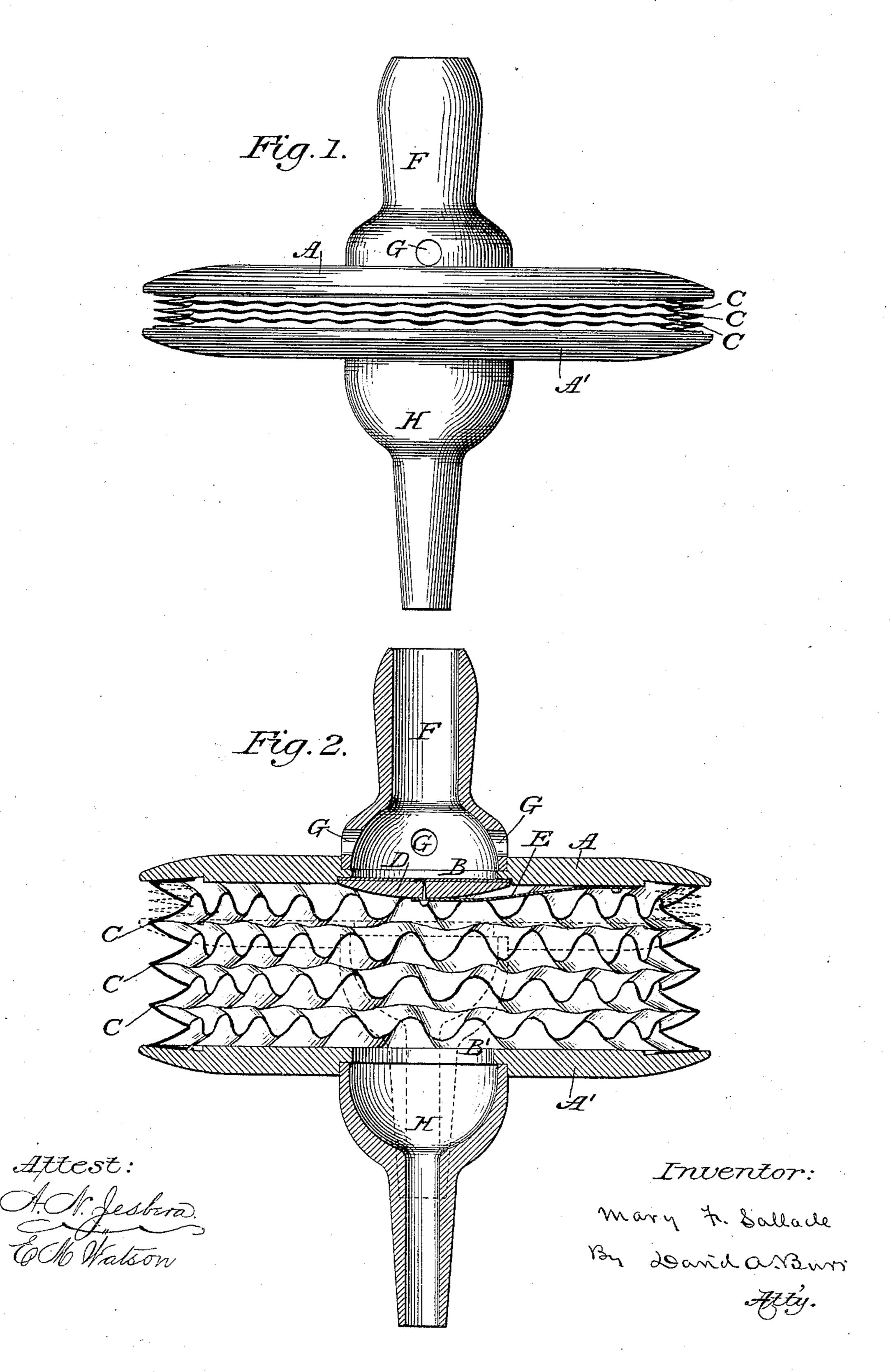
M. F. SALLADE. BELLOWS.

No. 418,232.

Patented Dec. 31, 1889.



United States Patent Office.

MARY F. SALLADE, OF NEW YORK, N. Y.

BELLOWS.

SPECIFICATION forming part of Letters Patent No. 418,232, dated December 31, 1889.

Application filed July 3, 1889. Serial No. 316,388. (No model.)

To all whom it may concern:

Be it known that I, MARY F. SALLADE, of the city, county, and State of New York, have invented certain new and useful Improve-5 ments in Bellows for Household Purposes; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, 10 making a part of this specification.

This invention relates to bellows for household use, and has for its object to provide a neat efficient air-delivering device in circular form, in which the air-valve shall be wholly

15 protected within the instrument.

It consists in the improved construction of the bellows, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is 20 a side elevation of my improved householdbellows, and Fig. 2 a longitudinal or diamet-

rical section thereof. The device is constructed of the two circular disks A A', centrally perforated, as at B 25 B'. These disks are united by a cylinder of very tough paper or other flexible material secured at each end to the inner face of each disk, near the edge thereof, and so crimped as to form accordion-plaits, which will fold 30 up very closely in a series of uniform longitudinally-corrugated plies C C, encircling the cylinder at regular intervals, as shown in the drawings. The central aperture B in one of said disks A is covered by a valve D, carried 35 upon the end of a spring-plate E, secured to the inner face of the disk, so that the valve shall lie within the bellows and automatically close its induction-port from the inner side, as shown in Fig. 2. The valve is wholly pro-40 tected by means of the piece F, serving as a handle for the bellows. The handle F is made tubular in form, and is fitted and secured at its inner end within the valve-opening B, to project outwardly therefrom. The outer end of this tubular handle is left open to provide for a free admission of air to the valve, and in addition thereto air-openings G G may be pierced laterally in the handle,

near to its juncture with the disk A. The aperture in the opposite disk A' is likewise 50 fitted with an exterior tubular piece H, which is left open from end to end, but is contracted at its outer end to form a suitable nozzle for the bellows.

The position of the valve D at the inner 55 end of the air-induction passage extending through the handle F serves to protect it effectually from accidental damage from ex-

ternal influences or causes.

The arrangement of the central axial han- 60 dle, in combination with the central axial nozzle placed in a right line therewith and with the intervening circular disks connected by the cylindrical wall of flexible material folding up in accordion-plaits renders the de- 65 vice very convenient for use, as well as ornamental in appearance. It is adapted not only for dusting out inaccessible corners, and for blowing a fire, but also for use in connection with a bottle of insecticide as a means 70 for spraying the powder or liquid into the crevices or localities to be treated therewith.

I claim herein as new and desire to secure

by Letters Patent—

The improved bellows comprising the two 75 circular disks having each a large central aperture therein, the air-tight tubular flexible wall folding in accordion-plaits and connecting said disks, the nozzle fitted to the aperture in one of them, the tubular open-ended 80 handle fitted to the corresponding aperture in the opposite disk, and the valve opening inwardly and hinged by an elastic plate to the inner side of the last-named disk to close automatically the aperture covered by said han- 85 dle, all arranged and combined substantially in the manner and for the purpose herein set forth.

In testimony whereof I have signed my name to this specification in the presence of 90 two subscribing witnesses.

MARY F. SALLADE.

Witnesses:

A. N. JESBERA, E. M. WATSON.