No. 778,283. PATENTED DEC. 27, 1904.

W. W. STURGIS.

STREET LAMP POST.

APPLICATION FILED OCT. 12, 1904.

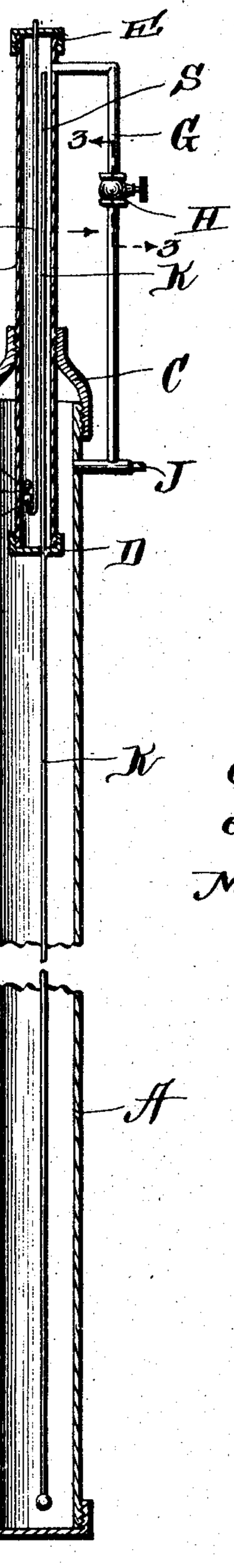


Fig. 1.

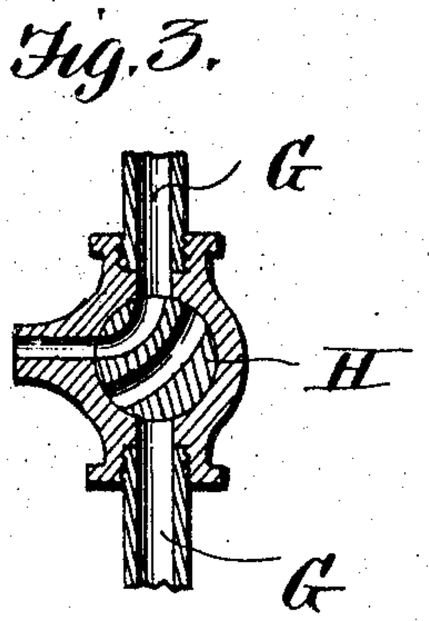


Fig. 3.

