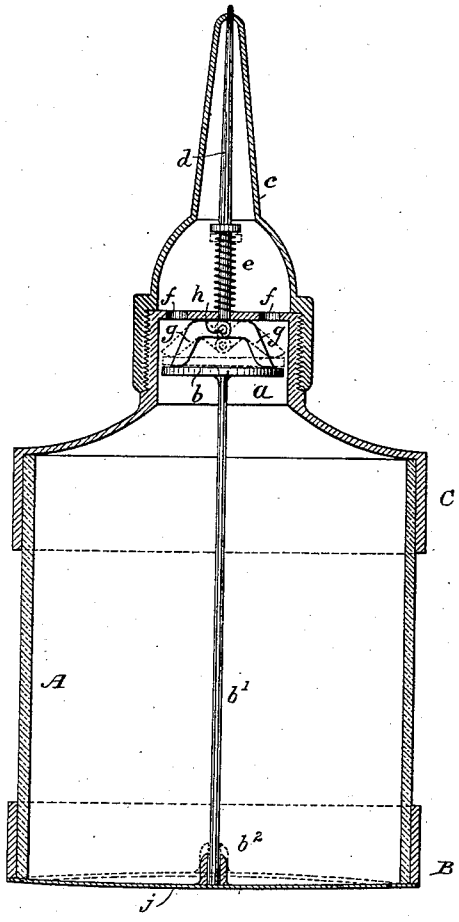
(No Model.)

C. W. ELLIOTT.

OILER.

No. 265,787. Patented Oct. 10, 1882.



WITNESSES

Wm A. Skinkle

H. W. Elmore.

INVENTOR

Charles W. Elliott

By his Attorney

Marcellus Bailey

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

CHARLES W. ELLIOTT, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO RUFUS S. MERRILL, OF SAME PLACE.

OILER.

SPECIFICATION forming part of Letters Patent No. 265,787, dated October 10, 1882.

Application filed August 29, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. ELLIOTT, of Boston, in the State of Massachusetts, have invented certain new and useful Improvements in Oilers, of which the following is a specification.

My invention relates to that class of oilers known as "oil-droppers." I have already obtained Letters Patent for an oil-dropper, numbered 247,488, and dated September 27, 1881.

My present invention may be considered as an improvement on my patented oil-dropper; and it consists in providing the device with a flexible depressible bottom, and in combining with the longitudinally-movable nozzle-closing stem angle or elbow levers, or their equivalent, operated on by a disk or plate connected with said flexible bottom in such manner that when the flexible bottom is depressed or pushed inwardly the disk or plate connected therewith shall be caused to press upon the free ends of the elbow-levers in a direction to cause them to draw back the stem, and consequently open the nozzle. The discharge-nozzle can thus be opened either by pressing on the projecting end of the stem, as in the patented device, or by depressing the flexible bottom.

I desire it to be understood at the outset that I do not claim broadly an oil-can or oiler possessing the characteristic just specified.

My improvement resides in the features of construction and arrangement hereinafter pointed out, whereby the stem is adapted to be operated in either of the ways mentioned, and it can best be explained and understood by reference to accompanying drawing, in which is represented a longitudinal central section of an oil-dropper embodying the several features of my invention in their preferred form.

A is the oil-reservoir, made preferably of glass and of tubular shape. It is closed at its ends by metal caps B C, which in this instance are fastened tightly in place upon the reservoir A, so as to prevent escape of oil at the joints. The rear cap, B, is formed with an elastic depressible bottom. The front cap, C, is struck up or otherwise formed or provided with a central cylindrical depression or chamber, *a*, in which the disk or plate *b*, hereinafter described, is placed, and can move like a piston in a cylinder. This disk, however, fits the cylinder *a* loosely, so that oil can pass freely between it and the cylinder. The cylinder *a* is screw-threaded externally, and upon it is screwed the tip or nozzle *c*, through which projects the nozzle-closing stem *d*. This stem projects at its rear back through the head of the cylindrical chamber *a*, and is of such length that its front end normally extends through and beyond the nozzle, being held in that position (in which it closes the nozzle) by a spiral spring, *e*, confined between the head of chamber *a* and a flange on the stem, as shown. In the head of chamber *a* one or more openings, *f*, are formed for the passage of the oil from the reservoir, and these openings (after the tip is unscrewed and removed) can also be used for refilling the reservoir, or the device can be furnished with a filling-opening at any other convenient point, this being a matter that will depend to some extent upon the size and proportions of the device and the particular use for which it is designed. The dropper shown in the drawing is intended for sewing-machines. Between the head of chamber *a* and the disk or plate *b* are interposed two elbow-levers, *g*, placed on diametrically-opposite sides of the stem. The interior opposite ends of these levers are connected to the stem by one and the same fulcrum or pivot pin, *h*. Their elbows rest upon the head of cylinder *a*, and their free ends project upwardly toward the disk or plate *b*, with which they are in contact. From the disk or plate *b* extends a rod, *b'*, which is in operative connection with the flexible bottom of the reservoir, being in this instance received in a tubular socket, b^2, projecting centrally from the inner face of the bottom. When the bottom is depressed or pushed inwardly corresponding movement will be imparted to the rod *b'*. This will have the effect of pushing the disk *b* against the outer and free ends of the elbow-levers. As the elbows of the levers rest against the head of the chamber *a*, they will consequently move upon their elbows as their fulcrums, with the effect of causing their inner ends to draw back the nozzle-closing stem *d* against the stress of its spring. The elbows are of course not fixed to the head of chamber *a*, and are free to move back and forth

thereon as the levers change their positions. As soon as pressure on the bottom is removed the parts return to their normal position.

It will be seen that the device can also be used as a dropper without recourse to the flexible bottom. The stem can readily be pushed back, as in other oil-droppers, by pressure on its projecting point, there being no positive union between it and its attachments and the flexible bottom. It is manifest that the presser which communicates movement from the flexible bottom to the elbow-levers may be of a shape and construction differing from the disk *b*. It is also manifest that the presser can be fastened to the flexible bottom instead of being loosely connected with it, as described; nor is it necessary that the elbow-levers should be located in a recess or chamber in the front of the oil-reservoir. The construction hereinbefore described, however, is that which I on the whole prefer.

What I claim as new and of my invention is—

1. The combination, with the reservoir, flexible bottom, oil-discharge nozzle, and spring-controlled nozzle-closing stem, of elbow-levers having their interior opposite ends pivoted to the stem and a presser intermediate between and in operative connection with the flexible bottom and said levers for joint operation, substantially as hereinbefore set forth.

2. The combination, with the oil-reservoir and its flexible bottom, of the nozzle, the spring-controlled nozzle-closing stem, the chamber or recess *a*, the elbow-levers *g*, having their interior opposite ends pivoted to the stem and their elbows resting against the head of chamber *a*, and the presser *b*, arranged to bear upon the projecting free ends of said levers and connected to the flexible bottom, as and for the purposes hereinbefore set forth.

In testimony whereof I have hereunto set my hand this 28th day of August, 1882.

CHAS. W. ELLIOTT.

Witnesses:
C. A. SHAW,
J. PAYSON BRADLEY.