

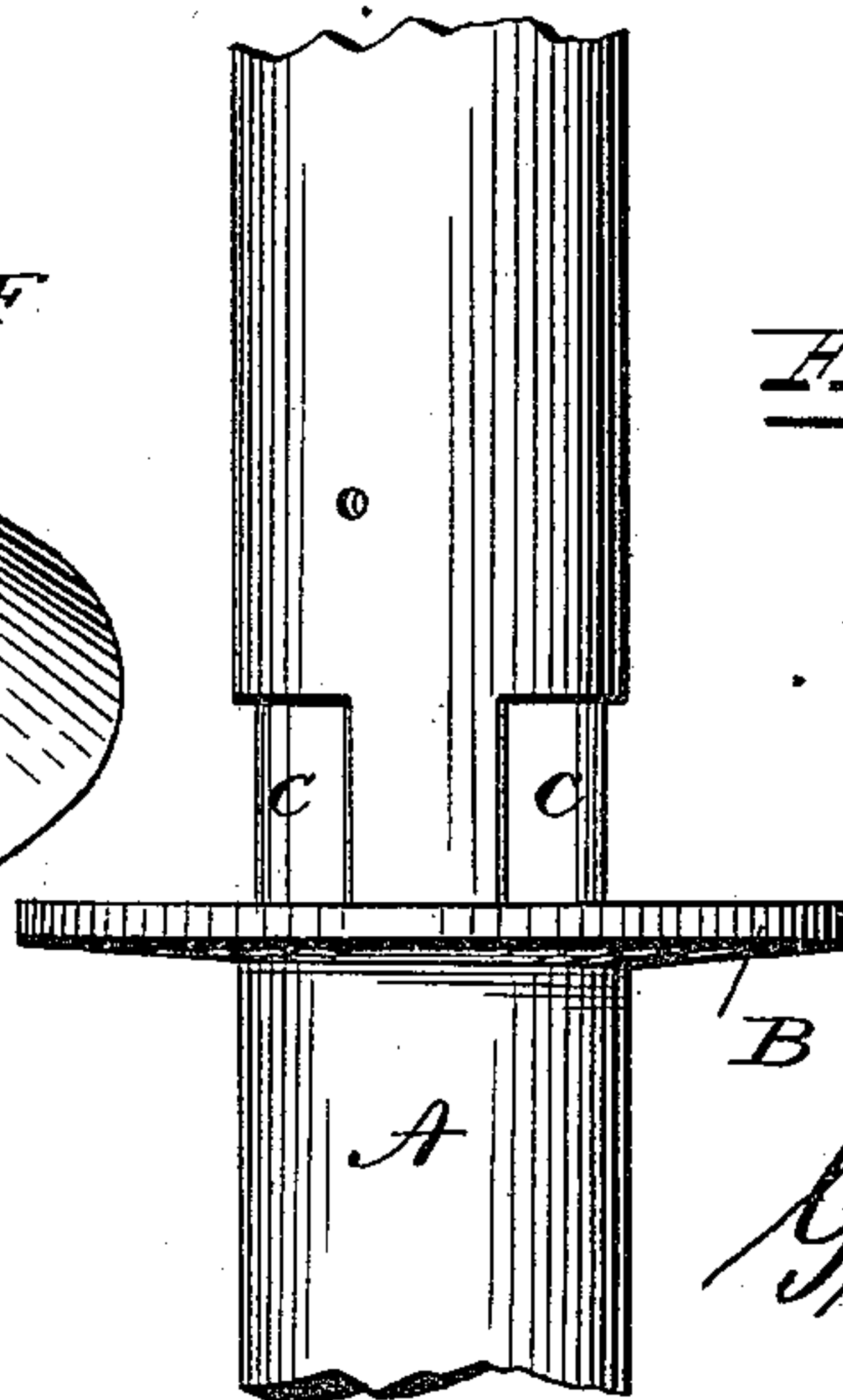
