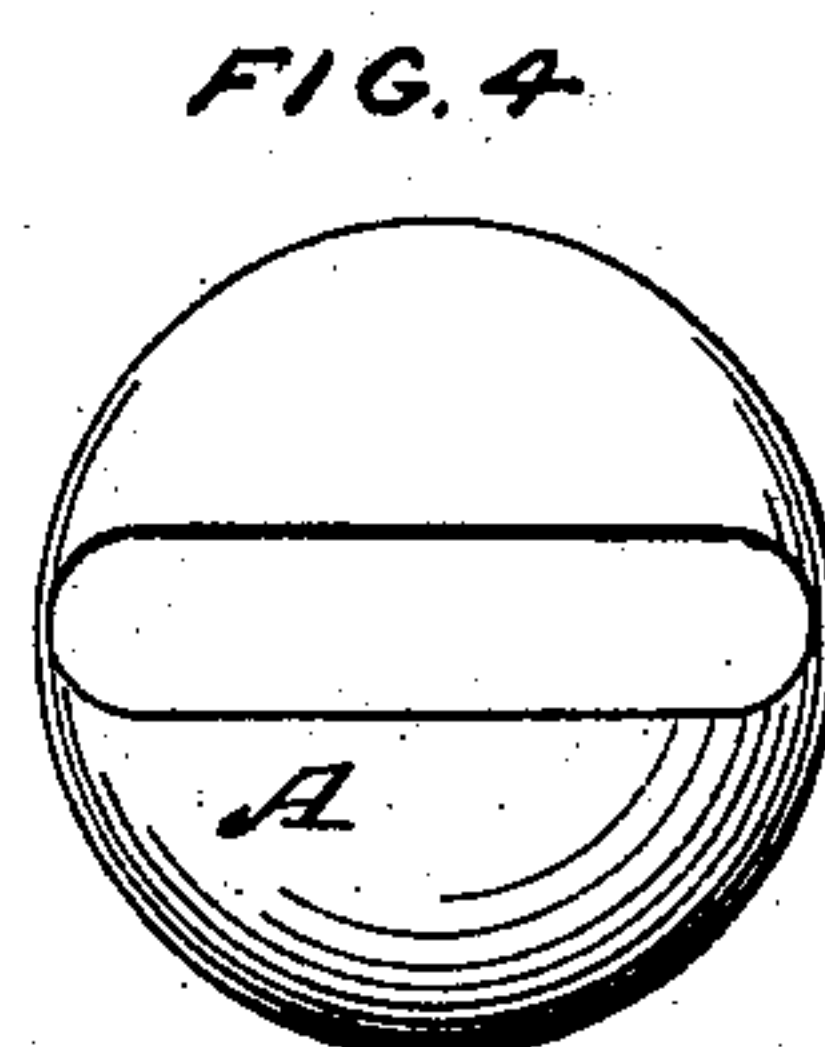