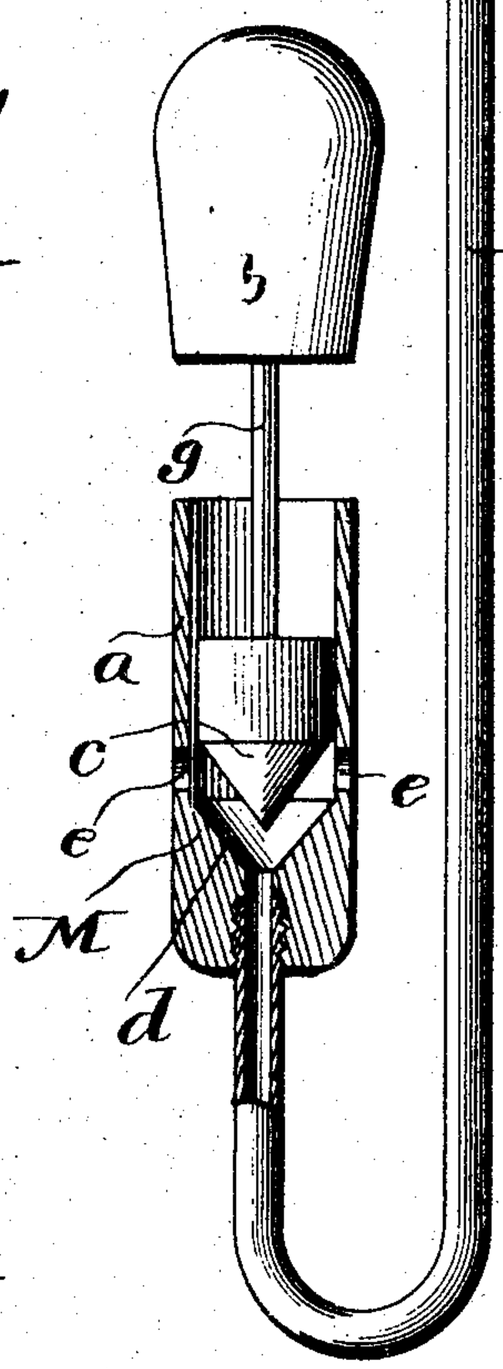
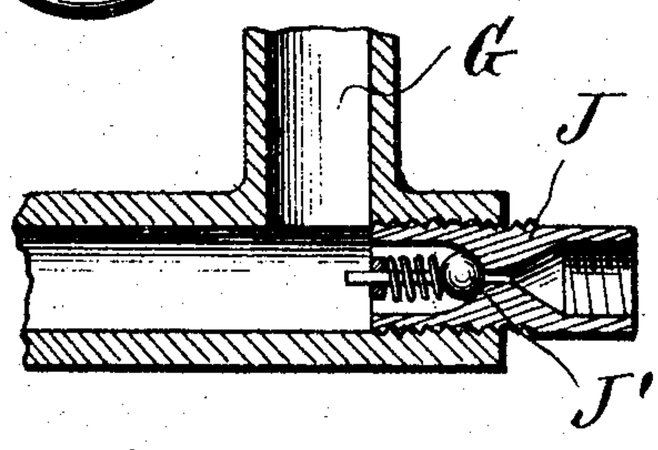


Fig. 2.

Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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STREET-LAMP POST.

SPECIFICATION forming part of Letters Patent No. 778,283, dated December 27, 1904.

Application filed October 12, 1904. Serial No. 228,208.

To all whom it may concern:

Be it known that I, WALTER WOOD STURGIS, a citizen of the United States, residing at Troy, in the county of Doniphan and State of Kansas, have invented a certain new and useful Improvement in Street-Lamp Posts; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in street-lamp posts; and it relates more particularly to that class of lamp-posts in which the hollow interior of the post is designed to be utilized as a storage chamber or receptacle for gasolene or other oil used as a fuel for the lamp.

The invention relates, further, to a means employed whereby the gasolene or oil contained within the post may be automatically supplied by air-pressure to the burner and the supply automatically regulated.

To these ends and to such others as the invention may pertain the same consists in the peculiar construction and in the novel combination, arrangement, and adaptation of parts, all as will be hereinafter fully described, shown in the accompanying drawings, and then specifically defined in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which drawings—

Figure 1 is a central vertical section through a lamp-post embodying my invention. Fig. 2 is an enlarged detail view of the automatically-operated valve and its connections. Fig. 3 is a sectional view on line 3 3 of Fig. 1; and Fig. 4 is a detail view of the plug J, showing the valve J′.

Reference now being had to the details of the drawings by letter, A represents the post, which is made, preferably, of tubing. The post is provided at its lower end with an imperforate cap or may be closed in any suitable way.

B is a section of piping, which in the construction of a gas-lamp post of standard size would be substantially about two feet in length and of a diameter slightly less than the diameter of the hollow interior of the post A, within which the lower end of said piping B is inserted, a suitable bushing or reducer, as shown at C, being provided in order to make close connection between the inner and outer tubes at their point of connection.

D is a cap which is screwed over the lower end of the inner pipe B.

E is a like cap secured to the upper end of said pipe B.

G is a tube or pipe which at its upper end communicates with the interior of the pipe B at a point near the upper end thereof and at its lower end communicates with the interior of the post A at a point directly below and adjacent to the point at which the pipe B enters the upper end of the post.

