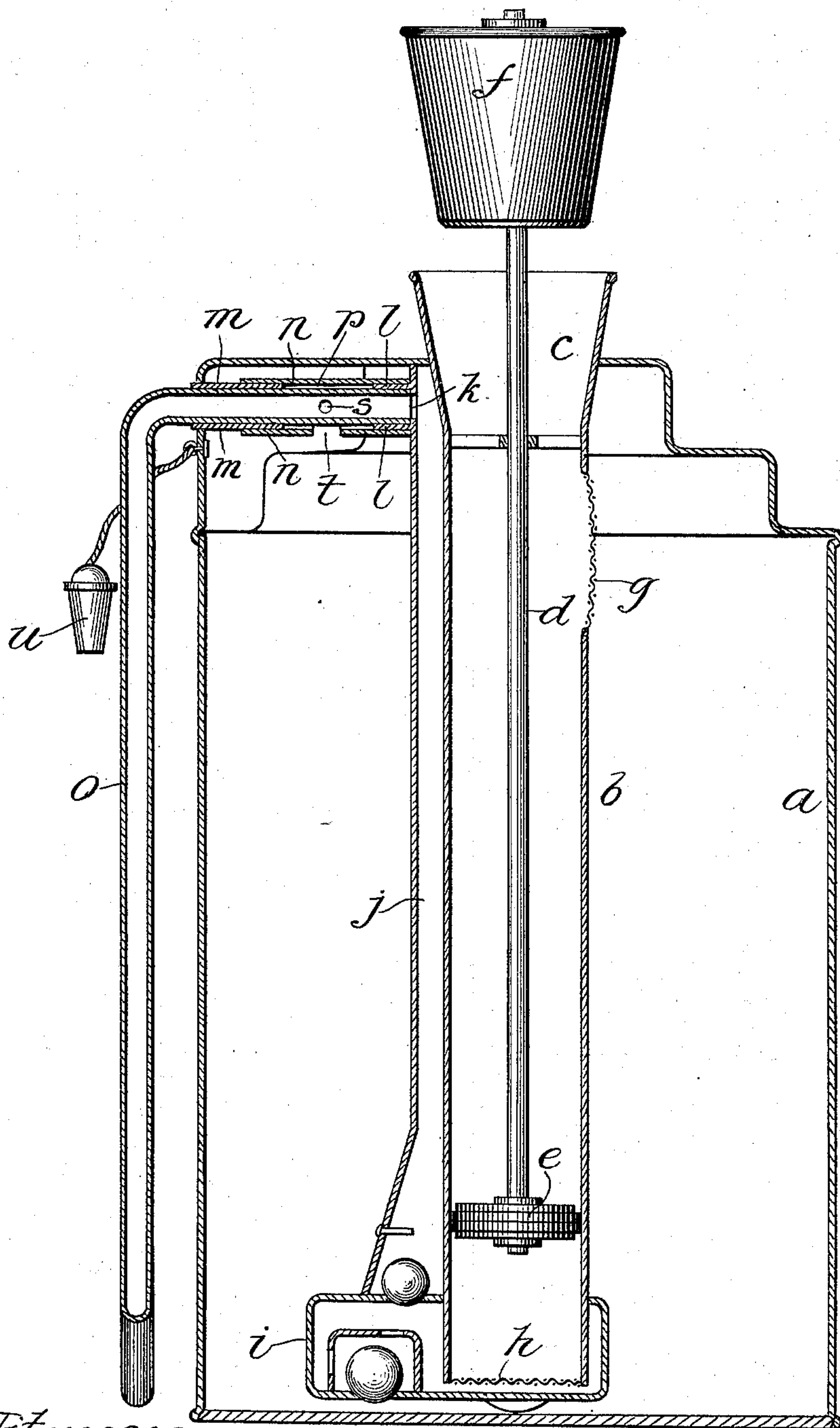


(No Model.)

C. W. PROCTOR.
OIL CAN.

No. 540,335.

Patented June 4, 1895.



Witnesses

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UNITED STATES PATENT OFFICE.

CHARLES W. PROCTOR, OF LAKE FOREST, ILLINOIS.

OIL-CAN.

SPECIFICATION forming part of Letters Patent No. 540,335, dated June 4, 1895.

Application filed January 19, 1895. Serial No. 535,520. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. PROCTOR, a citizen of the United States, residing at Lake Forest, in the county of Lake and State of Illinois, have invented certain new and useful Improvements in Oil-Cans, of which the following is a specification, reference being had to the accompanying drawing, in which the figure shown represents a vertical section through the can.

My invention relates to cans for holding liquid which is to be pumped therefrom in any desired quantity by pumping mechanism connected permanently with the can, and the invention is primarily designed for use in filling lamps with oil.

One object which I seek to accomplish by this invention is the formation of a joint between the discharge tube and the can that will positively prevent any leakage of the oil at that point, thus keeping the outside of the can-body entirely free from oil at all times; such joint being at the same time of a character that will permit the discharge tube to be freely turned so that its delivery end will be raised or lowered and oil delivered therefrom at various heights with relation to the can-body, to accommodate lamps or other vessels of varying heights.

Another object is to so construct the discharging devices as to prevent any siphoning of the oil and consequent waste thereof after the desired quantity has been pumped from the can.

Still another object is to construct the pumping mechanism so that when oil is not being pumped from the can, the pump-barrel can be securely closed by means of a stopper secured to the piston-rod, which stopper also acts as a handle to be grasped when pumping.