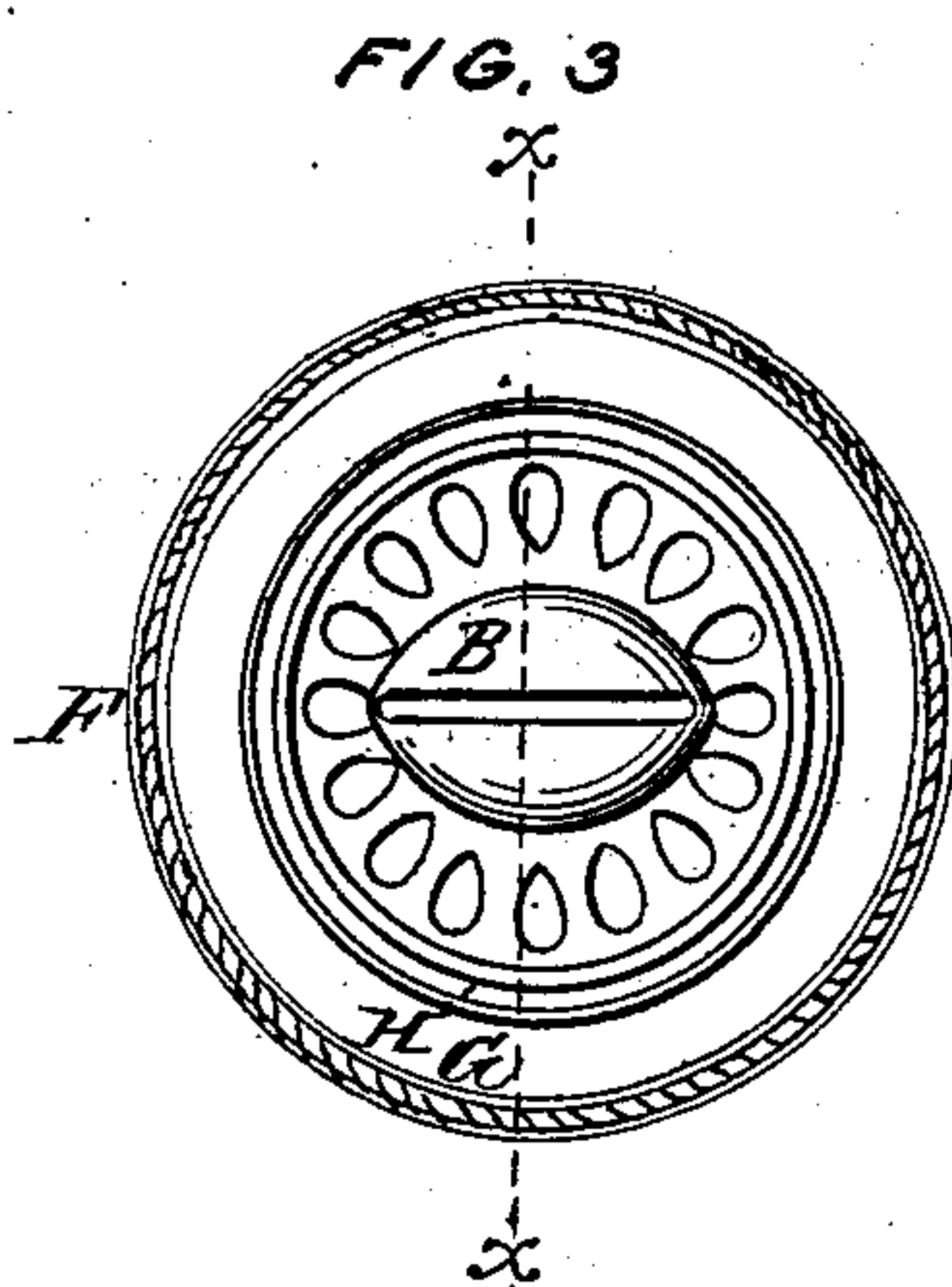
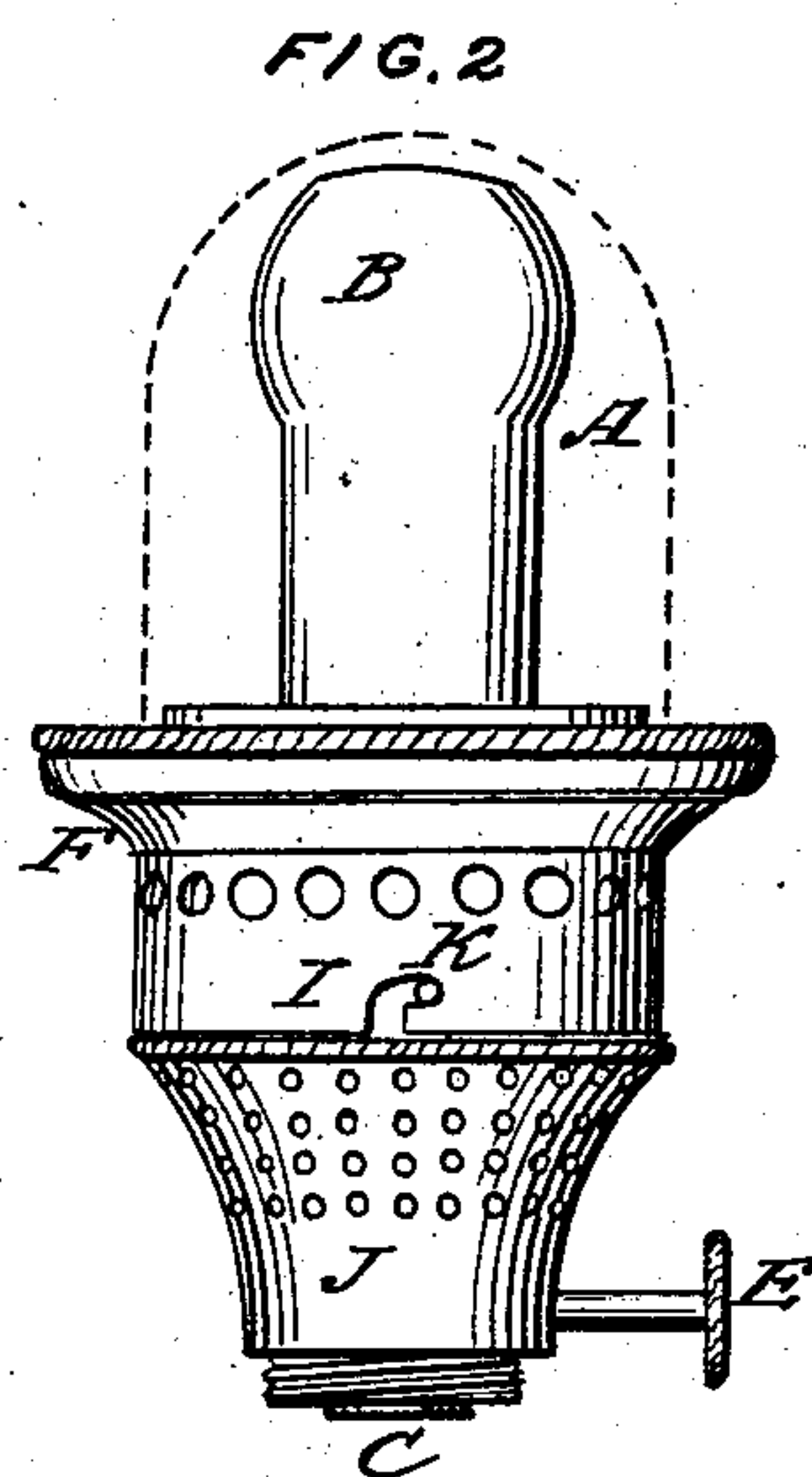
