

B.F. Sturtevant.

Blower-Case.

N^o 87523.

Patented Mar. 2. 1869

Fig. 1.

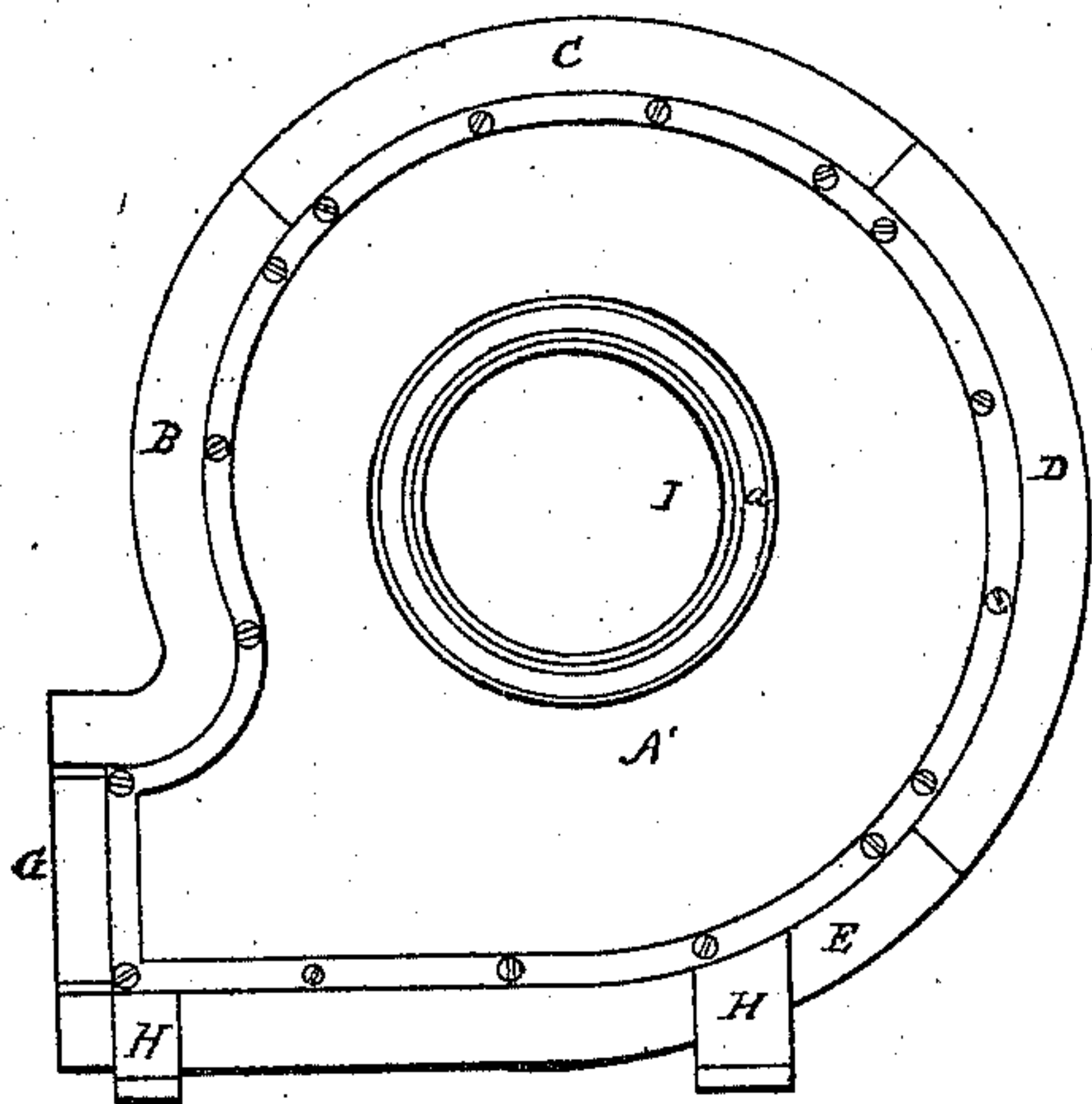


Fig. 2.

