

No. 885,893.

PATENTED APR. 28, 1908.

I. S. VAN LOAN.
OIL CUP.

APPLICATION FILED AUG. 9, 1906. RENEWED JUNE 3, 1907.

Fig. 1.

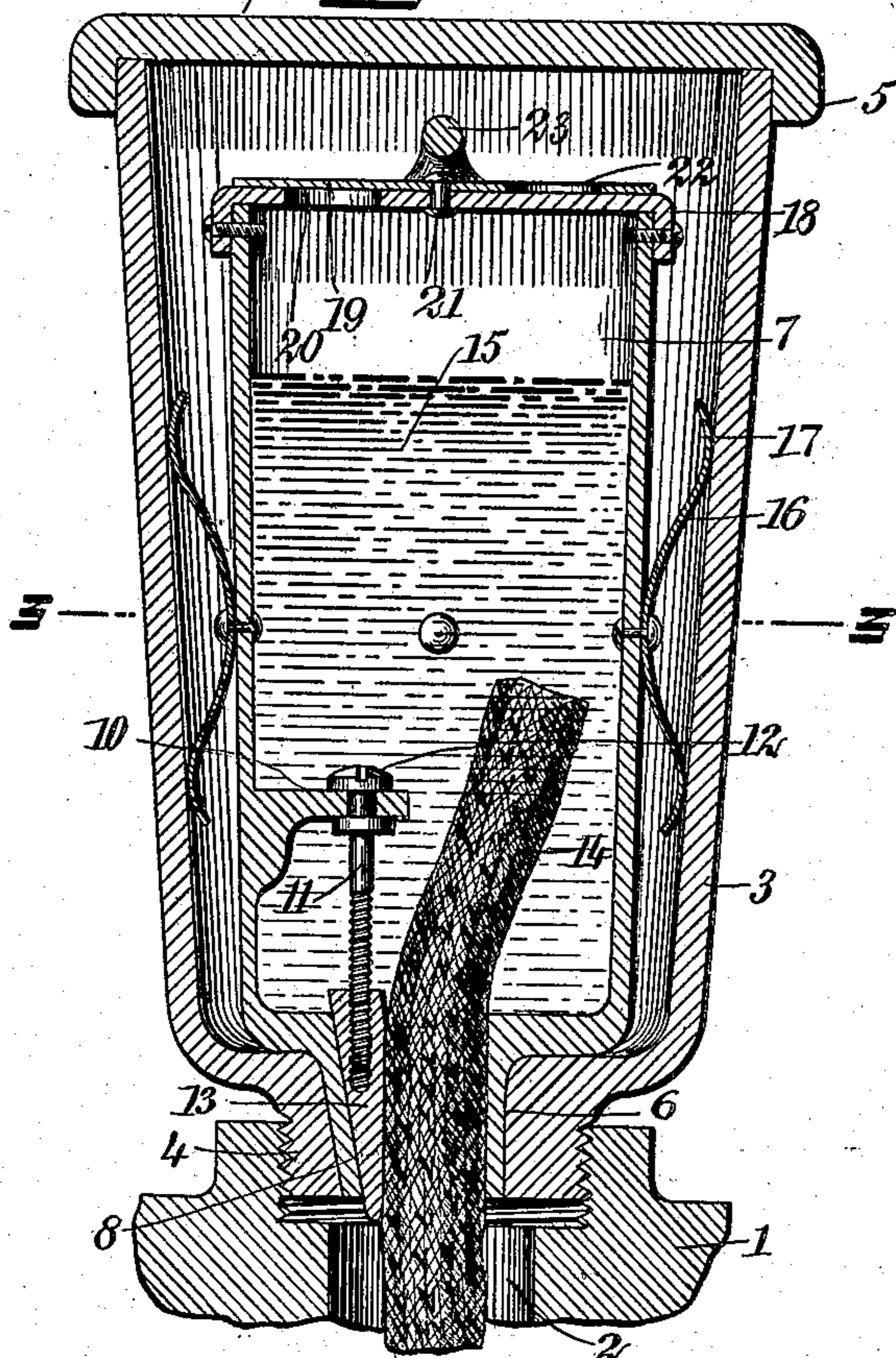


Fig. 2.

