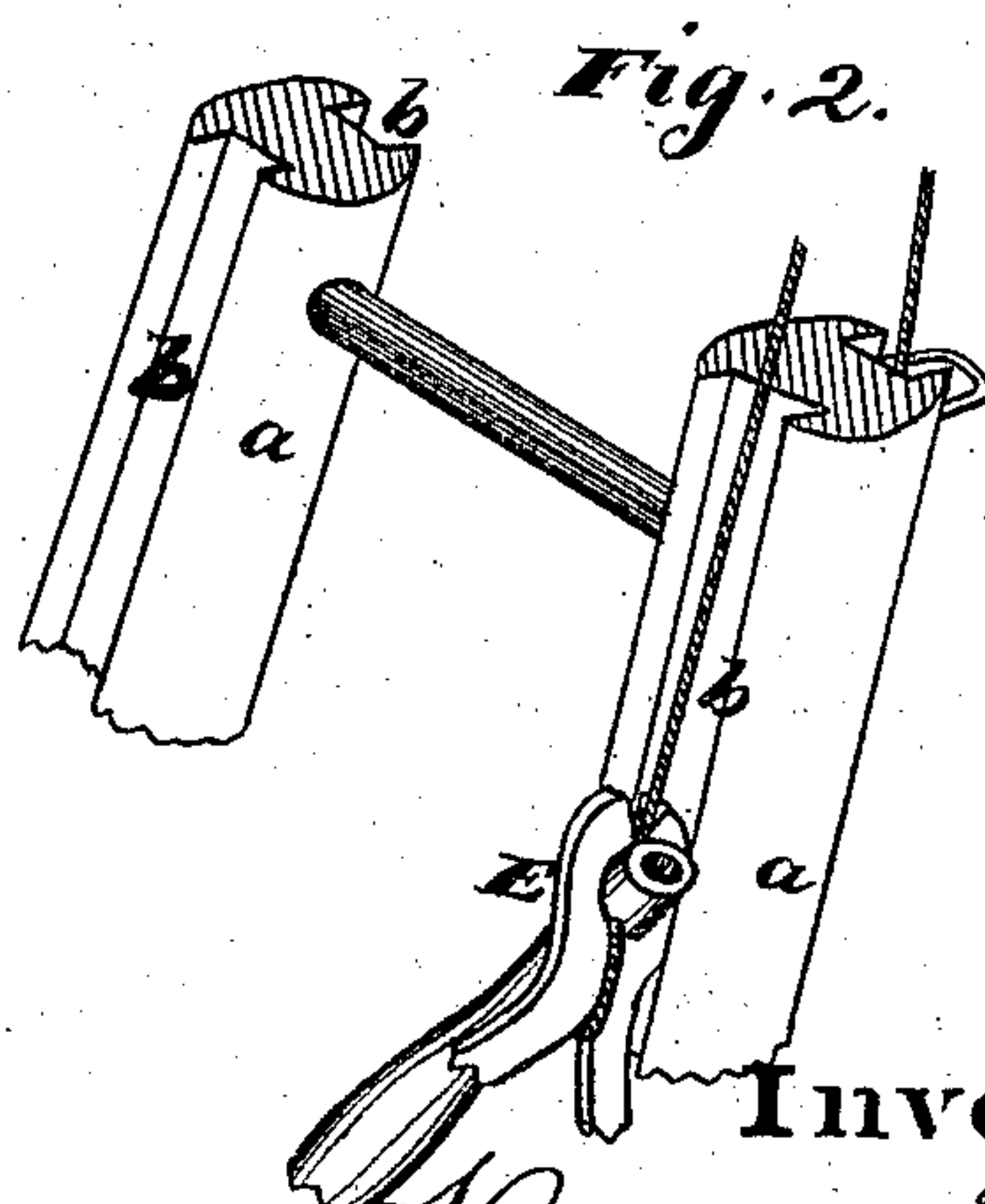
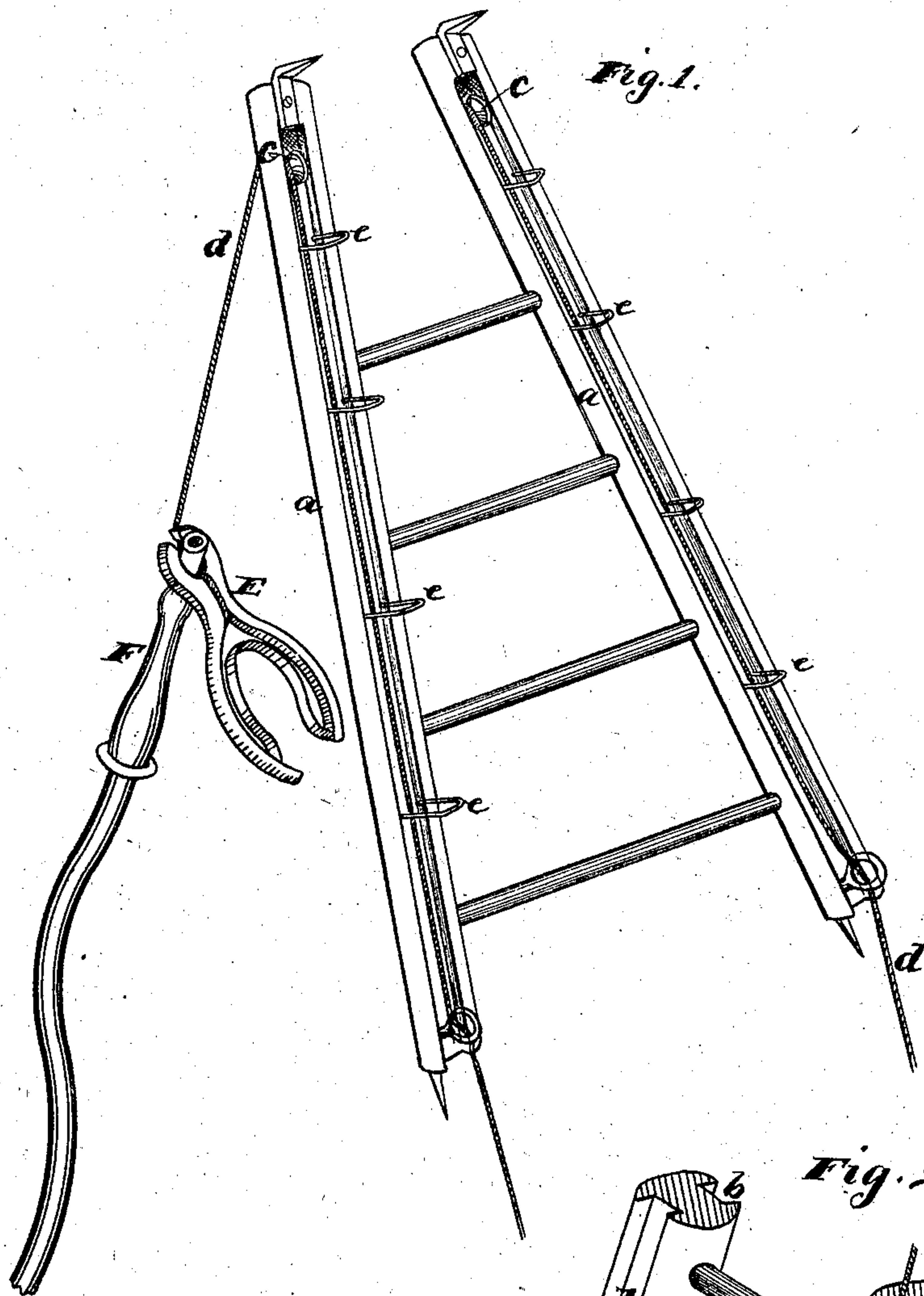


