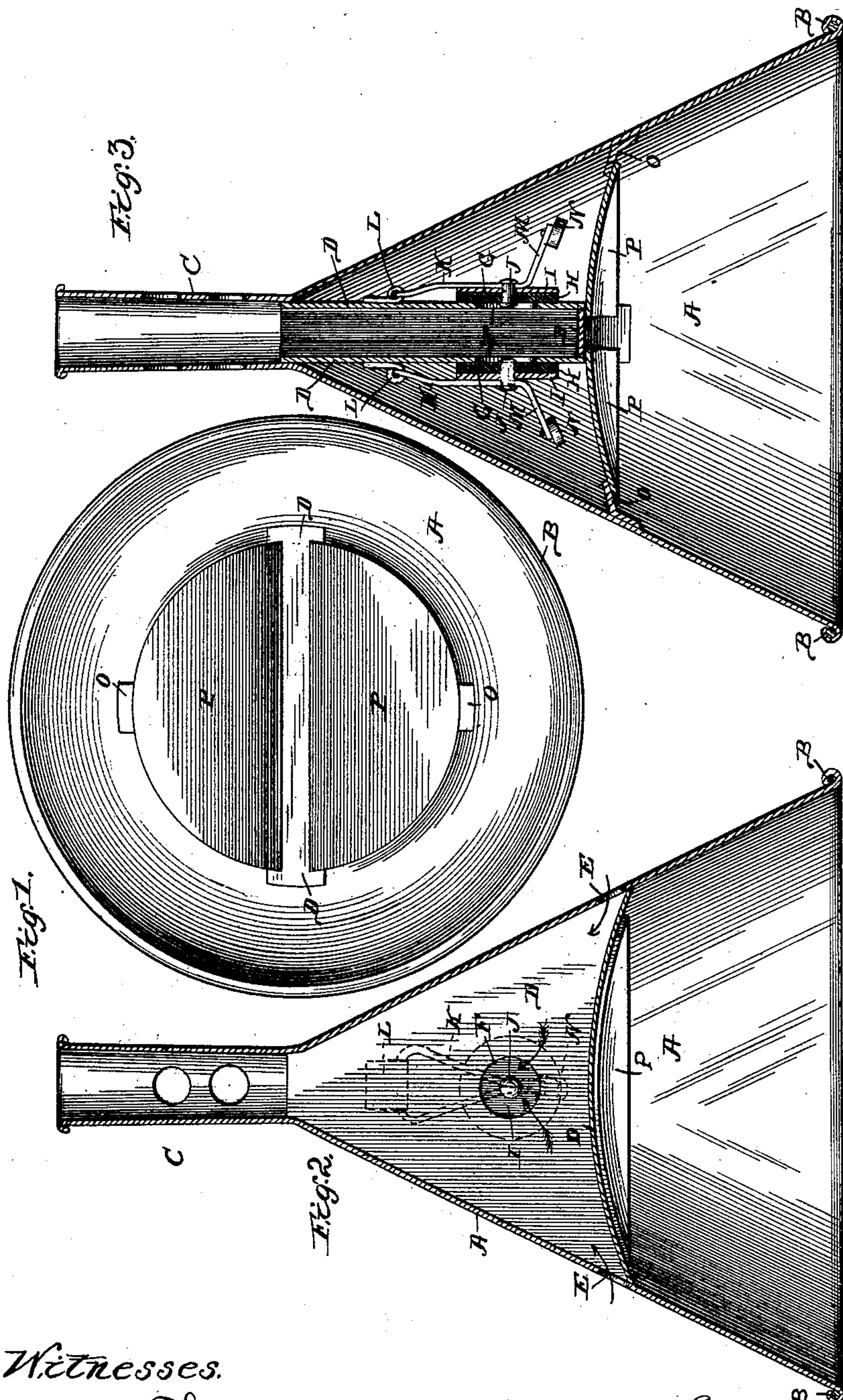


(No Model.)

E. B. DREIFOOS.
CLOTHES POUNDER.

No. 424,865.

Patented Apr. 1, 1890.



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UNITED STATES PATENT OFFICE.

EMANUEL B. DREIFOOS, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO
MAX KANTER, OF SAME PLACE.

CLOTHES-POUNDER.

SPECIFICATION forming part of Letters Patent No. 424,865, dated April 1, 1890.

Application filed January 28, 1890. Serial No. 338,328. (No model.)

To all whom it may concern:

Be it known that I, EMANUEL B. DREIFOOS, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Clothes-Pounders, of which the following is a specification.

This invention relates to improvements in that class of clothes-pounders manually operated for forcing water through the clothes while contained in a suitable receptacle, and has for its prime object to provide novel, prompt, and effective means for preventing the escape of the air when the pounder is brought forcibly down upon the articles being washed, and which will instantly admit air into and permit the raising of the pounder when the pressure is removed, whereby the pounder may be quickly handled and at small expenditure of power upon the part of the operator.

