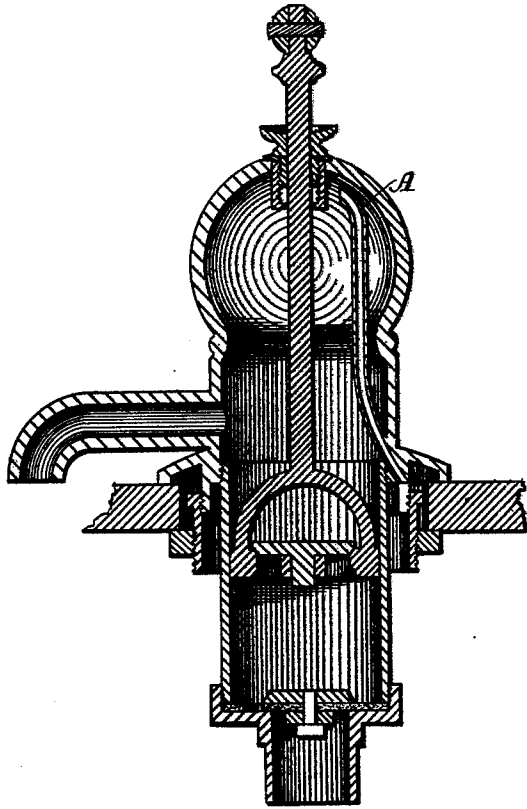


H. C. HART.

PUMP.

No. 175,246.

Patented March 28, 1876.



WITNESSES:

Jas. F. Duhamel,
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INVENTOR:

Henry C. Hart.

PER

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ATTORNEY.

UNITED STATES PATENT OFFICE.

HENRY C. HART, OF ADRIAN, MICHIGAN.

IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. **175,246**, dated March 28, 1876; application filed February 14, 1876.

To all whom it may concern:

Be it known that I, HENRY C. HART, of Adrian, in the county of Lenawee and State of Michigan, have invented certain new and useful Improvements in Pumps, of which the following is a specification:

This improvement in pumps is principally intended for the style of pump used in the saloons of railroad passenger-cars for pumping water from tanks, for either drinking or washing purposes. The invention consists of the following-described attachment.

In the accompanying drawing, forming part of this specification, is shown a pump provided with the improvement hereinafter claimed.

The pump itself does not differ from well-known forms of pumps; but it is necessary for use in the saloons of railroad-cars that the pump-rod should pass through a stuffing-box to prevent the waste and scattering of water upon surrounding objects. The top of the pump, therefore, being closed air-tight, compression of air takes place above the plunger as it rises, the air not being able to escape fast enough, if at all, out of the spout or nozzle of the pump through the uprising column of water on top of the plunger, thus making the pump more difficult to operate, which is frequently required to be operated by women and children having but little strength. The stream of water discharged by the pump is apt to be unsteady also, or to be forced out by alternate spurts, instead of

quietly and gently flowing out of the nozzle of the pump.

In order to obviate these objections the small pipe or tube A is fitted so that it shall lead from near the top of the pump under the stuffing-box down to some suitable point of discharge. By this simple expedient the air above the plunger of the pump can gently in-flow and outflow as the plunger is operated, and all the difficulty above mentioned be avoided.

The pipe A may lead from the top of the pump downward on the inside, and then outward, as shown in the drawing, or said pipe may lead downward from the top of the pump entirely on the outside; or it may be cast within the shell of the pump, having its upper and lower orifices suitably disposed—the one on the inside, the other on the outside, of the pump.

Having thus fully described this improvement in pumps, as of my invention, I claim—

A tube leading from near the top of the pump under the stuffing-box downward to a suitable place of discharge, substantially as shown and described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

HENRY C. HART.

Witnesses:

JAS. F. DUHAMEL,
THOMAS BYRNE.