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C. F. FELLOWS.
LAMP AND BURNER.
APPLICATION FILED JULY 19, 1907.

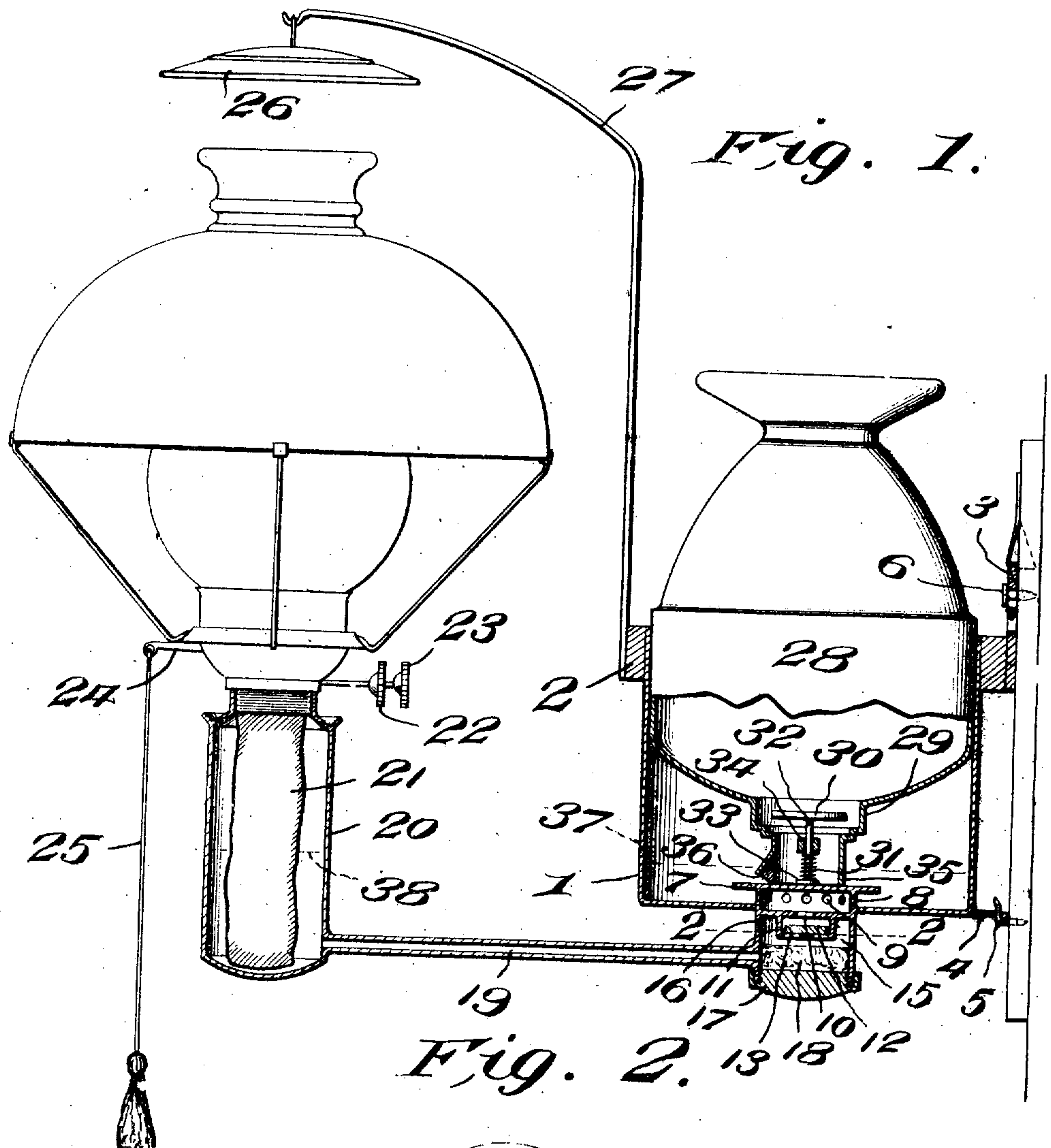