H is a straightway cut-off and waste valve of the ordinary construction, this cut-off or valve being interposed in the tube G at a point intermediate of its ends.

J is the filler-plug through which air is admitted.

K is a small tube through which the gasolene is forced from the storage-chamber contained in the hollow interior of the post to the interior of the upper chamber, which consists of the hollow interior of the pipe B. Said tube K has a perforated strainer-bulb at its lower end, and its upper end opens near the upper end of the pipe B, and L is a tube which extends upward through the cap at the upper end of the pipe B and communicates with the burner. (Not shown.)

M is an automatic valve designed for use in regulating the supply of gasolene to the burner.

In order that the construction and operation of the automatic valve M may be clearly understood, reference should be had to Fig. 2 of the drawings, in which the details of this valve and its connections are clearly shown.

Referring to said Fig. 2, *a* is a cup attached to the upwardly-bent lower end of the tube L within the lower end of the pipe B, and *b* is a float provided at its lower end with a valve-stem *g*, having at its lower end a conical valve *c*, adapted when closed to be seated upon the valve-seat *d*. *e e* are holes through the cup *a*, which serve to admit gasolene to the cup.

From the foregoing description of the construction of the device its operation will be readily understood and is as follows: In filling the chamber contained in the post A with gasolene or other oil to be used as a fuel the filler-plug J, provided with an air-valve J′, is removed, and after the chamber has been filled with gasolene or other oil used as a fuel air is forced, by means of any suitable air-pump, through said air-valve J′. In order to fill the tube B with gasolene, the valve H is given a one-quarter revolution to cause the waste-port of the valve to register with the portion of the tube G above the valve H, thus serving to release air from the pipe B and at the same time to cut off the passage of air from the tube A into the pipe B, the air-pressure forcing the gasolene through the pipe K from the lower end of the pipe B. When the pipe B has been filled with gasolene, the surplus will run out of the waste-hole in the valve H. Said valve H should then be turned to open communication between the reservoir A and pipe B, when the air-pressures therein will be equalized. The cut-off valve M, it will be noted, is attached to the pipe leading to the lamp, said pipe extending vertically through the pipe B. When the pipe B is filled with gasolene, the float *b* serves to hold the valve *c* from its seat *d*, permitting the gasolene to escape. As the gasolene lowers below the float *b* it permits the valve *c* to fall back into its seat *d*, and thus serves to stop the escape of gasolene.

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

1. A lamp-post oil-containing reservoir and feeding apparatus comprising a hollow post reservoir adapted to contain oil under pressure, a piping closed at its ends and having a valve-controlled passage-way communicating between the same and said reservoir, an open-ended tubing communicating between said reservoir and pipe, and a valve-regulated exit-tube leading from said pipe, as set forth.

2. A lamp-post oil-containing reservoir and feeding apparatus comprising a hollow post reservoir adapted to contain oil under pressure, a pipe with closed ends, a valve-regulated passage-way intermediate said pipe and reservoir, an open-ended tubing communicating between said reservoir and pipe, a burner-feeding tube positioned within said pipe and leading through the closed top thereof, and a float-regulated valve adapted to regulate the exit end of said burner-feeding tube, as set forth.

3. A lamp-post oil-containing reservoir and feeding apparatus comprising a hollow post reservoir adapted to contain oil under pressure, a closed pipe extending within said reservoir, a valve-regulated passage-way communicating between said pipe and reservoir, a valve filling-plug, an open-ended tube passing through the lower closed end of said pipe and affording communication between the reservoir and pipe, a burner-feeding tube passing through the closed top of said pipe and having its lower end bent, a cup provided with circumferential apertures, fitted to the lower end of said burner-feeding tube, a valve having a play within said cup and designed to close the exit-opening in the bottom of the cup, and a float secured to said valve, as set forth.

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

WALTER WOOD STURGIS.

Witnesses:
JOHN C. DEVEREUX,
JOHN O. HARDY.