

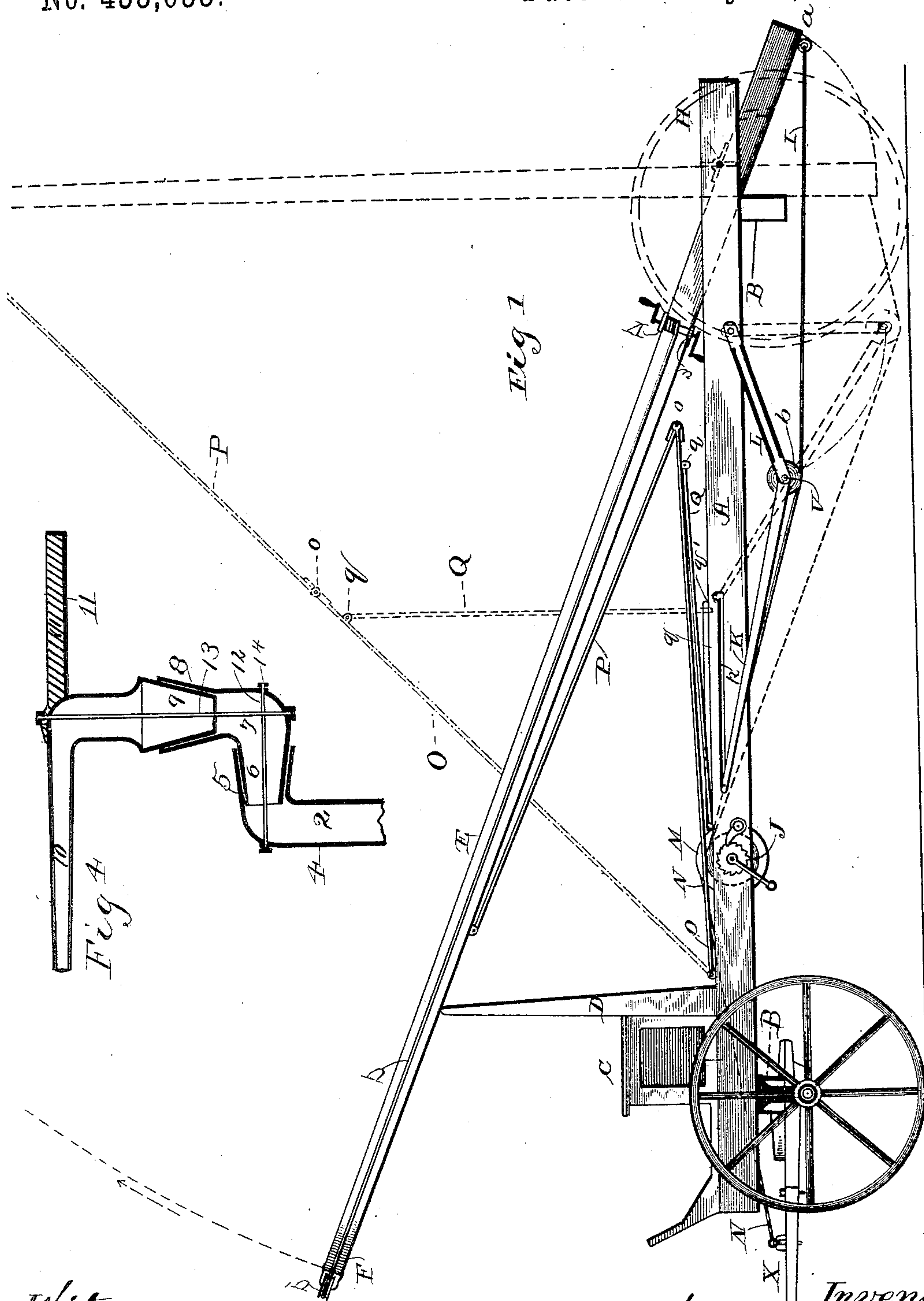
(No Model.)

2 Sheets—Sheet 1.

W. O. STAMPS
FIRE EXTINGUISHING APPARATUS.

No. 433,053.

Patented July 29, 1890.