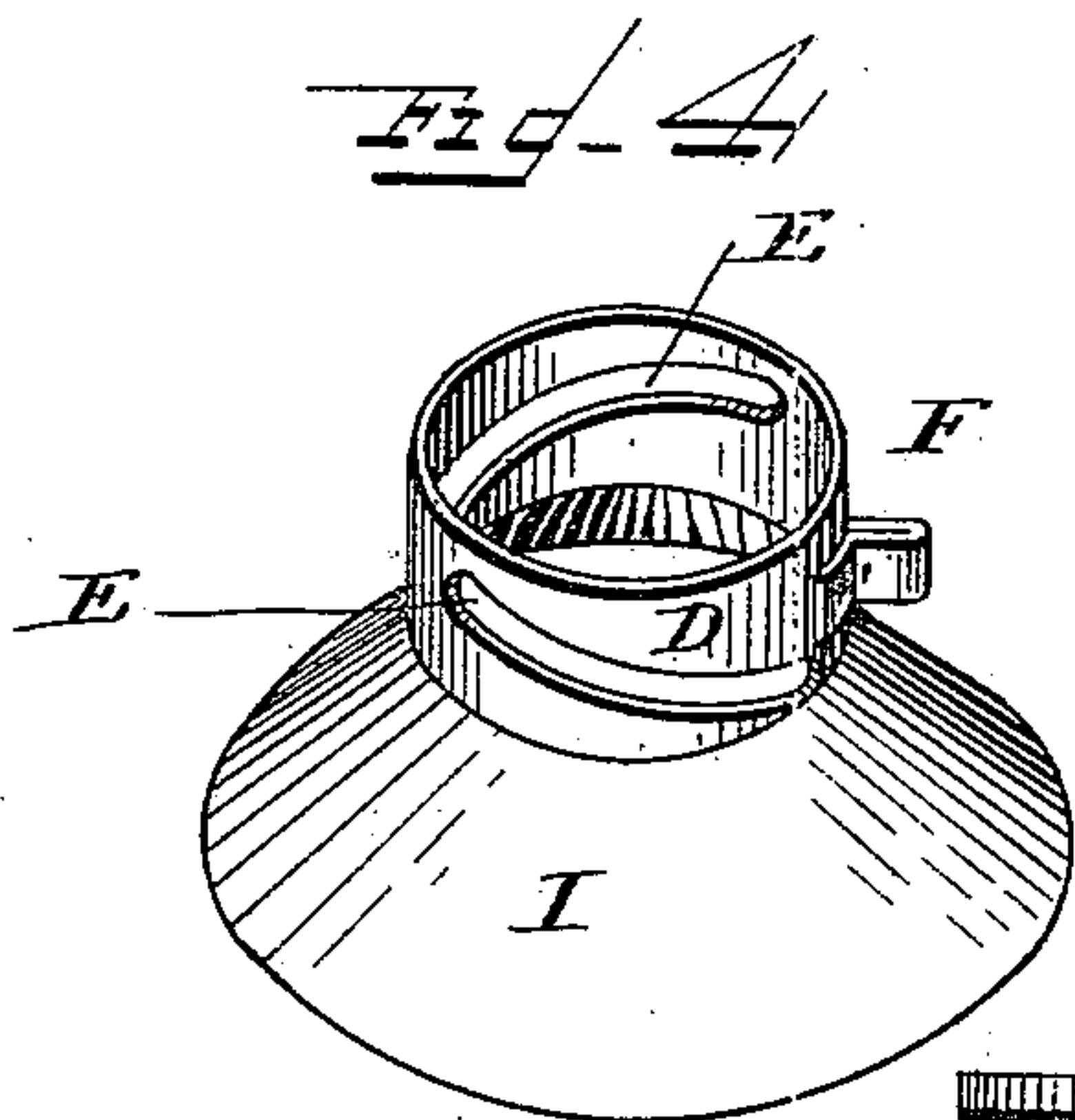