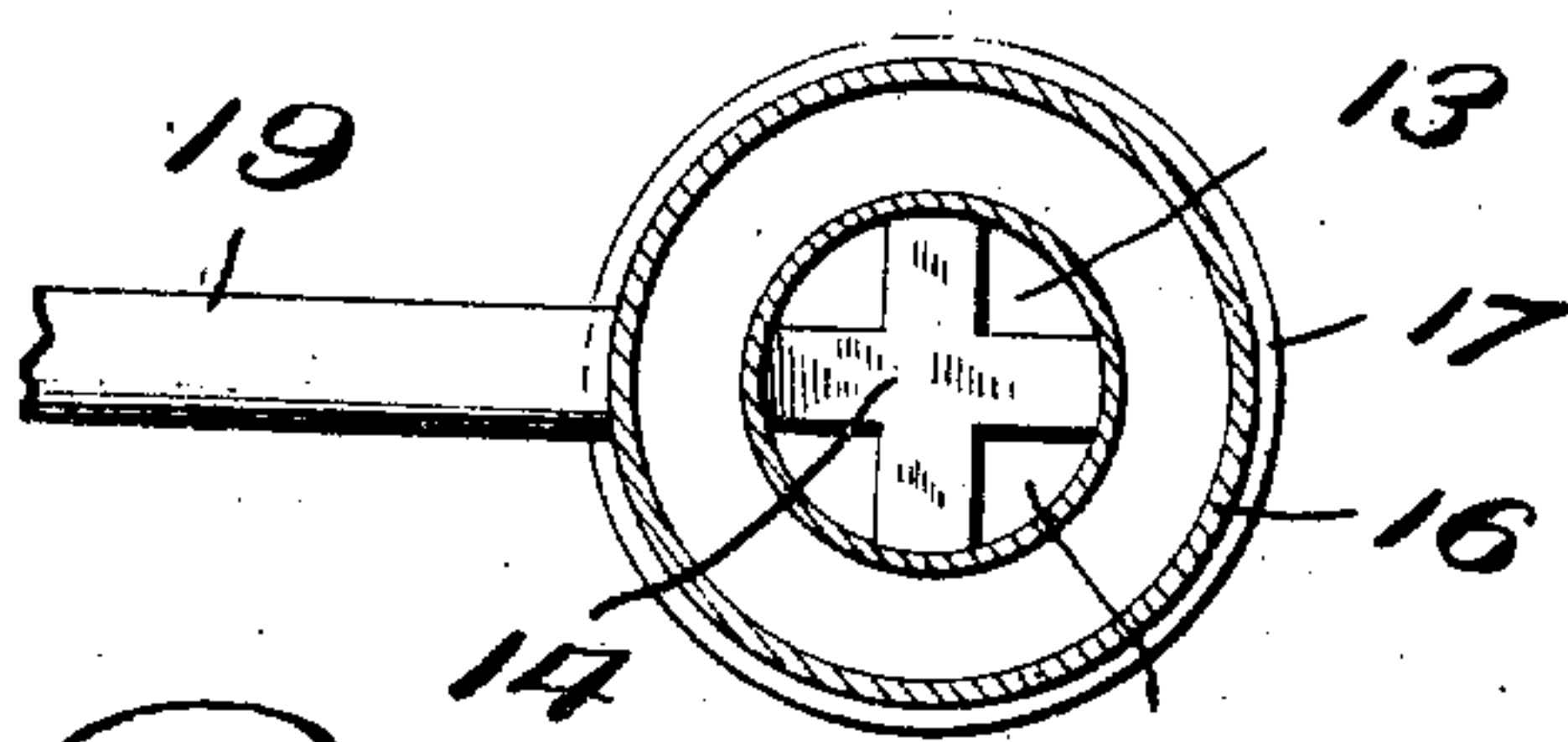


Fig. 2.



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LAMP AND BURNER.

