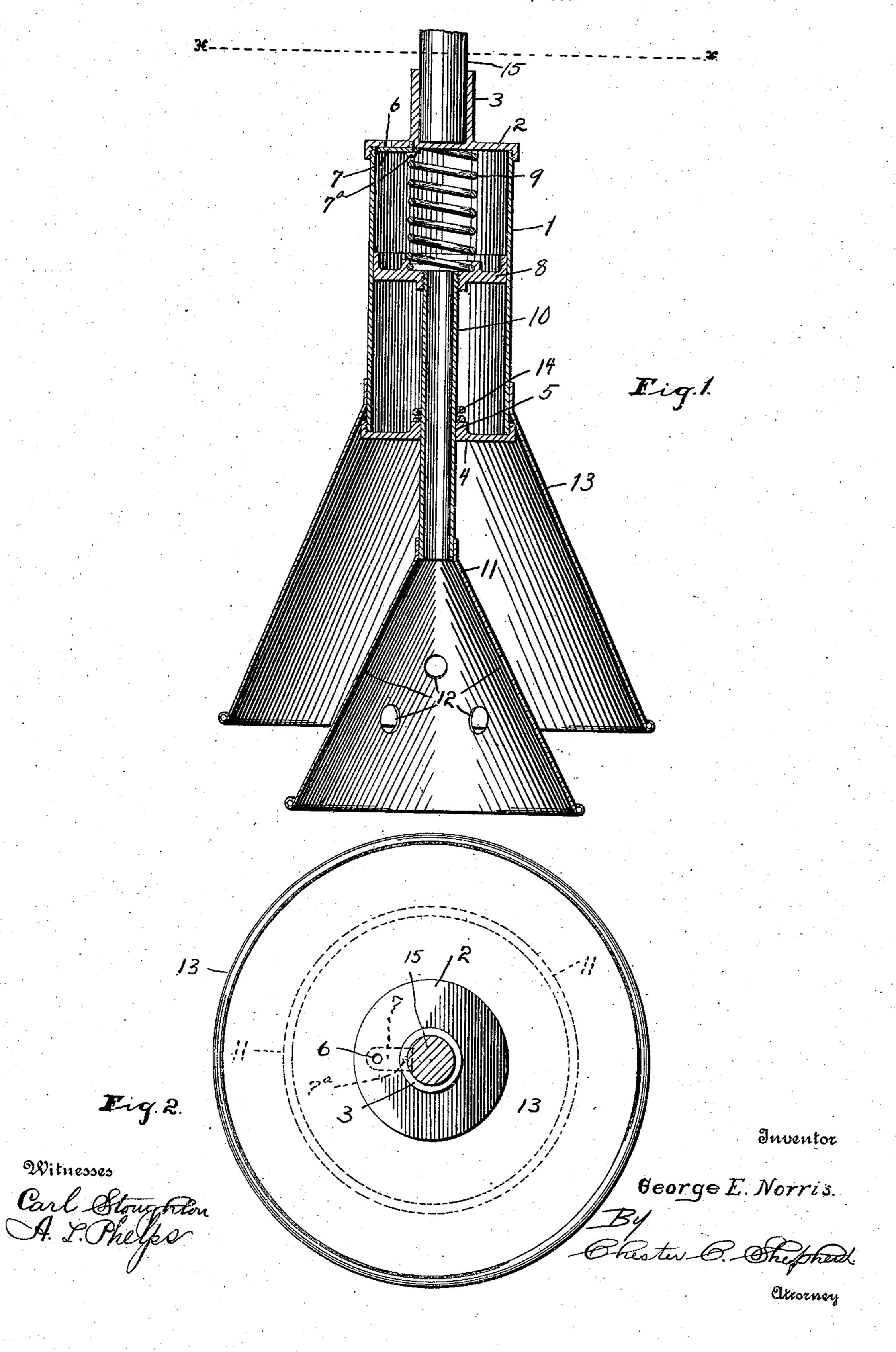
G. E. NORRIS.

CLOTHES POUNDER.

APPLICATION FILED NOV. 29, 1907.



UNITED STATES PATENT OFFICE.

GEORGE E. NORRIS, OF COLUMBUS, OHIO.

CLOTHES-POUNDER.

No. 881,707.

Specification of Letters Patent.

Patented March 10, 1908.

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To all whom it may concern:

Be it known that I, George E. Norris, citizen of the United States, residing at Columbus, in the county of Franklin and 5 State of Ohio, have invented certain new and useful Improvements in Clothes-Pounders, of which the following is a specification.

