

No. 808,537.

PATENTED DEC. 26, 1905.

C. E. GOULDING.  
WASHING MACHINE.  
APPLICATION FILED MAY 23, 1905.

Fig. 1.

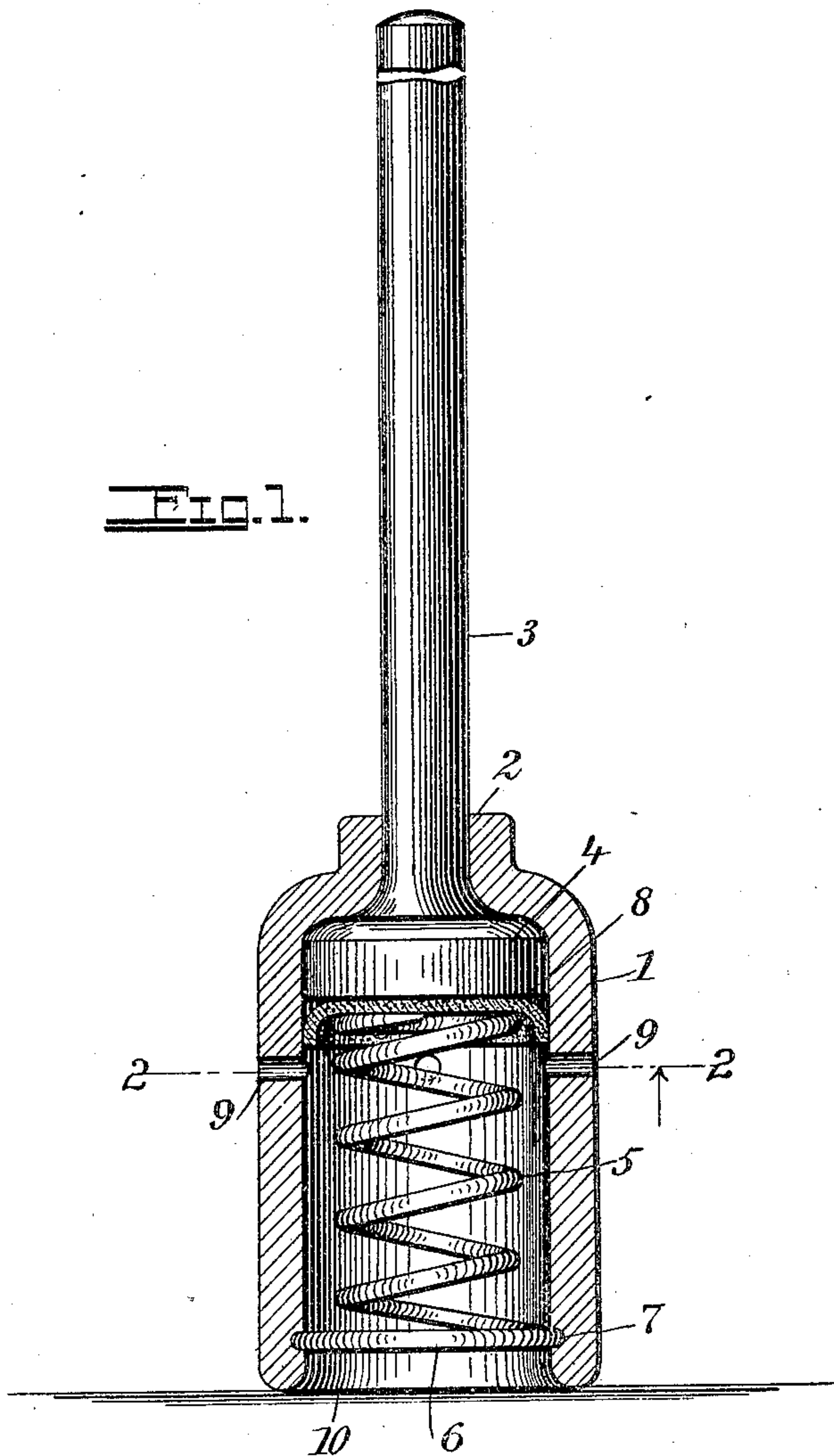
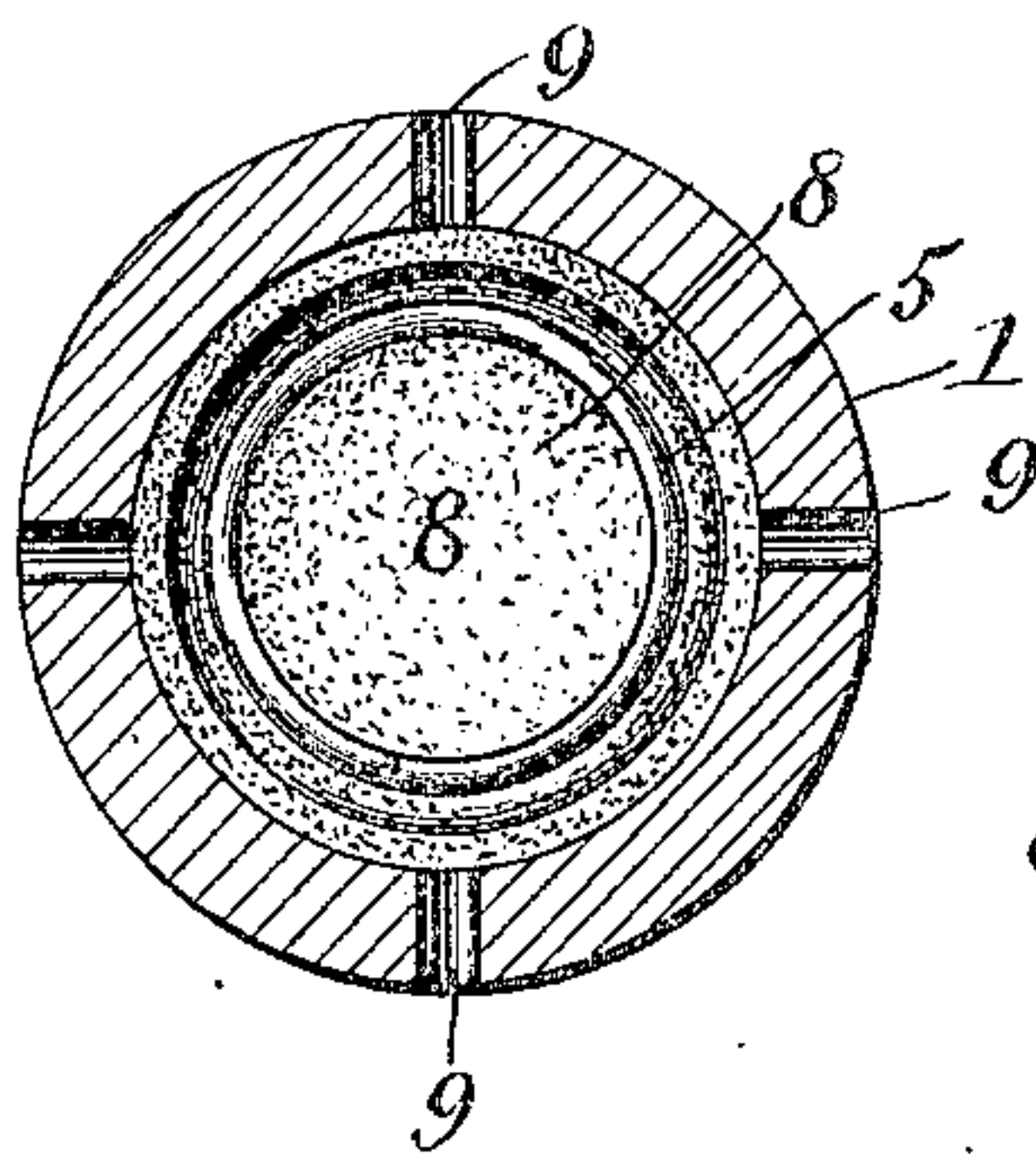


