

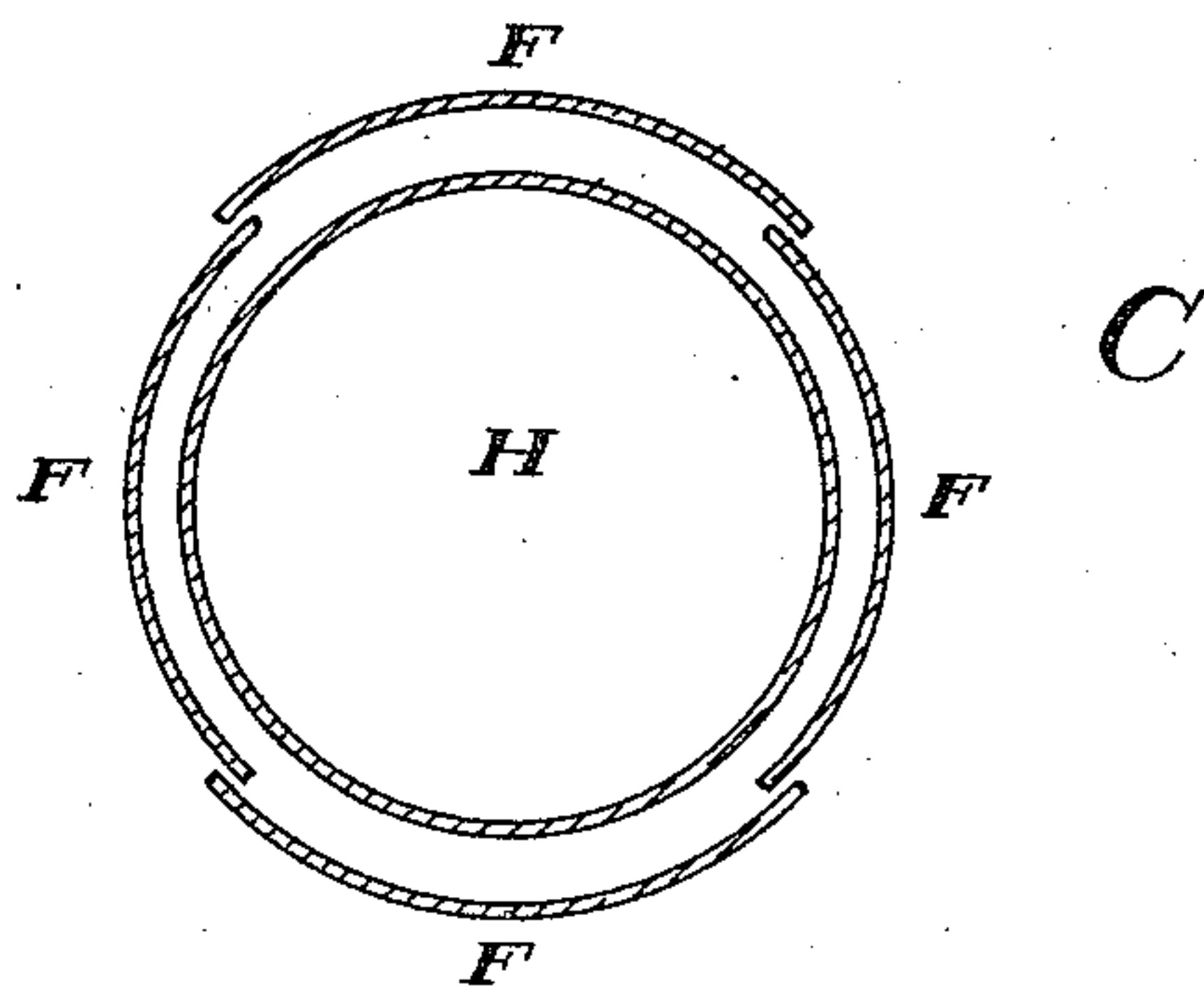
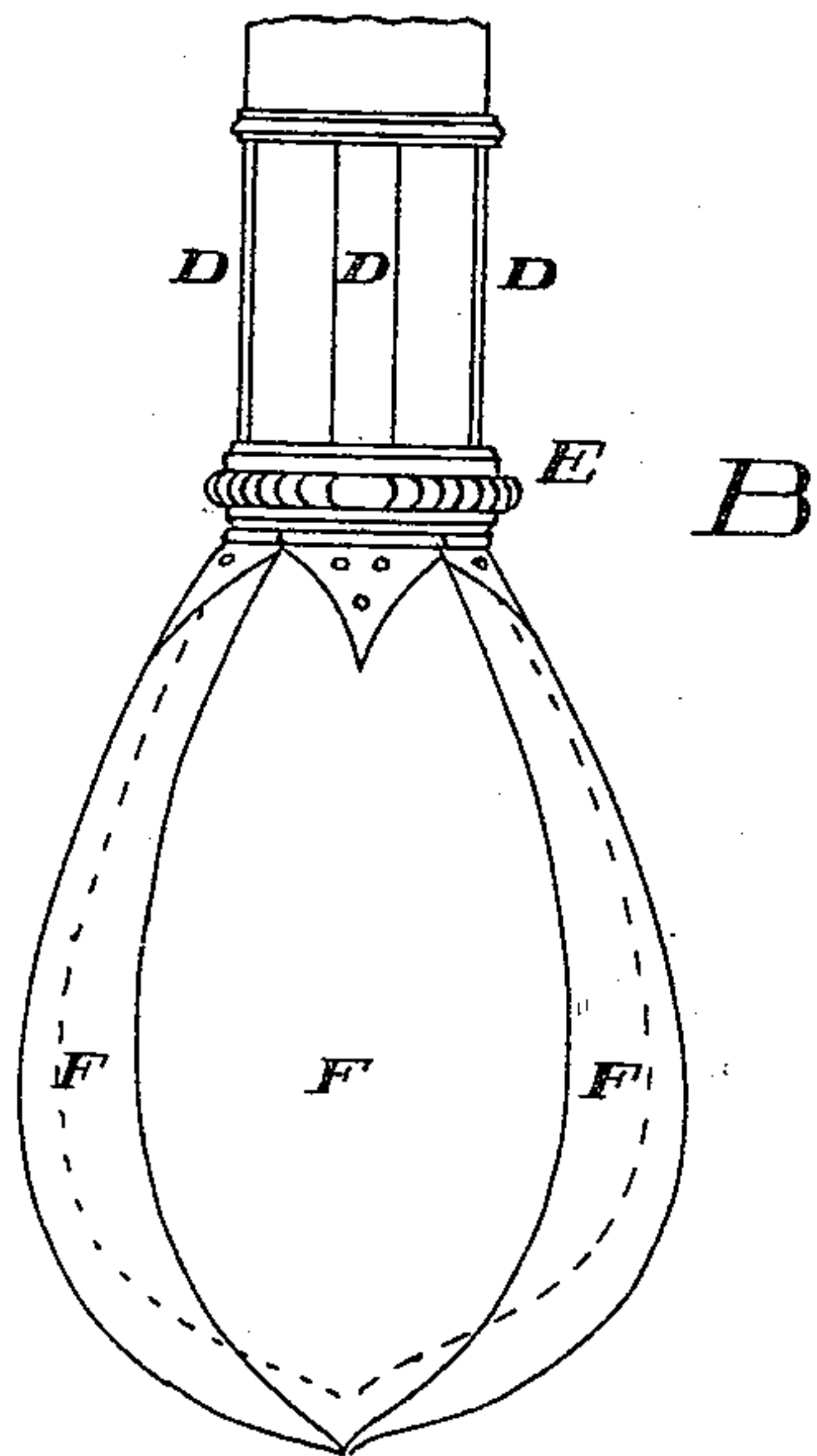
