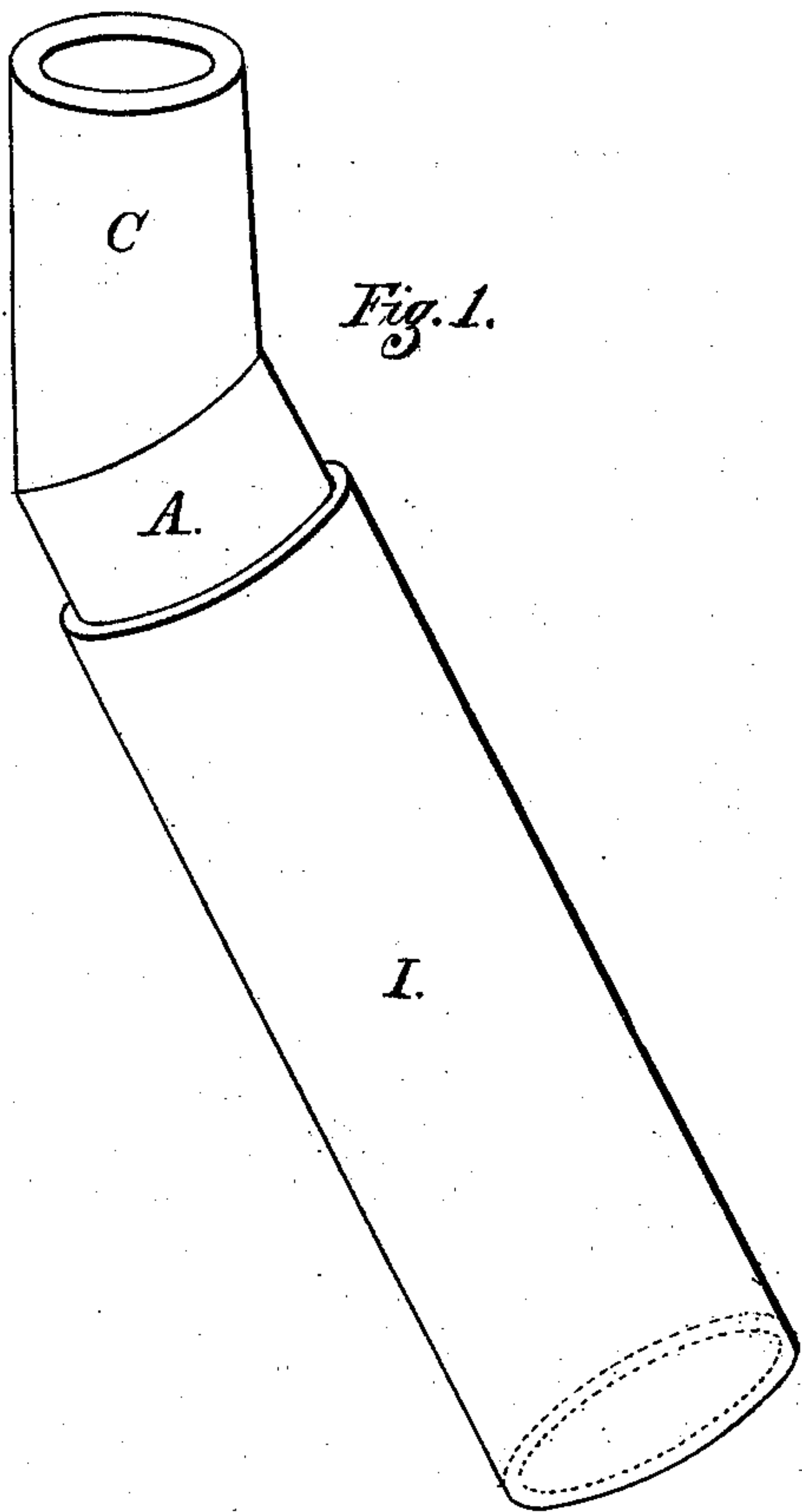


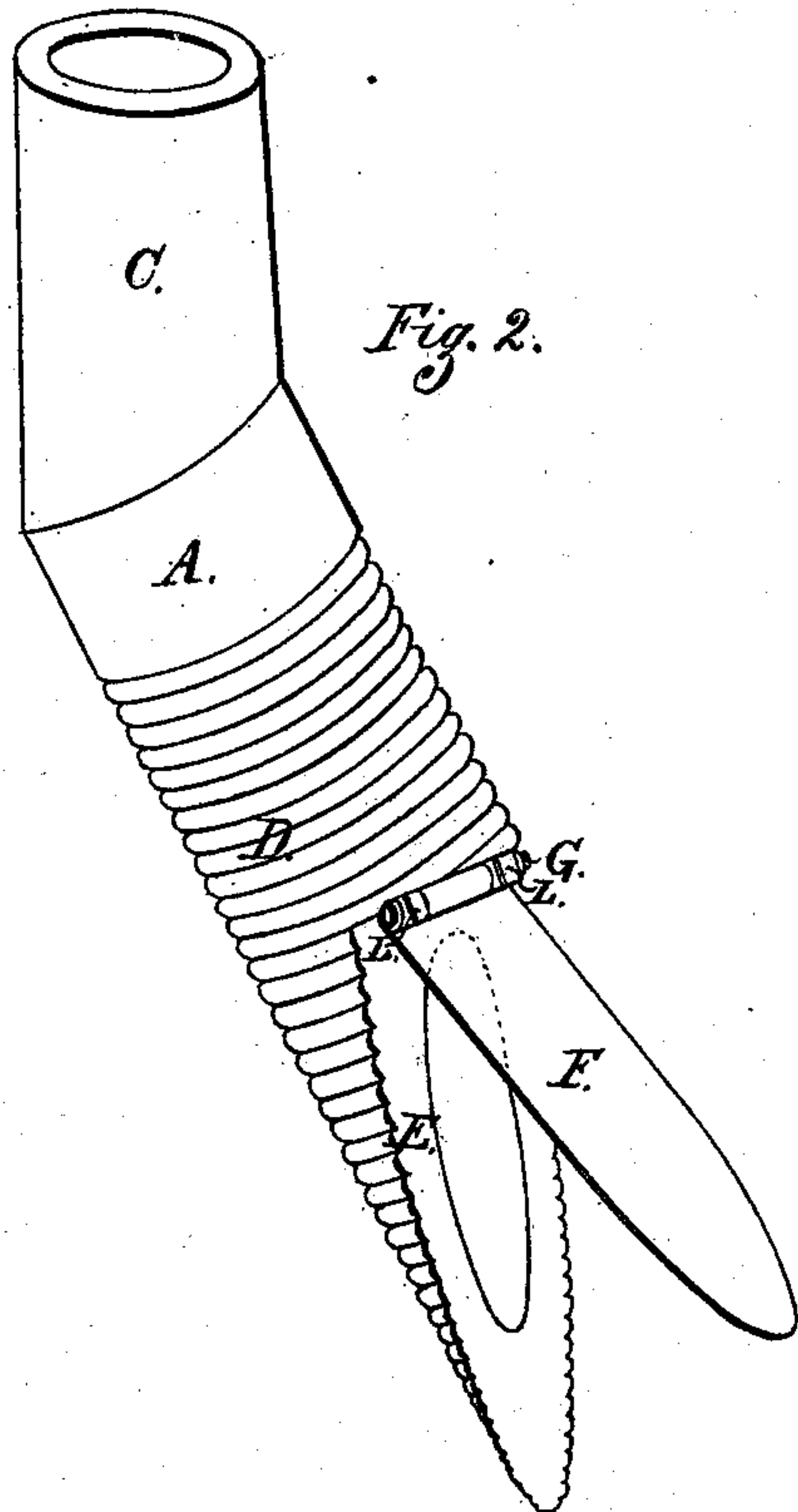
W. DONOVAN.
STENCH-TRAP.

No. 173,452.

Patented Feb. 15, 1876.



With Cylindrical tube on



With Cylindrical tube removed

Witnesses.

Wm. Tynan

Wm. Hartnett

Inventor.

William Donovan.

UNITED STATES PATENT OFFICE.

WILLIAM DONOVAN, OF NEW YORK, N. Y.

IMPROVEMENT IN STENCH-TRAPS.

Specification forming part of Letters Patent No. **173,452**, dated February 15, 1876; application filed January 11, 1876.

To all whom it may concern:

Be it known that I, WILLIAM DONOVAN, of the city, county, and State of New York, have invented a new and useful Improvement in Stench-Traps for waste-pipes of sinks, wash-basins, and water-closets, which improvement is fully set forth in the following specification:

The object of my invention is to close the cavity of the waste-pipe, and thus effectually prevent the escape of sewer-gases or vapors into the adjoining apartments.

My invention consists of three parts: First, a tube having an elbow on one end and partially slanting on the other. The inclining end has a rim around its elliptical orifice, and is provided with threads on and above its outward surface, to which it is intended to screw the third part of the invention.

The second part is a valve that is united by a rivet to two lugs near the top of slant end of aforesaid tube. The valve moves with ease and regularity in its operation, and attaches itself so closely to the rim of the aperture it covers that no vapors can escape between them when they are properly constructed.

The third part is a cylindrical tube, threaded internally on one end, which is to be screwed to the corresponding external threads on the first part. It incloses the valve, protects it from injury, and its extremity is inserted into and joined to the waste-pipe. Or the third part may be dispensed with, if desirable, by connecting the first part to the waste-pipe in such manner as would not destroy or impede the efficiency of the valve.