Fig. 2.



WITNESSES:

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## WASHING-MACHINE.

No. 808,537.

Specification of Letters Patent.

Patented Dec. 26, 1905.

Application filed May 23, 1905. Serial No. 261,733.

*To all whom it may concern:*

Be it known that I, CHARLES E. GOULDING, a citizen of the United States, and a resident of Bluffsprings, in the county of Escambia and State of Florida, have invented a new and Improved Washing-Machine, of which the following is a full, clear, and exact description.

This invention relates to washing-machines; and it consists, substantially, in details of construction and combinations of parts hereinafter more particularly described, and pointed out in the claims.

The invention has reference more especially to washing-machines of the pounder type; and one of the principal objects thereof is to overcome numerous disadvantages and objections frequently attending the use of many similar structures hitherto devised for a similar purpose.

A further object is to provide a washing-machine of the character specified with means whereby the material of the garments to be cleansed is prevented from sticking to any part of the machine or pulling out therewith when the machine is lifted from the cleansing-water at the end of each operative stroke imparted thereto.

A still further object of the invention is to provide a washing-machine of the character referred to which is exceedingly simple in its embodiment, besides being cheap to manufacture, thoroughly effective, and reliable for its purpose, and possessing the capacity for long and repeated service.

The above and additional objects are attained by means substantially such as are illustrated in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views.

Figure 1 is a vertical sectional view of a washing-machine embodying my improvements; and Fig. 2 is a horizontal sectional view thereof, taken on the line 2 2.

Before proceeding with a more detailed description it may be stated that in the form of my improvements herein shown I employ a hollow body of special construction, combined with a plunger therein, special means being employed for deriving a free circulation of air and water beneath the plunger in the elevated position thereof to thereby prevent any sticking of the garments to the plunger or any imprisonment of air beneath the

same as the structure is placed in the water preparatory to a downward stroke thereof.

While I have herein represented my improvements in a certain preferred embodiment, it will be understood, of course, that I am not limited thereto in precise detail, since immaterial changes therein may be resorted to coming within the scope of my invention.

Reference being had to the drawings by the designating characters thereon, 1 represents the hollow body or casing of my improved washing-machine, the same being provided at the upper part thereof with a bearing 2, in which works the handle or rod 3 of a plunger 4, fitting closely within said hollow body 1, as shown. The plunger 4 is held in its normal position at the upper part of the interior of the hollow body by means of a spiral spring 5, the diameter of the convolutions of which is less than the interior diameter of the hollow body, with the exception of the lowermost convolution 6 thereof, the diameter of which is somewhat in excess of the internal diameter of the hollow body, this convolution 6 being seated within an annular groove or recess 7 therefor formed in the inner surface of the walls of the hollow body, as clearly shown in Fig. 1. The upper convolution or terminal of the said spring 5 has seated thereupon what may be termed a "valve-packing" 8, embodying an inverted cup of leather or other suitable material fitting tightly within the interior of the hollow body, as shown.

Formed in the walls of the hollow body 1, at suitable intervals thereof, are a plurality of radially-disposed openings 9, extending all the way through such walls in a plane below the lower edge of the valve-packing 8 when the latter and the plunger are in their normal upward position.

From the foregoing it will be seen that when the structure is placed in the cleansing-water for garments located in a tub or other receptacle and subjected to the usual pounding or vertical reciprocating movements the plunger 4 will be caused to work up and down within the hollow body 1, and on each descent thereof the valve-packing 8 will be carried downwardly therewith, the spring 5 being thereby compressed, as will be understood. The water and air within the hollow body 1 will thereby be driven or forced out of the open end 10 of the said hollow body and into and through the garments to be cleansed, and



then when the downward force on the plunger is released and the same permitted to be again elevated by the reaction or force of said spring 5 any air or water which may have accumulated within the hollow body above the plunger by entrance therein through the radially-disposed openings 9 will be again forced out through said openings in a manner quite apparent. In virtue of the openings being located beneath the plunger in the normal position of the latter it will also be apparent that a free circulation of air and water beneath the plunger will be established, with the hereinbefore-mentioned effect of preventing any sticking of the garments to the plunger or any other part of the structure in the cleansing or washing operation.

It will be seen that my improved washing-machine is exceedingly simple and also that the same can be readily manipulated with effectiveness without liability to breakage or dislocation of any of the operative elements or parts thereof.

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

1. A washing-machine comprising a hollow body open at its lower end and provided at its upper end with a bearing, a plunger within the body having an operating-rod working in said bearing, a spring normally maintaining the plunger in elevated position

within the body, and a packing interposed between the spring and the bottom surface of the plunger, the said hollow body being formed with a plurality of radially-disposed openings located in a plane beneath the plane of the bottom of the plunger, and said packing embodying an inverted cup of leather, movable closely against the inner sides of the body with the plunger.

2. A washing-machine comprising a hollow body open at its lower end and provided at its upper end with a bearing, the inner surface of the body near its lower end being formed with an annular groove, a plunger within the body having an operating-rod working within said bearing, and a spiral spring for normally maintaining the plunger in upward position within the body, the same having the lower convolution thereof seated within the said annular groove, said body having formed in the walls thereof a series of radially-disposed openings located in a plane beneath the plane of the bottom of the plunger, and the said spring and plunger having interposed therebetween a valve-packing embodying an inverted cup of leather.

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

CHARLES E. GOULDING.

Witnesses:

P. M. PRITCHETT,  
SUSIE PRITCHETT.