

No. 835,815.

PATENTED NOV. 13, 1906.

J. R. DEAN.

OILER.

APPLICATION FILED FEB. 9, 1906.

Fig. 1.

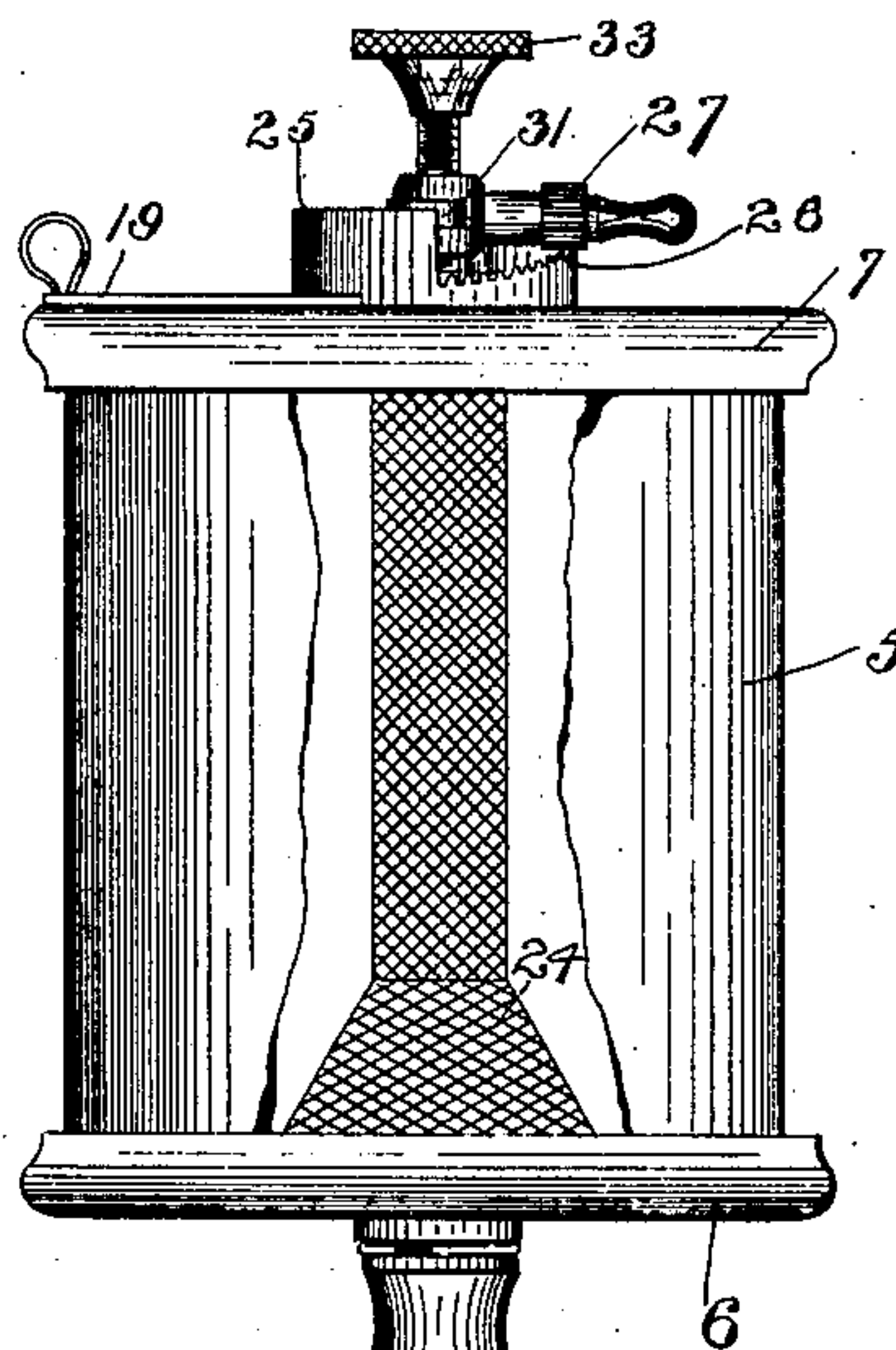


Fig. 3.