I accomplish these objects as shown in the drawing and as hereinafter fully described.

That which I regard as new will be set forth in the claims.

In the drawing, *a* indicates a can-body of any desired size, and made in any well known manner.

b indicates a pump-barrel extending from a point near the bottom of the can. As shown at *c*, the upper portion of this barrel *b* is slightly conical-shaped.

d indicates the piston-rod, provided at its

lower end with a solid piston-head *e*, secured to the rod in any well known manner. At the upper end of the rod *d* is secured a handle *f*, formed in the shape of a tapering plug, and adapted to enter and securely close the upper end of the pump-barrel *b*.

g indicates a screen of wire-cloth or other suitable material, covering an opening in the side and near the upper end of the pump-barrel *b*.

h indicates another and similar screen, covering the open lower end of said pump-barrel.

i indicates a cage surrounding the lower end of the pump-barrel and extending to one side thereof, in which cage are valves and valve-seats of any suitable character. In the construction shown ball-valves are employed.

j indicates a tube, into which the oil passes from the cage *i* when the pump is operated.

k indicates an opening in the wall of the tube *j* near its upper end.

l indicates a short section of tubing, soldered or otherwise secured to the wall of the tube *j*, and surrounding the opening *k*. In line with this short tube *l*, and secured to the can-body, is another short tube *m*, projecting into the interior of the can. A larger tube *n* surrounds and is secured to the short tubes *l* and *m*.

o indicates the discharge tube, by means of which the lamps or other vessels are filled. As shown, this tube *o* is bent to form a long and a short arm, and the short arm is inserted through the tubes *m* and *l*, and its open end lies against the wall of the tube *j* in line with the opening *k* in said wall. This short arm of the tube *o* is not soldered or otherwise fixed to prevent axial motion, but, on the contrary, is free to turn in said short tubes *l* and *m* as bearings, in order that the larger arm of such tube *o* may be adjusted to permit the oil passing through to be discharged at the desired point; and by means of the tube *o* passing into the can through another tube which is affixed to the can-body, a joint is provided that insures the escape of oil through such joint being absolutely prevented, and consequently the keeping of the exterior of the can entirely free from oil. The joint thus formed is very simple in construction, and much cheaper than the constructions ordinarily employed for such purposes. By reason of the shortness of the tubes *l* and *m* a space *p* is

left between the short arm of the discharge tube *o* and the covering tube *n*, as clearly shown in the drawing, and with this space *p* a hole *s* in the short arm of the tube *o* communicates.

t indicates a small slot cut in the under side of the surrounding tube *n* whereby communication is established with the interior of the can.

u indicates a small plug adapted to close the outer end of the tube *m* when the discharge tube *o* is withdrawn therefrom.

To fill the can *a*, the combined plug and handle *f* is pulled up and out sufficiently to afford free access to the upper end of the barrel *b*. Oil is then poured into such barrel, and being stopped by the head *e* enters the body of the can through the opening covered by the screen *g*, which screen acts to prevent the admission of any foreign substances with the oil.

To fill a lamp or other vessel from the oil in the can *a*, the pump is operated, drawing the oil through the cage *i* into the barrel *b*, and forcing it out through the cage and up the tube *j*, and through the opening *k* into the discharge tube *o*, from whence it passes to the vessel to be filled, the tube *o* being readily swung up or down to bring its discharge end over the filling aperture of the vessel to be filled,—the short tubes *l* and *m* acting, as before stated, as bearings for the short arm of the tube *o*, as the long arm is being swung into and out of position.

If provision were not made for guarding against siphoning of the oil, considerable oil would be lost by this means after the pumping operation had ceased, and more or less damage and discomfort also occasioned thereby. No such siphoning of the oil can occur with my device, as by means of the communication of the pipe *o* with the interior of the can, established and maintained by the hole *s*, the space *p* and the slot *t*, sufficient air is admitted to destroy the siphoning effect, and cause the oil remaining in the short arm of the tube *o* to drip back into the can through the means of communication just described.

While a little oil will also drip back through the same means during the pumping operation, it will be such an inconsiderable amount as to have no perceptible effect on the amount being forced out of the end of the discharge tube.

By the use of the screen *h* at the bottom of the barrel *b*, in addition to the other screen in the said barrel, the oil is most effectually screened, and the liability of any foreign particles passing up the tube *j* and clogging the hole *s* or space *p* is reduced to the minimum.

When the device is not in use the plug *f* can be forced down into the enlarged end *c* of the barrel *b*, thus forming an effectual stopper therefor.

When it is deemed desirable to remove the discharge tube *o*, as for example, for shipping purposes, it can be readily done by simply pulling the short arm out of the tubes *l* and *m*, and then the plug *u* is to be inserted in the end of the tube *m*.

That which I claim as my invention, and desire to secure by Letters Patent, is—

1. In a can for containing liquids, the combination with a pump, and a tube connected therewith, said tube having an opening near its upper end, of the tubes *l* and *m* in line with each other, a larger tube *n* surrounding said tubes *l* and *m*, and provided with a slot *t*, and a discharge tube inserted in the tubes *l* and *m*, and provided with a hole *s*, substantially as and for the purpose specified.

2. In an oil can, the combination of a pump, pumping mechanism mounted therein, an interior tube connected at the bottom with said pump and extending toward the top of the can, a slotted connecting tube connected with said interior tube and leading to the outside of the can, and a removable discharge tube axially rotatable in said connecting tube for raising or lowering the delivery end of the tube, substantially as described.

CHARLES W. PROCTOR.

Witnesses:

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