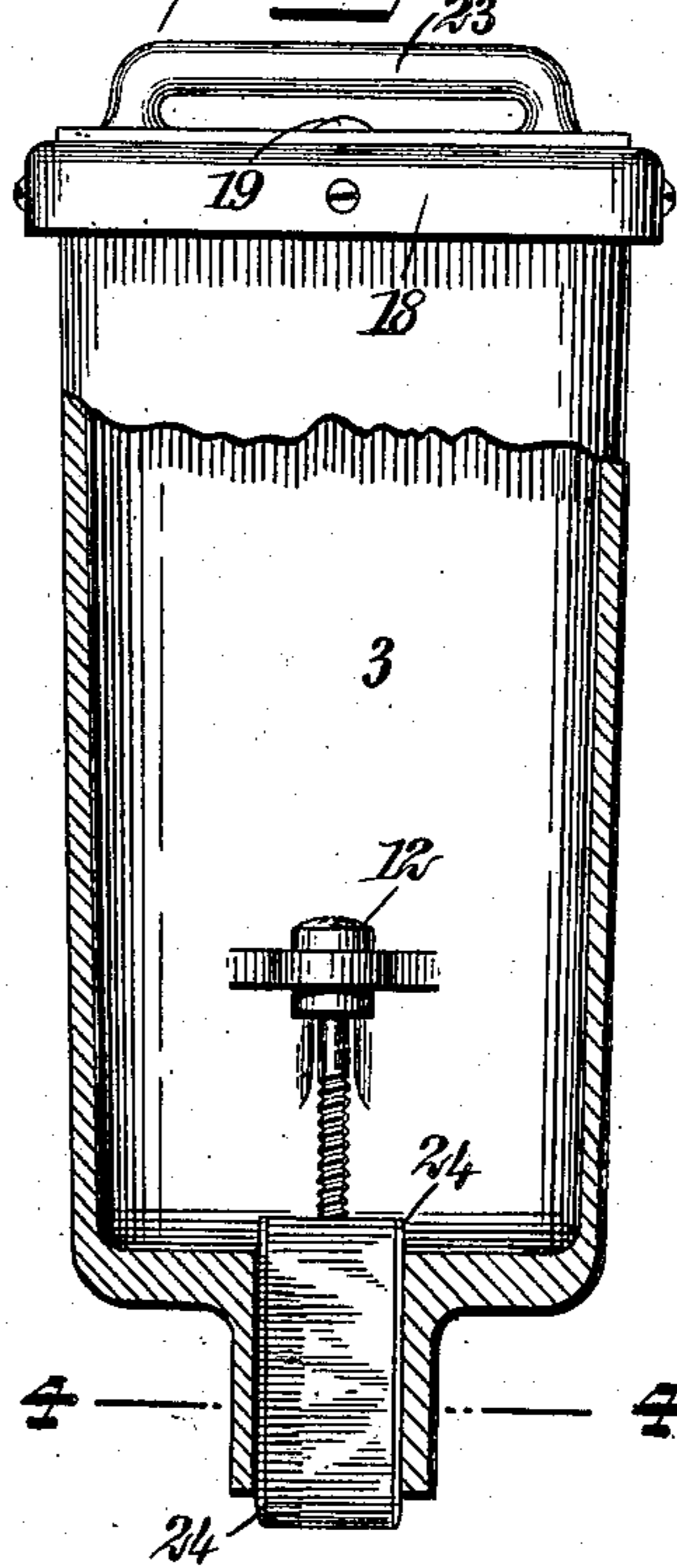


Fig. 3.