Witnesses
C. C. Bundine
J. B. Davis

Inventor
William O. Stamps
per
R. B. Davis
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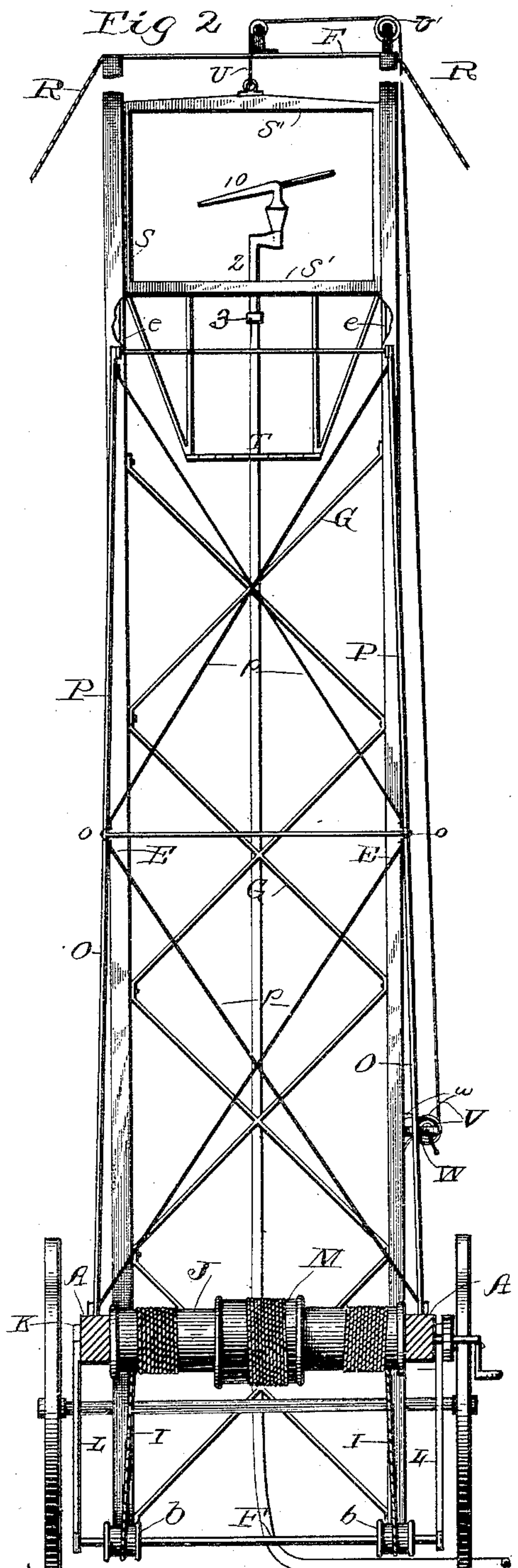
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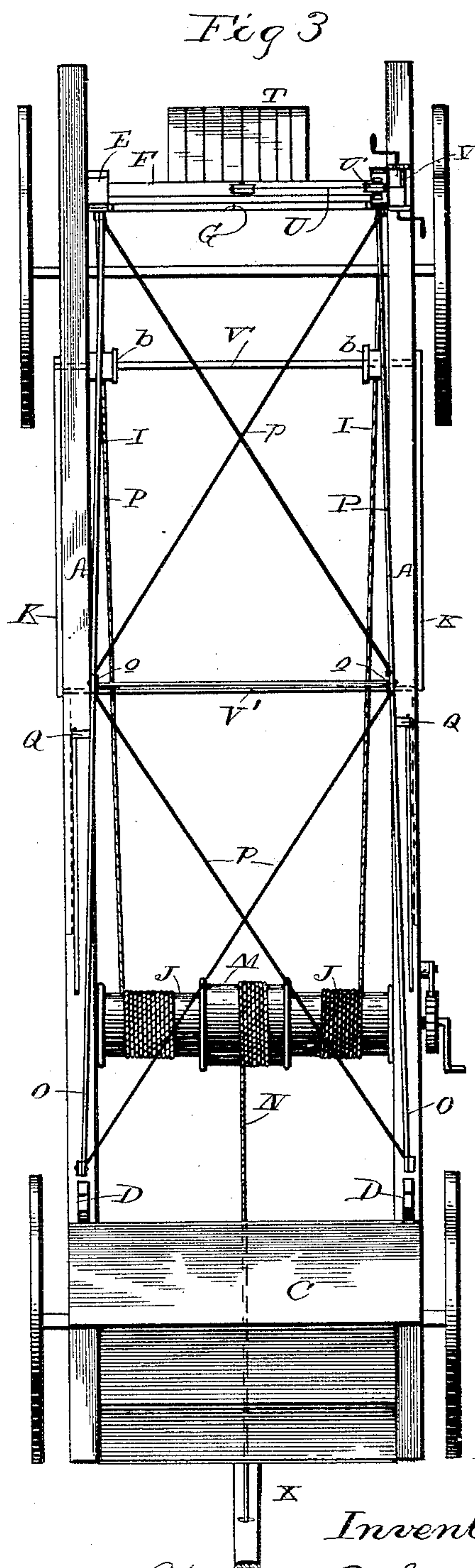
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UNITED STATES PATENT OFFICE.

