

(No Model.)

O. & L. W. DAMAN.
STAND PIPE FOR GASOLINE BURNERS.

No. 546,642.

Patented Sept. 17, 1895.

Fig. 1.

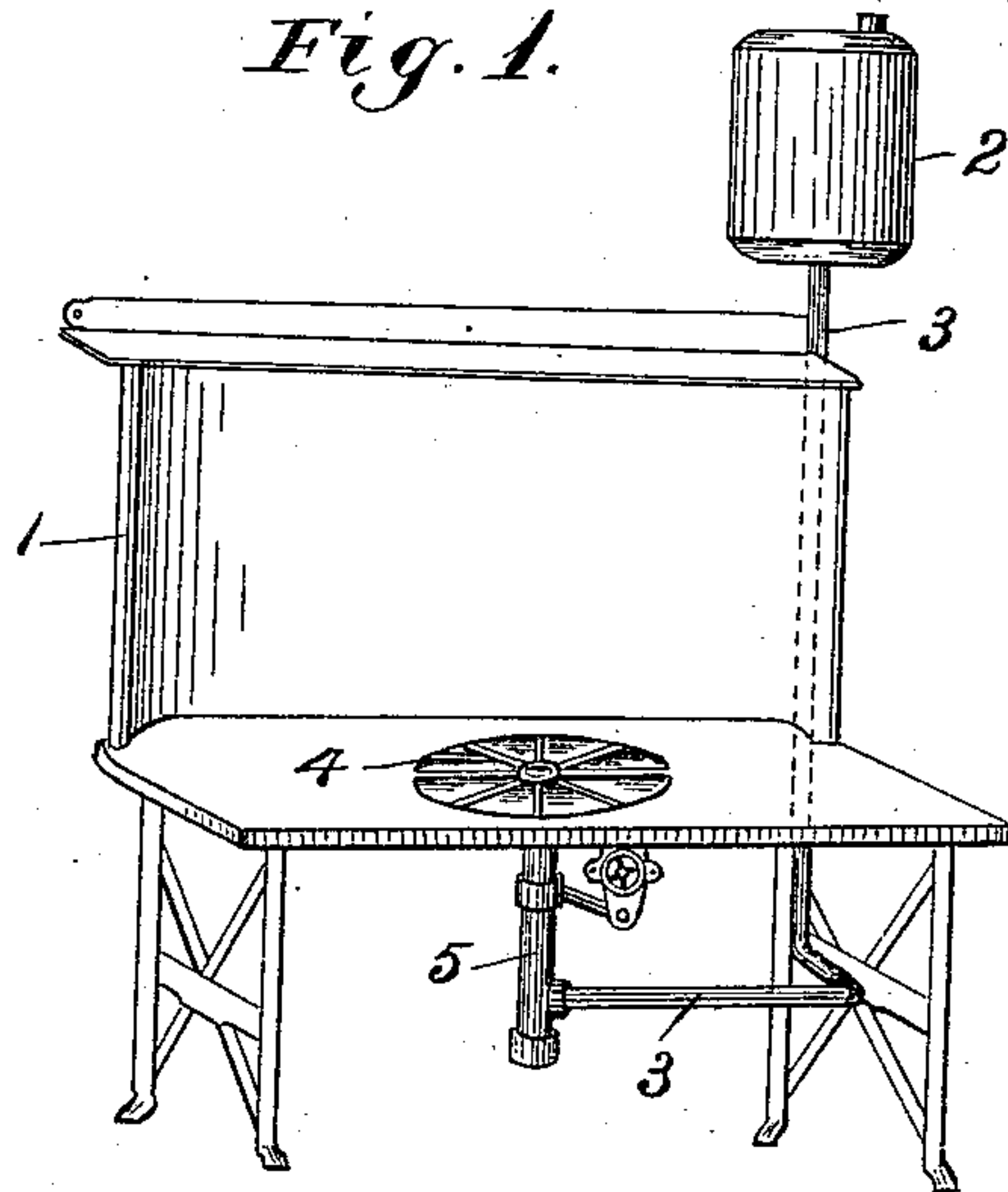


Fig. 2.

