

M. H. WILEY.
OIL CABINET.

No. 104,389.

Patented June 14, 1870.

Fig. 1.

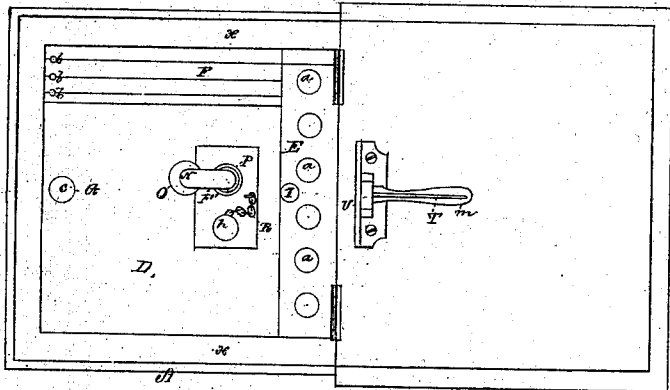


Fig. 2.

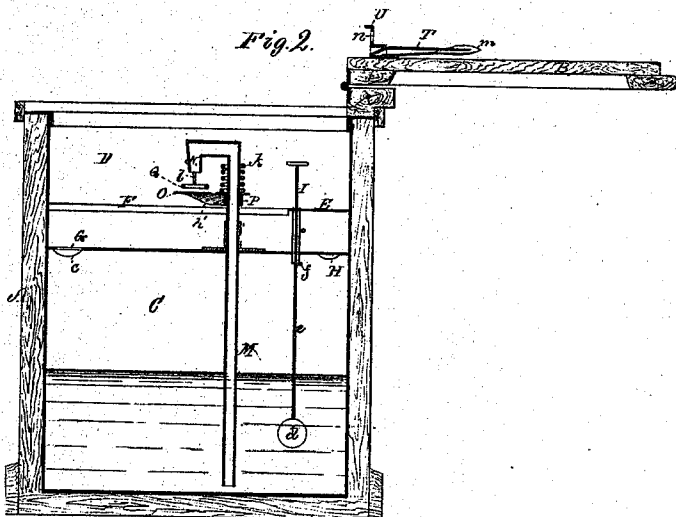
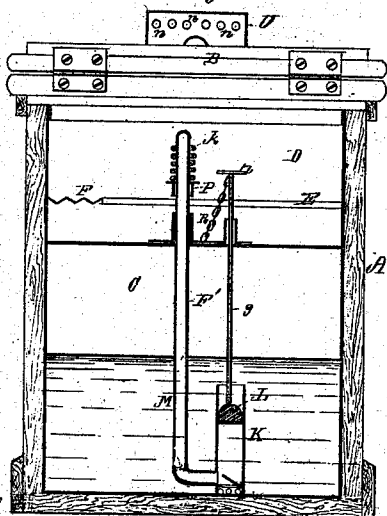


Fig. 3.



Witnesses.

C. Hart
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by his attorney

J. P. Hale

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MOSES H. WILEY, OF EAST BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF,
THOMAS MILLER, AND JOHN H. B. LANG, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 104,389, dated June 14, 1870.

IMPROVEMENT IN OIL-CABINETS.

The Schedule referred to in these Letters Patent and making part of the same

To all to whom these presents may come:

Be it known that I, MOSES H. WILEY, of East Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Oil-Cabinet for Factories, &c.; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawing, of which—

Figure 1 is a top view of my said cabinet, with the cover turned back.

Figure 2 is a vertical and central section, taken through the "tell-tale" and discharge or eduction-pipe of the pump.

Figure 3 is another vertical section, taken on the line $x x$ of fig. 1.

In the said drawing—

A denotes a rectangular box or case, provided with a cover, B, hinged thereto.

Within the lower part of the said case is an oil-reservoir or tank, C.

Disposed above the said tank is a chamber or compartment, D, which is provided with two shelves, E F, the former being provided with a series of holes, $a a$, &c., to receive the inverted necks of oil-cans, for the purpose of supporting them while being drained, preparatory to being filled.

The shelf F is corrugated or formed with channels running longitudinally, and terminating at one end in a series of holes, b . The object of the latter shelf is to support the cans after they may have been filled with oil, the said channels serving to convey any waste or surplus oil which may run down on the outside of the cans to the orifices b , where it will be discharged on the top of the tank C, and flow from thence down into it through the opening G, which is provided with a filter or strainer, c , as seen in figs. 1 and 2.

The oil dripping from the mouths of the can when in the orifices of the shelf E, will fall upon the upper surface of the tank, and will flow down into the interior thereof through the orifice H.

I is a "tell-tale," which extends down into the reservoir C, and has a hollow ball or float, d upon its lower end.

Upon the stem e of the float or "tell-tale," a stop, f , is disposed, which prevents the "tell-tale" from having a too great range of motion. The object of the "tell-tale" is not to show what amount of liquid there may be in the tank, but to indicate when it gets too low and the tank needs replenishing. Furthermore, the tube o of the said "tell-tale" operates as a vent, to allow of the escape of air while the tank is being filled.

Within the said reservoir C, and affixed to the bottom thereof, a force-pump, F', is disposed, K being the pump-barrel thereof.