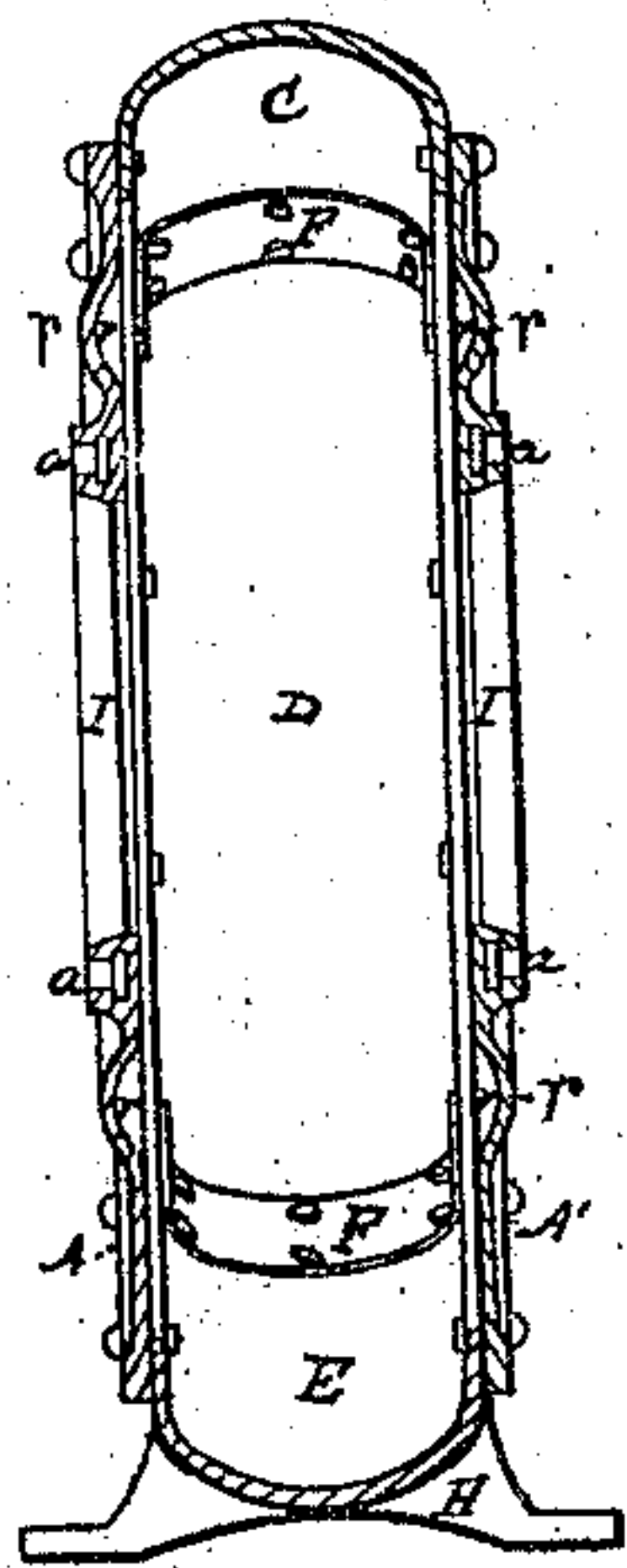
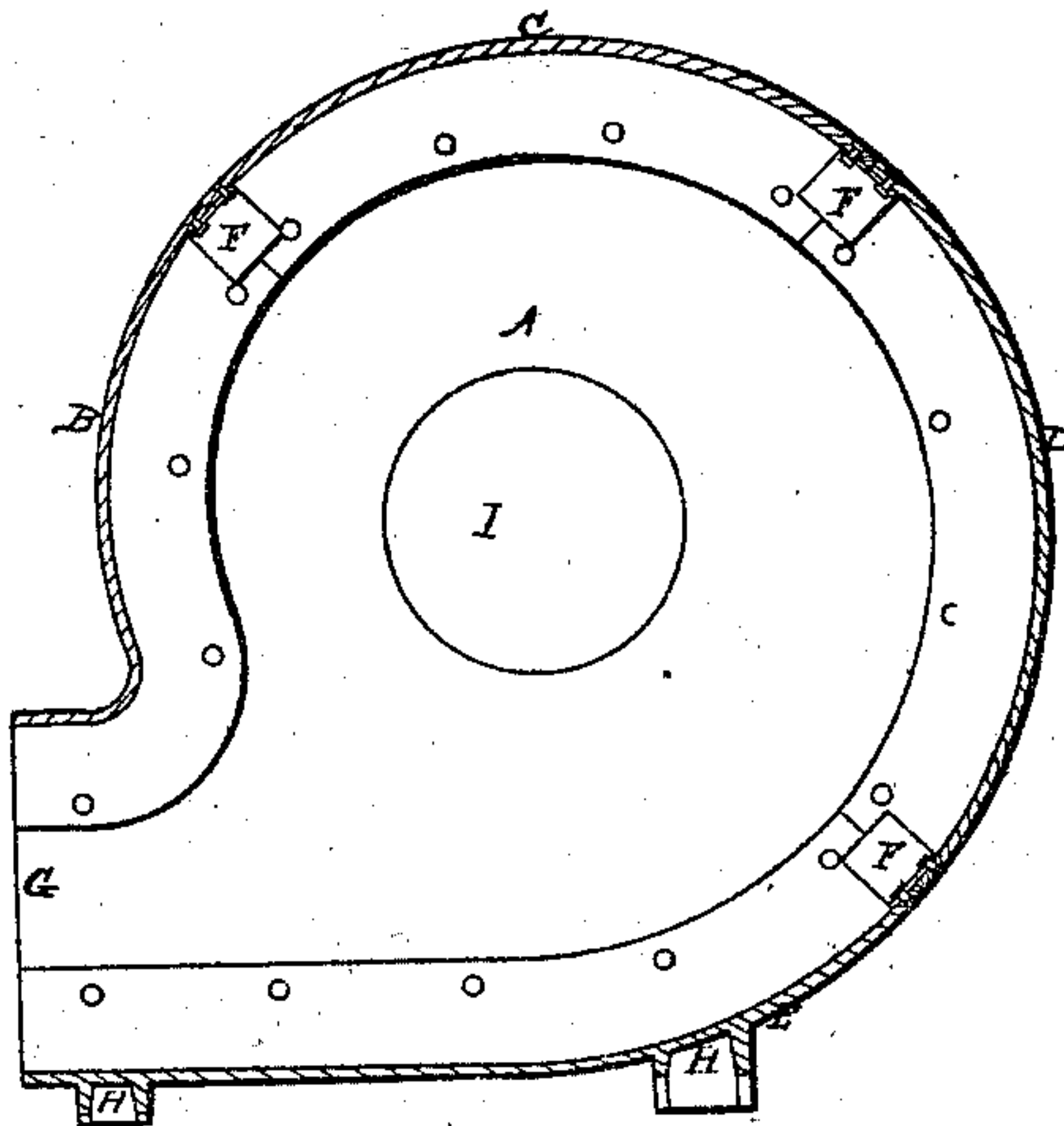