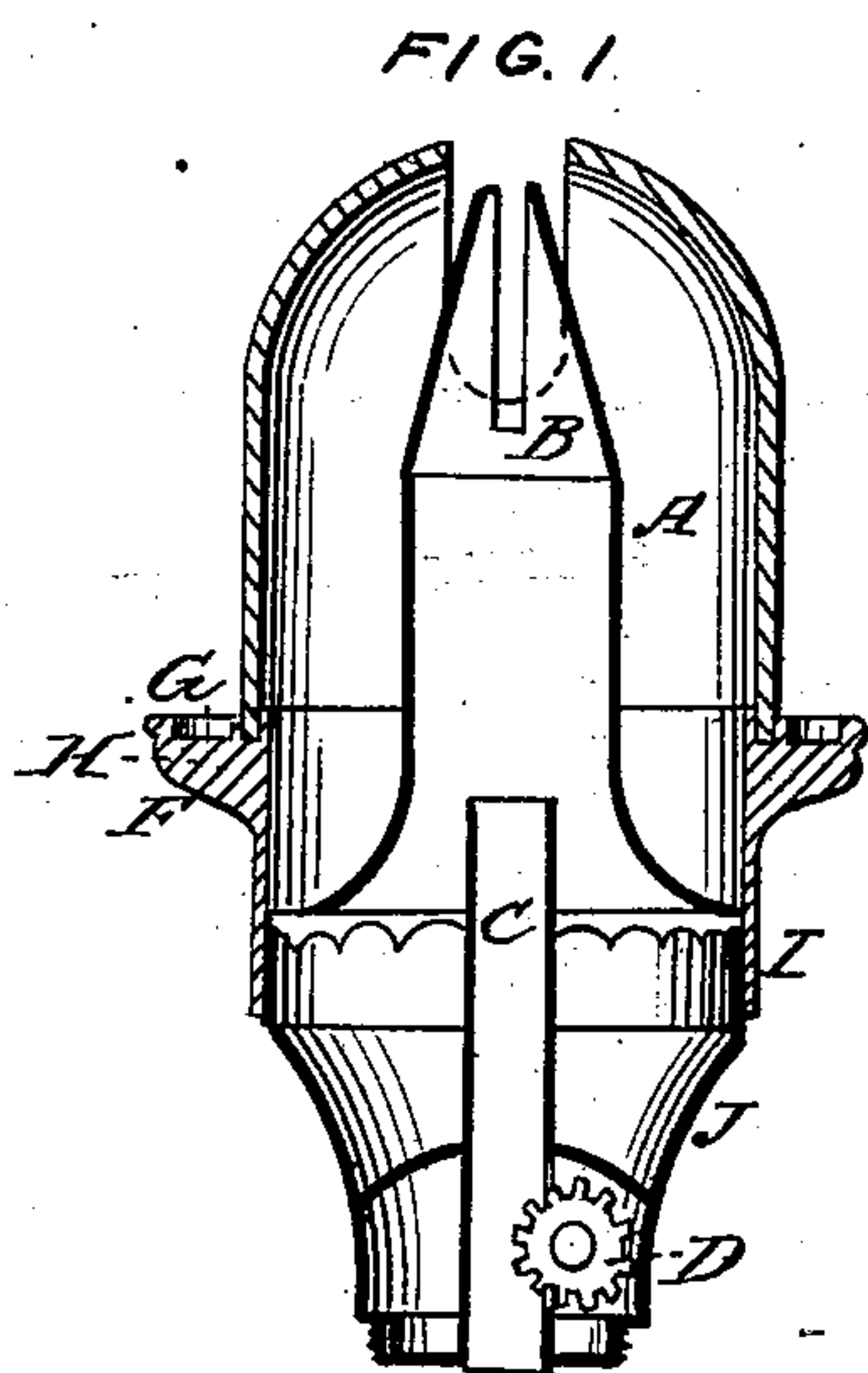