WILLIAM OSCAR STAMPS, OF DALLAS, TEXAS.

FIRE-EXTINGUISHING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 433,053, dated July 29, 1890.

Application filed April 16, 1890. Serial No. 348,187. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM OSCAR STAMPS, a citizen of the United States, residing at Dallas, in the county of Dallas and State of Texas, have invented certain new and useful Improvements in Fire-Extinguishing Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to fire-extinguishing apparatus, but more especially to a hose-elevating device mounted on a suitable truck to travel therewith; and my object is to produce a more simple, efficient, and convenient arrangement than has hitherto been known.

With this end in view my invention consists in certain peculiarities of construction and combinations of parts more fully described hereinafter, and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 is a side elevation of my complete structure, with the parts in lowered position as when traveling. Dotted lines represent the position when ready for action; Fig. 2, a front view when in the latter position; Fig. 3, a similar rear view; and Fig. 4 is a detail end view of the nozzle arrangement.

The truck proper is of ordinary construction, and consists of the side pieces A, bolsters B, supporting the same, and suitable running-gear, on which the latter are mounted. It is also provided at its forward portion with a seat C, provided with an extended back D, which acts as a supporting-standard for the forward end of the elevator-frame. This frame consists of two uprights or parallel side bars E, having end bars F connecting their upper and lower ends, and suitable cross-braces G extending from end to end, and it is arranged to be fitted between the side pieces A of the truck, with its lower end extending below the same, and pivotally connected to the truck slightly back of the rear axle of the same by means of a transverse rod H, extending through suitable bearings in side bars of the frame and the side pieces of the truck.

The elevator-frame is raised to a perpendicular position by the following means: To each side of its lower depending end at a is

attached a rope or cable I, which is carried forward under a suspended pulley b, and thence to a drum or windlass J, mounted between the side pieces of the truck, and this windlass is provided with suitable crank-arms and a pawl-and-ratchet mechanism on its outside end. The suspended pulley b is mounted in the lower end of a folding frame consisting of the hinged arms K L, the arm L being pivoted to the truck-frame and the upper end of the arm K sliding in a longitudinal slot k, in the side pieces of the truck-frame. A similar arrangement is provided on the opposite side of the truck, and the two frames are joined by cross-rods V', as seen in Fig. 2. Thus it is apparent that the frame can be folded up to the side of the vehicle out of the way of obstacles in the road, and when required for use can be readily let down to the proper position.

At the center of the windlass J is fixed a large pulley or drum M, around which is wound a rope N, and this rope is passed forward beneath the seat and fastened to the doubletree X, so that when the latter is uncoupled from the running-gear the horses can be used to draw out the rope N, and thus revolve the windlass, winding up the cables I thereon and pulling forward the lower end of the elevator-frame. When the latter has reached a perpendicular position, it will be bearing squarely against the rear bolster B, and hence will be held from falling backward. It is held from forward movement by means of brace-rods, which will now be described. These each consist of three sections O, P, and Q. The section O is hinged to the truck-frame at the base of the supporting-frame D, and the section P is similarly connected to the upper end of the side bar of the elevator-frame, and these two sections are hinged together at o. The section Q is hinged to the section O a little below the hinges o, as at q, and maintains a vertical position when the pivoted frame is in perpendicular adjustment, being fastened to the truck-frame at q', and thus supporting the long brace-rods. These latter are connected and secured from lateral play by means of the cross-braces p, as seen more clearly in Fig. 2. When the frame is to be lowered, the lower ends of the rods Q will be slid forward in the brackets

q' , and the rods will then fold in under the frame, as seen in Fig. 1. Suitable guy-ropes R are provided to prevent lateral movement of the frame.

