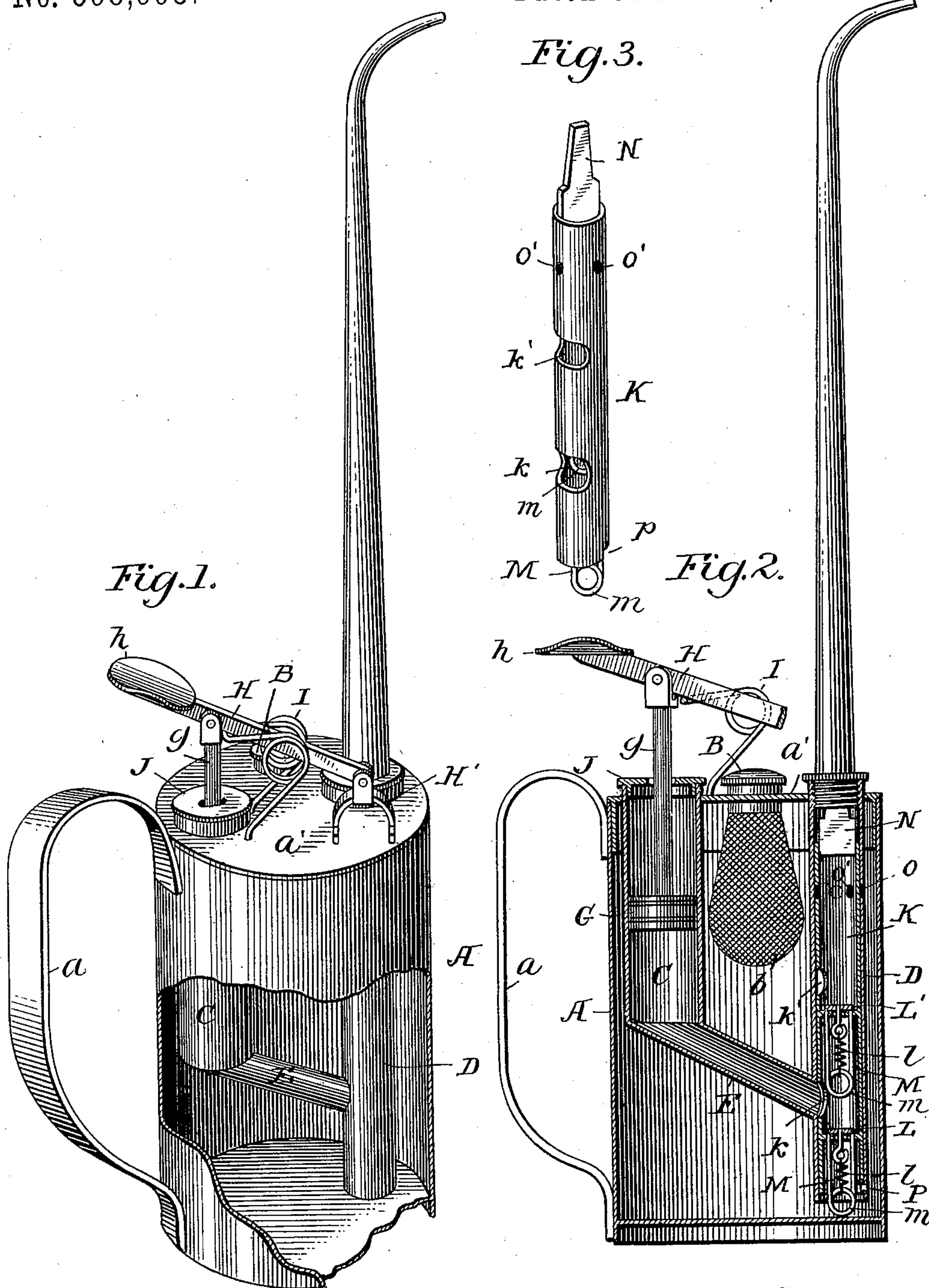


(No Model.)

J. A. HOUSE.
OIL CAN AND EJECTING DEVICE.

No. 598,993.

