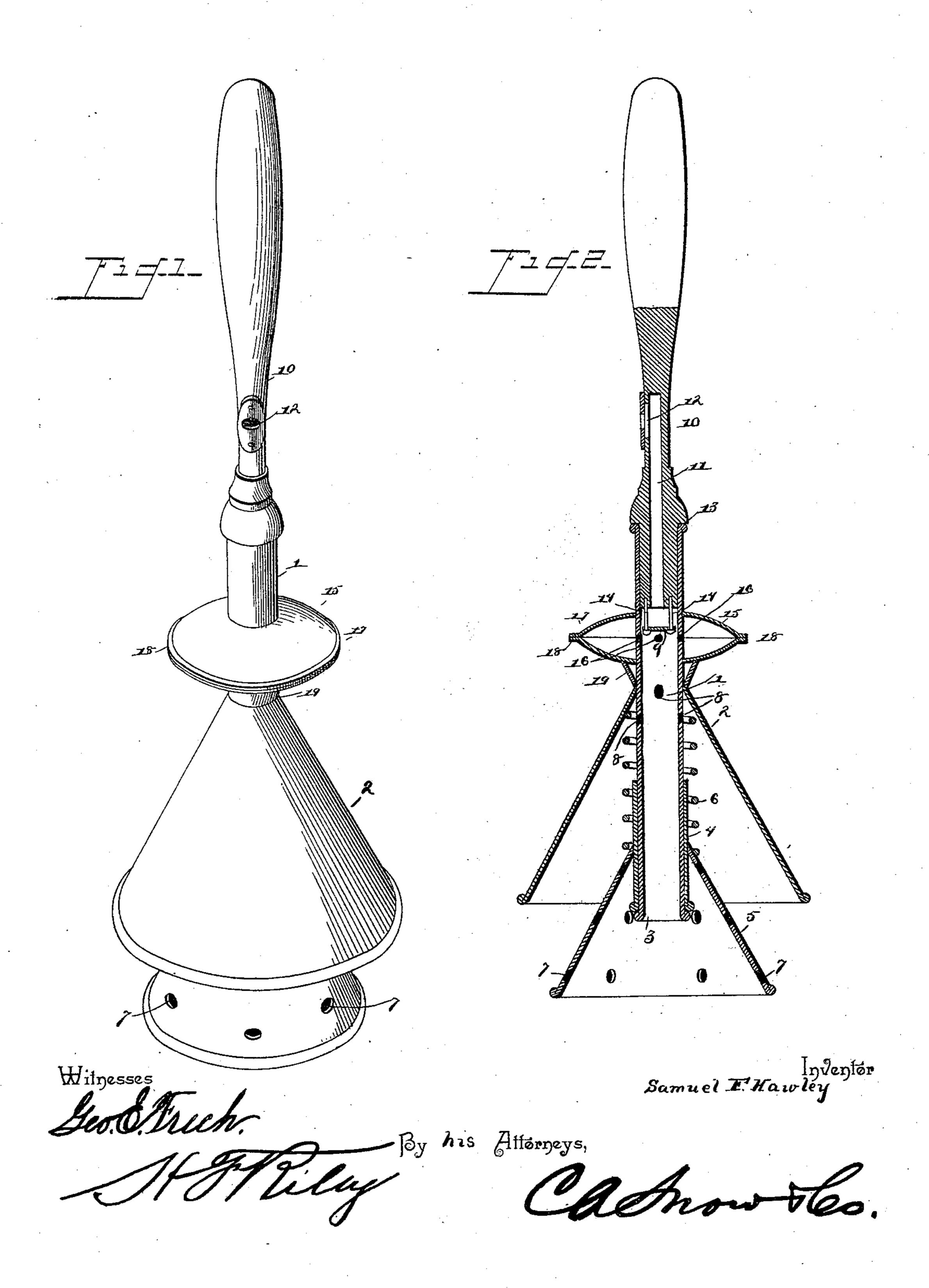
(No Model.)

S. F. HAWLEY.
CLOTHES POUNDER.

No. 455,250.

Patented June 30, 1891.



United States Patent Office.