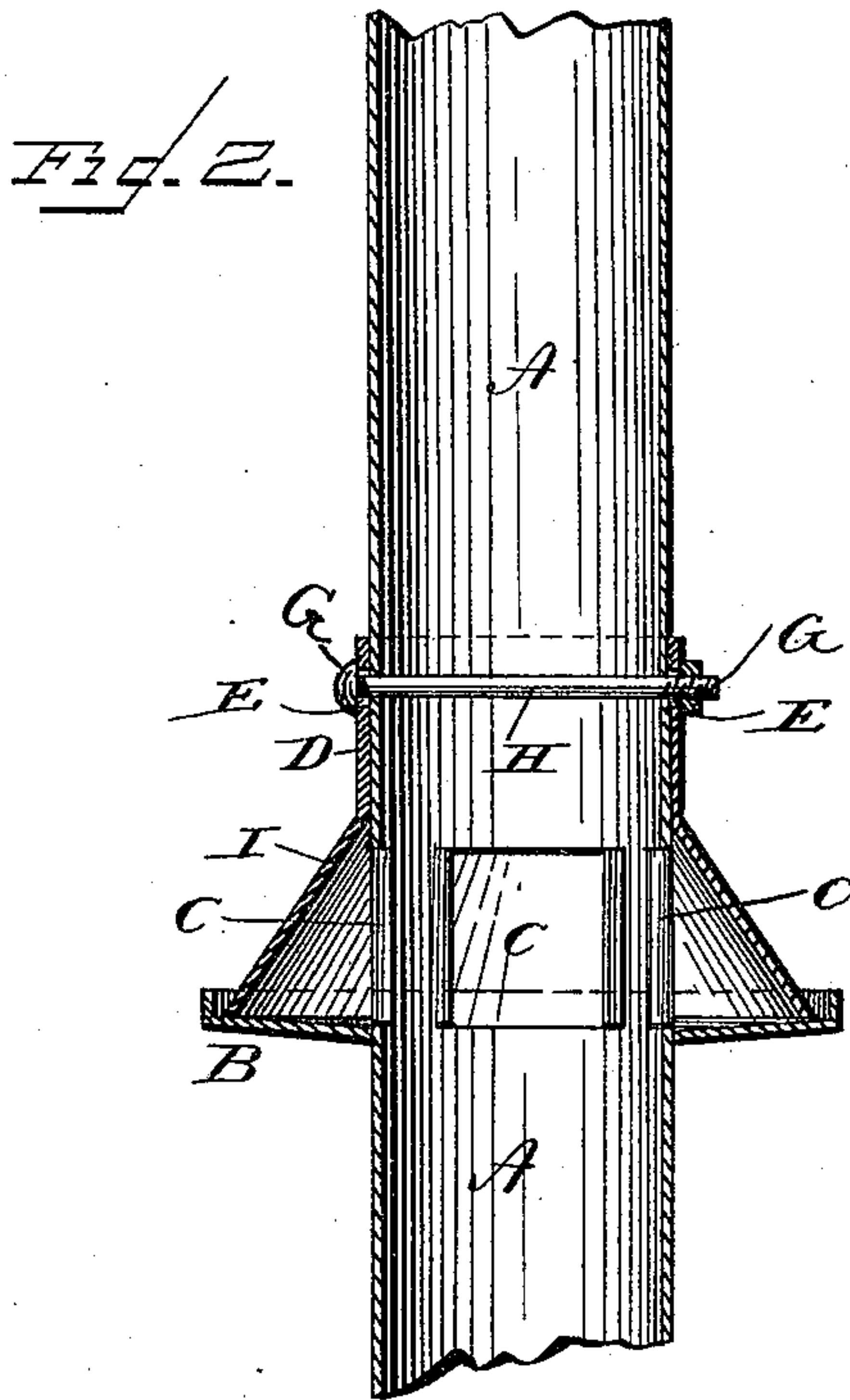