Patented Feb. 15, 1898.



Witnesses

J. Hinkel

J. E. Hutchinson Jr.

Inventor
James A. House
By *J. S. Barker and Clarence A. Brandenberg*
his Attorney

UNITED STATES PATENT OFFICE.

JAMES A. HOUSE, OF DYER, TENNESSEE, ASSIGNOR OF ONE-HALF TO W. S. COULTER, OF SAME PLACE.

OIL-CAN AND EJECTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 598,993, dated February 15, 1898.

Application filed February 16, 1897. Serial No. 623,657. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. HOUSE, a citizen of the United States, residing at Dyer, in the county of Gibson and State of Tennessee, have invented certain new and useful Improvements in Oil-Cans and Ejecting Devices Applicable Thereto, of which the following is a specification.

My invention has for its object to improve oil-cans of that kind in which a small pump is employed to eject the oil; and it consists of the improvements in the operative parts of the can, by means of which the discharge of the oil is controlled, as will be hereinafter pointed out.

In the drawings, wherein I have illustrated the preferred form of my invention, Figure 1 is a perspective view showing the interior parts of the can, the can-body being in part broken away. Fig. 2 is a vertical section taken through the oil-ejecting parts. Fig. 3 is a detail perspective view of the valve-carrying tube.

In the drawings, A represents the body of the oil-can, which may be of any preferred size and shape. It is shown as being provided with a handle *a* and a flat top or cover *a'*, in which is a filling-orifice B, below which is arranged a strainer *b*. Secured to the top or cover and depending therefrom are two tubes C and D, the latter being by preference the smaller in diameter and extending nearly to the bottom of the can, while the tube C is shorter. The lower end of the tube C is connected with the tube D a short distance from its lower end by a tube E. The tube D is open-ended and is screw-threaded at its upper end to receive the detachable discharge spout or nozzle.

A solid piston G is arranged within the tube C, being mounted upon a piston-rod *g*, the upper end of which is connected with an operating-lever H. This lever is pivoted to a stand H', arranged on the can-top, and is provided at its free end with a thumb-piece *h* to facilitate its manipulation. A spring I, arranged between the lever H and the can-top, operates to hold the latter and through it the piston in their uppermost positions. The piston-rod passes through a slot in the cap J, that closes the upper end of the tube C.

A valve-carrying tube K is arranged within the tube D, the inner surface of which it fits closely, though not so tightly as to prevent its being easily inserted and withdrawn or partially rotated therein. This tube has an opening *k* through it, so arranged that when the tube is in place within the tube D this opening comes opposite the opening of the tube E into the tube D, and below this opening *k* there is a check-valve L and above it another check-valve L'. These check-valves are preferably held in place by springs *l*, and to facilitate the connection of the springs I mount in the tube below each valve a piece of wire M, bent into U shape, with a coil *m* at its lower middle portion. The legs of the piece of wire are secured to the sides of the tube, and the spring is connected with the coiled portion. The opening *k* serves to give access to the valve L and the wire to which the spring of the upper valve is attached, and to give access to the upper valve L', I make another opening *k'* in the tube just above the said valve.

N is a piece of comparatively thin metal which is secured to the upper end of the tube K, with its end projecting therefrom. This serves as a means whereby the tube carrying the valves may be manipulated, it being shaped to be conveniently grasped by a pair of pincers or a suitably-shaped key. The projecting end of this piece is of a size to enter the lower end of the nozzle when that is screwed in place on the end of the tube D. The piece N, being thin, offers but little obstruction to the flow of the oil.

o o represent a series of holes in the upper portion of the pipe or tube D, and *o' o'* a similar series of holes in the tube K. When the tube K is in place in the tube D and is turned into one position, the holes *o* and *o'* register and there is free communication through them between the interior of the can and the delivery-nozzle above the valves of the pumping device; but when the tube is turned into another position the holes are out of register, and then the only communication between the interior of the can and the discharge-nozzle is through the tube K and past the valves L and L'.

