No. 691,859. Patented Jan. 28, 1902.

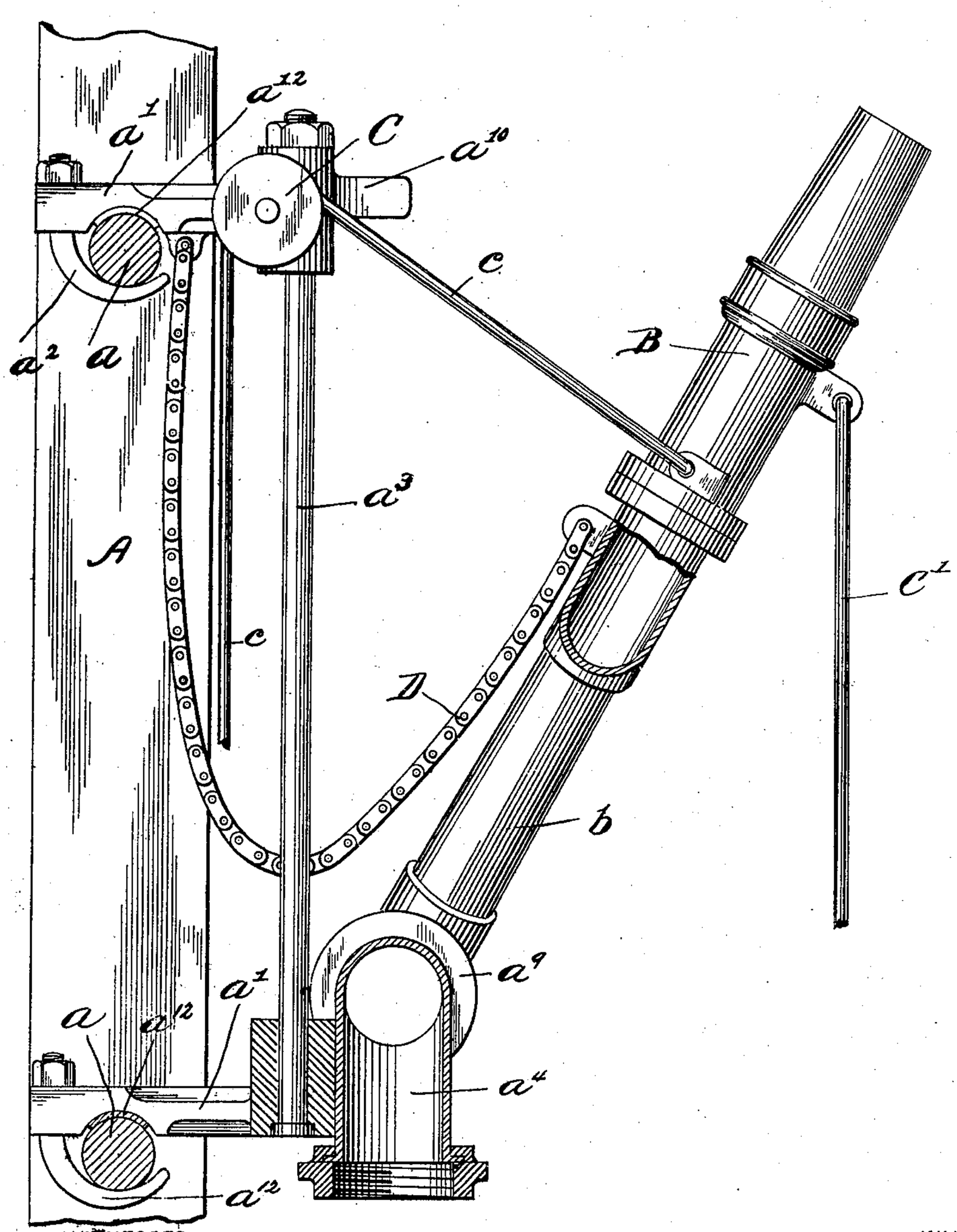
M. H. HART.

FIRE EXTINGUISHING APPARATUS.

(Application filed Feb. 25, 1901.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.



WITNESSES:

Geo. E. Brown.

Wm. A. Hinsley

INVENTOR

Milton H. Hart

BY

Dickerson, Brown & Baldwin

HIS ATTORNEYS

No. 691,859. Patented Jan. 28, 1902.

M. H. HART.

FIRE EXTINGUISHING APPARATUS.

(Application filed Feb. 25, 1901.)

(No Model.) 2 Sheets—Sheet 2.

Fig. 2.

