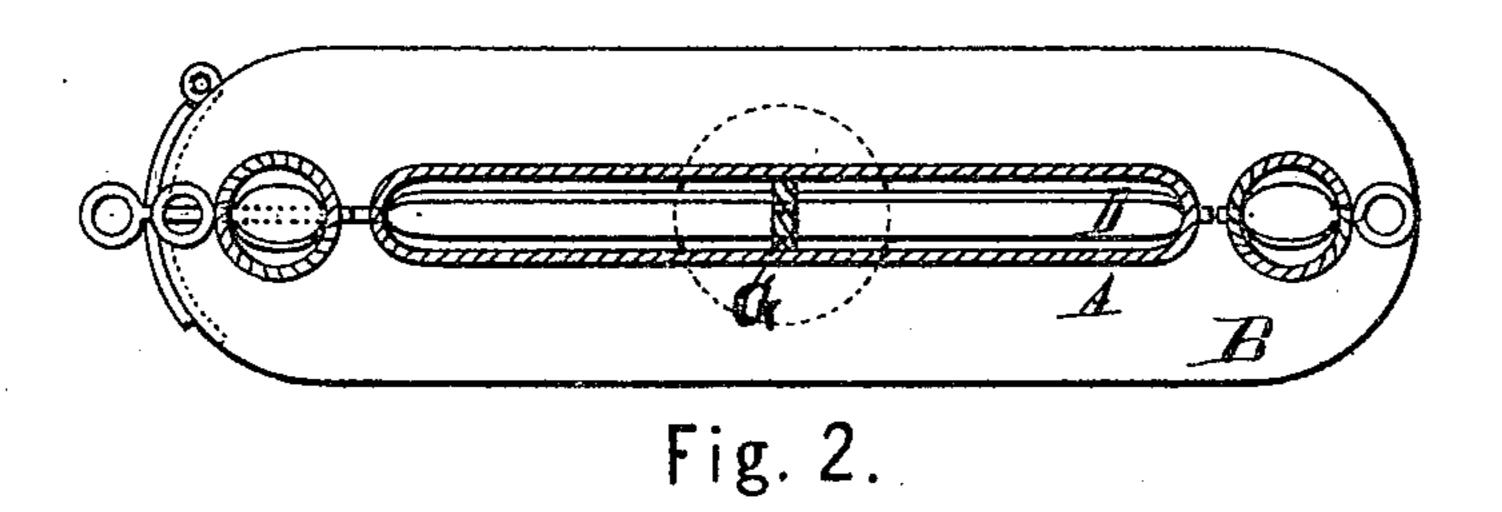
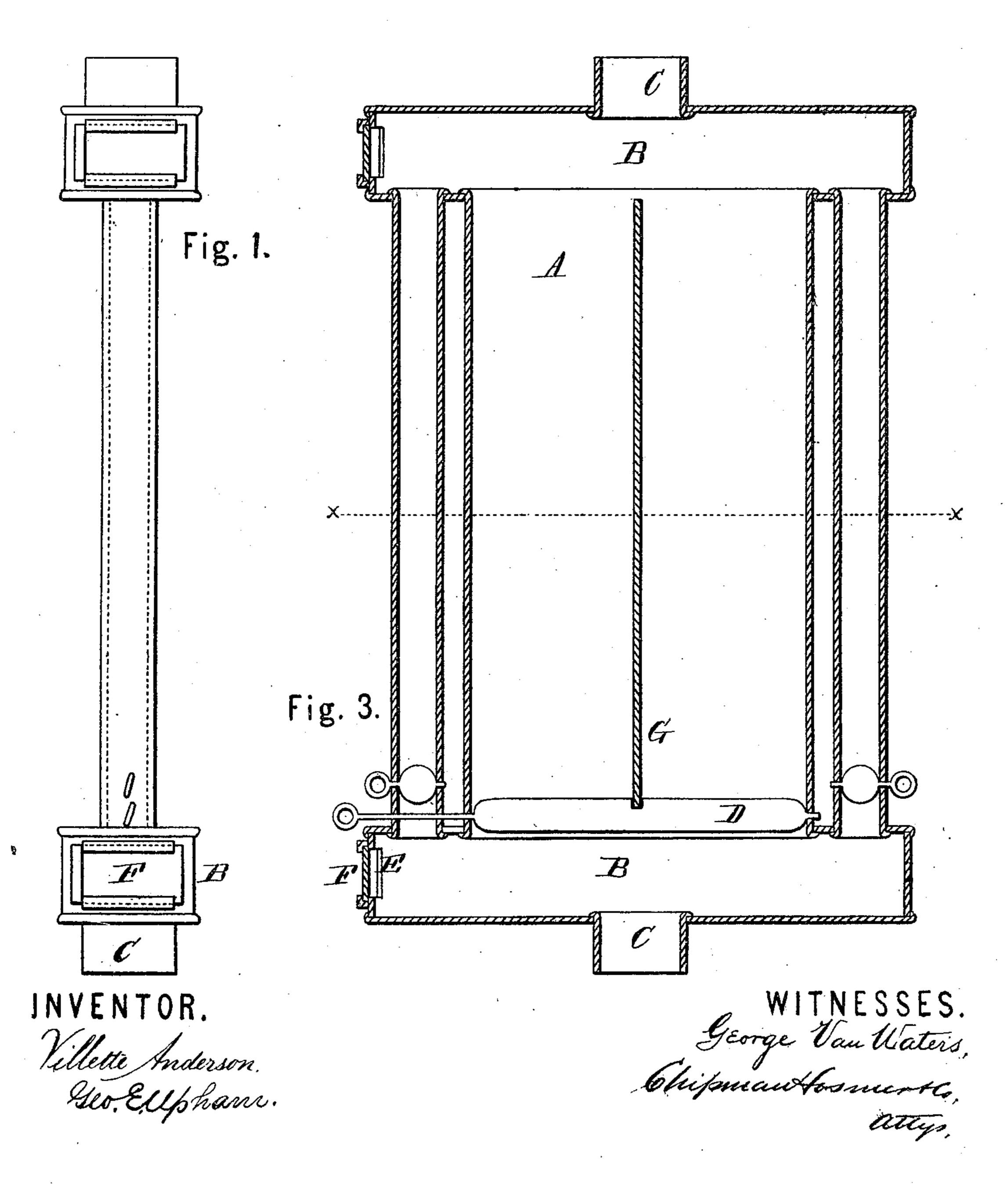
## G. VAN WATERS.