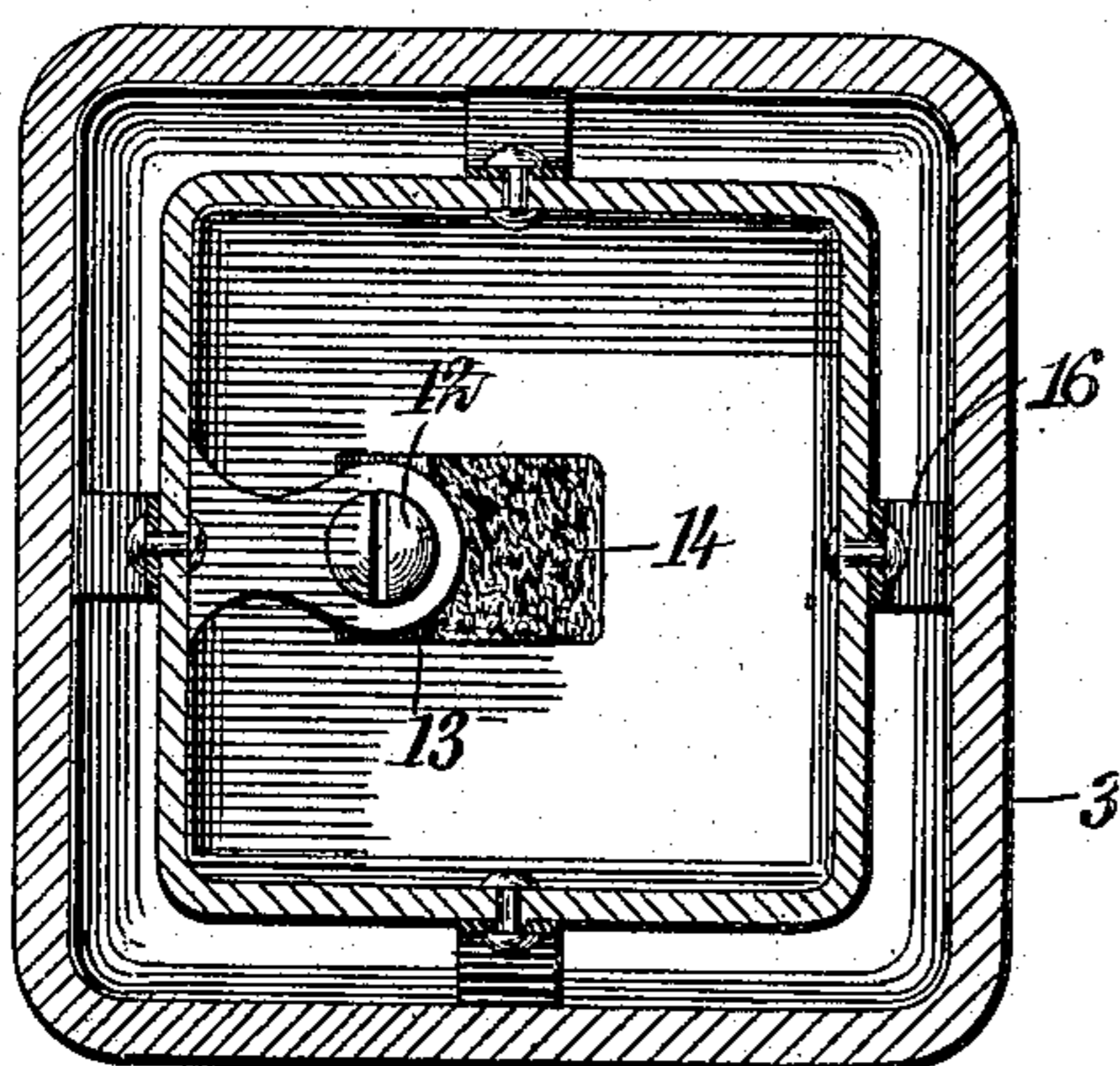
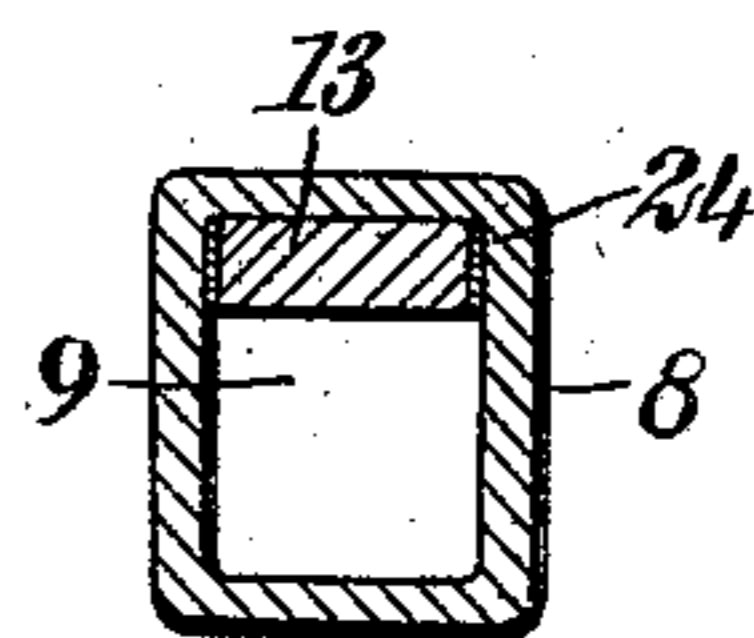