My invention relates to clothes pounders or devices for washing clothes of that class 10 in which one or more conical pounding or beating bodies are carried by a vertical handle, and the objects of my invention are to provide a clothes pounder of this character of improved construction and arrangement 15 of parts wherein is embodied improved means for forcing air into the water for the purpose of creating artificial currents and producing a greater agitation of the water and thereby increasing the cleansing effect; to provide 20 means for cushioning the piston in its upward and downward movement and at the same time utilize such means for forcing the piston and inner cone downward, and to produce other improvements the details of which will 25 be more fully pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawing, in which—

Figure 1 is a central vertical section of my 30 improved clothes pounder or washing device, and, Fig. 2 is a transverse section on line x-xof Fig. 1.

Similar numerals refer to similar parts throughout the several views.

In carrying out my invention, I employ a cylindrical body 1 which is provided at its upper end with a detachable head or cap 2, having extending upwardly therefrom a handle receiving socket piece 3. The lower 40 end of the cylinder 1 is provided with a detachable cap 4 having a vertical central opening 5 therethrough. The upper cap 2 is provided at one side of its center with an air port 6, the inner end of which is normally 45 closed by a valve 7 which is secured as indicated at 7^a to the cap 2 at one side of said port 6.

Within the cylinder I provide a suitable form of piston 8 which is adapted to fit and 50 slide within said cylinder and supported from about the center of this piston is an upwardly extending spring 9. Secured within an opening in and depending from the center of the piston 8 is a vertical tube 10, 55 this tube passing through the lower cap | It will be understood that the spring 14

municating with its lower end the upper and smaller end of a conical pounding body 11, the latter being preferably provided, as shown, with a desirable number of perfo- 60 rations 12.

13 represents an outer conical casing or pounder which is of greater diameter than the inner conical body 11 and which has its upper and smaller end rigidly incasing the 65 lower portion of the cylinder 1. Supported upon the central portion of the bottom plate 5 of the cylinder 1 is a short upwardly extending spring 14.

15 represents a suitable handle which has 70 its lower end portion secured in the socket

piece 2.

In the class of clothes pounders or washing devices to which my invention relates, the clothes which are submerged in a tub or 75 other receptacle, are subjected to the vertical pounding action of the conical members. In the construction which I have described it will be observed that the spring 9 will serve to normally hold the inner member 11 80 in the position shown in Fig. 1 of the drawing, in which the base of the inner member is projected below the base of the outer member 13. When a downward blow is imparted to the device, it will be under- 85 stood that the member 11 will enter the water in the tub and come into contact with the clothes and the resistance thus offered will drive the tube 10 and piston 8 upward toward the upper end of the cylinder 2, re- 90 sulting not only in a compression of the spring 9, but in the air which is contained in the cylinder above the piston being forced downward through the tube 10 and conical member 11 into the water, thereby creating 95 artificial currents which results in a greatly increased agitation of the water and a corresponding increase in the friction between the water and clothes which are contained in the tub.

On the downward stroke of the inner member 11 which will occur through pressure of the spring 9 when the device is raised, it is obvious that a suction will be created in the cylinder above the piston, which will 105 draw the valve 7 downward and draw air into the cylinder through the port 6, which air will be utilized as hereinbefore described at the next downward movement of the pounder.

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opening 4 and having secured to and com- will serve to cushion the piston 8 as it ap-

proaches its limit of downward movement. It will also be seen that the perforations 12 will furnish means of exit and entrance of both the air and water and thereby contribute toward the formation of the desirable artificial currents in the water.

From the construction which I have shown and described, it will be seen that I have combined in my device, means for not only drawing air into the cylinder, but for forcing the same downward and outward at

the time when it is needed.

What I claim, is:

1. In a clothes pounder, the combination with a cylinder, a handle connected therewith, said cylinder having an air port and a valve adapted to normally close said air port, of a piston contained in the cylinder, a tube 10 leading through said piston and through the lower end of the cylinder, a conical body on the lower end of said tube, and a second and larger conical body depending from said cylinder.

2. In a clothes pounder, the combination with a cylinder, a handle connected there- 25 with, said cylinder having a port in its upper portion, of a piston within said cylinder, a spring extending upwardly from said piston, a tube passing through the piston and through the lower end of the cylinder, a 30 conical body on the lower end of said tube and communicating therewith, an external conical body of larger diameter than said first mentioned body having its upper portion connected with said cylinder, a spring 35 in the lower portion of the cylinder, and a valve in the upper portion of the cylinder adapted to normally close said air port and to open on the downward movement of the piston.

In testimony whereof I affix my signature

in presence of two witnesses.

GEORGE E. NORRIS.

Witnesses:

C. C. Shepherd,

L. CARL STOUGHTON.