## Stove-Pipe Drums.

No. 133,506.

Patented Nov. 26, 1872.





## UNITED STATES PATENT OFFICE.

GEORGE VAN WATERS, OF DURAND, WISCONSIN.

## IMPROVEMENT IN STOVE-PIPE DRUMS.

Specification forming part of Letters Patent No. 133,506, dated November 26, 1872.

To all whom it may concern:

Be it known that I, GEO. VAN WATERS, of Durand, in the county of Pepin and State of Wisconsin, have invented a new and Improved Stove-Pipe, to be used as a heater in connection with the common stove-pipe, or as an attachment to stoves; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon, in which—

Figure 1 is a representation of a side elevation of my invention. Fig. 2 is a horizontal section, and Fig. 3 is a vertical central section of the same.

My invention has relation to stove-pipes; and it consists in the construction and novel arrangement of the parts constituting a stovepipe drum, as hereinafter more fully described.

Referring to the accompanying drawing, A designates a flat section of stove-pipe, constructed of one or more sheets of metal, the sides of which are arranged parallel, and made to stand not much less than half an inch and not much more than two inches apart, a measurement to be determined by the width and desired heating and discharging capacity of the pipe. B B represent two drums, attached, respectively, to the ends of the section A, and provided with collars C, to which are attached the cylindrical portions of the stove-pipe. D

represents a damper, arranged inside the section A, and used for regulating the draft. E designates orifices in the ends of the drums, provided with doors F. These are used in regulating the heat and clearing the drums of soot. G designates a brace for stiffening the section A and keeping the sides thereof parallel.

The draft or heated current enters the lower drum from the cylindrical section of stove-pipe leading from the stove, and, spreading out inside the drum, assumes a flattened shape, and enters the section A, through the sides of which it diffuses its heat. Passing through the section A, the draft enters the upper drum, and thence ascends through the continuation of the cylindrical pipe.

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

The combination and arrangement of the flattened section A, brace G, end drums B, orifices E, and doors F, substantially as described.

In testimony that I claim the foregoing invention I have hereunto set my hand this 13th day of January, A. D. 1872.

GEO. VAN WATERS.

Witnesses:

S. J. Humphrey, M. Vickery.