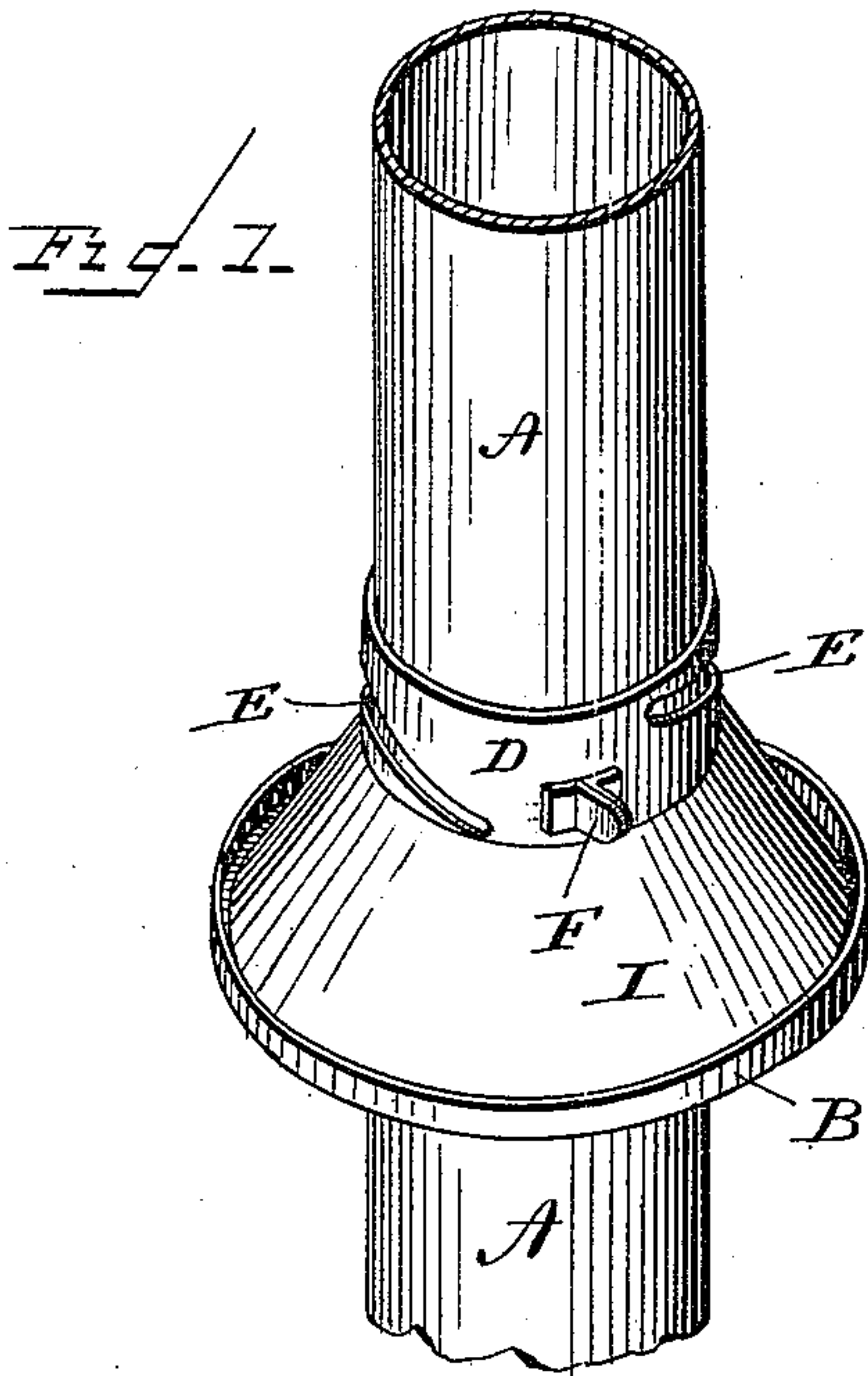
(No Model.)