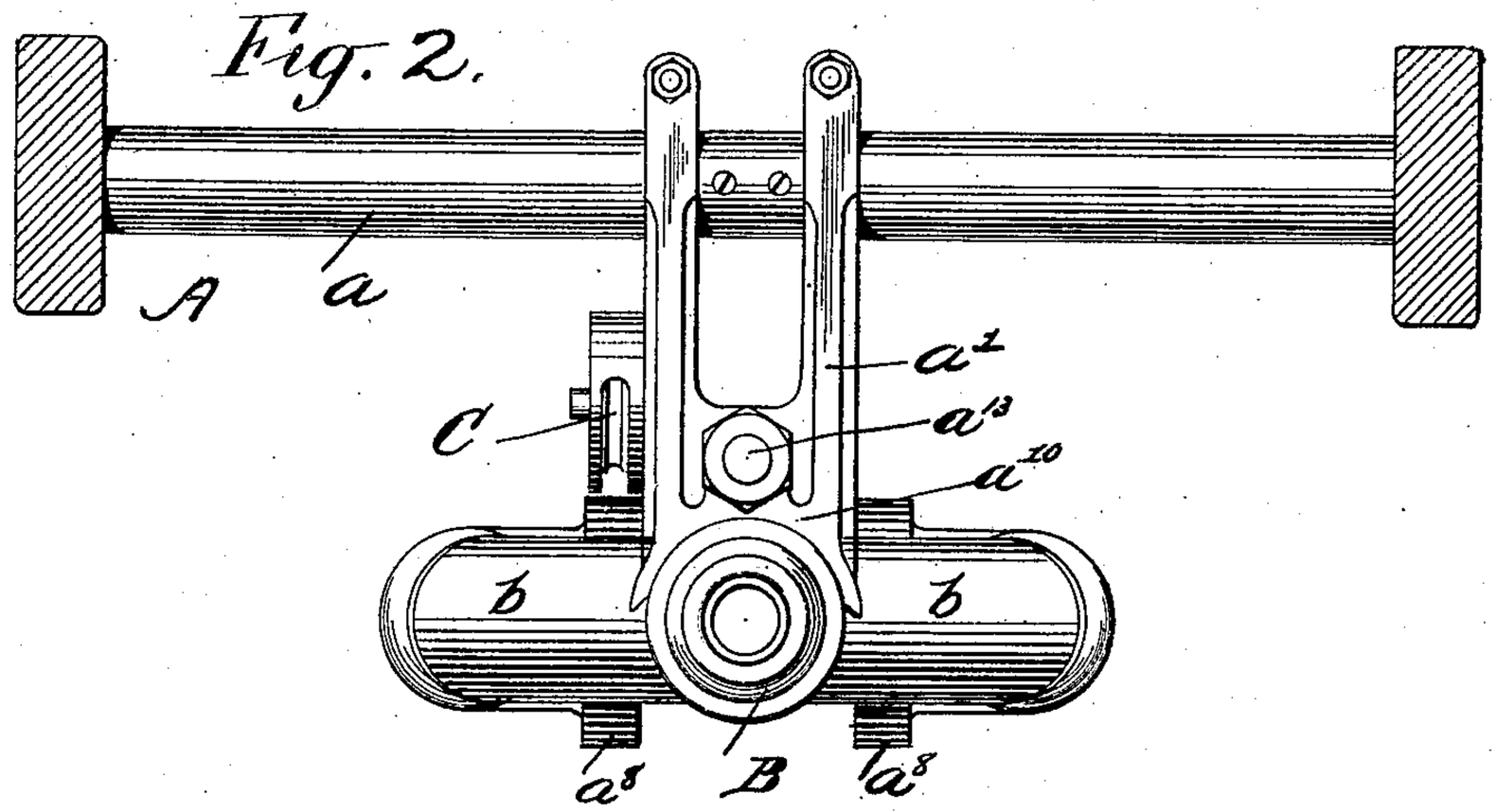


Fig. 3.

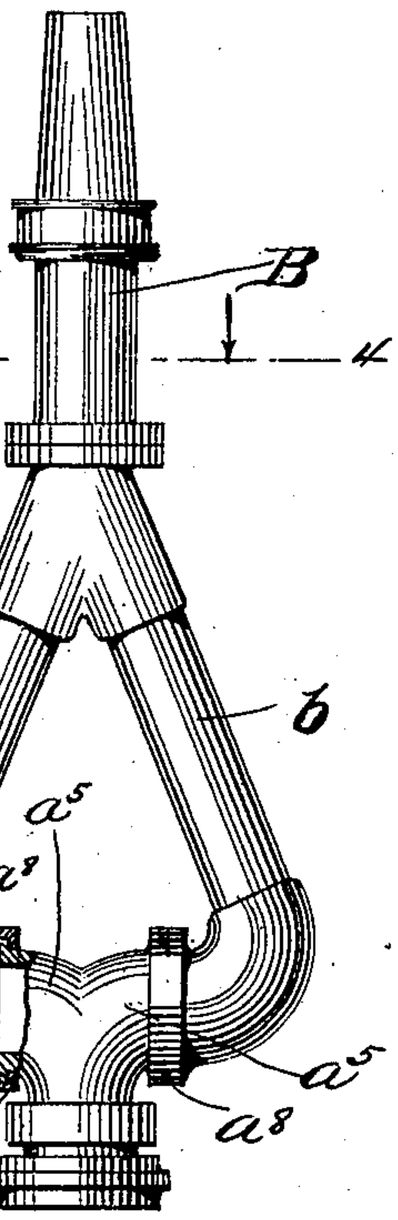
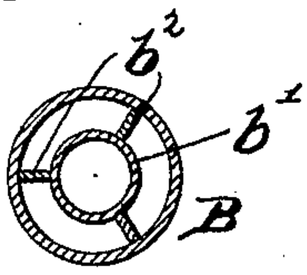


Fig. 4.



