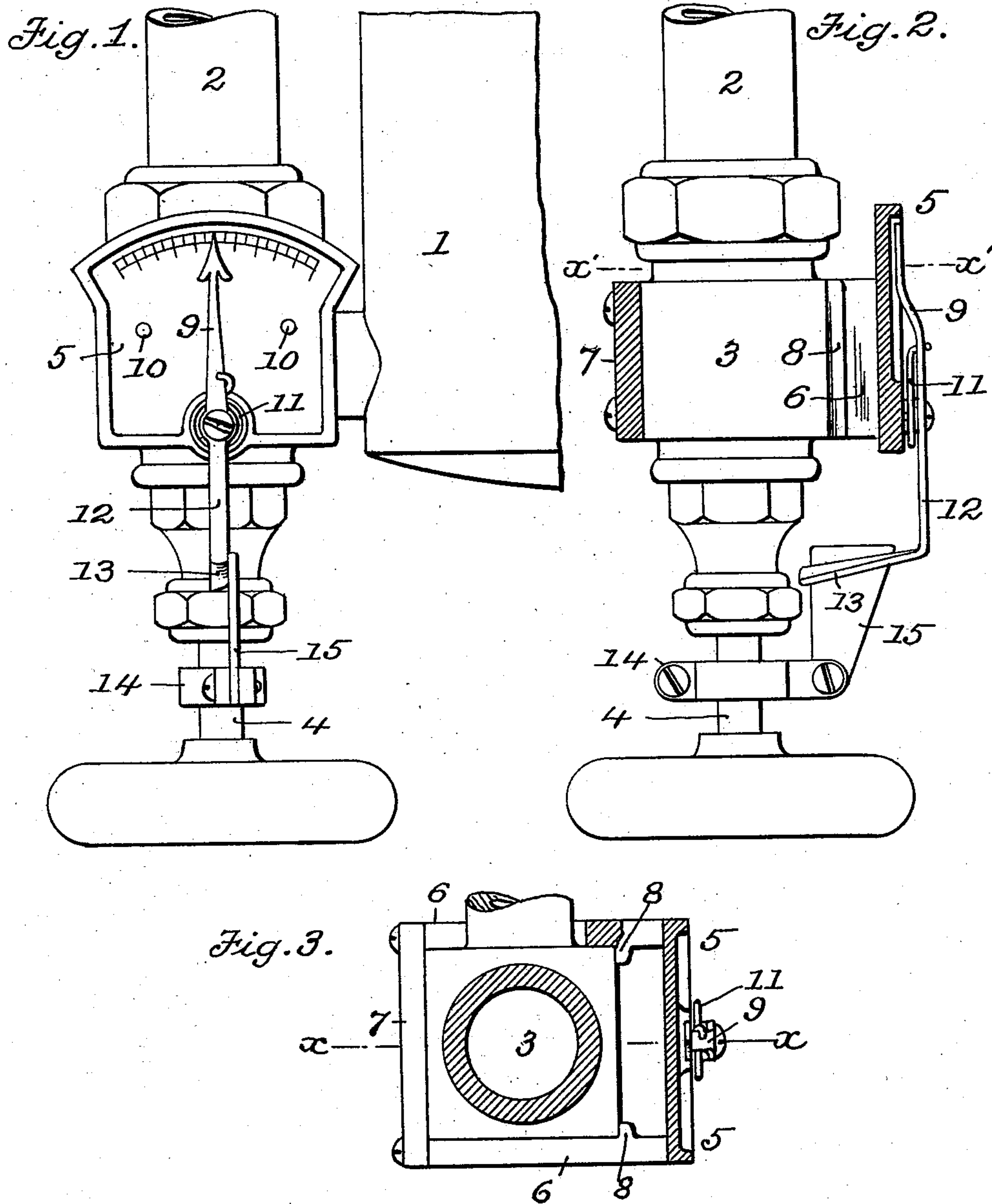


(No Model.)

D. L. BEACH.
FEED INDICATOR FOR LUBRICATORS.

No. 601,204.

Patented Mar. 22, 1898.



Attest:

W. H. Holmes,
James Cavallini

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Daniel L. Beach,
by Robert Burns, Att'y.

UNITED STATES PATENT OFFICE.

DANIEL L. BEACH, OF CHICAGO, ILLINOIS.

FEED-INDICATOR FOR LUBRICATORS.

SPECIFICATION forming part of Letters Patent No. 601,204, dated March 22, 1898.

Application filed May 22, 1897. Serial No. 637,786. (No model.)

