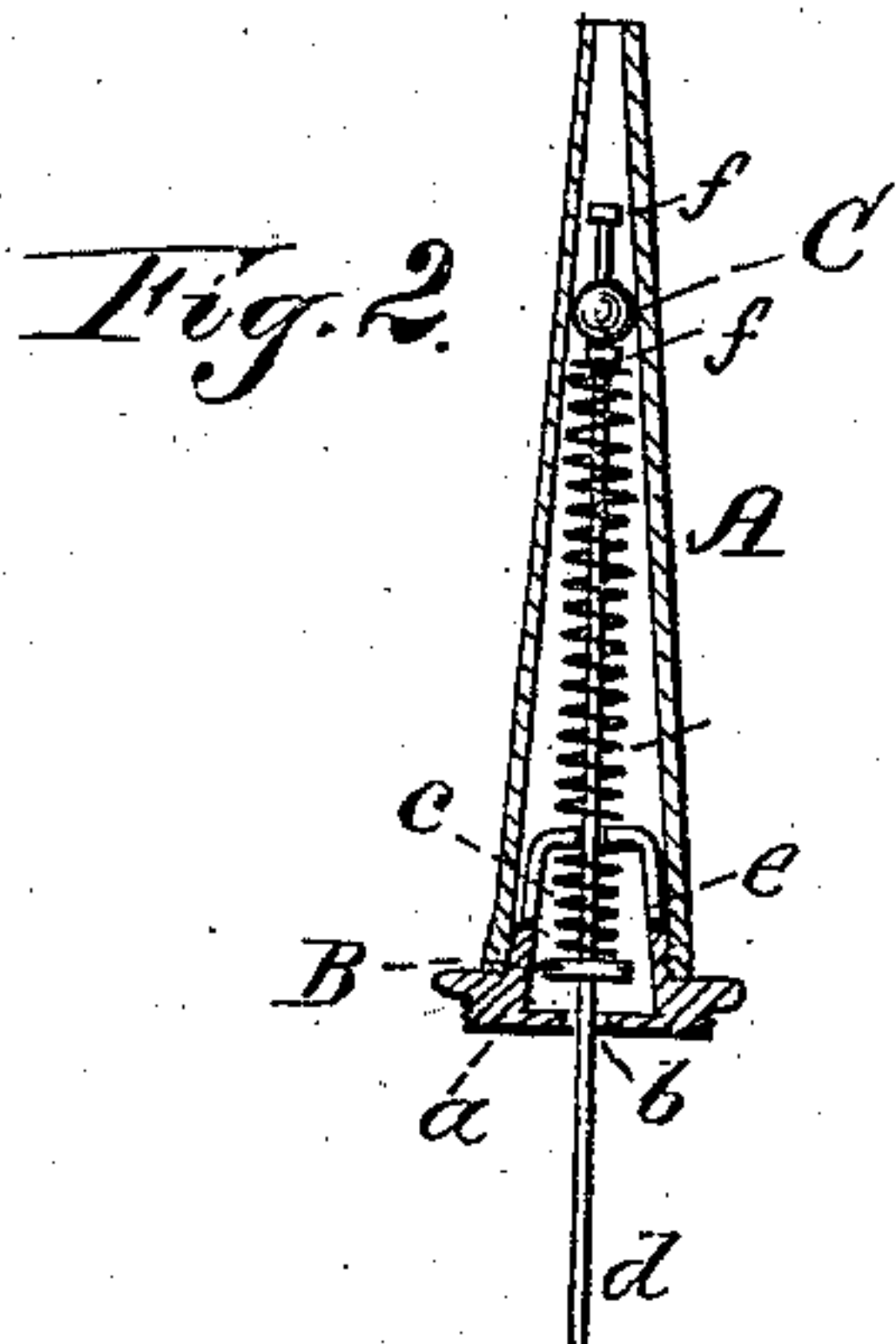