G. W. LORE.

DRAFT REGULATOR FOR STOVES, &c.

No. 356,047.

Patented Jan. 11, 1887.



WITNESSES

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# UNITED STATES PATENT OFFICE.

GEORGE W. LORE, OF MILWAUKEE, WISCONSIN.

## DRAFT-REGULATOR FOR STOVES, &c.

SPECIFICATION forming part of Letters Patent No. 356,047, dated January 11, 1887.

Application filed July 6, 1886. Serial No. 207,195. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. LORE, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Draft-Regulators for Stoves, &c.; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of a section of stove-pipe provided with my improved draft-regulator. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a view of the pipe with the conical regulator and its sleeve removed, and Fig. 4 is a view of the regulator and its sleeve.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to that class of regulators for the draft in stove-pipes and similar smoke and draft conducting pipes in which air may be admitted through apertures in the side of the pipe; and it consists in the improved construction and combination of parts of such a regulator, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates the stove-pipe, which is of the usual construction, and B indicates an outwardly-projecting flange having its edge bent upward. This flange is secured to the pipe at as far a distance from the stove as will be within convenient reach from the floor upon which the stove stands, and a number of equally large apertures, C, are formed in the sides of the pipe immediately above the flange, the side edges of the apertures being preferably bent inward, so as to re-enforce the pipe at the point where it is weakened by the apertures being cut into it. A sleeve, D, having two diametrically-opposite inclined slots, E, forming portions of a spiral, fits upon the stove-pipe above the flange, and is provided with an outwardly-projecting handle or lip, F, for turning it, and the ends G G of a rod, H, project out through the sides of the pipe and into the slots, causing the sleeve to be raised or lowered when turned upon the pipe, the inclined slots screwing the sleeve upward or downward upon the

pipe. The lower portion of the sleeve is formed into a truncate conical flange, I, the lower edge of which fits within the upturned edge of the flange upon the pipe when the sleeve is down, the sleeve and conical flange covering the apertures in the pipe.

It will now be seen that when the sleeve and conical flange are moved downward upon the pipe the draft in the pipe will pass freely through it, the apertures being covered so as to cause the pipe to be practically an uninterrupted length of pipe; but when it is desired to cut off some of the draft, reducing the combustion within the stove, the sleeve and conical flange may be raised by turning the sleeve upon the pipe, and the air entering through the apertures thus exposed will check the draft through the stove, lowering the combustion in the stove, and at the same time there will be sufficient draft in the pipe to carry off the products of combustion from the stove. It will thus be seen that the draft in the pipe, and consequently in the stove, will be checked without being deflected and forced back into the stove again and from the stove into the room, as is the case with damper-regulators, in which the damper will deflect the products of combustion and all gases, forcing them back into the stove, from which they escape into the room, while in this regulator the draft will be checked by the current of air entering through the apertures in the sides of the pipe, which, on account of its being easier accessible to the upper portion of the pipe above the regulator, will enter the pipe to the exclusion of the draft from the stove, which, when the apertures are perfectly uncovered, will be just sufficiently strong to carry off all noxious gases and other products of combustion without exciting the fire in the stove more than is necessary to keep it burning.

The conical flange will catch the air and deflect it toward the apertures in the pipe, and all bad air in the room will be drawn up by this device, so that the device will be as well a ventilator as a draft-regulator.

A number of changes may be made in this device without departing from the spirit of my invention—such as, for instance, the rod passing through the pipe may be dispensed with and two lugs upon the pipe will enter the slots of the sleeve; or the conical flange



may be dispensed with and the sleeve be perfectly straight; or the inclined slots may be replaced by other means for raising and lowering the sleeve; or any such changes may be made which will not affect the principle of my invention.

The draft will pass more freely through this pipe, as there is no damper placed across the aperture, and as a consequence of this no soot will collect at the damper or creosote drop out though the joints of the pipe, the air mingling with the products of combustion in the pipe carrying off the entire products without giving them time to settle in the pipe.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a draft-regulator for stove pipes, the combination of a section of stove-pipe having a series of apertures arranged around it and provided with lugs on its exterior above said apertures, and a flange projecting below the apertures, with a sleeve provided with an im-

perforated lower portion, and with spiral slots in its upper portion adapted to receive the said lugs, substantially as and for the purpose set forth.

2. In a draft-regulator for stove-pipes, the combination of a stove-pipe section having a number of large apertures around it, and a flange projecting below the apertures having an upwardly-turned flange or edge, studs projecting diametrically opposite to each other from the sides of the pipe above the apertures, and a sleeve having a conical lower portion resting with its edge within the upturned edge of the flange, and formed with diametrically-opposite inclined slots sliding upon the studs, as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

GEORGE W. LORE.

Witnesses:

WILLIAM SCHMITZ,  
CHARLES F. HUNTER.