T. F. GILLILAND.

Fire-Extinguishers.

No. 200,826. Patented March 5, 1878.

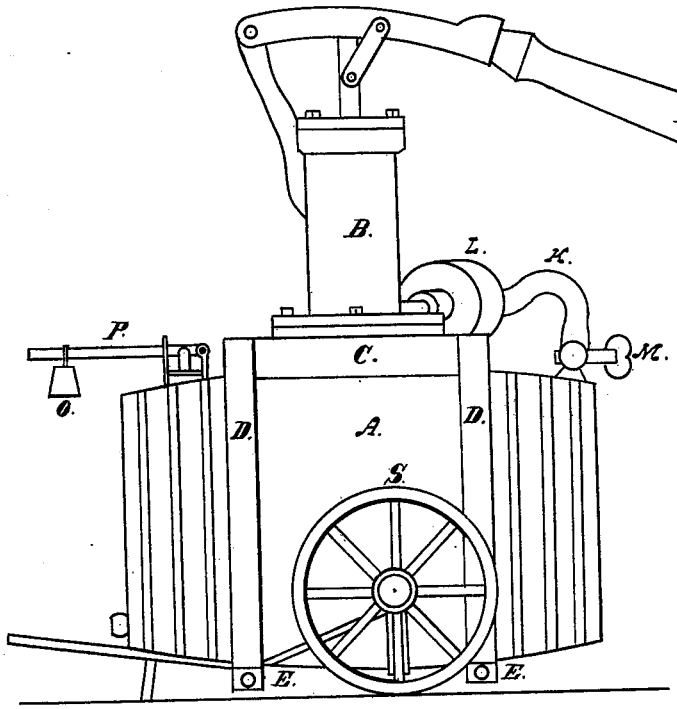

Fig. 1.

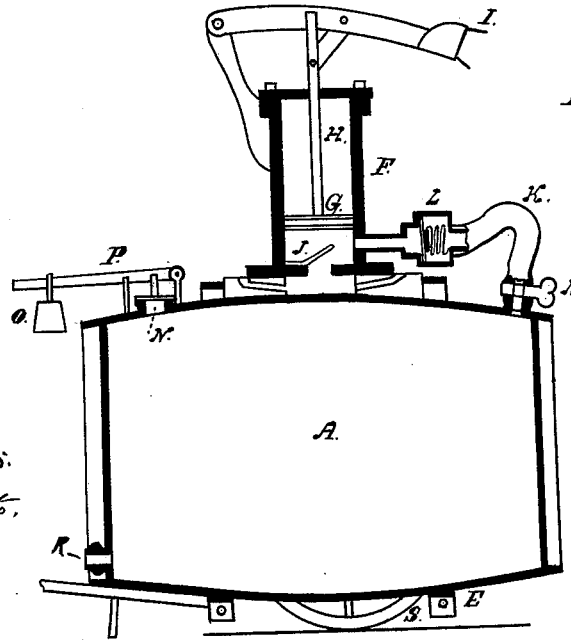

Fig. 2.

WITNESSES:

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UNITED STATES PATENT OFFICE.

THEODORE F. GILLILAND, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF ONE-HALF HIS RIGHT TO WILLIAM GUTENKUNST, OF SAME PLACE.

IMPROVEMENT IN FIRE-EXTINGUISHERS.

Specification forming part of Letters Patent No. **200,826**, dated March 5, 1878; application filed August 25, 1877.

To all whom it may concern:

Be it known that I, THEODORE F. GILLILAND, of the city of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Fire-Extinguishers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 of the accompanying drawings represents a side view of my invention. Fig. 2 represents a sectional view of the same.

The object of my invention is to furnish a device for extinguishing fire, which may be ready at a moment's notice to attach the same, with a jet of water propelled by compressed air; and consists in a reservoir, A, which will accommodate several gallons of water, provided with a pneumatic force-pump, B, which is securely attached to a saddle, C, with bolts. The saddle and pump thus connected are secured to the reservoir by strong metallic bands D, the ends of which are connected and drawn together firmly around the reservoir by bolts E.

The pump B is constructed in the ordinary manner, consisting of cylinder F, piston G, piston-rod H, handle I, and valve J. The air enters the cylinder through the valve J as the piston is raised, and with a reverse movement of the handle the valve J closes, and the air is forced into the reservoir through the pipe K. L is a check-valve, which prevents the compressed air returning from the reservoir to the cylinder when the pump is being operated. M is a stop-cock, which is closed to retain the compressed air when the pump is at rest. N is a safety-valve. It is constructed in the ordinary manner. The pressure of the compressed air against it is resisted by the weight O acting upon the lever P.

When desirous to fill the reservoir with water, the weight O is withdrawn from the lever P, and the lever and valve are thrown back, when the water may be injected with a funnel or pump through the valve-opening. R is a nozzle to the reservoir, to which a hose is attached, by which the jet of water is thrown upon the fire.

The reservoir, with said attachments, is secured to a carriage, S, the axle to which is made concave upon its upper side for the accommodation of the reservoir, and also that the handle of the pump may be within the reach of the operator.

For private purposes the whole apparatus may be made light, so that a light hand-cart may be used to convey it; but, when circumstances require, a large tank, containing several barrels, may be used with the same pressure and without additional labor, save only in proportion to the increased flow of water therefrom, the pump being required simply to fill the space of the water ejected, in which case one or more horses may be used to convey the apparatus.

Two or more reservoirs may be operated with a single pump, so that as one reservoir is being emptied another may be filled, the pipe K being simply moved from one reservoir to another.

Water may be forced from an air-tight cistern or a stationary reservoir in the same manner, by attaching the hose K to it and operating the pump until the required pressure is obtained.

It is obvious that the piston, valves, and all the working apparatus pertaining to the pump have no contact with the water, and, consequently, may be kept oiled and preserved much longer than common appliances for the purpose, which are frequently wet and allowed to dry.

It is designed that the reservoir be kept full of water and the pneumatic pressure kept on, so that in case of fire the water may be turned upon it instantaneously by simply opening the stop-cock to the hose, the expanding force of the compressed air serving to keep up the pressure until several gallons of water have been discharged, when the action of the pump will again become necessary.

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

The combination of lever I, piston-rod H, piston G, valve J, cylinder F, pipe K, and valve L with reservoir A, said cylinder having a suitable air-inlet, and said receptacle or reservoir A having a suitable outlet for fluid, substantially as set forth.

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

THEODORE F. GILLILAND.

Witnesses:
J. M. GOERTNER,
GEO. PROTZMANN.