

(No Model.)

2 Sheets—Sheet 1.

E. TICE.

MODE OF SECURING FIRE HOSE ON A LADDER.

No. 306,442.

Patented Oct. 14, 1884.

Fig. 1.

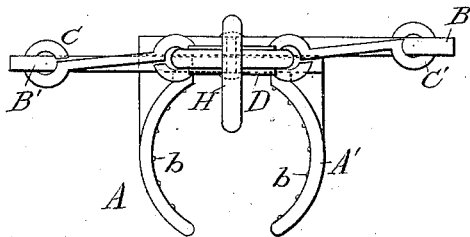


Fig. 2.

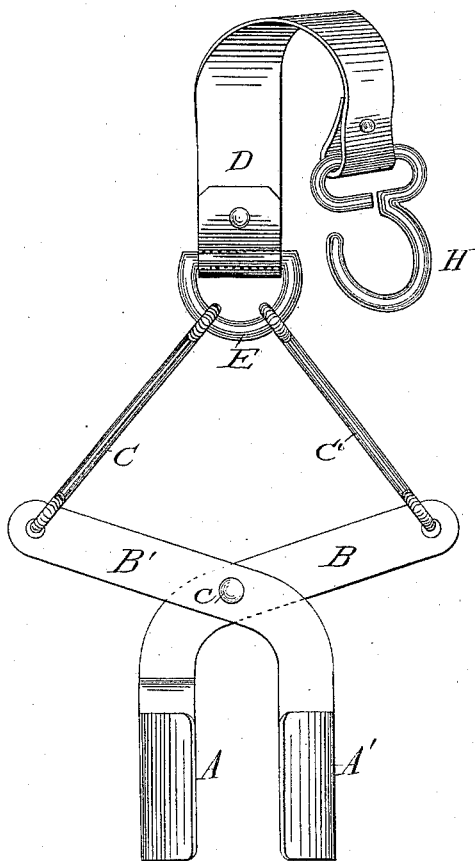
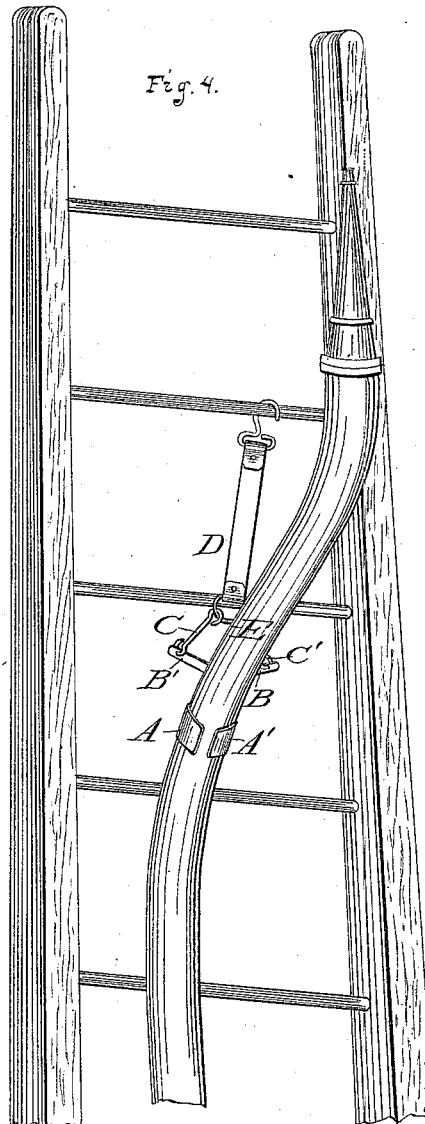


Fig. 4.



Witnesses.

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(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

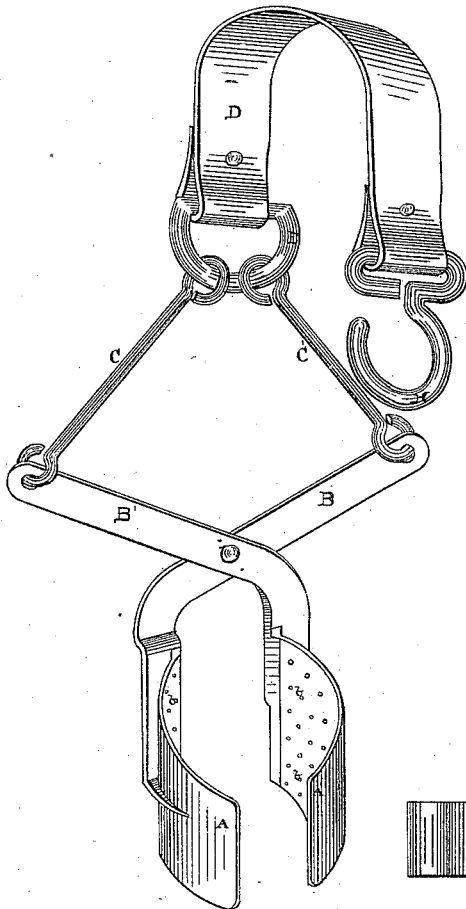


Fig. 5.

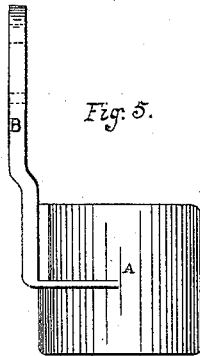


Fig. 6.