5 On the inside faces of the side bars E are fastened beads or tracks e , and between the latter travels the sash S, which consists of the side and end bars $s s'$, and has depending from its lower bar s' a car or platform T, on
10 which the operator stands. This sash or car is elevated by means of a cable U, attached to its upper bar s' , and thence extending through the upper bar of the frame, over a suitable pulley u' , and down the side of the
15 frame to the windlass V, mounted in brackets W, secured to the side bar E and provided with suitable crank-handles and a pawl and ratchet w . A pipe-section 2 is secured in the lower bar s' of the sash S, and is provided on
20 its lower end with an ordinary hose-coupling 3. Its upper end is threaded, and over it fits the lower end of an elbow 4, the upper arm of which is provided with a flaring bore 5. Into the latter fits the correspondingly-tapered
25 or conical end 6 of a second elbow 7, and the upper end of this elbow is also provided with a flaring bore 8. The lower end 9 of the nozzle is made conical or tapering to fit this latter bore, and the nozzle proper 10 extends at
30 right angles to said arm 9, and a suitable wooden handle 11 fits in the rear end of the same. These parts are secured together by means of the bolts 12 and 13, the bolt 12 extending through the portions 4 and 7 and provided with a nut 14 to clamp the parts together. The bolt 13 is similarly arranged, extending through the elbow 7 and the nozzle at right angles to the bolt 12. It is thus apparent that a universal joint is effected.

40 The preferred construction of my device having been set forth, I will now proceed to describe its operation. When the truck is traveling or when not in use, the parts will be in the positions shown in full lines in Fig. 1.
45 The elevator will be at the bottom of its frame, and the latter will be in lowered position, resting upon its support D, while the brace-rods O P Q will be folded in under it and the frame K L drawn up to the side of
50 the truck out of the way. When the fire is reached, the windlass J is revolved, either by horse-power, as previously described, or by hand by use of the crank-arms, the frame K L having previously been let down to bring
55 the pulley b in proper position, and the lower end of the elevator-frame is thus drawn forward and the latter raised to a vertical position, and there held in rigid position by the brace-rods O, P, and Q and guy-ropes, as previously described. The hose having been
60 coupled to the pipe 2, the fireman takes his position in the car T and the sash S is run up by the cable U to the desired height, where it will be held by the pawl and ratchet w .
65 The water will now be turned on and allowed

to advance to the nozzle, where it can be directed to any point desired by use of the handle 11, for it will be seen that the joint 5 allows vertical movement to any point, while the similar joint at b^8 admits of lateral movement to any extent desired. Thus the stream of water can be readily managed and played upon any desired point, whereas with an ordinary nozzle the force of the water is so great as to render it unmanageable and require a
75 number of persons to direct the stream.

It is evident that my device might be changed in many slight ways which might suggest themselves to a skilled mechanic; hence I do not limit myself to the precise
80 construction shown, but consider myself entitled to all such variations as come within the spirit and scope of my invention.

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

1. A hose-nozzle consisting of an elbow having a flaring bore, a second elbow fitting said bore, and having a similar bore in its opposite end, the nozzle proper provided with a tapering end to fit said latter bore, and means, substantially as described, for securing these parts together, as set forth.

2. The combination of a truck, an elevator-frame pivotally connected thereto, suitable
95 means, substantially as described, for raising said frame to a perpendicular position, and brace-rods for holding it in such position, each consisting of three sections, two of which are hinged together, and the third hinged to
100 one of the other two and attached to the truck-frame, substantially as set forth.

3. The combination of a suitable truck, an elevator-frame pivotally connected therewith, a cable and windlass for raising the latter to
105 a perpendicular position, a folding frame at the side of the truck, and a pulley in the lower end of said frame, under which said cable passes, substantially as described.

4. In a fire-extinguishing apparatus, the
110 combination of a truck, a standard erected therein, an elevator-frame pivotally connected therewith and arranged to be supported by said standard in its lowered position, a cable and windlass for elevating said frame to a
115 perpendicular position, brace-rods composed of a series of hinged sections pivotally connected to the truck and elevator-frame, respectively, a car traveling in the latter, a windlass and cable for elevating the car, and
120 a hose-nozzle secured in said car, whereby the hose will be run up with the car to the desired point, all arranged substantially as and for the purpose described.

In testimony whereof I affix my signature
125 in presence of two witnesses.

WILLIAM OSCAR STAMPS.

Witnesses:

J. F. PHILLIPS,

J. B. AVETHE.