L is a weighted piston, provided with a rod, g , and handle, h .

M denotes the eduction-pipe, and N the discharging end or nose of the pump, the said barrel and pipe being respectively provided with induction and eduction-valves in the ordinary manner.

O is an adjustable stand or can-supporter, which is attached by means of an arm, k , to a slider, P, which is arranged concentrically around the upper upright portion of the pipe M. The said slider is surmounted by a coiled spring, k , one end of which is attached to the slider, the other end being fastened to the said pipe.

Q is an annular guide or centralizer, which is supported by two arms, l , affixed to the sides of the pump-nozzle, one of which is seen in fig. 2, the said centralizer being arranged concentrically with respect to the base of the pump-nose, in order that, when the mouth of a can is introduced into the centralizer, the oil or fluid ejected from the nose of the pump may enter the mouth of the can axially, and thus prevent any overflow or waste of the oil or fluid. The object of making the can-supporter adjustable is, to enable it to receive and hold cans of different sizes and maintain them in their proper positions, with respect to the nose of the pump, while being filled. By this application and arrangement of the coiled spring, such not only serves to support the stand while a can is being filled, but enables it (such can) to be readily removed from or applied to the stand, as may be desirable.

R is a measuring or check-chain, one end of which is attached to the handle of the piston, and the other to the top of the reservoir, as seen in fig. 1. The object of this chain is to regulate the amount of oil received into the pump-barrel at each upward movement of the piston, in accordance with the capacity of the can to be filled; that is to say, if each oil-can to be filled holds one pint, we must raise the piston a sufficient distance to allow a pint to flow into the pump-barrel.

Each link of the said chain may be supposed to indicate a measure for a certain fixed quantity, for instance, a gill, or a pint, as may be desirable. Having adjusted the chain to the desired point to accord with the capacity of the can, we have only to raise the piston until arrested by the chain to cause the desired amount of oil to enter the pump-barrel. If, now, we release our hold of the piston-handle, the piston, being heavily weighted, will rapidly descend by the action of gravity, and will force the oil out of the pump-barrel into the eduction-pipe, and thereby force a like quantity from the eduction-pipe through the nose of the pump into the oil-can placed under the same.

T is a device for clearing the nozzles of the cans of any extraneous matter, and consists of a pointed wire attached to the cover B, as shown in fig. 1. The said cleaner is provided with a shield or guard m , whose

object is to protect it from injury, as well as from doing injury.

U is a shelf, which is arranged on the cover B, and with respect to the "clearer" T, as shown in the drawing. This shelf is provided with a series of holes, *n*, for receiving the nozzles of the cans to be filled.

In supplying the tank or reservoir with oil, the desired quantity is to be poured into the compartment or sink D, from whence it will flow into the reservoir or tank through the orifices G and H.

The reservoir having been supplied with oil, the operation of filling the oil-cans is as follows:

The cans to be filled are first to have their nozzles removed, and the nozzle-clearer passed through them. They are then to be placed in the orifices in the nozzle-receiving shelf U, and their cans to be placed mouth downward within the holes in the shelf E.

After being properly drained, the oil-cans are to be filled with oil by placing each one in succession on the stand O, and so that its mouth shall enter the centralizer Q, and next manipulating the pump, as before described. When filled, they are to be removed from the stand, the nozzle of each to be again inserted in the mouth of its can, when they are ready for use, and may be placed on the shelf E.

I would remark that I do not claim broadly limiting or controlling the stroke of a piston by means of a chain, or its equivalent, as I am aware that such is not new. Neither do I claim the invention, or any part thereof, as shown in Letters Patent No. 21,814, as my invention differs materially therefrom.

Having described my invention,

What I claim is as follows:

1. An oil-cabinet, substantially as described, the same consisting of a reservoir or tank, C, and a com-

partment or sink, D, provided with a pump, a stand or can-supporter, O, and "tell-tale," constructed as specified, all combined, arranged, and operating together in manner and for the purpose hereinbefore specified.

2. An oil-cabinet, consisting of a reservoir or tank, C, and a compartment or sink, D, provided with a pump, a can-supporter, O, and waste-receiving orifice G, all constructed, combined, and arranged together in manner and for the purpose hereinbefore set forth.

3. The combination of the adjustable stand or can-supporter O with the discharge-pipe or nozzle of the pump, substantially as and for the purpose hereinbefore specified.

4. The combination and arrangement of the stand O and the centralizer Q with the discharge or nozzle of the pump, in manner and for the purpose set forth.

5. Providing the piston of a pump with means or devices as described, (viz., a rod, *g*, handle *h*, check-chain R, and weight or gravitating power,) whereby the fluid contained within the tank or holder may not only be drawn and accurately measured, but be automatically discharged into a can or receptacle, in manner as specified.

6. The nozzle-clearer and its shield, when constructed as described, and applied to the cover of the case, as set forth.

7. The combination of the nozzle-supporting shelf *r* with the nozzle-clearer and its shield, substantially as and for the purpose set forth.

MOSES H. WILEY.

Witnesses:

F. P. HALE,
JAMES DUNCAN.