W. C. Marshall,

Fire-Proof Building,

No. 54,748, Patented May 15, 1866.

Fig. 2.

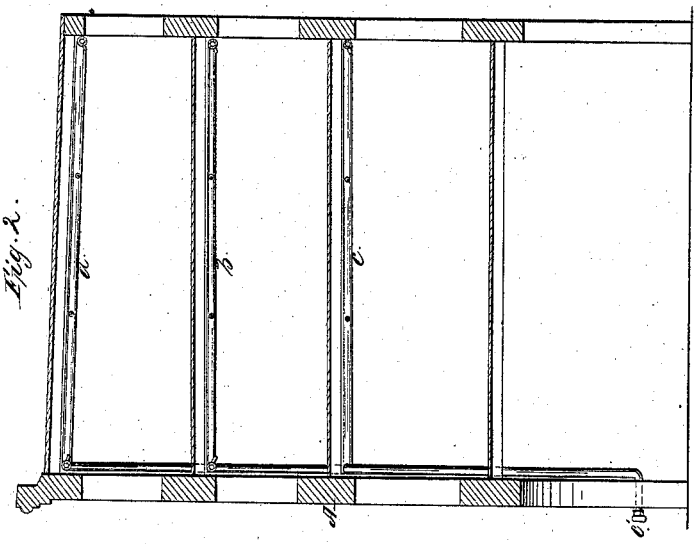
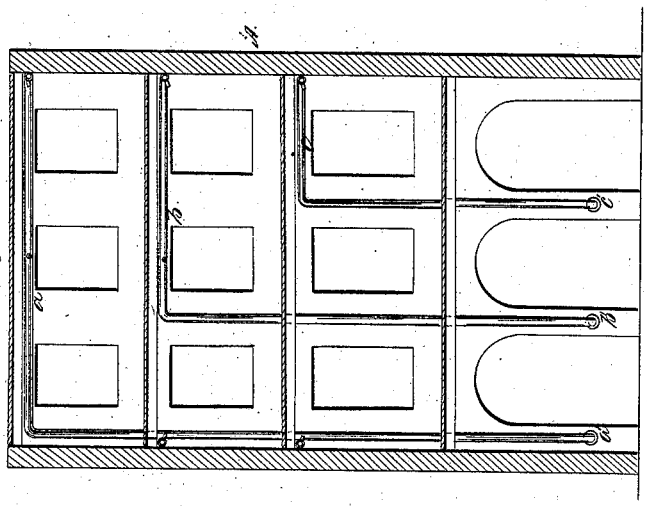


Fig. 1.



Witnesses:
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UNITED STATES PATENT OFFICE.

W. C. MARSHALL, OF NEW YORK, N. Y.

IMPROVED MODE OF EXTINGUISHING FIRES.

Specification forming part of Letters Patent No. **54,748**, dated May 15, 1866.

To all whom it may concern:

Be it known that I, W. C. MARSHALL, of the city, county, and State of New York, have invented a new and useful Improvement in Extinguishing Fires; 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 make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a transverse vertical section of this invention. Fig. 2 is a longitudinal vertical section of the same.

Similar letters of reference indicate like parts.

This invention consists in arranging in the interior of buildings and along the ceilings thereof several series of perforated pipes, one or more for each floor or story, in combination with nipples which are situated on the outside of the building, and each of which communicates with a distinct series of pipes in such a manner that in case of fire in the building a hose can be readily attached to the proper nipple and that floor on which the fire originated can be flooded with water and the fire extinguished before it is allowed to make much headway.

A represents a building with four (more or less) stories, and constructed in any suitable manner for a dwelling-house, store-house, or any other desirable purpose. Under the ceiling in each story I extend pipes *a b c*, which are perforated with a large number of holes, and the pipes *a* communicate with a nipple, *a'*, the pipes *b* with a nipple, *b'*, and the pipes *c* with a nipple, *c'*, said nipples being situated on the outside of the building and in such a position that each can be conveniently reached from the street.

Suitable screw-threads cut on these nipples allow of attaching a hose to either of them, or instead of a screw-thread any other suitable fastening may be used, and in case a fire takes place in the interior of the building water can be injected through the hose to that floor where the fire originates, and the fire is extinguished without being allowed to do much damage. After the fire is extinguished the perforated pipes are emptied and remain in position for future use.

I am aware that it has been proposed to arrange perforated pipes filled with water from a tank or reservoir in a building, so that in case of fire the house can be flooded with water. Such an arrangement, however, is dangerous, because in case a leak occurs in the pipes much damage is done by the water. My pipes are empty, and they are only used when a fire occurs, and by having separate nipples, one for each floor or story, I am enabled to throw the water to the exact spot where the fire originates and to extinguish the fire with the least possible quantity of water.

My pipes are easily kept in order, and even if the fire should have made considerable headway before the person having charge of the house arrives it is always possible to reach the nipples on the outside of the building and to flood the interior thereof with water, whereas if the connections of the perforated pipes are in the interior of the building the fire may originate in such a place that it is impossible to reach said connections, and the whole arrangement is useless.

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

The arrangement of several series of perforated pipes, *a b c*, (one or more for each floor of a building,) in combination with nipples *a' b' c'*, situated on the outside of the building, and each communicating with a distinct series of pipes, substantially as and for the purpose set forth.

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Witnesses:

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