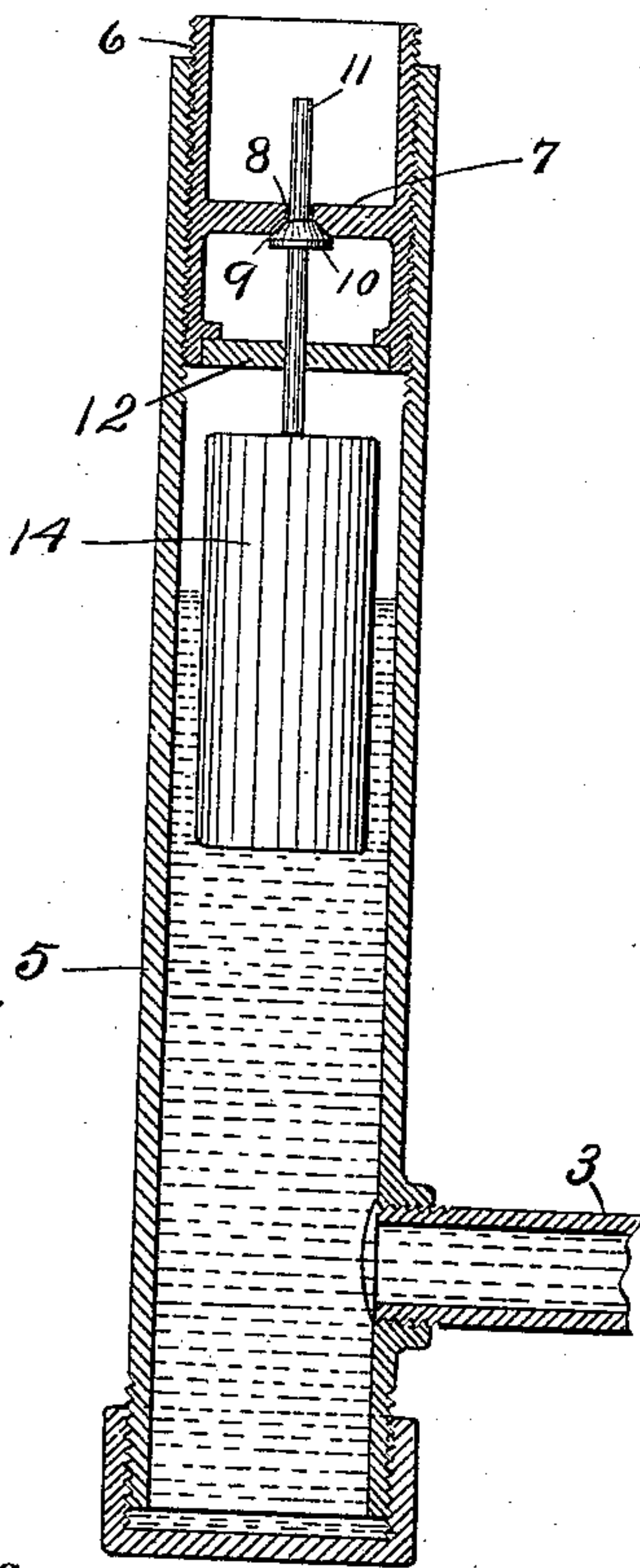


Fig. 3.

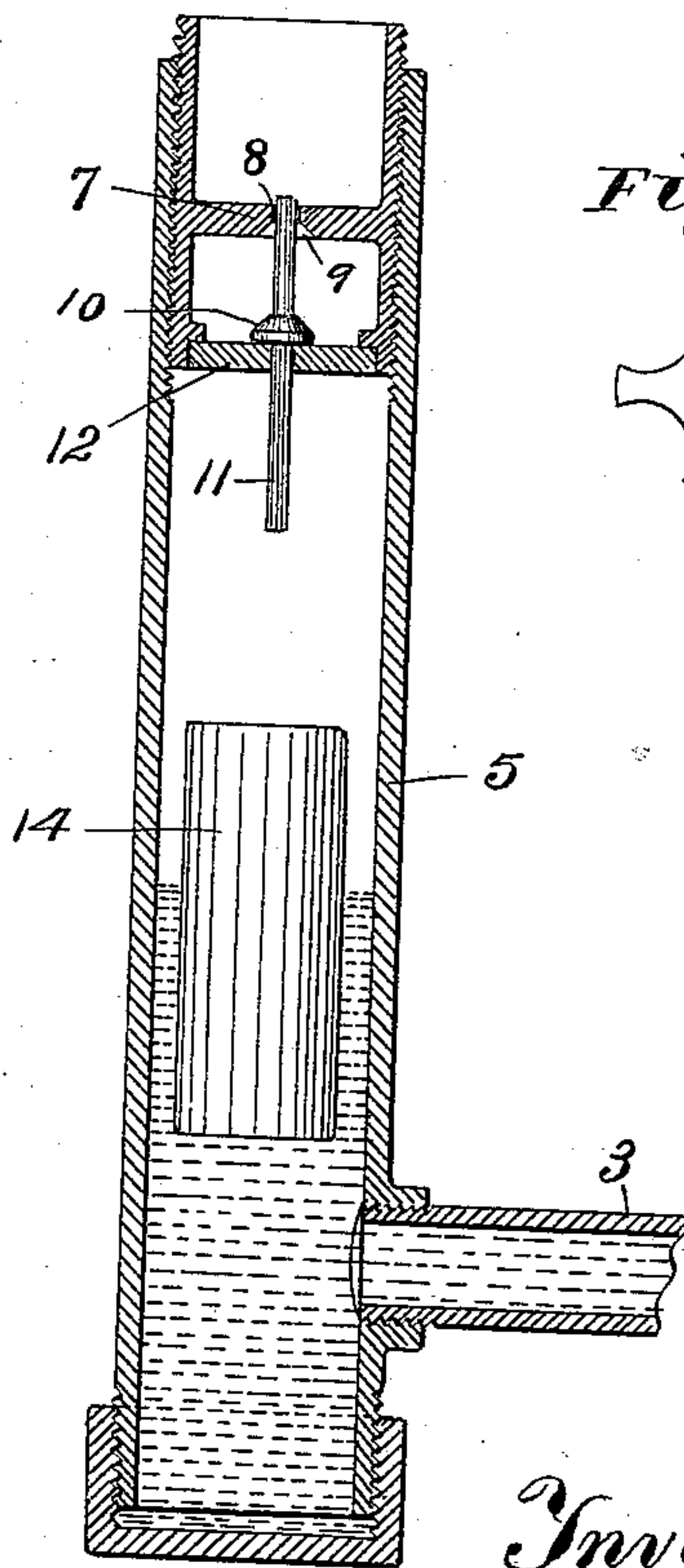
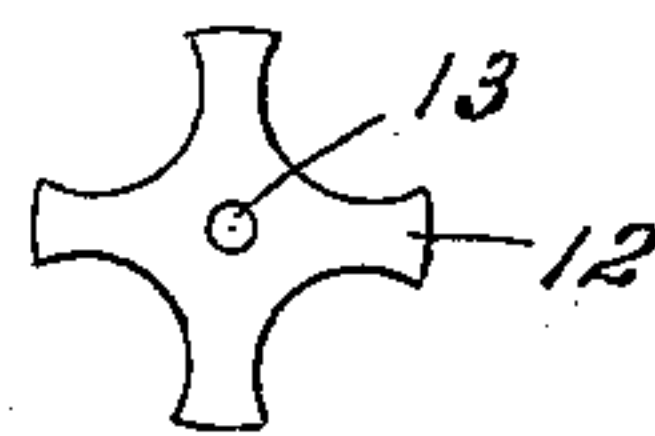