In order to determine the proper positions

of the valve-carrying tube, so as to bring the holes *o* and *o'* into or out of register with each other, as may be desired, I cut away a portion of the lower end of the tube *K*, as shown at
 5 *p*, so that there are formed two shoulders or stops, and I arrange a pin or projection *P* on the lower portion of the tube *D*. When the inner tube is turned so that one shoulder engages with the pin, the holes are in line with
 10 each other and register, and when turned so that the other shoulder engages with the pin the holes are out of line with each other.

The operation of the device may now be easily understood. By manipulating the lever *H* the piston *G* is worked and operates to
 15 pump the oil from the can out through the nozzle *F*. When this operation is taking place, the tube *K* is turned so that the holes *o* and *o'* are not in register with each other. If it
 20 is desired that the can should operate as an ordinary oiler, the tube *K* is turned so as to bring the holes *o* and *o'* into register, when, upon tipping the can, the oil will flow through the holes into the tube *K* and out through the
 25 nozzle.

It will be observed that the arrangement which I have described constitutes a register between the interior of the can and the delivery spout or nozzle, and it is evident that
 30 other forms of registers from that shown might be employed without departing from the spirit of my invention, though the one which I have shown and described is the form which I now prefer to use.

By mounting the valves of the pumping device in a removable tube it is possible to take them out of the can for the purposes of repair or cleaning without disturbing any of the permanent parts of the device or removing the
 40 top or cover of the vessel.

Without limiting myself to the precise construction and arrangement of parts shown, what I claim, and desire to secure by Letters Patent, is—

45 1. The combination with a vessel having a delivery-nozzle, of a pipe within the vessel to which the nozzle is connected and through which the contents of the vessel are delivered, a pump for ejecting the contents of the vessel through said pipe and nozzle, a register
 50 in the said pipe, and means for manipulating the register, whereby the pump is cut out and said pipe and nozzle connected directly with the vessel, substantially as set forth.

55 2. The combination, in a pump for ejecting

the contents of a vessel, of the tubes, *C* and *D*, the piston mounted in the tube, *C*, the tube, *E*, connecting the said tubes, and a removable and rotatable valve-carrying tube, *K*, mounted within the tube, *D*, having an
 60 opening adapted to come opposite the end of the tube, *E*, and the check-valves in the tube, *K*, arranged, one above and the other below the said opening therein, whereby when the tube *K*, is rotated so as to carry the said open-
 65 ing away from the end of the connecting-tube *E*, the piston-tube *C*, is cut off from the tube *D*, substantially as set forth.

3. The combination with a vessel having a delivery-nozzle, of a pump for ejecting the
 70 contents of the vessel, a tube to which the nozzle and pump are attached provided with the holes, *o*, another tube mounted within the first-named tube, provided with the holes, *o'*,
 75 and adapted to be rotated therein to bring the holes, *o* and *o'*, into and out of register, and the piece *N* secured to and projecting from the end of the inner tube for turning it, substantially as set forth.

4. The combination with a vessel having a
 80 delivery-nozzle, of a pump for ejecting the contents of the vessel, a tube to which the nozzle and pump are attached, provided with the holes, *o*, another tube mounted within the first-named tube, provided with the holes, *o'*,
 85 and adapted to be rotated therein to bring the holes, *o* and *o'*, into and out of register, and means for turning the said inner tube, substantially as set forth.

5. The combination with a vessel having a
 90 delivery-nozzle, of the tubes, *C*, *E*, and *D*, within the vessel, the latter tube being provided with the holes, *o*, the piston operating within the tube, *C*, means for operating the piston, the tube, *K*, mounted within the tube,
 95 *D*, and free to be withdrawn therefrom and also rotated therein, and provided with the holes, *o'*, which are so arranged as to be carried into or out of register with the holes, *o*, according as the tube, *K*, is turned into one
 100 position or another, the valves, *L* and *L'*, within the tube, *K*, and the projecting piece, *N*, secured to the tube, *K*, and by means of which it may be turned within the tube, *D*, substantially as set forth.

JAMES A. HOUSE.

Witnesses:

W. F. MCCAIN,
 J. T. BERRY.