H. FOX.
Firemen's Ladders.

No. 154,659.

Patented Sept. 1, 1874.



Witnesses
J. L. Boone
C. M. Richardson

Inventor
Herman Fox
by Dewey & Co
his attys

UNITED STATES PATENT OFFICE.

HEYMAN FOX, OF SAN FRANCISCO. CALIFORNIA.

IMPROVEMENT IN FIREMEN'S LADDERS.

Specification forming part of Letters Patent No. 154,659, dated September 1, 1874; application filed July 25, 1874.

To all whom it may concern:

Be it known that I, HEYMAN FOX, of San Francisco city and county, State of California, have invented an Improved Fireman's Ladder; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvement without further invention or experiment.

My invention relates to a ladder which is especially adapted for firemen's use. When a fire breaks out in the upper story of a building, the length of time usually consumed in dragging the fire-hose up a ladder by hand is sufficient to allow the fire to make such headway that it must be fought from a lower story at a great disadvantage. My invention consists in providing a fireman's ladder with such appliances that the hose can be hoisted to any desired point of its length with very little delay and trouble.

In order to describe my invention so that others will be able to understand its construction and operation, reference is had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 represents a ladder such as is usually employed at fires.

This ladder may be made in one or more sections, as desired. The side-rails *a a* of the ladder I provide with a groove, *b*, which extend their entire length from bottom to top, upon one or both sides, as desired. At the upper end of each groove I secure a pulley, *c*, over which a rope, *d*, can pass. This rope *d* has at one end a gripe or clamp, *E*, secured to it, so that by lowering the gripe and attaching

it to the fire-hose or nozzle *F* the hose may be hoisted directly up the ladder by drawing upon the opposite end of the rope. The groove *b* serves as a guide for the gripe and hose, and prevents the hose from getting inside of the side rails upon the rounds of the ladder. Usually, I shall make a traveller, which will move in the groove and be guided by it, and this traveller will be provided with a gripe for holding the hose, and be hoisted by a rope, as above described. On the reverse or back of the rails *a* of the ladder I secure staples *e e* at intervals in the groove upon that side, or if no grooves are used I secure them simply to the back of the rail, through which the rope, after being carried over the pulley *c*, will pass, and thus be guided when drawing upon it to hoist the hose.

By this arrangement I provide a combined fireman's ladder and hose-elevator, by means of which fire-hose may be expeditiously and easily hoisted to any desired point along the length of the ladder.

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

A fireman's ladder, having the groove or grooves *b* in the rails *a*, and the pulleys *C*, in combination with the rope *d* and gripe *E*, substantially as and for the purpose above described.

In witness whereof I have hereunto set my hand and seal.

HEYMAN FOX. [L. S.]

Witnesses:

JNO. L. BOONE,

C. M. RICHARDSON.