No. 889,779.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES F. FELLOWS, a citizen of the United States, residing at West Chelmsford, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Lamps and Burners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention, as will be hereinafter fully described and claimed, relates to lamps and lamp burners and more particularly to lamp burners and reservoirs therefor, which will render the feed of the lamp wholly automatic and will insure the greatest degree of safety, my main object being to provide a self-feeding oil supply to be used in connection with lamps, or for oil stoves and in fact for all manner of burners utilizing the oil as a fuel.

Other objects and advantages will be hereinafter referred to and more particularly pointed out in the claims.

In the accompanying drawings which are made a part of this application, Figure 1 is a side elevation, partly in section of my improved lamp as applied to a wall, and, Fig. 2 is a detail sectional view of the oil supply reservoir taken on line 2—2 of Fig. 1.

The details of my invention and cooperating accessories will be individually designated by numerals, the same numeral corresponding to a similar part in the drawings, 1 designating the main or body portion of my reservoir, open at its upper end and adapted to be secured to the wall or ceiling in any desired way, or may be arranged to rest upon a shelf or table, as will be obvious from the following description.

In Fig. 1 I have shown the said body portion or reservoir as attached at a convenient part upon the wall, as by means of the encircling collar 2, secured to the bracket 3 and also having the extension or ear 4 to fit over the hook or pin 5, or other convenient device, the said bracket being permanently or detachably secured to the wall, as by the screw or nail 6.

In the bottom of the bottom portion 1 I form the seat 7, resting slightly above the bottom of the body portion 1 as upon the annular collar 8, provided with a plurality of perforations 9, through which the oil in the body portion 1 may pass to enter the

opening 10 formed in the bottom proper of said body portion. Beneath the opening 10 I provide the valve seat or basket 11 carrying the valve proper 12.

The valve 12 normally rests over the apertures 13, said apertures being formed in the bottom of the basket, at preferably regular intervals, so that the bottom of the seat presents the appearance indicated by the numeral 14 in Fig. 2, though it is obvious that any form of openings may be provided, it being understood that the valve 12 is of sufficient size to fit loosely within the seat or basket 11, so that the oil may pass freely down around the edges thereof into the chamber 15, formed by a downward extension of the collar or chamber, said downward extension being designated by the numeral 16.

The lower end of the chamber 15 is provided with a suitable closure 17, which may be readily removed to clean the interior thereof and particularly to clean or renew the filtering member 18, formed of felt or other suitable substance to thoroughly cleanse the oil of sediment or other impurities.

Connected with the chamber or extension 16 is the oil conveyer or tube 19, to convey the oil to the lamp 20, as indicated in Fig. 1, it being understood that the lamp only represents one of the many uses to which the oil may be placed, as, for instance, the conveyer tube 19 may be connected to the burner of an oil stove or the conveyer tube may be multiplied in number, so that the chamber 16 may be placed in connection with any desired number of lamps, and I deem it unnecessary to multiply the number of pipe connections in the drawings, in-as-much as I desire it understood that I reserve the right to use any number which the circumstances may require.

It will be understood that the lamp shown in Fig. 1 is of the usual construction, having preferably a pair of wicks 21 controlled in the usual manner by suitable wick-raising and lowering devices 22 and 23.

I have provided the ordinary device for extinguishing the flame of the lamp, said device having a lever 24 and a convenient means for controlling the same, as indicated by the cord 25, and as said parts of the lamp are of ordinary construction, I deem it unnecessary to refer further thereto. It will also be seen that I have provided a lamp bell supported upon the bracket 27, attached at a convenient point, as to the collar 2.

