

United States Patent Office.

GEORGE W. TALCOTT, OF BUFFALO, NEW YORK, ASSIGNOR TO HIMSELF
AND ISAAC D. VOAK, OF THE SAME PLACE.

Letters Patent No. 82,767, dated October 6, 1868.

COMBINED FLOATING FIRE-ENGINE AND WRECKING-PUMP.

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. TALCOTT, of the city of Buffalo, in the county of Erie, and State of New York, have invented certain Improvements in Floating Fire-Engines and Wrecking-Pumps; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, in which—

Figure I is a longitudinal vertical section and elevation of a vessel provided with my improvements.

Figure II is a similar transverse section.

Like letters of reference designate corresponding parts in both figures.

The object of my invention is the construction and arrangement, on board of a suitable vessel, of an apparatus that may be used as a fire-engine, and also for pumping water from wrecks or other vessels. It is designed to be of sufficient power and capacity to throw a stream over the highest elevators, and other buildings, which the ordinary land-engines are unable to do, from a want of adequate power, and frequently from the difficulty of access thereto.

The invention consists—

First, in the arrangement of the two supply-pipes, which unite before connecting with the pump, the one opening through the bottom of the vessel, and the other extending upon deck, and communicating thence to the wreck, the said pipes being provided with suitable valves, and combined with the pump, so that water may be supplied to the latter through either pipe, as required.

Second, the arrangement of one or more nozzle-chambers above deck, in the engine-room, the nozzles of which extend outside, where sufficient space is left between the engine-room and gunwale for attaching and detaching the hose, the nozzles being controlled by the engineer by means of suitable valves, the handles of which extend inside.

Third, in the general arrangement of the various parts of the apparatus with a vessel, all as hereinafter more fully set forth.

In the drawings, A represents the hold of any tug, or other suitable steam-vessel, for containing or carrying the pump-engine, and other parts of my improved apparatus.

B is the pump, rigidly stationed in the hold.

C is a pipe, opening through the bottom of the vessel, through which water is supplied to the pump when it is used as a fire-engine. *c* is a shut-off valve, of any suitable construction, for closing said pipe.

D is an auxiliary or branch-pipe, extending upward from the pipe C, through the deck-floor E, where it is provided with an ordinary coupling for attaching the hose F, which communicates with the wreck from which the water is to be pumped. The pipe D is also provided with a cap or cover at its upper end, for closing the same when its use is not required, and a shut-off valve, *f*, similar to that in pipe C, may be employed for the same purpose.

G is the discharge-pipe from the pump; G' G', two branches thereof, which extend up the sides, H H, of the engine-room, or upper portion of the vessel, where they terminate in a nozzle-chamber; I, which may consist of cross or radial pipes, from which any required number of passages or nozzles, *i i*, extend to the outside of the engine-room, to which is coupled, when required, a corresponding number of hose-pipes, *j j*. Each of the nozzles *i* is controlled by a shut-off valve, *l*, constructed in any suitable manner, and preferably arranged so as to be operated by the engineer from the inside, as represented. Sufficient space, P, is left outside of the room or upper portion of the vessel, H H, to permit the handling and attachment of the nozzle-pipes.

When the apparatus is employed for pumping water from wrecks or other vessels, the water is discharged through a pipe attached to one or the other of the heads *m*, on either side of the vessel, as may be most convenient, the valves *l*, in such case, being closed, so that the water escapes only through the outlets *m m*. These outlets are closed by suitable caps when the apparatus is used as a fire-engine. Any suitable construction of

pump, of the requisite capacity, may be employed, and be actuated by an engine, arranged in the vessel as most convenient. The engine and pump of my apparatus I prefer to have distinct and separate from the engine employed in propelling the boat.

The pipe D is required to pass over the sides of the vessel, to prevent injury to the same in the event of the vessel colliding with the wreck or other vessel.

The operation of my improvements, constructed and arranged as before described, is as follows:

When the apparatus is required to be used for extinguishing a fire, the pipe D is closed by the valve *f*, or cap, at the end, the main outlets *m m* closed, and the required number of conducting-hose *j* attached to the nozzles *z*. The vessel having been brought to the required situation, the pump is set in motion, when the operation of the apparatus is similar to any ordinary fire-engine.

When the apparatus is required to be used as a wrecking-pump, the valve in pipe C is closed, the cap to pipe D removed, and the hose or flexible pipe F attached, the opposite end of which communicates with the wreck or other vessel. The caps from one or both of the outlets *m* are removed, and suitable discharge-pipes attached, for conveying off the water as it is pumped up, which should be made of sufficient capacity to permit a free discharge.

It will thus be readily perceived that my apparatus can be used with equal efficiency either as a fire-engine or as a wrecking-pump, the arrangement being such as to permit the necessary adaptation to the one or the other purpose to be effected with the greatest facility.

The arrangement of the manifold-heads or nozzle-chambers, with their nozzles and valves, with relation to the engine-room, and the construction of the latter, so as to leave ample space outside of the same for attaching or changing the hose, is of great importance, as it enables the hose to be coupled and uncoupled, and the nozzles closed, with the greatest convenience and dispatch.

The compact arrangement of the apparatus is such as to but little obstruct the upper portion of the boat, which can be used for the ordinary purposes of a tug, for towing, &c., when its employment for either of the above-described purposes is not required.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The pipes C D, provided with valve *e*, and valve *f*, or cap, and uniting and connecting with a force-pump, B, arranged in the hold of a vessel, substantially in the manner and for the purpose set forth.
2. The combination and arrangement, within a vessel, of the pump B, pipes C, D, G G', and nozzle-chamber I, forming a combined floating fire-engine and wrecking-pump, in the manner described.

GEO. W. TALCOTT.

Witnesses:

W. J. CHAMBERLAIN,

V. H. BECKER.