

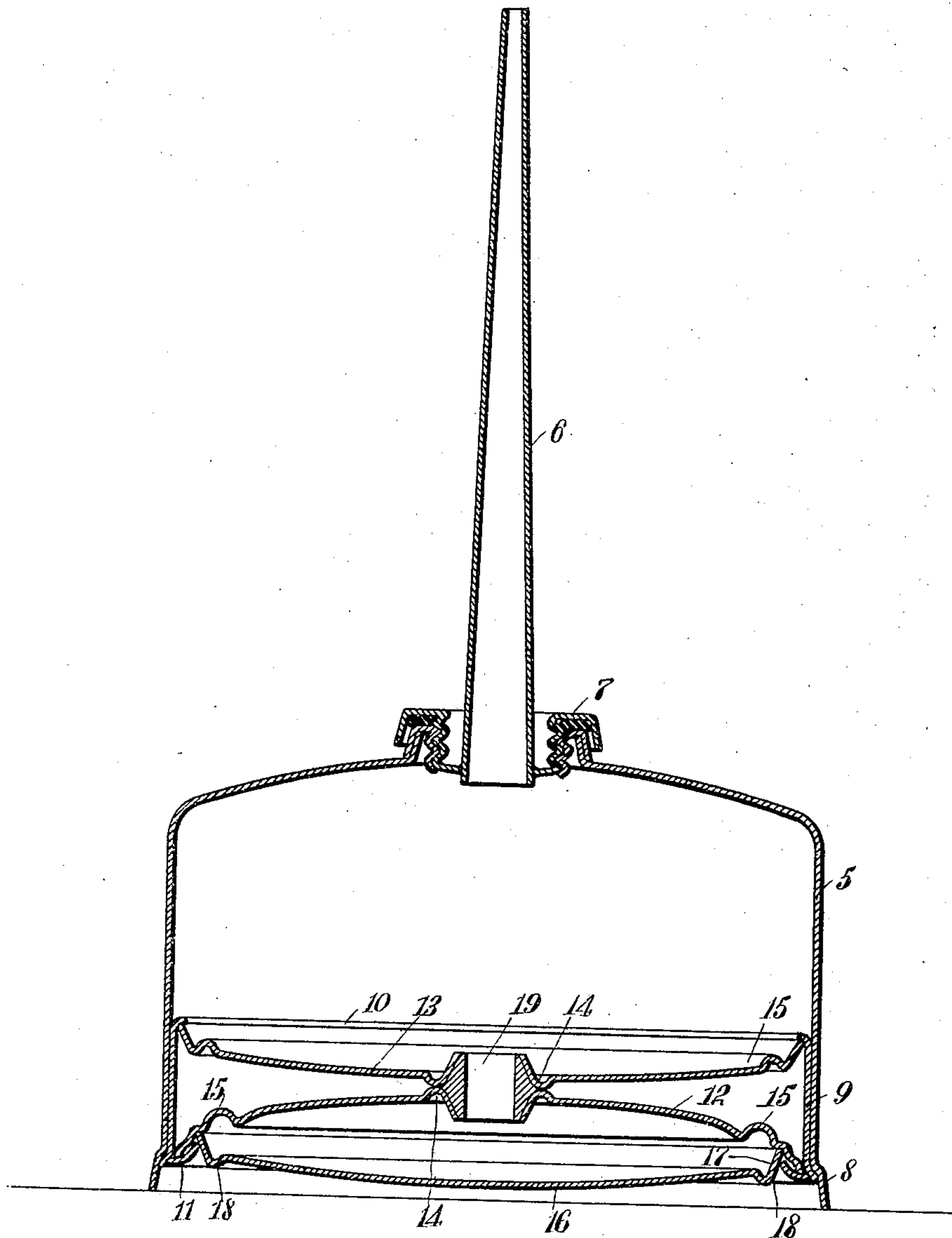
F. G. SVETLIK.

OIL CAN.

APPLICATION FILED SEPT. 8, 1909.

945,637.

Patented Jan. 4, 1910.



WITNESSES

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FREDERICK G. SVETLIK, OF CADOTT, WISCONSIN.

OIL-CAN.

945,637.

Specification of Letters Patent.

Patented Jan. 4, 1910.

Application filed September 8, 1909. Serial No. 516,689.

To all whom it may concern:

Be it known that I, FREDERICK G. SVETLIK, a citizen of the United States, and a resident of Cadott, in the county of Chippewa and State of Wisconsin, have invented a new and Improved Oil-Can, of which the following is a full, clear, and exact description.

