

No. 628,391.

Patented July 4, 1899.

E. S. CLARKE.
HOSE GATE.

(Application filed Sept. 3, 1898.)

(No Model.)

Fig. 1.

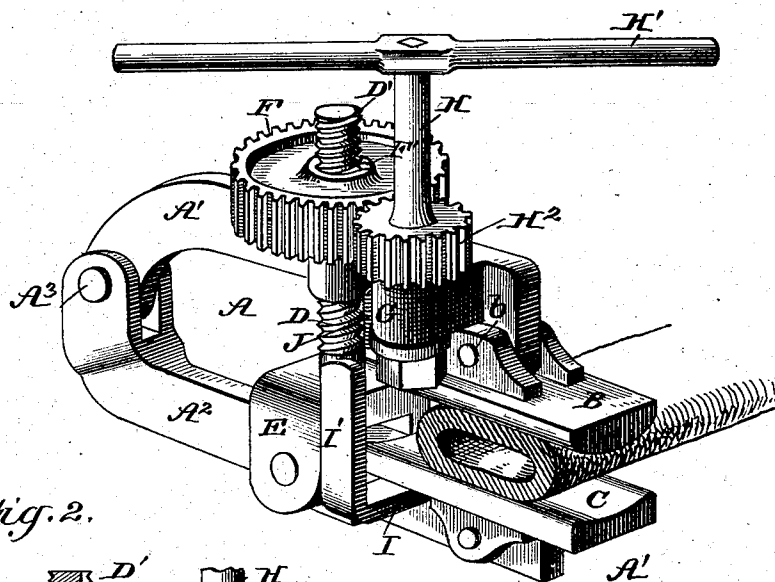


Fig. 2.

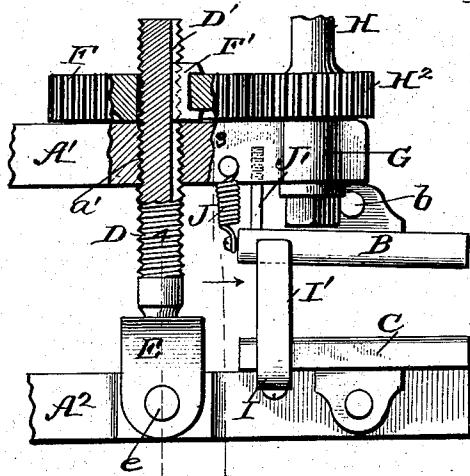


Fig. 3.

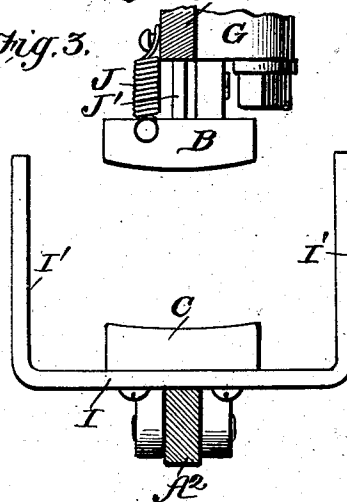
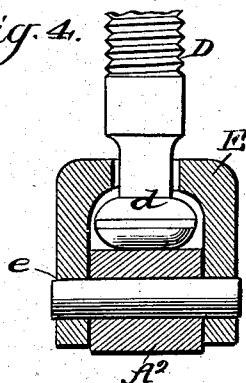


Fig. 4.



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HOSE-GATE.

SPECIFICATION forming part of Letters Patent No. 628,391, dated July 4, 1899.

Application filed September 3, 1898. Serial No. 690,188. (No model.)

To all whom it may concern:

Be it known that I, EDWARD S. CLARKE, of Richmond, in the county of Henrico and State of Virginia, have invented a new and useful Improvement in Hose-Gates, of which the following is a specification.

This invention is an improved hose-gate, having for an object to provide simple means for effectually clamping a hose to prevent the passage of water and which can be quickly and accurately applied to a hose at any point; and the invention consists in certain novel constructions and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of my improved gate. Fig. 2 is a detail view illustrating the upper clamping-jaw and its spring and stop-pin. Fig. 3 is a detail view on about line 3 3 of Fig. 2 of the lower clamping-jaw with the stop for the hose, and Fig. 4 is a detail view on about line 4 4 of Fig. 2 of the screw and its bearing-bracket.