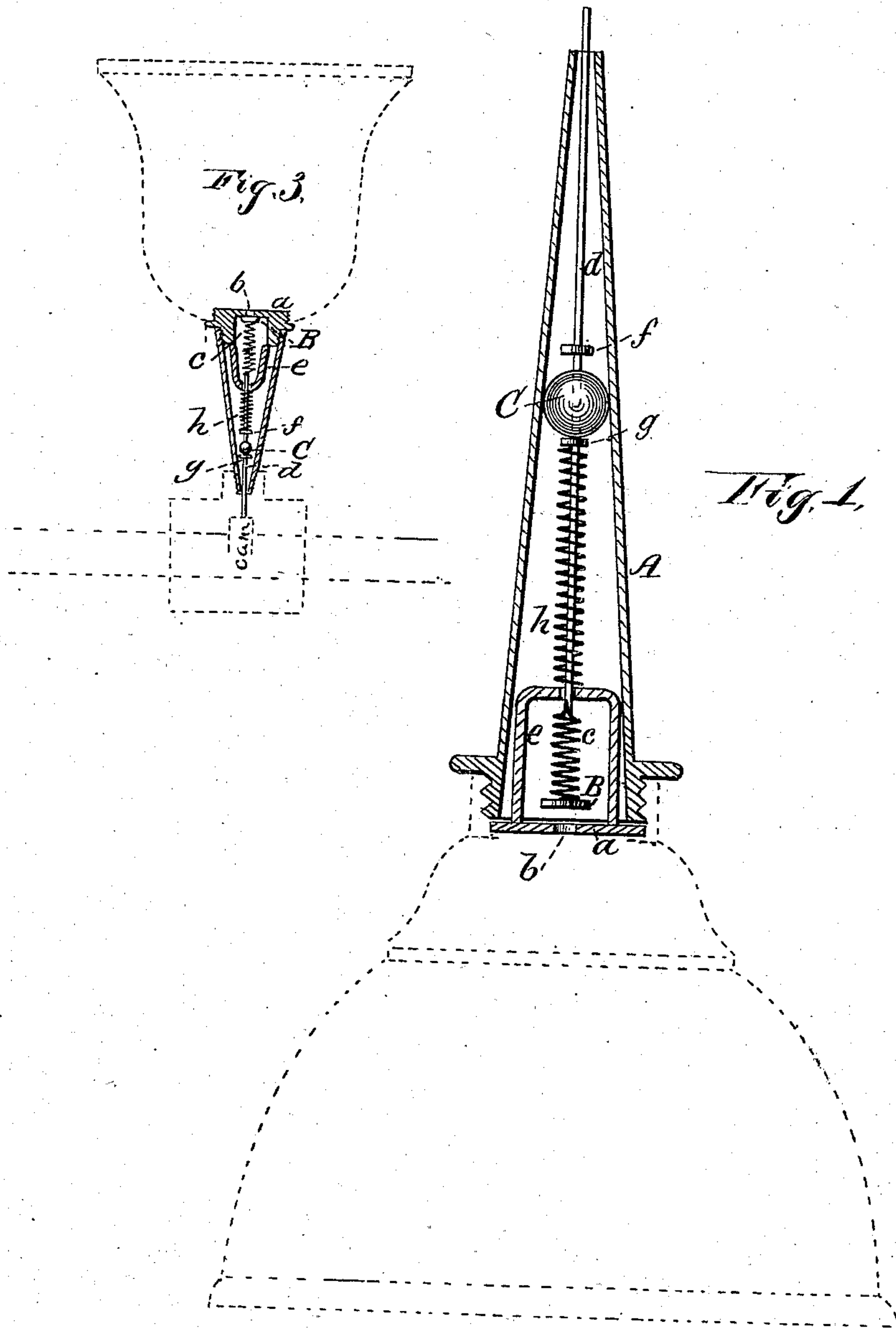