When the elbow is united to bottom of sink, wash-basin, &c., or any tube proceeding from them, in such manner as would secure for it an upright or somewhat inclined position, the valve comes in close contact with the rim of the aperture over which it is placed, and then

effluvia and all noxious gases are completely excluded.

The valve is automatic or self-acting. When water descends through the waste-pipe from sink, &c., above, it presses against the valve, which instantly opens, admits it through, and then suddenly closes, and thus continues to act uninterruptedly, thereby obstructing the ascent of pernicious gases, and preserving the health of the occupants of premises where it is employed.

The traps already in use for the same purpose are not of much benefit to the community in consequence of the siphon action in them, and the water they do contain becomes in a short time saturated with the mephitic gases from the sewer-pipe, and then it affords no protection against said exhalations.

Figure 1 is a drawing with cylindrical tube on. Fig. 2 is a drawing with cylindrical tube removed.

A represents the tube to which the valve is connected; B, the slant end of said tube; C, the elbow; D, the threads; E, rim of elliptical aperture; F, the valve; G, rivet; L, lugs; and I, cylindrical tube.

What I claim as new, and desire to secure by Letters Patent of the United States, is, viz:

In combination with the tube A, provided with slant end B, elbow C, threads D, and flat rim E, the automatic valve F, united to lugs near top of slant end B, and applied to and combined with the rim E, and the cylindrical tube I, provided with the threads D, as and for the purpose set forth and described.

WILLIAM DONOVAN.

Witnesses:

WILLIAM TYNAN,

WILLIAM HARTNETT.