As shown in the drawings, my gate includes a suitable frame A, the clamping-jaws B and C, and the screw D for operating the framing to compress the hose between the jaws.

The frame is composed of the sections A' and A², jointed together at A³ and supporting the jaws at their opposite ends. Between their ends the sections A' and A² are connected by the screw D, swiveled at d in a bracket E, which is pivoted at e to the section A². The screw D has a threaded bearing at a' in the section A', extends above said section, and is provided with a keyway D' to receive a key F' in a gear-wheel F. This wheel F is fitted on the said screw so it may slide along the same as the screw is turned within the section A'. A lateral lug G on the frame-section A' has a bearing for the shaft H, which may be turned by the lever H' or other suitable handle, and is provided with the pinion H², which is meshed with the gear-wheel F.

The clamping-jaws B and C are supported near the free ends of the sections A' and A², the upper jaw B being jointed at b between its ends, so it can rock to conform to and bear squarely upon the hose, which is rested on the bottom jaw C. The jaw C is provided with lugs, which lap on opposite sides of and are secured to the section A², as will

be understood from Figs. 2 and 3. The outer ends of the jaws B and C are unobstructed, so the hose can be readily slipped in between them, a stop I being provided to limit the inward movement of the hose, such stop being preferably supported on the jaw C and having the upright arms I' at the opposite sides of the inner end of said bracket. A spring J draws the inner end of the jaw B upward, such movement being limited by a stop J' on the section A'. The adjacent faces of the jaws B and C are made one convex and the other correspondingly concave to avoid any injury to the hose in clamping the same. In operation, the hose being placed between the jaws B and C, the handle H' may be properly turned, resulting in a turning of the screw in the frame-section A', drawing the sections A' and A² toward each other, and pressing the jaws B and C together upon the hose.

It will be noticed that the jaws are unobstructed and always ready to receive the hose.

The stop I avoids the necessity of any special care in inserting the hose, it only being necessary to fit the hose up against such stop and operate the compressing devices.

In use at a fire, when time is of great importance, if any section of hose, except that coupled to the engine, be broken or springs such a leak as to necessitate its being replaced by a new one it is only necessary to apply the gate to any section between the broken one and the engine and operate the devices to clamp the hose, thus shutting off the water until a new section can be substituted for the damaged one, thus avoiding the necessity of stopping the engine, the latter being fitted with a relief-valve, as is generally the case.

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

1. The combination of the framing, the clamping-jaws, the upper jaw being pivoted, a spring for actuating said jaw and a stop for limiting the movement of the jaw by said spring substantially as set forth.

2. The improved hose-gate herein described comprising the frame composed of sections jointed together at one end, the clamping-jaws at the other ends of said sections, the screw connected with one of the sections and having a threaded bearing in the other section,

the gear keyed to and movable along the said screw and the pinion meshed with said gear substantially as set forth.

3. An improved hose-gate consisting of the
5 frame-sections pivotally connected at one end and provided at their other ends with jaws adapted to receive the hose, and the connecting-screw arranged between said jaws and the
10 pivotal connection of the frame-section, said screw being threaded in one of the frame-sections and having a swivel connection with the other section, and means whereby to turn said screw substantially as set forth.

4. A hose-gate comprising the frame, the
15 clamping-jaws unobstructed at their outer ends, stop devices at the inner ends of the clamping-jaws whereby to limit the inward movement of the hose, and operating means

arranged in rear of said stop devices substantially as described. 20

5. A hose-gate comprising the frame-sections pivoted together at one end and movable at their other ends toward and from each other, and the clamping-jaws jointed to the movable ends of said sections, and operating
25 means substantially as described.

6. A hose-gate consisting of the frame composed of sections jointed together at one end, the clamping-jaws jointed to said frame-sections, and operating means arranged between
30 the clamping-jaws and the jointed connection of the sections substantially as set forth.

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Witnesses:

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