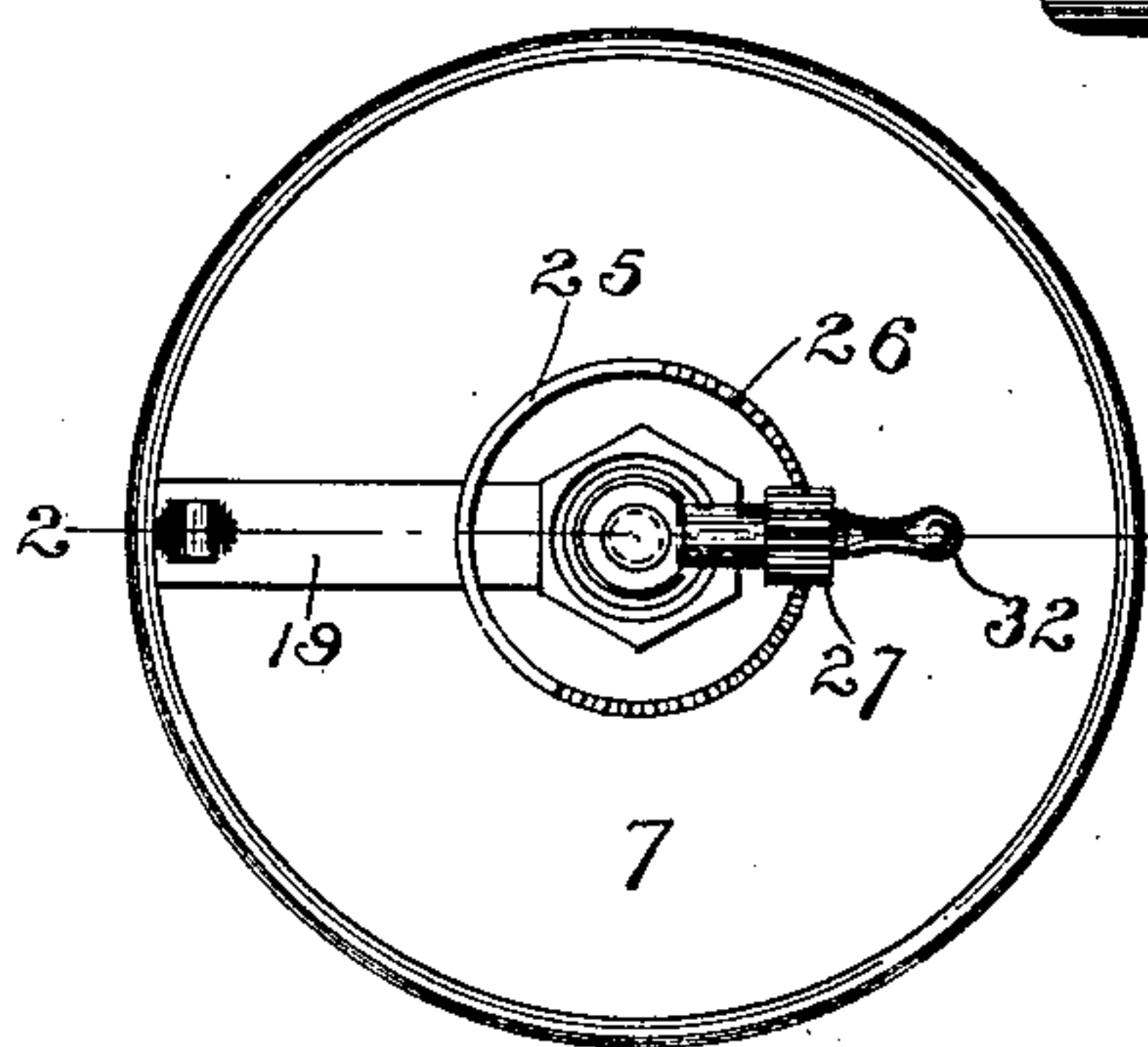


Fig. 4.