Fig. 4.



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UNITED STATES PATENT OFFICE.

OSCAR DAMAN AND LOUIS W. DAMAN, OF MINNEAPOLIS, MINNESOTA, ASSIGNORS OF ONE-THIRD TO EDWARD D. PERKINS, OF SAME PLACE.

STAND-PIPE FOR GASOLINE-BURNERS.

SPECIFICATION forming part of Letters Patent No. 546,642, dated September 17, 1895.

Application filed April 13, 1895. Serial No. 545,577. (No model.)

To all whom it may concern:

Be it known that we, OSCAR DAMAN and LOUIS W. DAMAN, citizens of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Stand-Pipes for Gasoline-Burners, of which the following is a specification.

Our invention relates to means for supplying gasoline through a stand-pipe to a burner, and its object is to improve the devices used for controlling the flow of fluid.

Generally stated, the invention consists in providing within the stand-pipe a lateral partition having an opening and valve-seat, a valve having a stem and means for guiding it, and a float below the stem for opening and closing the port, as service requires.

Our improvements are illustrated in the accompanying drawings, in which—

Figure 1 shows in perspective a gasoline-stove supplied with our improvements; Fig. 2, a central vertical section of the stand-pipe containing the feed-controlling devices of our improvement and showing the port open; Fig. 3, a similar sectional view showing the port closed, and Fig. 4 a detail of a bridge used for guiding the valve-stem.

In such drawings, 1 designates a gasoline-stove; 2, a supply-tank for gasoline; 3, the supply-pipe extending from the tank to a burner, and 4 a burner. These parts may be of any usual or desired form or arrangement, and, obviously, our improvements may be used in connection with a lighting apparatus as well as a stove. The vertical portion of the pipe next beneath the burner, commonly called the "stand-pipe," is indicated by 5, and in this portion are provided our improvements. The inlet from the feed-pipe proper to this upright portion may be at the bottom or at the side, as shown in the drawings.

In the top of the pipe 5 is screwed a hollow plug 6, having near its middle a horizontal partition 7, in which is an opening 8 for a valve-stem, and the under side of the opening

is made tapering, as shown at 9, to serve as a seat for a conical valve 10, the valve being on a stem 11, which fits loosely in the opening 8, so as to permit the flow of fluid. At a sufficient distance below the partition 7 is secured a bridge 12, having a central opening 13, and serving as a guide for the valve-stem, the bridge itself having suitable openings to permit the passage of the fluid. Below the valve-stem is a loose float 14, of cork or other suitable buoyant body, adapted to rise to the surface of the gasoline and to lift the valve-stem and valve.

In use the normal and closed position of the devices is indicated in Fig. 2. When by generation of heat in the burner the upper portion of the stand-pipe becomes heated so as to generate gas, the pressure of the gas in the stand-pipe will force the float and also the gasoline downward somewhat, as indicated in Fig. 3, and so will permit the valve and its stem to gravitate, as indicated, and thereby free the port for the flow of gas from the stand-pipe to the burner, and this condition will continue so long as the flame continues at the burner; but when the flame is extinguished, the float will immediately rise and lift the valve to its seat and thus shut off the escape of fluid.

Having described our invention, what we claim is—

The combination with a burner and a pipe for conducting gasoline upward thereto, of a transverse partition in the pipe providing a port, a valve below the same having a valve-stem extending above and below the port, a bridge in the pipe for guiding such stem, and an independent float in the pipe below the stem for co-operating therewith to regulate the feed, substantially as set forth.

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Witnesses:

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