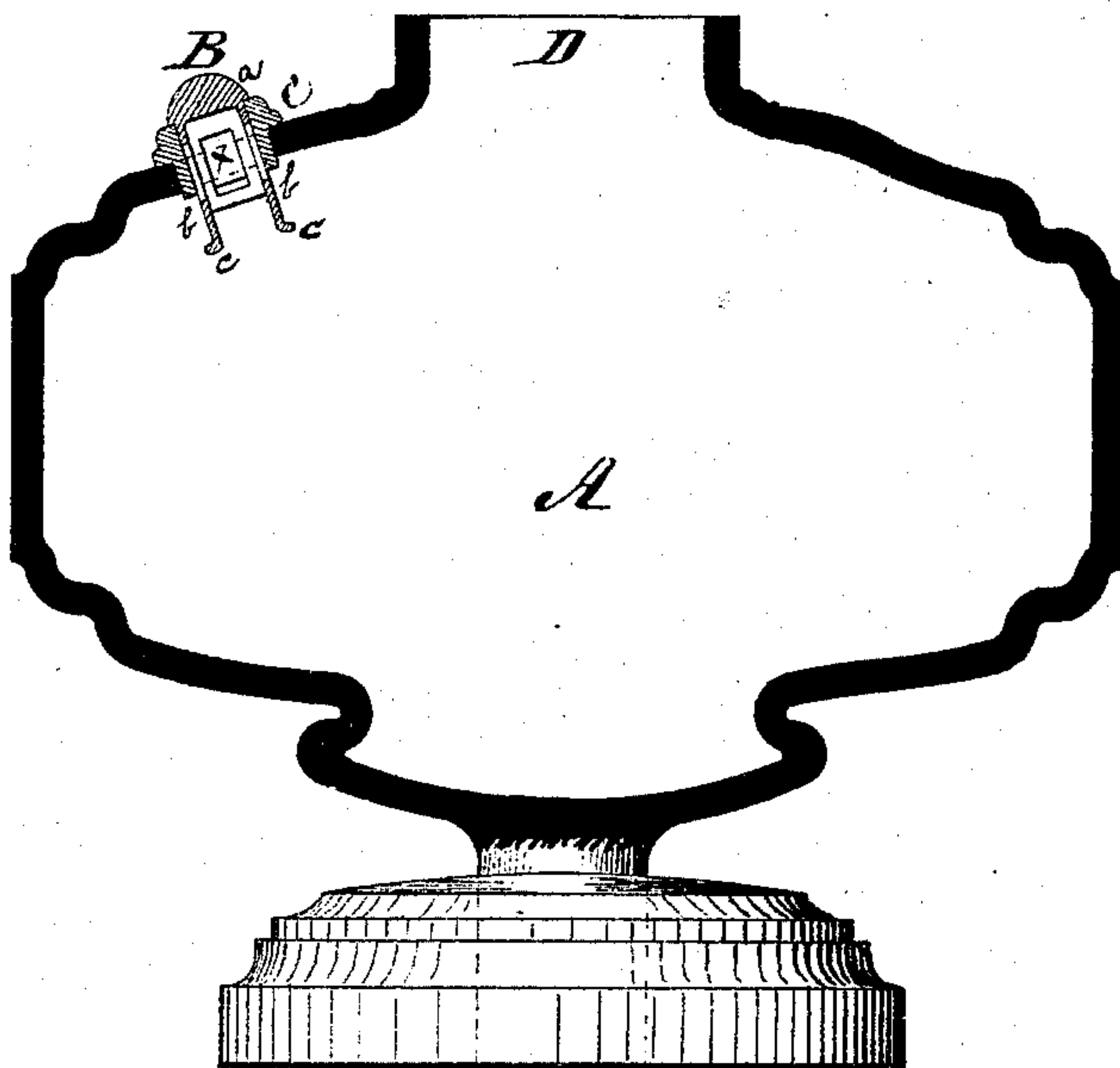


F. KAMPFE.
Lamps.

No 143,452.

Patented Oct. 7, 1873.



Witnesses.
C. Thonlor
F. McEwan.

Inventor.
Frederic Kampfe
per Henry C. Roeder
Attorney.

UNITED STATES PATENT OFFICE.

FREDERIC KAMPFE, OF NEW YORK, N. Y.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. **143,452**, dated October 7, 1873; application filed August 14, 1873.

To all whom it may concern:

Be it known that I, FREDERIC KAMPFE, of New York, in the State of New York, have invented a new and useful Improvement in Lamp, of which the following is a specification:

The object of my invention is to prevent the bursting of lamp-reservoirs by the application of a self-acting valve, applied on the upper part of the reservoir, through which any dangerous gas which may be generated in said reservoir can readily escape; and it consists in the construction of the device hereinafter set forth.

The accompanying drawing represents a vertical section of a lamp-reservoir embodying my invention.

A represents a lamp-reservoir which contains the oil or fluid, constructed in the usual manner and of any desired material. On the upper part of this reservoir, and near to the neck D, upon which the wick-tube is fastened, a self-acting valve, B, opening outward, is attached. This valve B is composed of a head or stopper, *a*, a tube, *b*, of thin metal, with openings *x x* in the sides, and provided with spring-arms *c c*, the ends of which are turned outward, the whole valve being made in one piece. An orifice is first made in the lamp-reservoir, and into which is inserted a flanged col-

lar, C. The valve B is inserted into this collar, the head *a* being provided with shoulders which bear against the outer face of the collar, and form a stopper for the collar when the valve is closed.

As soon as any gases are generated in the inside of the reservoir A, which, under ordinary circumstances, might cause said lamp-reservoir to burst, the valve B will be forced open to allow the gases to escape, and so relieve the reservoir from any undue pressure which might endanger or cause its bursting.

I am aware that safety-valves for the escape of the gases in lamps have been used before; and hence I do not claim such, broadly, as my invention.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, with a lamp-reservoir, A, of the flanged collar C and the valve B, consisting of the shouldered head *a*, forming a cap to close the opening in the collar, the tube *b* with openings *x x*, and the spring-arms *c c*, all made in one piece, substantially as and for the purposes set forth.

FREDERIC KAMPFE.

Witnesses:

HENRY E. ROEDER,
C. THORNTON.