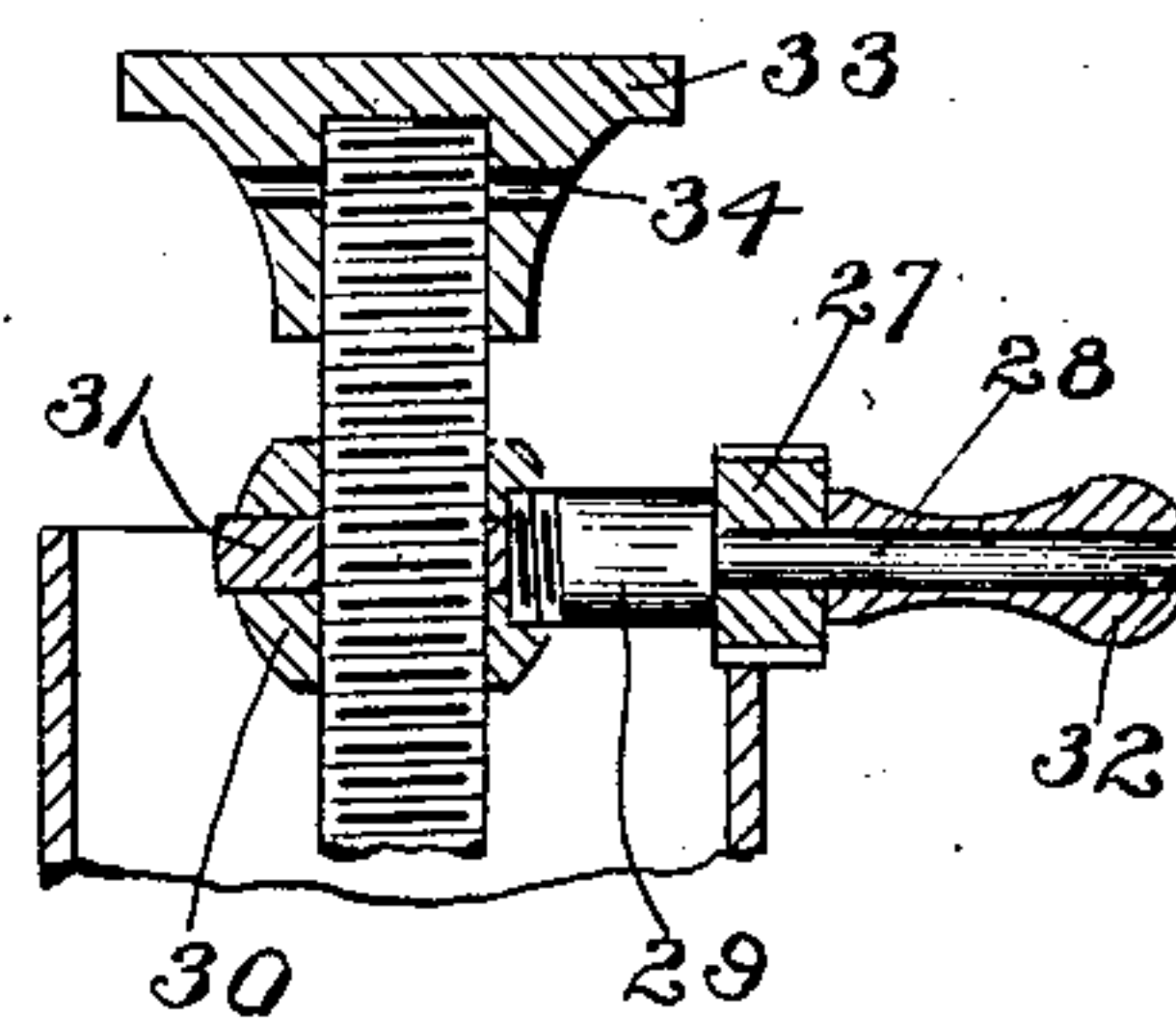