H. M. RICHMOND.

Vapor Burner.

No. 65,011.

Patented May 21, 1867.



WITNESSES:
Alex. Mahon
Amstrong

INVENTOR:
Holland M. Richmond

United States Patent Office.

HOLLAND M. RICHMOND, OF BUFFALO, NEW YORK.

Letters Patent No. 65,011, dated May 21, 1867.

IMPROVEMENT IN VAPOR-BURNERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, HOLLAND M. RICHMOND, of Buffalo, in the county of Erie, in the State of New York, have invented certain new and useful improvements in Kerosene Gas-Generating Burners; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

The nature of my invention consists in the combination of a transparent cone with the inner cone or deflector of a gas-generating burner. In said drawing—

Figure 1 represents a section through line X X, in fig. 3.

Figure 2 is a side elevation of the burner complete, showing the transparent cone and a front view of the inner cone or deflector.

Figure 3 represents a plan or top view of the burner; and

Figure 4 a top view of the transparent cone.

Like letters in the several figures represent similar parts in each.

A represents the transparent cone; B the inner or metallic cone; C the wick tube; D a toothed wheel, by which the wick is regulated; E, in fig. 2, is a thumb-piece for turning said wheel; F represents a flange which surrounds the burner; H is a groove in said flange, into which the transparent cone is fitted; G represents another groove in the same flange into which a shade or transparent globe may be fitted if desired. The burner is made of two parts, I and J, the part I being made to slip over the part J, as shown in fig. 1, and fastened to the same by the well-known device shown at K, in fig. 2. To the upper part the inner cone B is fastened, also the flange F, and to the lower part the wick tube C and wheel D. These parts are made so as to be easily fastened together or detached, as clearly shown at K, in fig. 2, thereby affording a convenient means for cleaning or trimming the wick. The burner is constructed of the usual metals.

I am aware that a cone or deflector made of transparent materials has been used in chimney burners or for purposes for which mine is not adapted, it being an inner cone, and standing in the same position with reference to the wick tube as the cone B; I therefore lay no claim to a transparent cone of that description; but what I do claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the transparent cone or deflector A with the inner cone B of a gas-generating burner.

2. In combination therewith, I claim the flange F with the grooves H and G, or the equivalent thereof, as and for the purposes described.

HOLLAND M. RICHMOND.

Witnesses:

EDM. F. BROWN,

JAMES SANGSTER.