

(No Model.)

G. W. LORE.
DRAFT REGULATOR.

No. 316,552.

Patented Apr. 28, 1885.

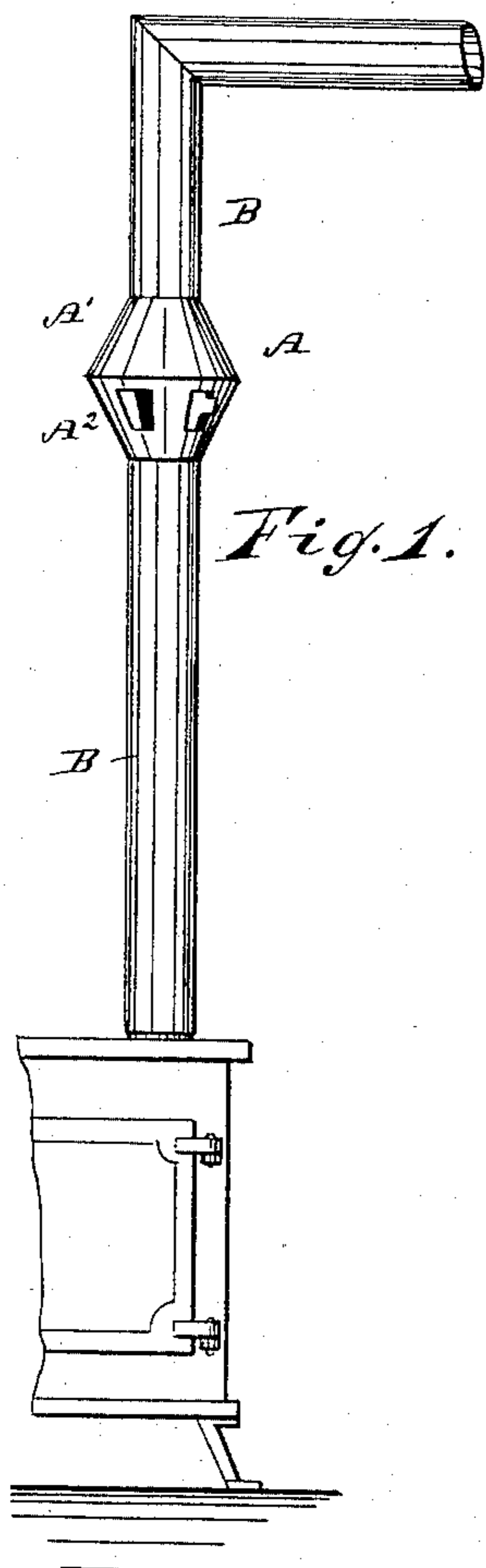


Fig. 1.