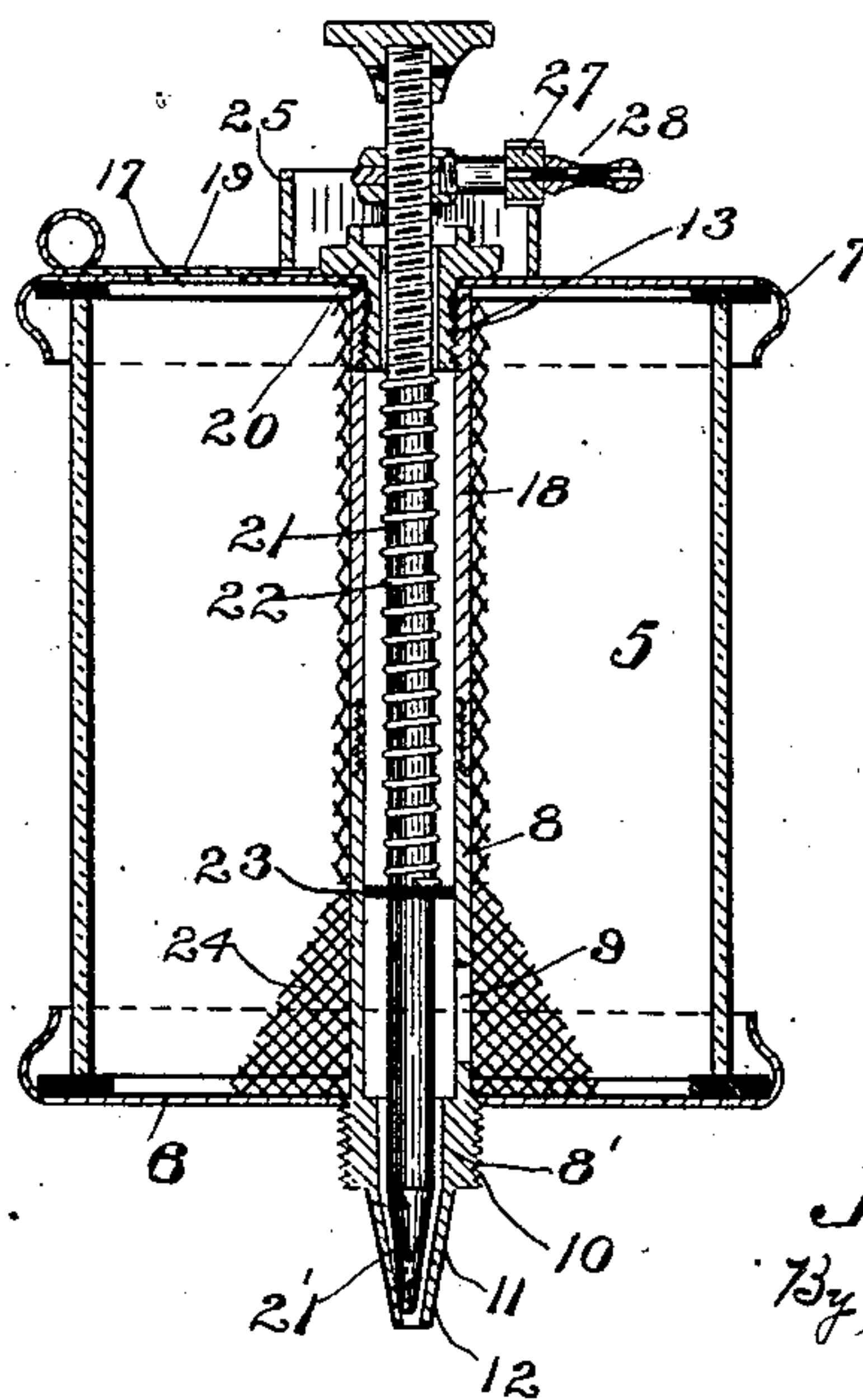