(No Model.)

S. B. PARKER.
Oiler.

No. 241,561.

Patented May 17, 1881.



Witnesses:
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UNITED STATES PATENT OFFICE.

SIMON B. PARKER, OF BROOKLYN, NEW YORK.

OILER.

SPECIFICATION forming part of Letters Patent No. 241,561, dated May 17, 1881.

Application filed February 28, 1881. (No model.)

To all whom it may concern:

Be it known that I, SIMON B. PARKER, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Oilers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a sectional elevation of an oil-can nozzle embodying my invention, with the body of the can in broken lines; and Fig. 2 is a sectional elevation of a nozzle on a reduced scale, showing a modification of my invention. Fig. 3 is a sectional view of the nozzle, showing it applied to a stationary oil-cup.

The present invention has relation to certain new and useful improvements in that class of oilers in which the nozzle contains a suitable valve operated by a rod passing up through the end of the nozzle, so that the valve may be opened by depressing said rod and automatically closed by a suitable spring.

The object of my invention is to arrange and connect the several parts to the operating-rod, whereby they may be removed with said rod from the nozzle of the oiler, and replaced as circumstances may require, thereby adapting the valve-operating mechanism for connection to the nozzles of the oilers now in use without changing or altering them.

A further object of the invention is to improve and simplify the details of construction of the operating-valve mechanism, whereby a more perfect feeding of the oil to and discharging it from the nozzle is effected.

In the accompanying drawings, A represents the ordinary nozzle to an oil-can, the latter being shown in broken lines. A diaphragm, *a*, closes the lower end of the nozzle A, and is held against the same by the shoulder around the screw-opening in the can and the screw end of the nozzle, between which it is clamped.

If desired, the diaphragm *a* may be cast with the screw-threaded end of the nozzle, or otherwise form a part of the same and the nozzle proper, connected thereto as found desirable.

The diaphragm *a* is provided with a suit-

able valve-opening, *b*, which is controlled by a suitable valve, B, which may be of an elastic or non-elastic material, as found most desirable. The valve B has connected to its upper side a rubber, coiled, or other suitable spring, *c*, the upper end thereof being connected to a rod, *d*, which passes up through an opening in a bracket, *e*, said bracket being connected to or cast with the diaphragm *a*.

A ball or other suitable valve, C, passes loosely over the rod *d*, and is located between two stops, *f g*, rigidly fixed on the rod, and at such distance apart as to admit of the rod slightly playing in either direction without the stops coming in contact with the valve. Between the lower one of the stops and the bracket *e* is located a coil-spring, *h*, which encircles the rod *d*, the ends of the spring resting against the stop *g* and bracket *e*.

Assuming that the can is supplied with oil and the valve B open, upon the tipping of the can oil will flow through the valve-opening *b* into the nozzle A and fill the space up to the valve C. In this position the nozzle of the can, with the projecting end of the rod *d*, is brought in contact with the object to be lubricated, and as the rod is pressed in a direction toward the can the valve B is closed before the stop *f* comes in contact with the valve C, when at that moment the valve is forced off its seat and the oil contained in the nozzle allowed to escape.

A very important feature of my invention is that of arranging the several operating parts wholly within the nozzle, or, rather, forming an adjacent part thereof, so that the nozzles can be manufactured of any of the sizes usually required and be applied to any of the ordinary oil-can bodies, or, as the several parts are all detachable from the nozzle, they can be sold separately and applied to any of the nozzles now in use; besides, they can be readily removed for cleaning or repairing.

My oiling device is equally applicable to the lubricating of machinery with stationary cups containing my valve-operating mechanism; also, it can be used to great advantage on rolling-stock, car-axles, &c., entirely dispensing with the cotton packing now commonly used, and thus preventing a great waste of oil.

It will therefore be seen that I do not desire

to confine myself to portable oil cans or cups, as I reserve the right to apply my valve-operating mechanism to any form of oiler, either stationary or portable, and for whatever purpose used.

5 In Fig. 2 I have shown a modification of my invention, which consists in extending the operating-rod down into the body of the can in contact with the bottom thereof. To operate
10 the rod the bottom of the oil-can is pressed in, which elevates the rod and opens the valve B and closes valve C, this allowing, when the nozzle is held down, the oil to pass into and fill the same. When pressure is removed from
15 the bottom of the can the valve B will automatically close and valve C open.

In the application of my invention to stationary oil-cups, as shown in Fig. 3, the end of the nozzle is formed with screw-threads, by which
20 means the end of the nozzle is connected to a screw-threaded opening in the ordinary journal-box, the operating-rod *d*, as in Fig. 1, extending beyond the end of the nozzle. The journal, which passes horizontally through the box, is
25 provided with a cam or inclined shoulder, so that upon each revolution of the journal said cam or shoulder will be brought in contact with the end of the rod *d*, elevate it and open the valve C, and at the same time close valve B, when oil
30 will pass out of the nozzle onto the bearings.

As the cam or shoulder passes from contact with the operating-rod the valve C is automatically closed and valve B opened, until the cam or shoulder again comes in contact with the rod.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an oiler, the combination, with the removable nozzle thereof, of an operating-rod
40 contained within the nozzle and having connected thereto the several operating parts, consisting of the valves, valve-seats, springs, and bracket for guiding the rod, whereby the whole may be removed with the rod, substantially as
45 and for the purpose specified.

2. The combination, with the removable nozzle A, provided at its lower end with diaphragm
50 *a*, having opening *b*, of the rod *d*, springs *c h*, stops *f g*, and valves B C, constructed and arranged to operate substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

SIMON B. PARKER.

Witnesses:

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