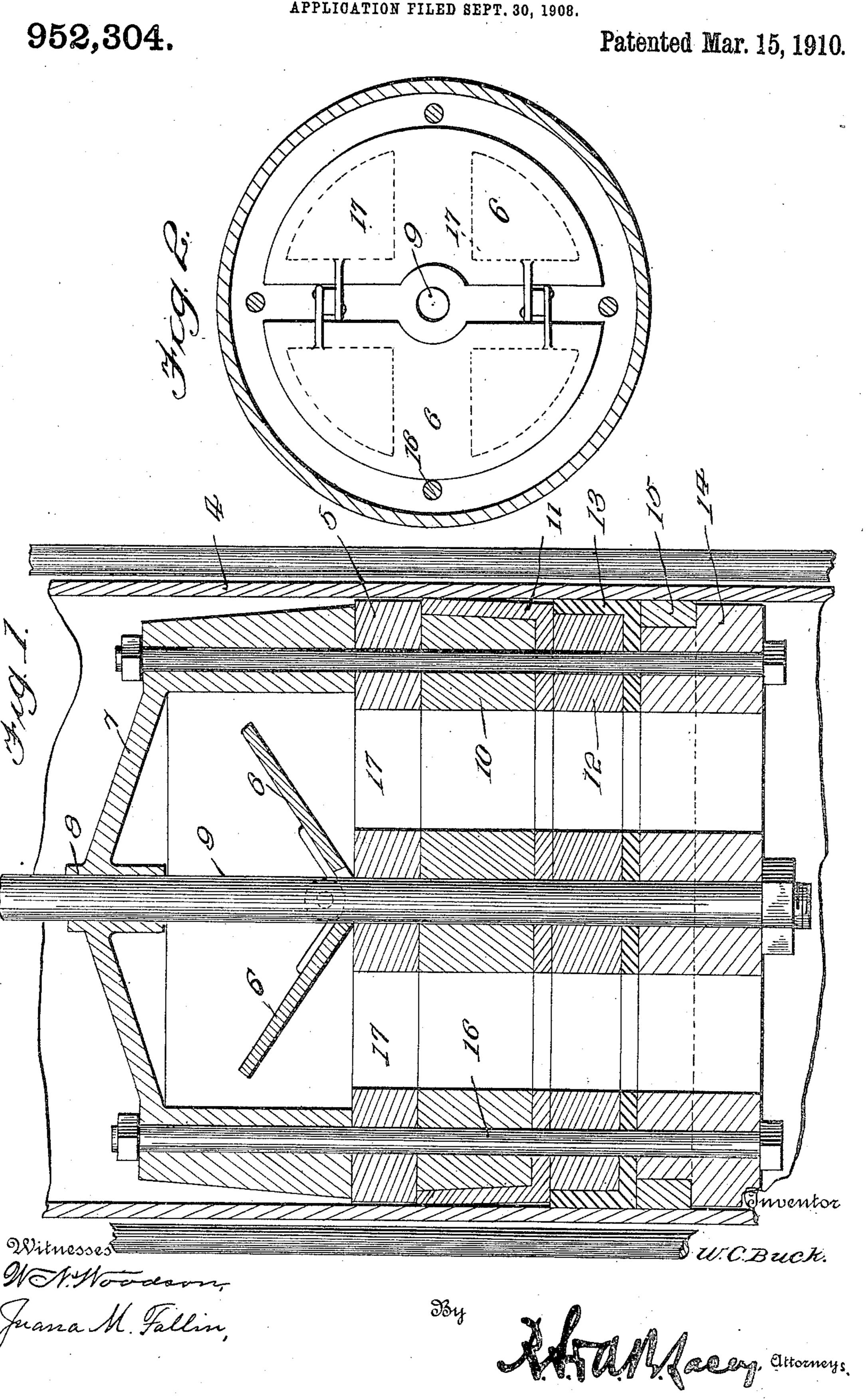
W. C. BUCK.
PUMP PISTON.
APPLICATION FILED SEPT. 30, 1908.



## UNITED STATES PATENT OFFICE.

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## PUMP-PISTON.

952,304.

Specification of Letters Patent. Patented Mar. 15, 1910.

Application filed September 30, 1908. Serial No. 455,427.

To all whom it may concern:

Be it known that I, William C. Buck, a subject of the King of Great Britain, residing at Peterborough, county of Peterborough, Province of Ontario, Canada, have invented certain new and useful Improvements in Pump-Pistons, of which the following is a specification.

This invention relates to pump pistons and has for its object generally to improve this class of devices so as to increase their utility, durability and efficiency.

In the accompanying drawings: Figure 1 is a vertical sectional view of a pump piston constructed in accordance with my invention; Fig. 2 is a transverse sectional view taken on the line x-x of Fig. 1.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The piston forming the subject matter of the present invention is mounted for reciprocation in a pump cylinder 4, and com-25 prises a valve seat 5 consisting of a plate in which a series of openings is formed for the passage of the water. Suitable flap valves 6 are hinged to the central portion of the valve seat and open upward at their outer 30 ends and downward upon the seat. Mounted on the valve seat 5, is a cage 7 having a vertically disposed opening 8 formed therein to permit the passage of the pump rod 9. A plate 10 is arranged beneath the valve 35 seat and is slightly tapered, and a metal packing 11 of cup form is fitted to the plate 10. Another plate 12 is placed beneath the metal packing 10 and receives a leather packing 13 also of cup form. A foot plate 14 is 40 placed beneath the leather packing 13 and its upper portion is reduced and receives a metal packing 15. Bolts 16 pass through the

several parts of the piston and serve to hold the same in assembled position. The several plates have openings in coincident rela- 45 tion corresponding to the openings in the valve seat 5 so as not to obstruct the passage of the water therethrough. The pump rod 9 passes through the opening in the cage and the several plates and parts comprising the 50 piston and is connected thereto in any suitable way. Thus it will be seen that on the downward stroke of the piston, the water will flow upwardly through the openings 17 and elevate or open the flap valves 6, and on 55 the upward stroke of the piston, the water in the cylinder 5 above the flap valves 6 will be discharged through the usual spout.

Having thus described the invention, what is claimed as new is:

A pump piston substantially as herein described, the same comprising a valve seat consisting of a plate having openings therein, valves hinged to the central portion of the valve seat and adapted to close down- 65 ward thereon, a cage placed over the valve seat, a plate located beneath the valve seat and having its edge tapered, a metal packing fitted to said plate, a second plate located beneath the metal packing, a leather pack- 70 ing of cup form fitted to said second plate, a foot plate having its upper portion reduced, a metal packing ring fitted upon the reduced portion of the foot plate, the several plates having openings in coincident relation with 75 the openings of the valve seat, and bolts connecting the cage and several plates and packing.

In testimony whereof, I affix my signature in presence of two witnesses.

WILLIAM C. BUCK.

Witnesses:

CHAS. R. SCHULTE, J. OAKLAND.