To all whom it may concern:

Be it known that I, DANIEL L. BEACH, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Feed-Indicators for Lubricators; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

The present invention relates to mechanical means for affording a visible indication of the amount of oil that is fed from a lubricator during use, the object of the present improvement being to provide a simple and efficient attachment for lubricators, either sight-feed or otherwise, whereby the position of the oil-regulating valve is indicated upon a dial, and thus afford a guide for the operator in a subsequent setting of the valve to attain a like feed or one approximately faster or slower. I attain such object by the construction and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of a portion of a sight-feed lubricator to which the present invention is applied; Fig. 2, a sectional elevation at line $x x$, Fig. 3, of the same; Fig. 3, a horizontal sectional elevation at line $x' x'$, Fig. 2.

Similar numerals of reference indicate like parts in the different views.

Referring to the drawings, 1 is the body of a sight-feed lubricator; 2, the sight-feed tube; 3, the feed-tube base, and 4 the stem of the regulating-valve by which the flow of oil is controlled.

5 is a dial-plate secured to the base 3 in a detachable manner by means of side extensions 6 and end plate 7, which is secured to the extension 6 by screws, as shown.

8 are lugs on the extensions 6, that are adapted to engage against the forward face of the base 3, and said lugs are positioned, as shown, so as to support the dial-plate 5 out of contact with said base.

9 is a hand or pointer of the dial-plate, pivoted at the lower end of the same and which has its movement limited by stop-pins 10 on said dial-plate, as shown.

11 is a spring secured to the dial-plate and

to the hand or pointer, the tendency of which is to move said hand to the zero-mark of the index-plate.

12 is the tail extension of the hand or pointer, having a thin flexible formation and an in-turned or bent extremity 13, as shown.

14 is a collar removably secured to the stem 4 of the regulating-valve by screws or other like means.

15 is a vertical member, preferably of the triangular formation shown, that is secured to the collar 14 of the regulating-valve and adapted to engage the tail extension 12 of the pointer 9, so as to move said pointer across the dial as the stem of the regulating-valve is turned to adjust the flow of oil.

The present improvement is intended to operate with a fractional rotation of the regulating valve-stem, and thus afford a very sensitive indication of the same, and accordingly it is intended that the said regulating-valve be adjusted approximately to the required opening before the present device is set to indicate in a sensitive manner the further adjustment of the valve; and to this end a material feature of the present invention consists in the heretofore-described flexible formation of the tail extension 12 of the hand or pointer 9, combined with the vertical member 15 on the collar that is secured to the stem of the regulating-valve, and which member is preferably of the triangular form shown in that such construction admits of the ready passage of one part past the other in the preliminary rotation of the valve-stem in either direction to attain the desired flow or feed of the lubricant from the lubricator.

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

1. The combination with a lubricator, and its regulating-valve of a member 15, secured to the stem of the valve, a stationary index-plate, and a pointer pivoted on said index-plate and having a tail or extension 12, adapted to be operated by the member 15, substantially as set forth.

2. The combination with a lubricator, and its regulating-valve, of a member 15 removably secured to the stem of said valve by a collar 14, a stationary index-plate, and a pointer pivoted on said index-plate, and hav-

ing a tail or extension 12, adapted to be operated by the member 15, substantially as set forth.

3. The combination with a lubricator, and
5 its regulating-valve, of a member 15, secured to the stem of the valve, a stationary index-plate, and a pointer pivoted on said index-plate and provided with a tail or extension 12, the extremity 13 of which is intumed, said
10 tail 13 being adapted to be operated by the member 15, substantially as set forth.

4. The combination with a lubricator, and its regulating-valve, of a member 15, secured to the stem of said valve, a stationary index-
15 plate, a pointer pivoted on said index-plate, and provided with a tail or extension 12, and a spring 11, tending to push said pointer to the zero-mark of the index-plate substantially as set forth.

20 5. The combination with a lubricator, and its regulating-valve, of a member 15, secured to the stem of said valve, a stationary index-

plate secured to the feed-base 3, of the lubricator, by extensions 6, and end plate 7, and a pointer pivoted on said index-plate and provided with a tail or extension 12, adapted to be operated by the member 15, substantially as set forth. 25

6. The combination with a lubricator, and its regulating-valve, of a member 15, secured to the stem of said valve, a stationary index-plate secured to the feed-base 3, of the lubricator by extensions 6, having lugs 8, and end plate 7, and a pointer pivoted on the index-plate and provided with a tail or extension 12, adapted to be operated by the member 15, substantially as set forth. 30 35

In testimony whereof witness my hand this 17th day of May, 1897.

DANIEL L. BEACH.

In presence of—

ROBERT BURNS,
JAMES LAVALLIN.