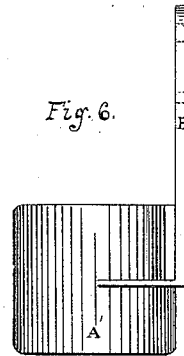


Fig. 7.



Fig. 8.



Fig. 9.

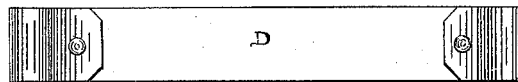


Fig. 10.

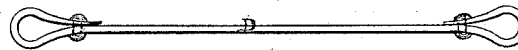


Fig. 11.

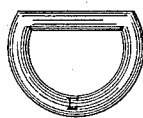


Fig. 12.

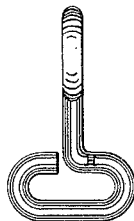
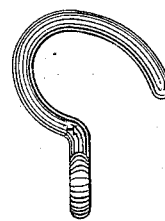


Fig. 13.



Witnesses.

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UNITED STATES PATENT OFFICE.

EDWARD TICE, OF ALBANY, NEW YORK.

MODE OF SECURING FIRE-HOSE ON A LADDER.

SPECIFICATION forming part of Letters Patent No. 306,442, dated October 14, 1884.

Application filed April 25, 1884. (No model.)

To all whom it may concern:

Be it known that I, EDWARD TICE, of Albany, in the county of Albany and State of New York, have invented certain new and useful Improvements in Grapples for Securing Hose to Ladders, of which the following is a specification.

My invention relates to that class of grapples which are adapted for securing fire-engine or water hose to a ladder, and hold the same in a perpendicular position, so as not to kink the hose, and thereby cut off the flow of water or burst the hose, and also means for firmly gripping and to suspend the same from a ladder, which enables the fireman to have free use of the pipe when stationed on said ladder without being obliged to hold the entire heft of the hose and water; also, to prevent the possibility of being thrown from the ladder by a sudden slip of the hose, which is often the case as they are held up by hand. It is a life-saving, serviceable, and cheap device, designed chiefly for the purposes above stated, as will be more fully set forth and explained. I attain these objects by means of the devices illustrated in the accompanying drawings, (in two sheets,) forming a part of my specification, in which there are thirteen figures illustrating my invention, in all of which the same designation of parts by letter reference is used.

Figure 1 is a plan view of my grapple. Fig. 2 is a front elevation of my grapple. Fig. 3 is a perspective view open to receive hose. Fig. 4 is a perspective view showing its application and position attached to a ladder, reduced scale. Figs. 5 to 13, inclusive, are detail views of the several parts of my invention illustrated in Figs. 1, 2, 3, and 4.

In the drawings, A represents one part or jaw of my grapple. A' is the other part or jaw. These parts have cast on them arms B B', which are bent on an angle of forty-five degrees, more or less, and at right angles with each other, as is illustrated in Figs. 2 and 3, and are pivoted together at c, so as to be freely opened and closed.

The grapple-jaws A A' are made in a section of a circle to correspond with the circumference circle of said fire-engine or wa-

ter hose, and of a depth about two and one-half inches, more or less, and about three-sixteenths of an inch in thickness. On the inner side surface the jaws A A' have cast on them slight oval-shaped projections b b, which will not injure the hose, but will securely hold the same from slipping.

C C' are two links, which connect arms B B' to ring E, said ring being secured to leather strap D, and at the outer end of said strap is iron hook H, which is for the purpose of hooking said grapple to the round of a ladder.

In order to use my invention, the clamps A A' are opened wide enough to receive the hose, when, the weight of said hose pulling on the strap D through arms B B' and links C C', the grip is made perfect. When it is desired to loosen the grip and detach the hose, it is accomplished by pushing down on the arms B B', or by slightly lifting the hose. These parts or jaws and arms A B and A' B' are made of cast-iron annealed, and are cast in one piece by preference, although they may be made in separate parts and riveted together.

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

1. The grapple that is adapted to hold fire-engine or water hose in a perpendicular position, and to be attached to a ladder, substantially as set forth.

2. The combination, with the grapple that is adapted to hold fire-engine or water hose in a perpendicular position and to be attached to a ladder, of a strap and hook or their equivalent, substantially as and for the purposes set forth.

3. In a grapple for securing fire-engine or water hose to a ladder, said grapple being adapted to hold said hose in a perpendicular position, clamps or jaws A A', and arms B B', being pivoted together, said arms and jaws being made of malleable iron, having slight projections b b cast on the inner side surface of said jaws, substantially as and for the purposes set forth.

4. The combination, with a grapple which is adapted to secure fire-engine or water hose to a ladder, having clamps or jaws A A' and

arms B B', cast in one piece, as described, of links C C', substantially as and for the purposes set forth.

- 5 5. The combination, with a grapple which is adapted to secure fire-engine or water hose to a ladder, as described, having clamps or jaws A A', which have cast on them arms B B', and having links C C' attached to said arms, of ring E, strap D, and hook H, combined to op-
10 erate said grapple, substantially as set forth.

6. The combination of a grapple that is

adapted to secure fire-engine or water hose to a ladder, and clamps or jaws A A', having slight projections *b b* cast on their inner side surfaces, arms B B', pivoted at *c*, links C C', 15 ring E, leather strap D, and hook H, arranged as described, and for operation as set forth.

EDWARD TICE.

Witnesses:

WILLIAM G. WINNE,
CHESTER THOMPSON.