SAMUEL F. HAWLEY, OF FARMINGTON, ILLINOIS.

CLOTHES-POUNDER.

SPECIFICATION forming part of Letters Patent No. 455,250, dated June 30, 1891.

Application filed June 17, 1890. Serial No. 355,769. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL F. HAWLEY, a citizen of the United States, residing at Farmington, in the county of Fulton and State of Illinois, have invented a new and useful Clothes-Washer, of which the following is a specification.

The invention relates to an improvement on the clothes-washer set forth in Letters Patero ent No. 143,901, granted me October 21, 1873.

The object of the invention is to simplify and improve the construction of clothes-washers and enable the operation of washing to be performed at the expenditure of a small amount of force.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a perspective view of a clothes-washer constructed in accordance with this invention. Fig. 2 is a cen-

tral longitudinal sectional view.

Referring to the accompanying drawings, 1 designates a main tube of a clothes-washer, having centrally secured to it a stationary cone 2, the lower edge of which is arranged approximately in the same plane as the end 30 of the vertical tube 1, and the lower end 3 of the latter is provided with a ring, which prevents a sliding sleeve 4, carrying a sliding cone 5, from slipping off the lower portion of the vertical tube. The sliding sleeve 4 is ca-35 pable of longitudinal movement along the tube 1 between the ring 3 and the apex of the stationary cone. A spiral spring 6 is interposed between the stationary and sliding cones and encircles the sleeve and tube, and 40 has its lower end soldered or similarly secured near the apex of the sliding cone, and has its upper end loosely engaging the apex of the stationary cone. The said sliding cone and sleeve can turn on the tube 1, and as only one 45 end of the spiral spring 6 is fastened there is no liability of breaking or injuring the washer by the turning of the sliding sleeve and the sliding cone or by the sliding sleeve slipping off the tube 1.

The sliding cone 5 is provided with a series of openings 7, and the lower portion of the tube is provided with similar openings 8, and

when the washer is forced down upon the clothes, air which is within the tube and the upper portion of the cone and is forced through 55 the clothes and water and produces a great agitation of the latter, which cleans the clothes; but as soon as the device is lifted a valve 9 in the lower end of the handle 10 is opened and admits air through a bore 11, having its up-60 per end terminating in a slot 12, communicating with the outside air. The handle closes the upper end of the tube 1 and fits snugly therein, and is provided with a shoulder 13, which rests upon the upper edge of the tube. 65

The valve 9 consists of a metallic disk sliding upon parallel pins 14 and adapted to be closed by the downward motion of the washer and to open and permit the air to escape as soon as the washer is raised, thereby avoiding the trouble and force required to operate

washer having a closed upper end.

In order to increase the power of the washer, an air-chamber 15 is provided, which is supported by the flaring upper end 19 of the sta- 75 tionary cone 2 and which communicates with the tube through perforations 16 in the latter and is circular and composed of rings or annular flanges 17, which have their inner opposed faces concaved or dished and have cen- 80 tral openings to receive the tube 1 and have their peripheries 18 secured together, and they are soldered or similarly secured to the tube 1 and are braced by a conical or flaring tube 19, having its smaller end secured to the sta- 85 tionary cone 2 and its upper and larger end secured to the lower one of the rings or flanges 17. Air collects in the chamber and tube, and on a downstroke of the machine the valve closes and prevents the escape of the air 90 through the handle and the air is forced through the clothes. On an upstroke the valve opens and the chamber and tube refill with air.

From the foregoing description and the accompanying drawings the construction, operation, and advantages of the invention will be readily understood.

What I claim is—

In a clothes-washer, the combination of the 100 tube 1, provided with the perforations 16, the annular air-chamber secured to the tube 1 and surrounding the perforations 16 and composed of oppositely-concaved flanges having

their outer edges secured together, the stationary cone secured to the tube and provided with a flaring upper end 19, supporting the air-chamber, and the handle fitted in the tube and having a bore communicating with the outside air and provided with a valve, substantially as described.

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

SAMUEL F. HAWLEY.

Witnesses:

J. T. ZOOK, W. H. DYER.