Fig. 4.



WITNESSES:

John H. Bachwood
J. R. Ammer

INVENTOR

Irving S. van Loan

BY

Munn & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

IRVING S. VAN LOAN, OF NEW YORK, N. Y.

OIL-CUP.

No. 885,893.

Specification of Letters Patent.

Patented April 28, 1908.

Application filed August 9, 1905, Serial No. 273,328. Renewed June 3, 1907. Serial No. 377,042.

To all whom it may concern:

Be it known that I, IRVING S. VAN LOAN, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Oil-Cup, of which the following is a full, clear, and exact description.

This invention relates to lubricating.

10 In lubricating axles, and especially where the same are subjected to jarring great difficulty is experienced in feeding a regular supply of oil to the journals.

15 The object of this invention is to produce an oil cup having an improved arrangement for regulating the flow of oil therefrom to the end that the supply passing from the cup will be uniform, constant and capable of being accurately regulated.

20 A further object of the invention is to provide a cup which is adapted to be inserted within an ordinary grease cup as commonly employed for lubricating purposes.

25 The invention consists in the construction and combination of parts to be more fully described hereinafter and definitely set forth in the claims.

30 Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

35 Figure 1 is a vertical central section through a grease cup or grease box in which my invention has been placed; Fig. 2 is a vertical section through the lower portion of my oil cup and illustrating the arrangement for regulating the flow of oil therefrom; Fig. 3 is a cross section taken on the line 3—3 of Fig. 1; and Fig. 4 is a cross section taken on the line 4—4 of Fig. 2.

40 Referring now to the drawings which illustrate one embodiment of my invention and reserving it to the claims to point out the novel features of my invention, 1 represents the upper portion of the cap of a bearing, the same having a lubricating duct or opening 2, leading down to the bearing. Above this opening, a grease cup 3 of common form is attached by being screwed into position, for 45 which purpose the lower extremity of the grease cup is provided with the usual threaded nipple 4. The grease cup 3 is closed by a removable cover 5, and through the nipple 4 the usual opening 6 is provided 50 through which the lubricant may pass downwardly. As indicated, the grease cup 3 is

substantially square in section, tapering slightly toward its lower extremity.

In applying my invention, I provide an inner body 7 which is adapted to hold the fluid lubricant, such as ordinary lubricating oil. This cup is of substantially rectangular form to correspond with the form of the grease cup 3. It is provided in its lower extremity with a short spout 8, which projects downwardly, as shown, said spout being provided with a rectangular opening 9 as indicated most clearly in Fig. 4.