Fig. 2.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

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## OILER.

No. 835,815.

Specification of Letters Patent.

Patented Nov. 13, 1906.

Application filed February 9, 1906. Serial No. 300,289.

*To all whom it may concern:*

Be it known that I, JAMES R. DEAN, a citizen of the United States, residing at Randolph, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Oilers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in oilers of that class in which the oil is allowed to fall drop by drop and principally intended for the lubrication of journal-bearings.

The invention consists in the combination of elements and in certain parts of construction entailed in the combination of said elements to obtain the desired result.

A full understanding of the invention can best be given by a detailed description of a preferred construction embodying the various features of the invention, and such a description will now be given in connection with the accompanying drawings; and I attain my object by the mechanism there illustrated, showing such preferred construction, and the features forming the invention will then be specifically pointed out in the claims.

In the drawings, Figure 1 is an elevation with a portion of the glass of the oil-chamber broken away to more clearly show the screen. Fig. 2 is a vertical central section. Fig. 3 is a plan view of the same. Fig. 4 is an enlarged detail view of part of the regulating means.

Latitude is allowed herein as to details, as they may be changed or varied at will without departing from the spirit of my invention and the same yet remain intact and be protected.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

In the drawings, the numeral 5 represents the oil-chamber, preferably of glass, provided with the bottom plate 6 and the cover 7. The bottom plate 6 is formed with a tubular stem 8, which extends up about midway within the oil-chamber and is threaded at its top. The stem 8 has an opening 9 in close proximity to the base, through which the oil flows from the interior of the oil-chamber 5. The stem 8 extends through the bottom plate 6, as at 8', and is provided with the thread 10, the nipple 11, and the conical valve-seat 12.

Upon the thread 10 is screwed a tubular stem 14, threaded at its lower end, as at 15, and adapted to be screwed into the cap of the bearing to be lubricated. The nipple 11 extends downward into the tubular stem 14, which stem is enlarged about opposite the lower portion of the nipple and forms a sight-feed chamber with the sight openings 16 opposite to one another to permit the observation of the drops of oil as they form and fall through the stem 14.

The cover 7 is formed with a feed-hole 17 and cover 19, and also with a stem 18, which has a thread cut inside of its lower end to receive the corresponding thread upon the stem 8. The plug 20 is screwed into the center of the tubular stem 18, and 21 is a valve-stem passing through the center of the plug 20, through the stem 18, and through the stem 8, and having its point tapered at 21' to fit the conical valve-seat 12.

22 is a spiral spring placed in the chamber within the stems 18 and 8, and bearing at one end against the plug 20 and at the other against a shoulder 23 of the stem 8. The object of this spiral spring is to press the thread of the plug 20 against the corresponding threads of the tubular stem 18 of the cover 7, so that friction enough may be created to prevent the plug 20 from being moved by the jarring of the machinery.

Within the oil-chamber 5 and extending around the periphery of the stems 8 and 18 is a screen 24, preferably of wire, extending from the inner side of the cover 7 downward to the top of the bottom plate 6, being broadened at its lower portion and adapted to screen the oil, preventing dirt and similar substances from passing into the stem 8.

Attached to and extending upward from the cover 7 is a stem 25, a portion of which forms a toothed rack 26, formed in the upper edge of the stem and extending about one-half way around its circumference, and this toothed rack extends from the top of the stem on one side on an incline downward to a point about diametrically opposite the starting point and nearly to the top of the cover 7. With the rack 26 is adapted to mesh a pinion 27, journaled on a shaft 28, extending outward from a stud 29, screwed into a nut 30 on the upper threaded end of the valve-stem 21. In order that this nut 30 may be tightly secured upon the valve-stem 21 at the point desired, the nut is provided with a metallic



washer 31, which is pressed against the threaded side of the valve-stem 21 by the stud 29. Upon the shaft 28 is a handle 32, adapted to hold the pinion in place upon the shaft 28 and to be used to set the pinion according to the amount of oil it is desired to allow to pass through the nipple 11, so that if it is desired to close the valve the handle 32 is moved, the pinion revolving on the rack until it has reached its lowest position at the lowest end of the rack. A thumb-screw 33, screwed upon the top of the threaded end of the valve-stem 21 and held in place by the pin 34, is used when it is desired to regulate the nut 30 upon the valve-stem 21.

It is to be understood that my invention is not limited to the specific details of construction shown in the accompanying drawings, but that said details may be varied in the practical carrying out of my invention. It is also to be understood that the combinations specifically set forth in the several claims are intended to be separately claimed without limitation to the use in connection

therewith of other features of construction illustrated.

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

1. In a lubricator, the combination with the oil-chamber provided with a valve-stem, of a toothed rack and a pinion connected with the valve-stem and meshing with the rack, substantially as shown and described.

2. The combination with the oil-chamber provided with a valve-seat in the oil-passage, of a valve-stem within the oil-passage, a toothed rack without the chamber, a shaft attached to the valve-stem, a pinion on the shaft and adapted to mesh with the teeth of the rack, and a handle for operating the pinion, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES R. DEAN.

Witnesses:

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MELVA W. PORTER.