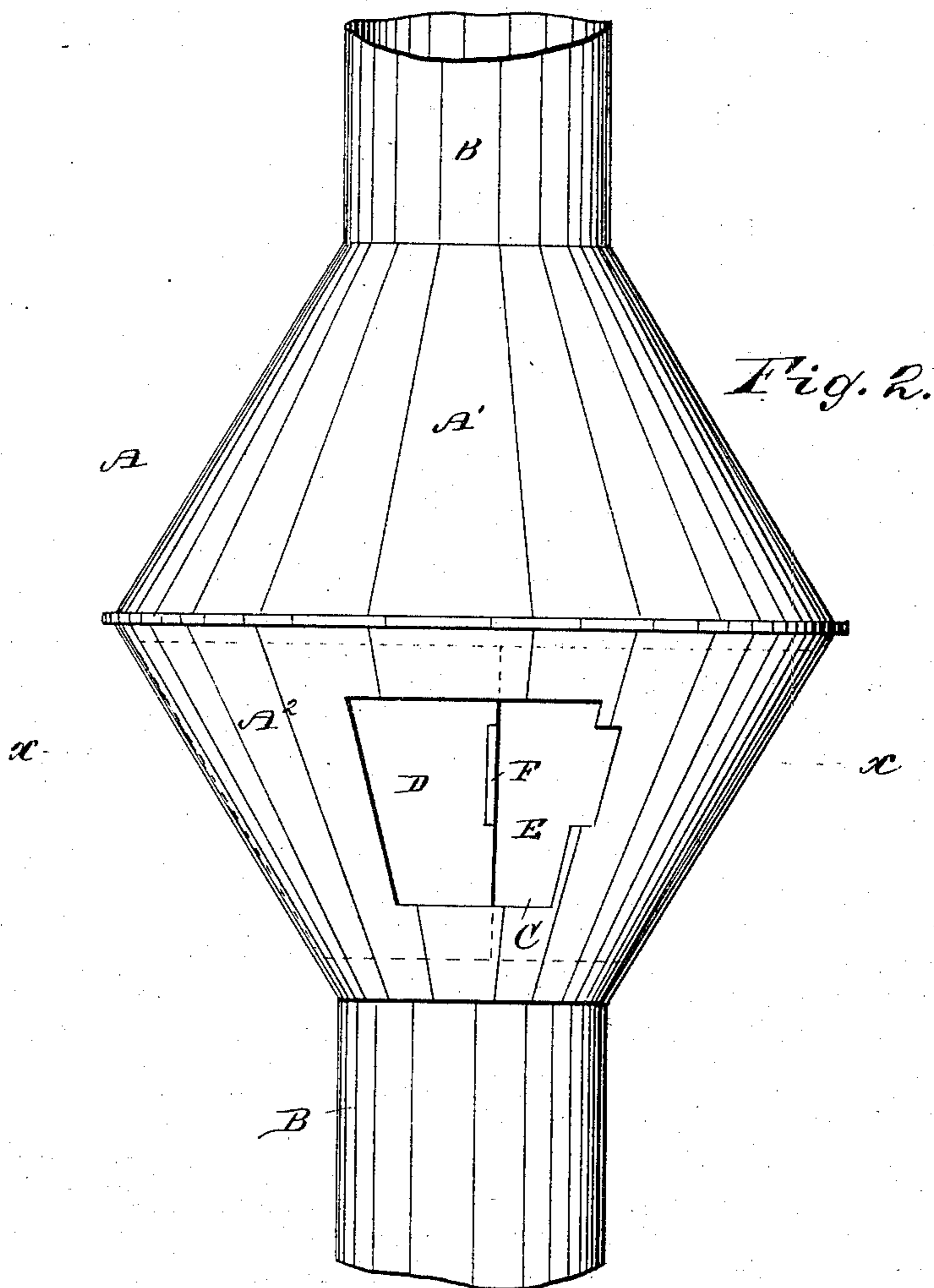


Fig. 2.

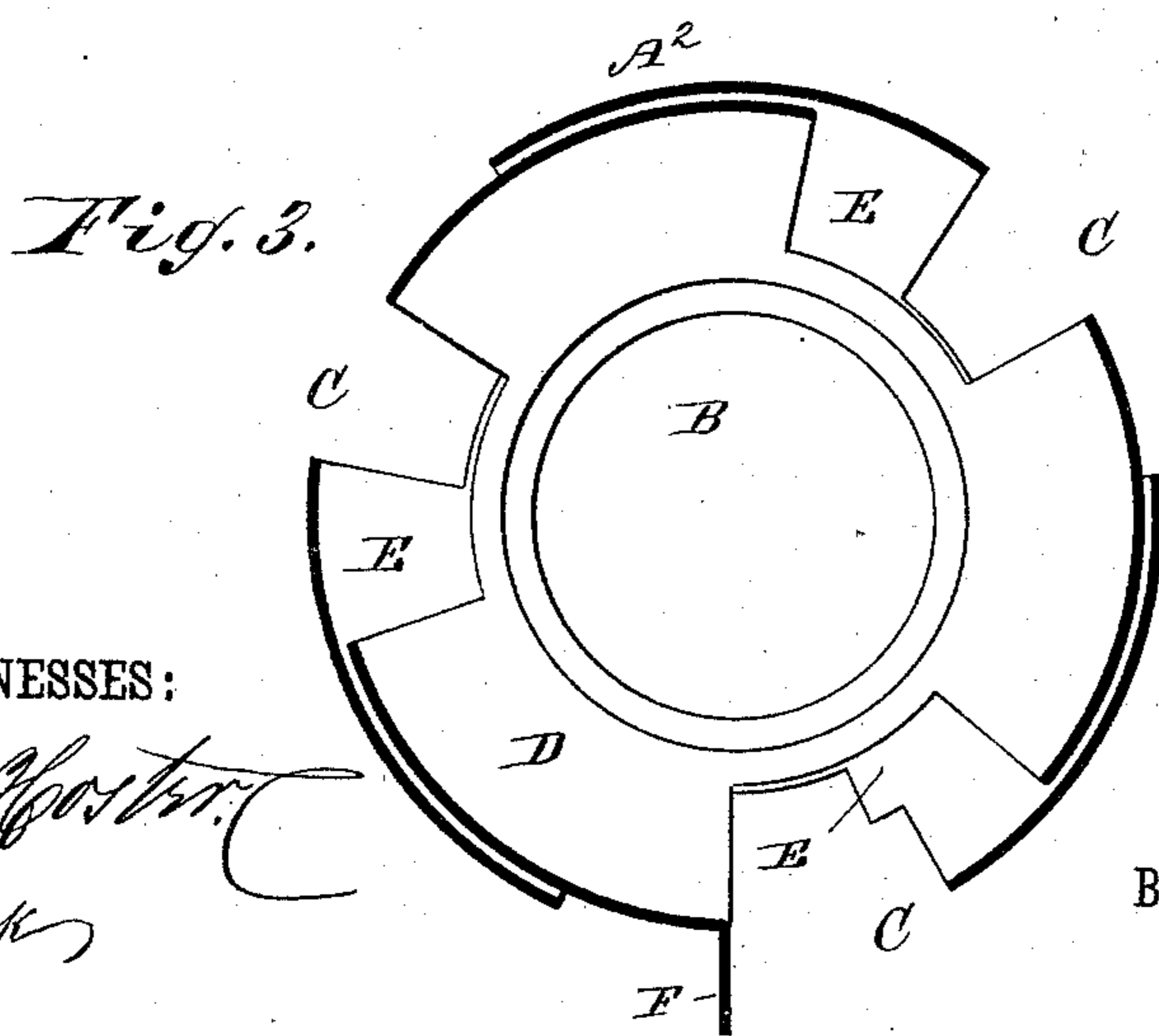


Fig. 3.