Other objects are to insure promptness in the opening and closing of the valve, to have the valves of such a character that they will be affected only in the minimum degree by the hot water and steam, and to have them shielded and protected against entanglement with the articles being washed, whereby their operation is at all times insured, and to provide certain details in the carrying out of my invention, all as illustrated in the accompanying drawings, in which—

Figure 1 represents an inverted plan view of a clothes-pounder embodying my invention; Fig. 2, a central vertical section there-through; and Fig. 3 represents a similar view taken at right angles to Fig. 2.

Similar letters of reference indicate the same parts in the several figures of the drawings.

Referring by letter to the accompanying drawings, A indicates the body or casing of my pounder, conical in form, hollow, and composed of sheet metal, preferably rolled at its lower edge B, so as to prevent tearing or cutting of the clothes, and terminating at its upper end surrounding the apex of the cone in a hollow handle C for convenience in manipulating the pounder. Dividing this cone-shaped body centrally is a double-walled partition D, extending from side to side of the body about half of the depth thereof from the

handle down, the partitions being located apart a distance about equal to the diameter of the handle and connected at their lower ends by a cross-partition so as to form a narrow chamber closed as to the interior of the body, except at the valved openings therein, described farther on, and the air-inlet ports E therein, preferably near the lower ends of the partition through the body or wall of the cone, this chamber constituting an air-passage for the air into and out of the interior of the cone when in operation, but more especially for admitting air into the cone.

Each partition is provided with a perforation F near the center thereof and with a flat gravity-valve G for closing the perforation, preferably consisting of a disk of rubber or some suitable composition H and a disk I, of tin or other sheet metal, united by a rivet J and suspended by a bent wire K, soldered or secured to the valve by the rivet, the upper end of which passes through a hinge-plate L, secured to the partition, thus pivotally suspending the valve, while the lower end M thereof is bent outwardly at nearly a right angle to the valve, and has secured thereto a small weight N, which insures the normal seating of the valve.

Secured to the lower end of the partition and to lugs or ears O, projecting from the interior of the cone, is a pair of semicircular plates P, extending from the partitions nearly to the walls of the cone, which together practically form a disk, around which and between which and the cone the air can pass, these guard-plates, besides serving as deflectors for the air, subserving the further purpose of protecting the valves from engagement or entanglement with the clothes, dividing the cone into an upper and a lower compartment, the upper compartment of which is further divided by the double-walled partition heretofore described.

In operation, when the pounder is pressed down upon the clothes, the air in the lower compartment thereof will pass around the dividing-disk and be compressed in the upper compartment, and by this compression serving to force the water through the clothes; but immediately the pressure is removed and the pounder slightly raised the air will rush

in through the inlet-ports E and the valved openings F, forcing the valves backward in its passage, and thus enabling the instantaneous lifting of the pounder with practically only the gravity of the pounder to overcome; but as soon as the upward movement ceases the valves G, under the influence of their weights, will be instantly reseated and remain so during their entire downstroke, being only the more firmly forced on their seats by the compression of the air in the valve-chambers, or rather the upper compartment of the cone.

This pounder, besides being simple, cheap, and durable in its construction, is especially efficient in its operation, answering so promptly to all the movements imparted thereto that the operator, while able to exert his maximum force in the pounding operation, is practically relieved of all laborious effort in freeing the pounder from the clothes. Besides this, the parts of the valve are of such construction as to remain substantially unaffected by the action of the hot water and steam, will not corrode and soil the clothes, and cannot become entangled with the clothes so as to become deranged or tear the clothes, or interfere with the pounding operation.

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

1. In a clothes-pounder, the combination,

with the conical body and a disk-like plate horizontally dividing the cone into an upper and lower compartment, said plate being of less diameter than the cone on the line of bisection, of a double-walled partition subdividing the upper compartment, provided with a perforation in each wall thereof, and gravity-valves adapted and arranged to close each perforation against the escape of air from the interior of the cone, substantially as described.

2. In a clothes-pounder, the combination, with the cone A and the double-walled partition D, provided with the perforations F, of the valves G, wires K, and hinge-plates L, substantially as described.

3. In a clothes-pounder, the combination, with the cone A and the double-walled partition D, provided with perforations F, of the valves G, wires K, hinge-plates L, angular arms M, and weights N, substantially as described.

4. In a clothes-pounder, the combination, with the cone A, the double-walled partition D, provided with perforations F, the ears O, and semicircular plates P, of the valves G, wires K, hinge-plates L, angular arms M, and weights N, substantially as described.

EMANUEL B. DREIFOOS.

Witnesses:

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