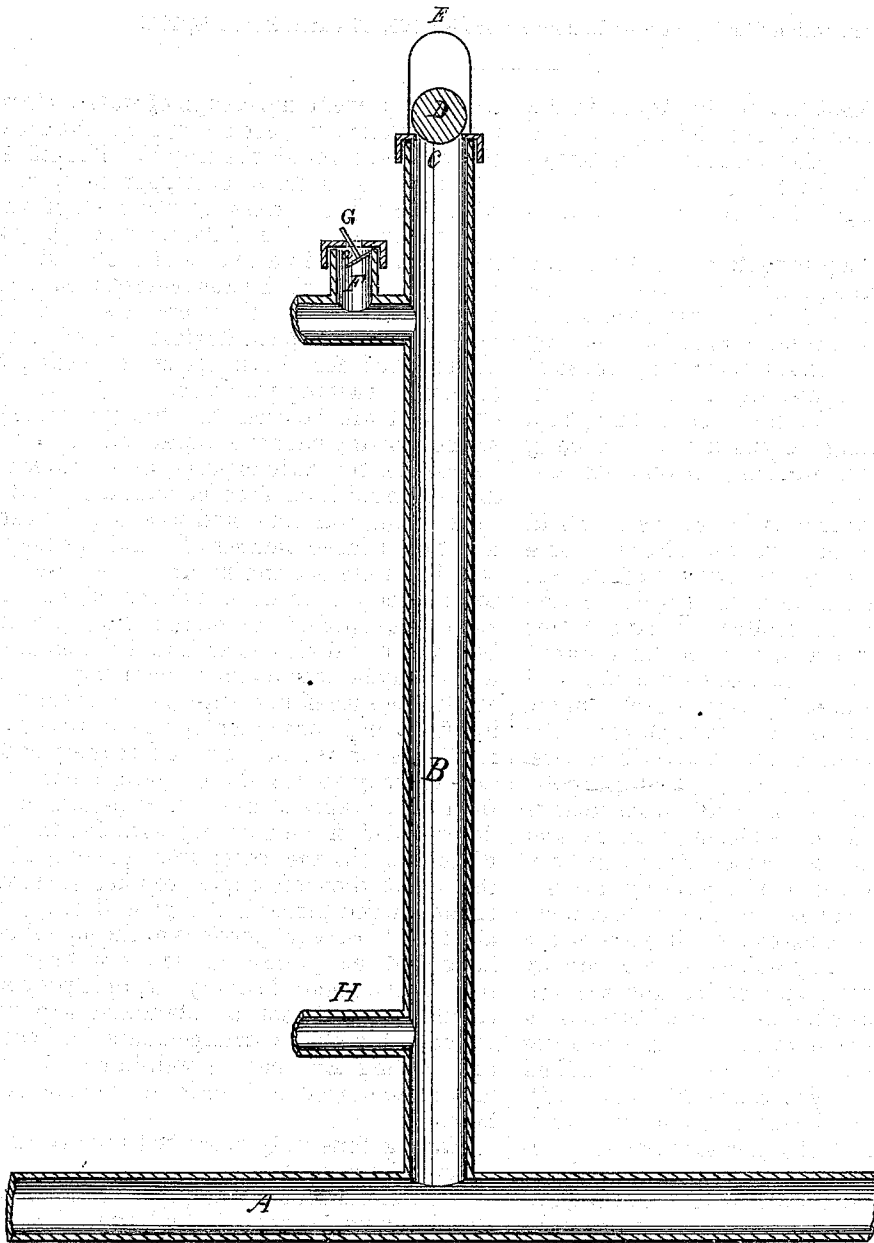


THOMAS J. MARTIN.

Fire Extinguisher.

No. 125,063.

Patented March 26, 1872.



Witnesses.

Shepherd H. Wheeler
Chauncey T. Lee

Inventor.

Thomas J. Martin

UNITED STATES PATENT OFFICE.

THOMAS J. MARTIN, OF DOWAGIAC, MICHIGAN.

IMPROVEMENT IN FIRE-EXTINGUISHERS.

Specification forming part of Letters Patent No. 125,063, dated March 26, 1872.

I, THOMAS J. MARTIN, of Dowagiac, in the county of Cass and State of Michigan, have invented certain Improvements in Fire-Extinguishing, and Warming, Ventilating, and Washing Buildings, of which the following is a specification:

The nature of my invention relates to the construction, arrangement, and combination of suitable pipes and valves for conducting water from suitable reservoirs to buildings by means of stationary engines, for the purpose of preventing or extinguishing fires in dwellings, mills, factories, towns, and cities, and may also be used for warming, ventilating, and washing buildings, and for washing pavements and sprinkling streets.

The accompanying drawing shows a vertical longitudinal view through the diameter of a device embodying my invention, with letters of reference marked thereon, in which A represents the main or conducting pipe. This pipe connects with a force-pump and water-supply, also with a hot-and-cold-air pump, said pumps to be operated by any suitable engine or motor that will be a constant power. The pump and engine need not be described here, as I use common devices for that purpose. The pipe A should be protected from frost or cold, and should be sufficiently large and strong to conduct the necessary quantity of water for the protection of a building or buildings, as the case may be. B represents branch-pipes. These pipes extend to all parts of the building where it may be desirable to convey water for protection against fire, and are provided with a suitable number of discharge-nozzles, C. These nozzles have globe-valves D seated in them. These valves are confined in the cage E. These cages are made sufficiently high to allow the valve D to rise when pressed up by a jet of water through the nozzle C, in which case the valve D is held by the concave form of the under side of the cage E, causing the water to spread in an annular sheet or spray and wet a large surface. F represents an air-trap. This trap has a valve, *a*, closing upward, but is made sufficiently heavy to resist the current of air and remain open when air is passed through the pipes A and B. But in case water is forced into the trap the valve *a* will float up and close the

trap and prevent the escape of water. G represents a stem projecting up from the face of the valve *a* through the trap F. The office of this stem is to throw a trigger to an alarm when the valve *a* rises by the rush of water into the trap F. Thus the alarm of fire may be timely given in all parts of the building or buildings to which the above-described device may be attached. H represents a branch-pipe. To this pipe a flexible hose-pipe may be attached for the purpose of wetting the streets or washing windows.

Now, it will be seen that the foregoing-described arrangements of pipes and valves can be used for the various purposes of preventing and extinguishing fires in buildings, and for ventilating, warming, and washing the same, and that a large number of buildings may be supplied from one engine, and when used in a town or city as large a number of buildings should be supplied from one engine as practicable; and it will also be seen that the engine or motor may be used for manufacturing purposes at all times when not employed in extinguishing fires, and consequently will always be in readiness for use on the first discovery of fire, and thereby secure almost perfect immunity from the ravages of fire. A stop-cock should be provided in the pipe B, just above the pipe H, to prevent the water from passing above that point when it is wanted to wash the streets or discharged through the pipe H only; and all of the horizontal portions of the pipe should have sufficient pitch to cause the water to run back to the point of supply. Ample provision should be made for an abundant supply of water and suitable arrangements for heating and forcing air; but as well-known devices may be employed no description need be given here.

Having thus fully described my invention, what I claim is—

The combination of the pipes A and B, nozzles C, valve D, cage E, and trap F having the valve with the stem G, all constructed, arranged, and combined substantially as and for the purposes hereinbefore set forth.

THOMAS J. MARTIN.

Witnesses:

SHEPHERD H. WHEELER,
CHAUNCEY T. LEE.