WITNESSES:

Geo. E. Crane.

Wm. Walmsley

INVENTOR

Milton H. Hart.

BY

Dickerson, Brown & Payne

HIS ATTORNEYS

UNITED STATES PATENT OFFICE.

MILTON H. HART, OF BROOKLYN, NEW YORK.

FIRE-EXTINGUISHING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 691,859, dated January 28, 1902.

Application filed February 25, 1901. Serial No. 48,654. (No model.)

To all whom it may concern:

Be it known that I, MILTON H. HART, a citizen of the United States, residing in the borough of Brooklyn, city and State of New York, have invented certain new and useful Improvements in Fire-Extinguishing Apparatus, of which the following is a specification.

My invention relates to fire-extinguishing apparatus, and especially to that type of apparatus comprising a nozzle which is secured to an aerial ladder and to which a hose-pipe is connected.

I will describe a fire-extinguishing apparatus embodying my invention and then point out the novel features thereof in the claims.

In the accompanying drawings, Figure 1 is a view, partly in vertical section, of an apparatus embodying my invention, only a portion of a ladder being shown. Fig. 2 is a top plan view of Fig. 1, with the exception that the nozzle is in a vertical position. Fig. 3 is a detail view, partly in section. Fig. 4 is a cross-sectional view taken on the line 4 4 of Fig. 3.

Similar letters of reference designate corresponding parts in all of the figures.

A represents a portion of a ladder, which may be of any length. Secured to two of the rungs a of the ladder are a pair of laterally-extending brackets a', the brackets being secured to the rungs by clamping portions a^2. The upper bracket a' is provided with a forked portion a^{10}, which receives a nozzle B when the nozzle is in a vertical position. The clamps are also each provided with a wearing-piece a^{12}. A vertical spacing and bracing rod a^3 is fastened to both of said brackets, which rod and the brackets constitute a support. Secured to the lower bracket a' in any desired manner is a coupling a^4, to which a hose (not shown) is adapted to be connected. This coupling is provided with opposite outlets a^5. The nozzle B is formed with branches b, and these branches have a swiveling connection with the coupling to permit the nozzle B to be raised or lowered. The swiveling connection may be as follows:

The outlets a^5 are each provided with an annular flange a^6, and the ends of the branches b are each provided with a screw-thread a^7. A collar a^8, having a flange a^9, which engages with the flange a^6, and an interior thread which engages with the thread a^7, is employed to connect the branches b with the outlets a^5.

a^{13} is a packing-washer to form a tight joint.

The nozzle B is provided with an interior concentric cylinder b' and radial wings b^2.

C represents a pulley which is suitably supported on the upper bracket a'. Passing over this pulley is a rope or other similar device c, one end of which is connected to the nozzle B. This rope is intended to move the nozzle in an upward direction. A second rope C′ or similar device is also connected to the nozzle B to move it in a downward direction.

D represents a chain for limiting the movement of the nozzle in its downward movement. This chain or other equivalent device may be of any length.

When the nozzle is not in use, it rests in and is retained in the forked portion of the upper bracket.

What I claim as my invention is—

1. In a fire-extinguishing apparatus, the combination of a pair of brackets suitably connected together, means for securing said brackets to a ladder, a coupling carried by one of said brackets to which a hose may be connected, and a nozzle having a swiveling connection with said coupling.

2. In a fire-extinguishing apparatus, the combination of a pair of brackets suitably connected together, means for securing said brackets to a ladder, a coupling carried by said brackets, a nozzle having a swiveling connection with said coupling, and means for moving said nozzle about its connection.

3. In a fire-extinguishing apparatus the combination of a pair of brackets suitably connected together, means for securing said brackets to a ladder, a coupling carried by said brackets to which a hose is adapted to be connected, a nozzle having a swiveling connection with said coupling, means for moving said nozzle about its connection, and a device for limiting the movement of a nozzle in one direction.

4. In a fire-extinguishing apparatus, the combination of a pair of brackets, one of which is provided with a forked portion, and a nozzle having a swiveling connection to said brackets and adapted when in one position to fit in said forked projection.

5. In a fire-extinguishing apparatus, the

combination of a support adapted to be secured to a ladder, a coupling carried by said support to which a hose may be connected, and having curved ends, a nozzle having branch passages extending acutely from the nozzle, each of which passages terminates in a curved end, and a suitable swiveling connection between said curved ends of the nozzle and curved ends of the coupling.

6. In a fire-extinguishing apparatus, the combination of a pair of brackets each of which is secured to a rung of a ladder, a rod extending between said brackets, a coupling carried by one of said brackets, a nozzle having a swiveling connection with said coupling, and means for moving said nozzle about its connection.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MILTON H. HART.

Witnesses:
D. L. WOODHOUSE,
GEO. E. CRUSE.