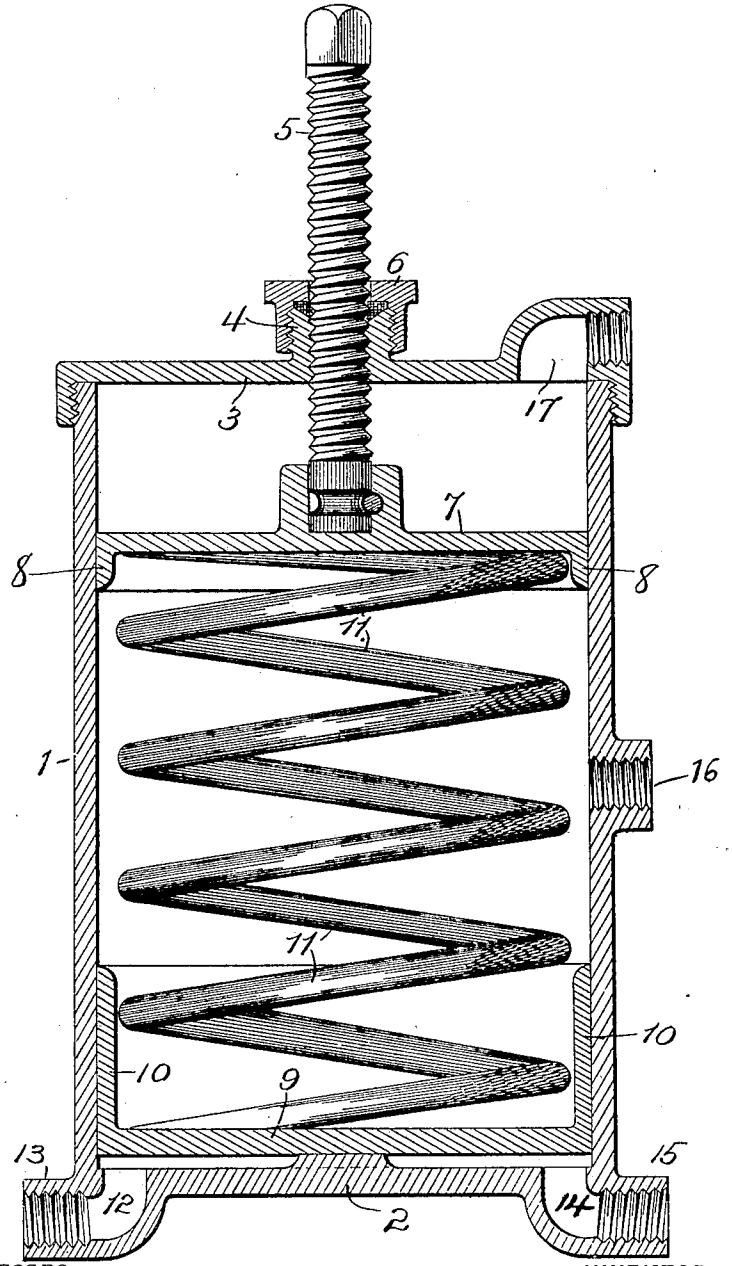
E. G. OFELDT.

AUTOMATIC FUEL FEED.

APPLICATION FILED APR. 22, 1907.

904,984. Patented Nov. 24, 1908.



WITNESSES

E. D. Nottingham

G. F. Downing.

INVENTOR

E. G. Ofeldt

By H. A. Seymour Attorney

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ERNEST G. OFELDT, OF NYACK, NEW YORK.

AUTOMATIC FUEL-FEED.

No. 904,984. Specification of Letters Patent. Patented Nov. 24, 1908.

Application filed April 22, 1907. Serial No. 369,552.

To all whom it may concern:

Be it known that I, ERNEST G. OFELDT, of Nyack, in the county of Rockland and State of New York, have invented certain new and useful Improvements in Automatic Fuel-Feeds; 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 relates to an improved automatic liquid feeding device adapted for use in feeding liquid fuel or liquids under pressure to a furnace or for other purposes,—the object of the invention being to provide simple and efficient means whereby the liquid can be stored under a predetermined pressure and to so construct the device that the pressure under which it may be desired to feed the liquid can be regulated and controlled and so that a greater pressure than may be desired will be prevented.

With this object in view the invention consists in certain novel features in construction and combinations and arrangements of parts as hereinafter set forth and pointed out in the claim.

The accompanying drawing is a sectional view illustrating my improvements.

1 represents a cylinder having a closed bottom 2 and provided with a head 3 having an internally threaded boss 4 for the passage of a screw 5 and said boss 4 is threaded externally for the accommodation of a stuffing box 6. The lower end of the screw 5 is secured to a piston 7 in the cylinder 1, said piston being provided with a depending annular flange 8. Below the piston 7 a piston 9 is located and provided with an upwardly projecting peripheral flange 10. Between these pistons a coiled spring 11 is located and the tension of this spring can be regulated by means of the screw 5 for increasing or diminishing pressure upon liquids which may be within the cylinder between the bottom 2 thereof and the piston 9.

The bottom 2 of the cylinder is provided with an inlet opening 12, with which a nipple 13 communicates,—said nipple being adapted for the reception of a pipe from a suitable liquid supply. The bottom 2 of the cylinder is also provided with an outlet opening 14 with which a nipple 15 communicates, and this nipple is intended to receive a pipe leading to the place of consumption of the liquid. The cylinder 1 is provided at a point approximately midway between its ends with an outlet or overflow nipple 16 and this nipple may, if desired, be connected with the source of liquid supply. An outlet 17 is made in the head 3 of the cylinder for the escape of any liquid which may find its way past the piston 8.

In operating the device, liquid fuel will be forced into the cylinder 1 by means of any suitable pump connected with the nipple 13 and a source of supply, thus causing the piston 9 to rise against the resistance of the spring 11. The liquid fuel will flow from the cylinder through the outlet 14 and will be conveyed to the burner by means of a suitable pipe connected with the nipple 15. If, during the operation of the device, the burner does not take all the fuel being fed to it, the piston 9 will rise sufficiently to uncover the outlet afforded by the nipple 16, and the excess of fluid will be permitted to flow back to the source of supply through a suitable pipe connected with said nipple 16.

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

In a device of the character described, the combination with a cylinder having an inlet and also an outlet at one end and having an overflow outlet between its ends, of a piston located within said cylinder between said overflow outlet and the end of the cylinder having the inlet and outlet openings, a spring pressing against said piston and means for regulating the tension of said spring.

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

ERNEST G. OFELDT.

Witnesses:

HAROLD T. EATON,

IRVING HOPPER.