The invention is an improvement in oil cans or oilers, and belongs to that class of such devices embodying a reflexive or rebounding bottom, and has in view a can of this character in which the flow of oil in a given time is considerably greater than in cans of the conventional construction. This I attain by employing in the can a number of spring diaphragms, preferably three, spaced one from the other, one of which forms the bottom of the can and the other two arranged at the inside of the can and connected together at the center by a nipple, the latter providing communication between the oil chamber formed at the bottom of the can by the diaphragms, and the main portion of the can body.

Reference is to be had to the accompanying drawing forming a part of this specification, wherein is illustrated in central vertical section an oiler constructed in accordance with my invention.

The body of the can may be of any desired form and capacity, and, as shown, is provided with the usual nozzle 6 rigid with the screw-threaded filling plug 7. The body of the can at the base is preferably expanded slightly, as indicated at 8, to receive at the inside the expanded bottom edge of a retaining ring 9, the latter being inwardly turned at the top to provide a flange 10, and of an external diameter to fit snugly within the lower portion of the can body. To the lower expanded edge of the retaining ring is secured an internal flange 11, curved upwardly slightly and receiving the margin of a thin diaphragm 12, preferably of spring sheet metal. A similar diaphragm 13 arranged above the diaphragm 12 has its marginal portion engaged under the internal flange 10 of the retaining ring, with each diaphragm dished and provided with annular corrugations 14 and 15, respectively arranged near the center and the margin, the diaphragms having their convex faces opposed to each other and contacting at the corrugations 14. A diaphragm 16 of like material is also dished and forms the bottom

of the oil cup, this diaphragm having an upwardly and outwardly-inclined marginal flange 17 which is secured to the diaphragm 12 contiguous to the inner edge of the flange 11 and has an adjoining annular corrugation 18. The concave side of the diaphragm 16 faces upwardly, as is the general practice in oilers of this type, and forms in connection with the intermediate diaphragm 12, an oil chamber. Communication is afforded between this chamber and the main body portion of the can by a nipple 19 forming a union between the diaphragms 12 and 13. For this purpose the nipple is tapered toward the ends, with the enlarged portion at the center, and the metal of the two diaphragms at the inside of the corrugations 14, which is removed to receive the nipple, is flattened against its tapering end portions.

With the can thus constructed, on applying pressure to the under side of the diaphragm 16, the oil from the bottom reservoir will be driven through the nipple 19, due to the displacement, and the inner diaphragms will also yield under the pressure, effecting a considerably greater discharge of the oil in a given time than is possible to get with the conventional form of oil can. In practice, all joints between the diaphragms, retaining ring, etc., will be soldered, the diaphragms 12 and 13 being first secured together by the nipple 19, the diaphragm 13 then secured to the flange 10 of the retaining ring, the bottom diaphragm 16 then applied to the diaphragm 12, and these several connected parts introduced into the bottom of the can and the flange 11 soldered in place at the same time as the ring is soldered to the body of the oiler.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. An oiler comprising an oil reservoir having a discharge nozzle, and a plurality of spring diaphragms, with one of said diaphragms forming the bottom of the oiler and the other of said diaphragms forming in connection with the bottom, an oil chamber, and having an oil passage providing communication between the chamber and body of the reservoir.

2. An oiler comprising a can body having a discharge nozzle, and a plurality of spring diaphragms, one of which forms the bottom of the can and the others forming in connection with the said bottom, an oil chamber,

and having an oil passage providing communication between the chamber and body of the can.

3. An oiler comprising a can body having
5 dished spring diaphragms having the convex faces arranged in opposed position and provided with an oil passage, and a spring diaphragm forming the bottom of the can and arranged under the said diaphragms.

10 4. An oiler comprising a reservoir, dished spring diaphragms arranged in the lower portion of the reservoir and having a nipple at the center providing a union, and a diaphragm arranged under the said diaphragms
15 and forming the bottom of the reservoir.

5. An oiler comprising an oil reservoir, a retaining ring fitting within and secured to the lower portion of the reservoir, dished
20 spring diaphragms having their convex faces arranged in opposed position and provided with an oil passage, with the outer edges of the diaphragms secured to the retaining ring, and a spring diaphragm form-

ing the bottom of the cup, secured to the lower of said diaphragms. 25

6. An oiler comprising a can body having a discharge nozzle, a retaining ring fitted within the lower portion of the body, dished spring diaphragms having the outer edges thereof secured to the retaining ring and
30 provided with an oil passage at the center, a diaphragm forming the bottom of the cup, arranged below and secured to the lowest of said diaphragms, and a flange secured to the lower edge of the retaining ring, receiving
35 the edge of the lowest of said diaphragms and projecting against the margin of said bottom.

In testimony whereof I have signed my name to this specification in the presence of
40 two subscribing witnesses.

FREDERICK G. SVETLIK.

Witnesses:

FRED M. FALLENDORF,
FRANK E. WATSON.