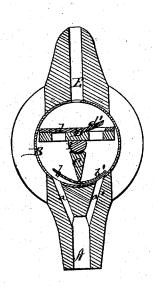
G. 11. Putnani, Rotary Pamp. No.112,491. Fatented Mar. 9.1871.



J. & Butchinson Le Lauert Storge W. Futura en ful flexanda & masoz Alexanda & masoz Atty

## United States Patent Office.

## GEORGE W. PUTNAM, OF SOUTH GLENS FALLS. NEW YORK.

Letters Patent No. 112,491, dated March 7, 1871.

## IMPROVEMENT IN ROTARY PUMPS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GEORGE W. PUTNAM, of South Glens Falls, in the county of Saratoga and in the State of New York, have invented certain new and useful Improvements in Pumps; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a "pump," as will be

hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which represents a longitudinal vertical section of my pump.

A represents the inlet-pipe, having two branches, a a', which lead into the cylinder B, one on each side of

the partition C.

This partition extends from the center of the cylinder downward to between the openings of the branches a a', said openings being within the cylinder, covered with valves b b', as shown.

From the upper side of the cylinder leads the outlet-

pipe E.

Through the center of the cylinder B passes a shaft, I, attached to which is a piston, D, extending from side to side of the cylinder.

This piston is provided with two valves, d d', one on each side of the center.

The operation of this pump is readily understood. Through suitable means a rocking motion is contributed to the shaft I, making the piston D move on its center from side to side, or rather the ends of the piston move in a circle up and down, which creates a perpetual stream of water without the assistance of an air-chamber.

By inserting the discharge-pipe in top of the pump, down near the center, it forms an air-chamber suffi-

cient for a fire-engine.

Having thus fully described my invention,

What I claim as new, and desire to secure by Let-

ters Patent, is-

The arrangement of the inlet-pipe A, with branches a a', each with a valve, bb', said branches leading into the cylinder B, one on each side of the partition C, in combination with the rocking piston D, with valves d and discharge-pipe E, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 18th day of October, 1870.

GEORGE W. PUTNAM. [L. s.]

Witnesses:

C. L. EVERT,

S MOTT SWEET.