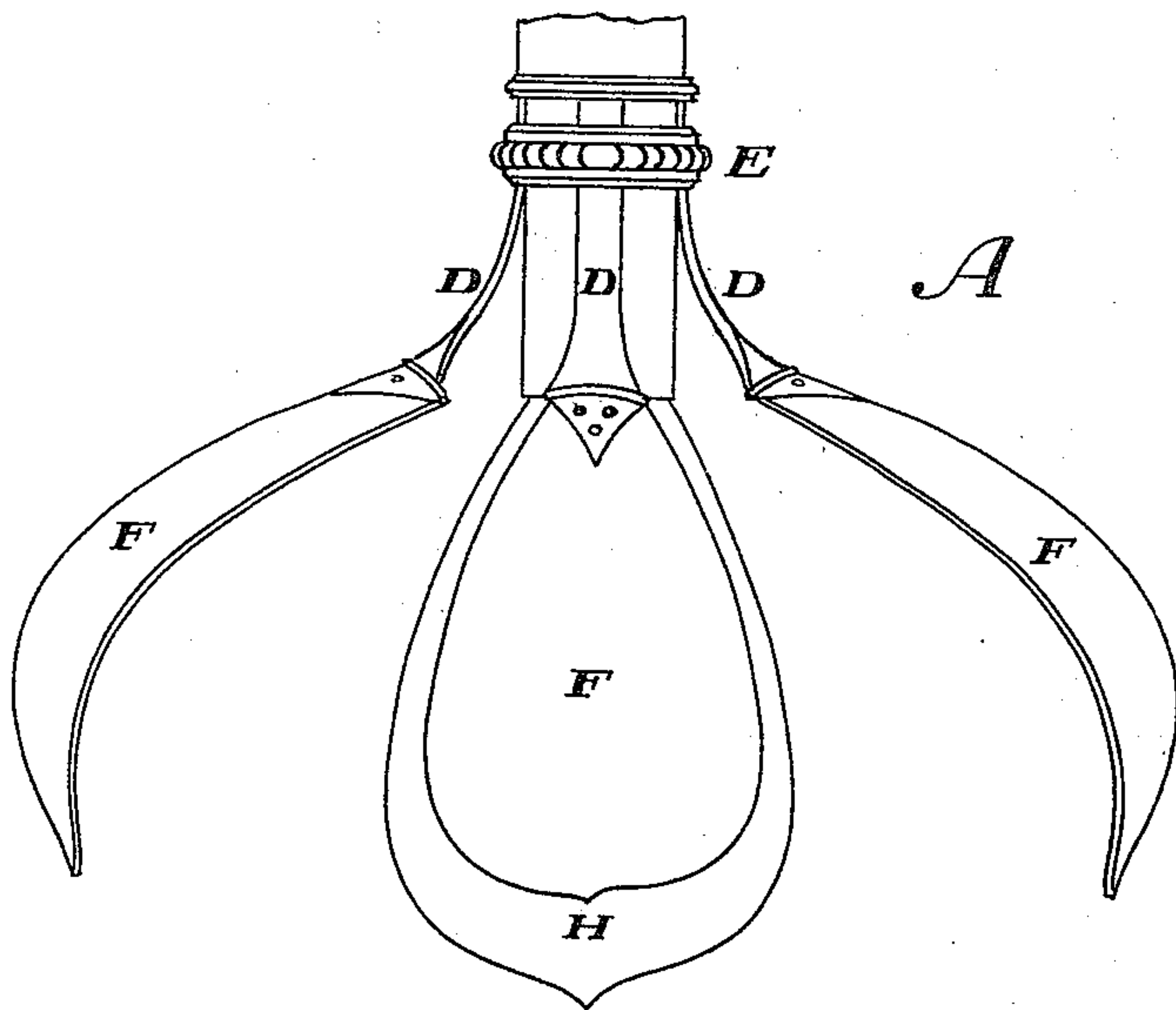
(No Model.)