I now desire to call particular attention to my oil reservoir proper 28, which may be of any desired shape and size and of any material, either glass, sheet metal or other character. In the lower end of the reservoir proper, I provide the valve seat 29, in which I locate the valve 30, which is normally held in a depressed or closed position by the spring 31 disposed upon the stem 32 intermediate the head and the cross bar 34 and as the valve seat is provided with an extension 35, open at its lower end, it is obvious that when the reservoir proper is raised off of the plate or platform 7, the spring 31 will at once act to force the valve 30 tightly down upon its seat and, thereby, prevent further escape of the oil, it being understood that the valve stem 32 is of sufficient length to hold the terminal member 33 normally slightly below the edge of the extension 35, so that said terminal 33 will come in contact with the plate 7, before the edge of the extension 35 is brought into contact therewith. It will, therefore, be clearly apparent that the reservoir proper may be readily filled with oil by withdrawing the same from the body section and pressing the valve inward, as by applying pressure upon the member 33, which can be readily done by the spout of the oil can or with the finger, pencil, or the like, and, after said reservoir has been filled, the valve 30 automatically closes when pressure is removed from the member 33, thus enabling the reservoir to be at once disposed in its normally inverted position.

Upon one side of the lower edge of the extension 35, I provide the outwardly curved section 36 which affords an opening at the lower edge of said extension for the escape of the oil, thus permitting only sufficient oil to escape into the bottom of the body section 1 to reach slightly above the opening 36, the height of the oil being designated by dotted lines 37. It will thus be seen that I have provided a safety seal in the oil and that the oil in the reservoir proper 28 will be prevented from escaping to reach only to the height designated by the numeral 37, thus insuring a completely automatic control of the oil feed or source of supply, the result being the attainment of great safety. It is further obvious that if, for any reason, there should be a back flow from the lamp body, the valve 12 will automatically rise upward and close the aperture 10, thus preventing further back flow into the bottom of the body section and, thereby, insuring that substantially the same level of oil in the body section 1 and the lamp will be reliably and automatically maintained. Obviously, the level of oil will be the same in the body section 1 and in the lamp body, the height of the oil in the lamp being indicated by the numeral 38.

Having thus described the construction and manner of using my improved auto-

matic reservoir for the attainment of a perfect and automatic feed of the oil to supply a lamp, or other form of burner, further detail description is deemed unnecessary, and while I have described the preferred combination of elements, I wish to comprehend all substantial equivalents and substitutes as may fall fairly in the scope of my invention.

What I claim is:

1. The combination with a lamp burner, 75 and a supply tube therefor; of an automatically feeding reservoir comprising a body, said body being open at its upper end, an annular collar extending upwardly from the bottom of said body having a plurality of perforations therethrough, a seat on said collar, an opening in the bottom of said body below said seat, a downwardly extending collar on said body connected to said supply tube and having a closure at its lower end to form a 85 chamber, an apertured basket in said chamber, a valve in said basket; an oil reservoir adapted to be seated in said body, a valve seat in the bottom of said oil reservoir, an extension on said seat having an opening at 90 its lower edge, a cross bar in said extension, a valve stem mounted in said cross bar, a valve at one end of said stem, a head at the opposite end thereof, a spring disposed on said stem intermediate the head and cross 95 bar whereby said valve is normally held in closed position and means to secure said body to a wall.

2. The combination with a burner; of an oil supply reservoir comprising a body, said 100 body being open at its upper end, a collar in the bottom of said body having perforations therethrough, a seat on said collar, an opening in the bottom of said body, a chamber on said bottom, a supply tube connecting said 105 chamber and burner, a basket in said chamber, a valve in said basket, an oil reservoir adapted to be seated in said body, a valve seated in the bottom of said oil reservoir, an extension on said seat having an outwardly 110 curved portion at its lower edge, a crossbar in said extension, a valve stem mounted on said crossbar, a valve at the upper end of said stem adapted to be normally retained in said seat, a head at the lower end thereof, a 115 spring disposed on said stem intermediate the head and crossbar, said stem normally reaching beyond said extension whereby when said oil reservoir is seated in said body, said stem will engage said seat on the collar 120 and the valve opened, and means to secure said body to a wall.

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

CHARLES F. FELLOWS.

Witnesses:

BESSIE CROSSLEY,
GEO. S. SNOW.