WITNESSES:

Theo. G. Hoster
C. Sedgwick

INVENTOR:

G. W. Lore

BY

Munn & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

GEORGE W. LORE, OF FAYETTE, NEW YORK, ASSIGNOR TO HIMSELF AND
WILSON H. GILLILAND, OF SAME PLACE.

DRAFT-REGULATOR.

SPECIFICATION forming part of Letters Patent No. 316,552, dated April 28, 1885.

Application filed February 6, 1884. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. LORE, of Fayette, in the county of Seneca and State of New York, have invented a new and Improved Draft-Regulator, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved draft-regulator for stove-pipes, which regulator also serves as a ventilator.

The invention consists in certain improvements in that class of draft-regulators formed of two hollow truncated cone-sections united at the base edges, and having the truncated ends coupled to the stove-pipe, the bottom cone-section having a series of apertures which can be closed by a valve-plate resting on the inner surface of the bottom cone-section, as will be hereinafter fully described and claimed.

In these draft-regulators above referred to, in one instance a pipe carrying a damper passed entirely through the sections of the ventilator and had oblong apertures communicating with the chamber formed by the cone-sections, and around the outside of this chamber the cone-shaped valve-plate was situated. In another instance the pipe carried a damper and projected above the cone-shaped valve-plate, but not into the pipe above it.

The damper and valve were connected in the above construction, and were simultaneously operated to alternately open and close. In another instance the valve-plate was formed W-shaped in cross-section, openings in the two middle arms registering with the stove-pipe, and openings in the outer arms registering with openings in the outward-flared end of the pipe and communicating with the outer air. In these several constructions soot in falling down the pipes would collect between the pipe and draft-regulating plate and between the outer and middle arms of the draft-regulating plate, so that every time the draft-regulating valve-plate was operated the soot would fall into the room and upon the stove and carpeting. By my construction these disadvantages are obviated and at the same time the cost of manufacture is lessened.

Reference is to be had to the accompanying drawings, forming part of this specification,

in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side view of my improved draft-regulator, showing it held on a stove-pipe. Fig. 2 is an enlarged side view of the draft-regulator. Fig. 3 is a sectional plan view of the same on the line *x x*, Fig. 2.

A casing, A, is formed of hollow truncated cones A' A², united at the base, the casing being connected at the truncated ends of the cones with the stove-pipe B; but the stove-pipe does not project into the cones, and here is a very essential feature of my invention. The stove-pipe ends at the truncated ends of the cones, so that there is no obstruction throughout the pipe and valve-casing. There are no plates for the soot to accumulate on and fall into the room when the valve-plate is operated. The bottom cone-part, A², is provided with a series of apertures, C, which can be closed by a conical valve-plate, D, fitting closely on the inner surface of the bottom cone part or section, A², which valve is provided with as many recesses or openings E as there are apertures C in the bottom cone-section, A². The valve-plate D is provided with a handle-lug, F, projecting out of one of the apertures C in the bottom cone-section, A². The valve-plate D rests loosely on the inner surface of the bottom section, and is not held on the same by any clips, lugs, &c., which might become clogged by the soot, dust, &c. The regulator is arranged some distance above the stove, so that a draft will be created in that part of the pipe below the regulator, and the smoke, &c., will have a strong upward movement at the regulator. The apertures C can be opened more or less by means of the valve, according to the draft required, the draft increasing as the apertures are closed. The regulator also prevents condensation of the smoke. The regulator is also a good ventilator, which carries off the foul air in the room very rapidly.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A draft-regulator consisting of a casing formed of two truncated hollow cone-sections united at their bases and having their trunc-

ated ends connected with the ends of the pipes, said pipes extending into the cone-sections only a sufficient distance to unite them with said sections, the bottom cone-section being
5 provided with a series of apertures which can be closed by a valve, substantially as herein shown and described.

2. In a draft-regulator, the combination, with the hollow truncated cone-sections $A' A^2$,
10 united at the base edges, the lower section, A^2 , having apertures C, of the cone-shaped valve-

plate resting on the inner surface of the bottom section, A^2 , and provided with apertures E, whereby a draft-regulator is provided having an unobstructed interior surface to prevent the collection of dust and soot, substantially as herein shown and described. 15

GEO. W. LORE.

Witnesses:

BENJ. HENDRICKS,
JAMES MOYER.