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E. W. GRACE.

BLUING GAGE AND MIXER FOR WASHING MACHINES.

APPLICATION FILED MAY 9, 1903.

NO MODEL.

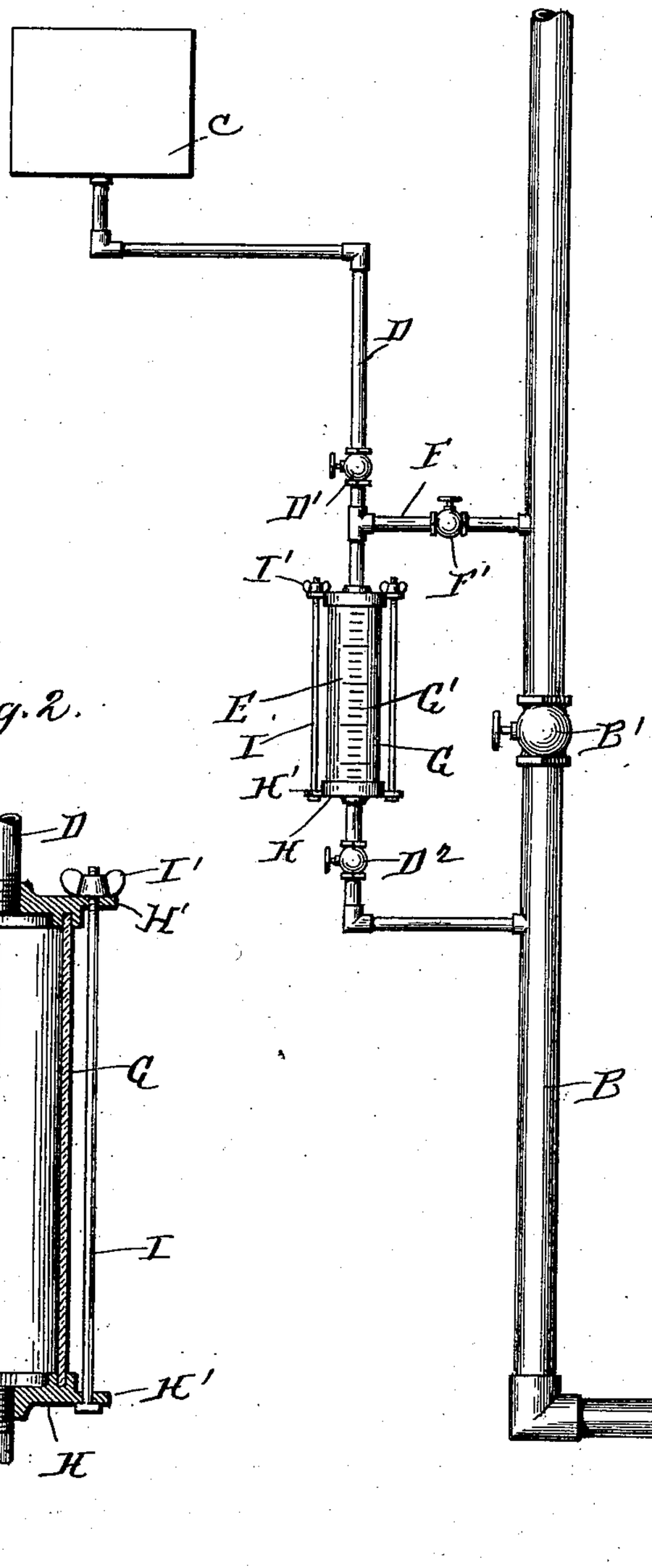

Fig. 1.

Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

ETHEL W. GRACE, OF SAPULPA, INDIAN TERRITORY.

BLUING GAGE AND MIXER FOR WASHING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 750,185, dated January 19, 1904.

Application filed May 9, 1903. Serial No. 156,365. (No model.)

To all whom it may concern:

Be it known that I, ETHEL W. GRACE, a citizen of the United States, residing at Sapulpa, Creek Nation, Indian Territory, have invented a certain new and useful Improvement in Bluing Gages and Mixers for Washing-Machines, of which the following is a specification.

