T. MILLER.
Fire-Extinguishing Water-Pipe Attachments to Buildings.

No.149,669. Patented April 14, 1874. Jig. 1. Jig. 2. $\subseteq B$ WITNESSES: BY

UNITED STATES PATENT OFFICE.

THOMAS MILLER, OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN FIRE-EXTINGUISHING WATER-PIPE ATTACHMENTS TO BUILDINGS.

Specification forming part of Letters Patent No. 149,669, dated April 14, 1874; application filed March 28, 1874.

To all whom it may concern:

Be it known that I, THOMAS MILLER, of Jersey City, Hudson county, New Jersey, have invented a new and useful Improvement in Fire-Extinguishing Water-Pipe Attachments for Buildings, of which the following is a

specification:

My invention relates to utilizing the fire-extinguishing water-pipe attachments used to conduct the water to the upper stories and the roofs, for fire-ladders also; and it consists of, preferably, two pipes side by side, or one separated into two branches above the lower story, with rungs for a ladder crossing from one to the other and connected to them, said rungs being made of tubes, for allowing the water to circulate through them to keep them cool when exposed to fire in the building, and thus make the ladder available when it would not always be with solid rungs, which heat when solid, so as to render the ladder useless.

Figure 1 is a side elevation of a fire-extinguishing water-pipe attachment and ladder, illustrating my invention; it also shows a front elevation of a part of a house in dotted lines. Fig. 2 is a side elevation of the water-pipe and ladder attachments, with a part

broken out.

Similar letters of reference indicate corre-

sponding parts.

A represents two pipes, side by side, a short distance apart, extending up the side of the building, with pipe-connections or nozzles B for discharging water into the house at the

different floors and onto the roof. C represents hollow or tubular rungs of metal connected to the pipes to form a ladder for the escape of persons in the house when egress by the usual way is cut off by the fire. These pipes A are, in this case, in two branches of a single pipe, D, at or below the second floor of the building, having a pipe-connection, E, for attaching the hose of the engine, and extending down to, and connecting with, the main of a water-supply apparatus, if required, with cocks G and H, for shutting off and letting on the one or the other. Three or more pipes may be used, making a double or triple ladder, if preferred, but probably two will be most desirable. I also propose to make the rungs of a single pipe-ladder hollow, for protecting them from heat, in the same manner.

Having thus described my invention, I claim as new and desire to secure by Letters Pat-

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The rungs employed, in combination with the fire-extinguishing water-pipe attachment to buildings for converting it into a fire-escape, made hollow, and connected with the pipe or pipes in such manner that the water will circulate in and protect them from heat, whether one, two, or more stand-pipes are used, substantially as specified.

THOMAS MILLER.

Witnesses:

A. P. THAYER, T. B. MOSHER.