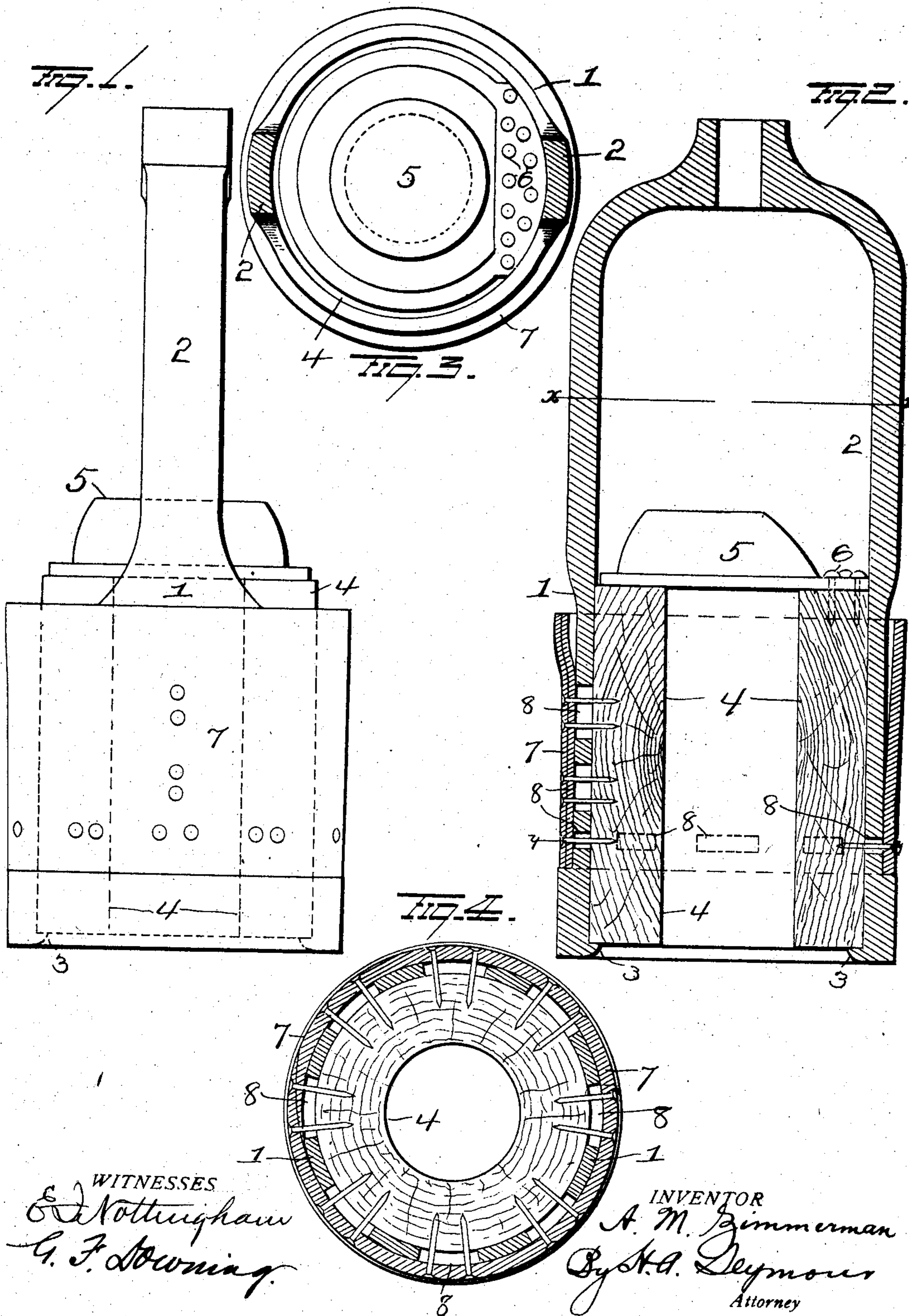


No. 834,959.

PATENTED NOV. 6, 1906.

A. M. ZIMMERMAN.
PUMP BUCKET.

APPLICATION FILED AUG. 11, 1904.



WITNESSES
E. Nottingham
G. F. Downing

INVENTOR
A. M. Zimmerman
By H. A. Seymour
Attorney

UNITED STATES PATENT OFFICE.

ABRAHAM M. ZIMMERMAN, OF NEW HOLLAND, PENNSYLVANIA.

PUMP-BUCKET.

No. 834,959.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed August 11, 1904. Serial No. 220,399.

To all whom it may concern:

Be it known that I, ABRAHAM M. ZIMMERMAN, a resident of New Holland, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Pump-Buckets; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improved pump bucket or piston, the object of the invention being to provide an improved bucket with wood bushing to enable the outer leather packing and valve to be secured thereto by nails or tacks, which permits the easy removal and replacing of worn leather when desired; and the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in side elevation illustrating my improvements. Fig. 2 is a view in longitudinal section. Fig. 3 is a view in section on the line *xx* of Fig. 2, and Fig. 4 is a view in section on the line *yy* of Fig. 2.

1 represents a metal casing or frame, having a lower cylindrical portion and upper yoked end 2, to be secured to the pump-rod. The lower end of the cylindrical portion of casing 1 is made with an inturned flange 3 to limit downward movement of my improved wood bushing 4, tightly fitting in the casing and made hollow, as shown, for the passage therethrough of the water. A leather valve 5 is secured to the bushing by nails or tacks 6 or equivalent fastening devices and can be readily removed and replaced as may be necessary.

The cylindrical portion of casing 1 is made with an annular recess to receive leather packing 7, and the casing is made with a number of openings 8 in its recessed portion to permit nails or tacks 9 or other fastening device to be driven through the leather packing 7 and openings 8 into bushing 4, and these fastening devices can be easily withdrawn when it is desired to replace the leather by a new packing.

While I have stated that bushing 4 is of wood, I would have it understood that the

bushing may be made of various other non-metallic substance, and by constructing the bucket as above explained worn leather and valve can be replaced without difficulty and without special tools, and there are no screws or nuts to rust or get tight. The leather lying on metallic surface always fits very close, and if the new leather is cut over the same pattern it makes a perfect fit, and the result is a very convenient, strong, and durable bucket.

A great many slight changes might be made in the general form and arrangement of the parts described without departing from my invention, and hence I do not restrict myself to the precise details set forth, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

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

1. A pump-bucket comprising a metal cylindrical shell having a plain interior face, a tubular wooden bushing seated within said metal shell and having an unbroken peripheral wall contacting with the plain interior face of the metallic shell, a valve normally closing the end of the wooden bushing, a packing embracing the metal shell and fastening devices passing through said packing and slots in the shell and entering the wooden bushing.

2. The combination with a cylindrical metal casing open at both ends, and provided at its lower end with an inwardly-projecting flange, and on its outer side with a peripheral shoulder, of a wooden bushing having an open center and resting on said inwardly-projecting flange, a flap-valve resting on and secured directly to the upper end of said bushing, and normally closing the opening through the bushing, and a packing resting on the peripheral shoulder of the casing and secured to the bushing by fastening devices passing through slots in the casing.

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

ABRAHAM M. ZIMMERMAN.

Witnesses:

AARON W. SNADER.

ELIAS GROFF.