W. S. FRASER.

SHADE AND REFLECTOR FOR ELECTRIC OR OTHER LIGHTS.

No. 442,577.

Patented Dec. 9, 1890.



Witnesses
D. J. Kuhn
Thos. Hammah.

Inventor
Wm. S. Fraser

UNITED STATES PATENT OFFICE.

WILLIAM S. FRASER, OF PITTSBURG, PENNSYLVANIA.

SHADE AND REFLECTOR FOR ELECTRIC OR OTHER LIGHTS.

SPECIFICATION forming part of Letters Patent No. 442,577, dated December 9, 1890.

Application filed April 16, 1890. Serial No. 348,275. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. FRASER, a citizen of the United States, residing at Pittsburg, in the county of Allegheny, State of Pennsylvania, have invented a new and useful Shade and Reflector for Electric or other Lights, of which the following is a specification.

The accompanying drawings show the shading apparatus in various positions, namely:

Drawing A shows lamp with wings or petals open. Drawing B shows wings or petals closed and lamp fully shaded. Drawing C shows a cross-section through lamp and wings or petals when closed. F F F F are wings or petals. D D D D are of metallic substance having sufficient spring or elasticity to open wings or petals and hold open. E is a metal ring movable by raising or lowering, by which the wings or petals are opened or closed. H is globe of lamp containing light.

The petals or covering can be constructed from various materials. In fact, any transparent, perforated, or woven substance which will in a measure intercept a portion of the rays will serve, some of these being glass, china, wire-gauze, &c. The petals can be of different colors. In fact, of white or reflective colors on side next light to serve as reflector when open and darker hue on outer surface to tone down light when closed.

I claim—

The combination, in a shade and reflector for electric or other lights, of the movable petals F, the springs D, and the movable ring E, substantially as described.

WM. S. FRASER.

Witnesses:

D. I. KUHN,

WM. T. STRUTHERS.