from the merchant who owns the can. Such merchants have been greatly annoyed and have suffered much loss for the reason that when the oil had been used from a can the customer would have the can refilled by another merchant or oil-peddler, thereby causing the owner of the can to lose the profit he would have made on the sale of the oil if he had refilled the can. If all filling-openings are securely locked and only the merchant owning the can has possession of a key to the lock, access cannot be had to the interior of the can without his permission and the use of his oil only in such cans is insured.

Referring to the drawings, A is the can proper provided with the pump A′, operated by the piston-rod A^2 in the usual manner and having a lateral outlet-pipe A^3, connecting with the vertically-oscillatory nozzle A^4. The pump-barrel extends to a point near the bottom of the can and is screw-threaded near its upper end to fit within a similarly-threaded sleeve A^5, erected from the can-top A^6, surrounding the pump-aperture, and acts as a plug for such aperture, substantially as described in said Patent No. 445,061. When it is desired to fill the can, the pump-barrel is unscrewed from the sleeve and raised vertically till it is entirely withdrawn from the can, leaving the pump-opening free to be used as a filling-opening. The frequent removal of the pump from the sleeve causes the threads of each to wear, and in filling a large number of cans at the same time it frequently happens that the pumps are changed from one can to another, so that in a short time the vertically-oscillatory nozzle, which normally occupies a position approximately radial to the can, as shown in Fig. 2, assumes a position angular to its normal position, due to the wear of the threads of the sleeve and pump. If the pump is given an extra partial rotation to compensate for the wear, the nozzle is left in a fixed position inconvenient for use in filling a lamp, while if such extra partial rotation is not given the pump is not firmly seated in the sleeve and is left free to rotate, allowing the nozzle at times to project beyond the can when not in use.

To prevent unauthorized persons from gaining access to the interior of the can and to hold the pump firmly in the desired position, with the nozzle approximately radial to the can, I provide an inverted-U-shaped hasp or strap B, inclosing the outlet-pipe A^3, connecting the nozzle with the pump and movably secured at one end to the can by the staple B^2, one leg of which passes through an aper-

ture in the end of the strap. The other end of the strap is provided with an eye adapted to receive the staple B^2 and be locked thereon, as by the padlock B^3. The U-shaped portion of the strap closely fits the lateral connecting-pipe A^3 and holds the pump in a locked position as regards vertical or horizontal rotary movement.

When desired, the threads on the pump-barrel and the threaded sleeve A^5 may be dispensed with and an ordinary packed joint between the pump and can-top substituted therefor.

My locking device is also applicable to cans filled with oil for shipment, whether provided with a pump or having the filling-aperture closed by any other form of plug, in either case the strap being located transversely of the path traversed by the plug in being removed from the can-opening. The top of the can is concaved to receive the drip and is also provided with a drip-valve D, located within a valve-case D′, erected from the can-top about an opening formed in the lowest part of the same. The valve is vertically movable within the case to and from the annular valve-seat D^2, surrounding the opening in the can-top, and is retained within the case by the engagement of the screw-threads on the exterior of the valve with similar threads on the interior of the case, as shown in Fig. 3.

The valve-case is provided with one or more drip-openings D^3, preferably formed in its lower portion just above the annular valve-seat D^2 on a level with the can-top to receive the drip therefrom. The concaved top receives the drip which passes through the openings D^3 and the opening in the can-top into the can when the valve is open, as shown in Fig. 3, the direction of the drip flow being indicated by the arrow D^2. When there is no drip, the valve may be screwed down upon its seat to close the aperture in the can-top, thereby preventing evaporation or spilling of the contents of the can. I thus provide a can with a drip-opening that can be closed when desired, which allows of its use for shipping liquids of any kind by preventing both spilling of the contents and entrance of foreign substances through the drip-opening and makes it especially adapted for storing volatile liquids.

When desired, the valve may be provided with a leather or other suitable packing-ring D^4.

I prefer to retain the valve within its case by the screw-threads, as before described, thereby also affording a convenient means for operating the valve; but the valve may be operated in any known manner and may be prevented from leaving the case by the strap B, secured to the can and having a bent portion or reach B^4 passed across the vertical path of the valve at a distance above the same greater than the distance of the drip-openings D^3 above the the annular valve-seat to allow the valve to be opened to receive the drip and less than the depth of the valve-case to prevent the valve being removed from the case. The strap may be secured permanently to the can; but when the drip-opening in the can-top is sufficiently large to be used also as a filling-opening it becomes desirable to lock such strap to the can, so that it can be detached and the valve removed to fill the can. When so constructed the strap B would not only serve to lock the filling and drip opening, but also to retain the valve in its case if the screw-threads were omitted. By securing the strap or hasp B movably to the can at one end and providing it with a U-shaped portion to inclose the lateral pump-outlet A^3 and with another bent portion or reach B^4 to extend above the drip-valve and securing the other end of the strap to the can by a lock, as before explained, I am able to secure all filling-openings of the can and retain the drip-valve within its case by a single strap and lock.

The pump may be permanently secured to the can to prevent rotary movement, in which case a short strap only would be necessary to lock the valve closing the drip and filling opening, or the pump-opening and the drip and filling opening may each be secured by a separate strap and lock.

What I claim as new, and desire to secure by Letters Patent, is—

1. In an oil-can, the combination, with an apertured concaved can-top, of a valve-case secured to the can-top around such aperture and provided with a distinct drip-opening near its junction with said can-top, a valve vertically movable within the case, having a seat below the drip-opening, said opening being in free communication with the aperture in the can-top whenever the valve is raised and said valve being adapted to close both the opening and the aperture, and means for retaining the valve in its case, adapted to permit it to be moved to disclose the opening and aperture, substantially as set forth.

2. In an oil-can, the combination, with an apertured can-top, of a valve-case secured to the can-top around such aperture and provided with a drip-opening in its lower portion, a detachable valve vertically movable within the case to and from an annular valve-seat located below the drip-opening and surrounding the aperture in the can-top, a strap extending across the vertical path of the detachable valve at a distance above the same less than the depth of the valve-case and greater than the distance of the drip-opening above the annular valve-seat, and means for securing the strap to the can, substantially as described.

3. In an oil-can, the combination, with an apertured can-top, of a vertically-movable plug adapted to close such aperture, a strap extending across the vertical path of the plug, means for locking the strap to the can, and means for withdrawing its contents without

unlocking the strap, substantially as described, whereby vertical movement of the plug is limited or prevented.

4. In an oil-can, the combination, with a pump inserted in an aperture in the can-top and horizontally rotatable therein, a nozzle oscillatory in a vertical plane, and a lateral outlet connection between such nozzle and pump, of a U-shaped strap inclosing such lateral connection, and means for locking such strap to the can, substantially as described, whereby rotary or vertical movement of the pump is prevented.

In testimony whereof I have hereunto set my hand this 2d day of May, 1891.

CHARLES W. HART.

Witnesses:
GEO. A. MOSHER,
FRANK C. CURTIS.