My invention relates to a new and useful improvement in bluing gages and mixers for washing-machines, and has for its object to provide an apparatus whereby the bluing may be drawn from a tank, measured, and mixed before entering the machine; and a further object of my improvement is to provide an apparatus which is extremely simple, durable, and very efficient, which will not be liable to get out of order, and if becoming damaged can be easily repaired at any time.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth, and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is an elevation showing the manner in which my invention is used; Fig. 2, a vertical section taken through the gage.

A represents the washing-machine; B, the water-pipe leading thereto; B′, a valve for controlling the supply of water; C, the bluing-tank; D, a pipe leading from this tank to the water-pipe B, and interposed between the sections of the pipe D is a gage E.

F is a branch pipe leading from the pipe D to the water-pipe B. This branch pipe has a valve F′ located intermediate its ends. D′ is a valve in the pipe D above the branch pipe F, and D^2 is a valve in the pipe D below the gage. The gage E consists of a glass cylinder G, provided with a series of graduations G′, representing fluid ounces or fractions thereof. Upon each end of this glass cylinder are fitted caps H, provided with annular grooves upon their interior faces, in which the ends of the glass cylinder G fit. Extending outward from these caps are ears H′, through which pass rods I, headed upon one end and provided with thumb-nuts I′ upon the other for the purpose of drawing the caps together upon the cylinder G. Of course it is understood that suitable packing, if necessary, may be inserted between the caps and the edges of the glass cylinder. The pipe D enters the gage through the top cap and leaves the gage from the bottom cap, as shown in Fig. 2.

The operation of my device is as follows: When it is desired to insert bluing in the washing-machine A, the valve F′ in the pipe F is closed, as is also the valve D^2 in the pipe D, and by opening the valve D′ the bluing may be allowed to flow into the gage in the desired quantity, as shown by the graduations, and then by closing the valve D′ the flow of the bluing is stopped, and by opening the valve F′ in the pipe F the water may be allowed to enter the gage, mix with the bluing, and then by opening the valve D^2 may be allowed to flow through the water-pipe into the washing-machine A. Thus it will be seen that bluing may be measured and mixed and allowed to flow into the washing-machine at any time desired by the simple manipulation of a few valves.

Of course I do not wish to be limited to the exact construction here shown, as slight modifications could be made without departing from the spirit of my invention.

Having thus fully described my invention, what I claim as new and useful is—

1. In a device of the character described, the combination of a washing-machine and water-supply pipe leading thereto, with a bluing-tank arranged at an elevation, a pipe leading from said bluing-tank to the water-pipe, a graduated gage interposed between the sections of the bluing-pipe, a branch pipe leading from the bluing-pipe to the water-pipe above the gage, a valve arranged in the bluing-pipe above the branch-pipe connection, a valve arranged in the bluing-pipe below the gage, and a valve arranged in the branch pipe, as and for the purpose specified.

2. In a device of the character described, the combination of a washing-machine, the water-supply pipe leading thereto with a bluing-reservoir arranged at an elevation, a pipe leading from said reservoir to the water-pipe, a

gage interposed between the sections of the bluing-pipe, a branch pipe connecting the bluing-pipe with the water-pipe above the gage, said gage consisting of a glass cylinder with graduations marked thereon, and valves arranged in the bluing-pipe and branch pipe adapted to control the supply of water and bluing, as and for the purpose specified.

3. In combination with a washing-machine and water-supply pipe leading thereto, a bluing-tank arranged at an elevation, a pipe leading from said tank downward to the water-pipe, a gage interposed between the sections of this bluing-pipe, said gage consisting of a glass cylinder, caps arranged upon each end of the cylinder, ears extending outward from the caps, rods passing through the ears, said rods being headed upon one end and provided with thumb-nuts upon the other end for drawing the caps against the ends of the cylinder, the bluing-pipe being threaded through the caps, a branch pipe extending from the bluing-pipe above the gage to the water-pipe, a valve arranged within this branch pipe, a valve arranged in the bluing-pipe above the branch-pipe connection, and a valve arranged in the bluing-pipe below the gage, as and for the purpose specified.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

ETHEL W. GRACE.

Witnesses:
H. E. RAKEMAN,
W. L. EVANS.