On the inner face of one of the side walls of the upper body or cup 7, an inwardly projecting finger 10 is formed, and in this finger there is rotatably mounted an adjusting screw 11, the same having a double head 12, which locks the adjusting screw against longitudinal movement in the finger, as will be readily understood. This adjusting screw 11 is for the purpose of regulating the position of a wedge block 13, said block being mounted in the aforesaid opening 9. The forward face of this block is substantially parallel with the opposite wall of the opening 9, but the rear face of the wedge block is inclined as shown, and rests against the wall of the opening 9, which is inclined at this point to correspond with the wedge block. In the space not occupied by the wedge block, a wick 14 passes upwardly through the opening 9, its upper extremity being disposed within the body of the oil 15, contained in the cup. By rotating the adjusting screw 11, the wick 14 may be securely held in any adjusted position desired, and at the same time the pressure upon the wick may be regulated. If the pressure upon the wick exerted by the wedge block is less than normal, the flow of oil downwardly through the wick will be increased, and vice versa. In this way I am enabled, to adjust the wick so that it rests against the journal in the bearing and at the same time the flow of oil through the wick can be accurately controlled. By firmly grasping the wick in this way, the wick is not displaced by jars or vibrations and the flow of oil through it remains substantially constant. Such an effect is impossible where the feed is solely by gravity.

In setting the inner body or oil cup 7 in position, the spout 8 is received in the opening 6 of the threaded nipple 4, as indicated most clearly in Fig. 1, the bottom of the inner cup rests upon the bottom of the grease 110

cup. For the purpose of assisting in maintaining the inner cup in an upright position, I provide the side walls thereof with leaf springs 16, which are bent to form a bow, the
 5 extremities of the bow being slightly curved so as to present shoes 17, which rest against the side of the outer cup. The oil cup 7 is closed by a cap 18, having a cover 19 of disk form. The cap 18 is formed with an opening
 10 20, and the cover 19 is rotatably attached at its central point 21 to the cap; the cover 19 is provided with an opening 22 which is similar to the opening 20 and adapted to register therewith so as to enable the contents of the
 15 oil cup to be replenished without removing the cap. In order to facilitate the rotation of the cover 19, the same is provided with a transverse bar 23 which constitutes a handle. As indicated most clearly in Fig. 2, the side
 20 edges of the wedge block 13 lie against the sides of the opening 9 and to these edges I attach facing strips 24 of leather or similar material.

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

1. In combination, an outer cup having an opening therein, an inner cup having a spout received in said opening, and resilient mem-
 30 bers carried by one of said cups and engaging the sides of said inner cup to support the same.

2. In combination, an oil cup having an opening therefrom, a wedge block mounted
 35 in said opening and adapted to jam a wick passing through said opening, and means for adjusting said wedge-block longitudinally.

3. In combination, an oil-cup having an

opening to receive a wick; a member adapted to be reciprocated through the opening; said
 40 member having one face next the wick and an opposite face in wedging contact with the side of the opening to move the member, when reciprocated, to and from the wick,
 45 said member being confined to be non-rotary in the opening relative to the wick; and means for reciprocating said member.

4. In combination, an oil cup having an opening to receive a wick, a member mounted to be reciprocated lengthwise of the wick
 50 in the opening and when so reciprocated to move laterally with greater or less pressure against the wick, and packing material between said member and the sides of the open-
 55 ing in the oil cup, and means for reciprocating said member.

5. An oil cup adapted to be received into a grease-receptacle on a machine, said oil cup having an opening for a wick to pass through
 60 and carrying resilient members adapted to engage the interior of the grease-receptacle to support the cup therein.

6. An oil cup adapted to be received into a grease-receptacle on a machine, said oil cup
 65 having an opening for a wick to pass through and provided with yielding members adapted to engage the interior of the grease-receptacle to support the cup therein, and means adapted to variably compress the wick.

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

IRVING S. VAN LOAN.

Witnesses:

JNO. M. RITTER,
 F. D. AMMEN.