Fig. 3.



Witness

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UNITED STATES PATENT OFFICE.

BENJAMIN F. STURTEVANT, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN BLOWER-CASE.

Specification forming part of Letters Patent No. 87,523, dated March 2, 1869.

To all persons to whom these presents may come:

Be it known that I, BENJAMIN F. STURTEVANT, of Boston, in the county of Suffolk and State of Massachusetts, have made a new and useful invention having reference to the Cases of Air-Blowers or the Fan-Wheels thereof; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a side elevation, Fig. 2 a transverse section, and Fig. 3 a longitudinal section, of a blower-case made in accordance with my invention.

In carrying out my invention I construct the case and its eduction-mouth of two side plates, a series of peripheral and arched sections, and a series of connecting and joint-breaking plates, the said joint-breaking plates being riveted to the peripheral sections, which are connected with the side plates by screws or equivalent devices.

In the drawings, A and A' are the two side plates. B C D E are the arched and peripheral sections; and F F F are the connecting and joint-breaking plates, the whole being arranged and formed in manner as represented, and constituting a blower-case having an eduction-mouth, G.

Foot-pieces H H are cast upon the lower peripheral section, E, and project from it for the purpose of supporting the case upon a floor or stand.

Each of the side plates has a circular aper-

ture, I, extended through it and surrounded by a dovetailed concentric groove, *a*, the said groove being to hold the heads of the clamp-screws by which the bearings of the blast-wheel shaft are fixed to the case.

Each of the peripheral sections is arched or curved transversely.

Furthermore, each side plate has formed in it, and about its opening, an annular recess, *r*, for the purpose of diminishing the resistance which the wheel, while revolving, meets with from the friction of the air.

The wheel-case may be circular, but I prefer to have it scroll-shaped in form, as represented in the drawings. It is intended to make the case of cast metal.

There are difficulties attendant on the casting of the arched periphery or rim in one piece, which are obviated by casting it in separate sections, and connecting them by plates to extend across the joints of the sections, and be riveted to the sections.

I claim—

1. The arrangement of the side plates and the peripheral arched sections connected together, so as to constitute a blower-case.

2. I also claim each side plate as made with a dovetailed concentric groove, *a*, extending about its opening, and arranged as set forth.

B. F. STURTEVANT.

Witnesses:

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