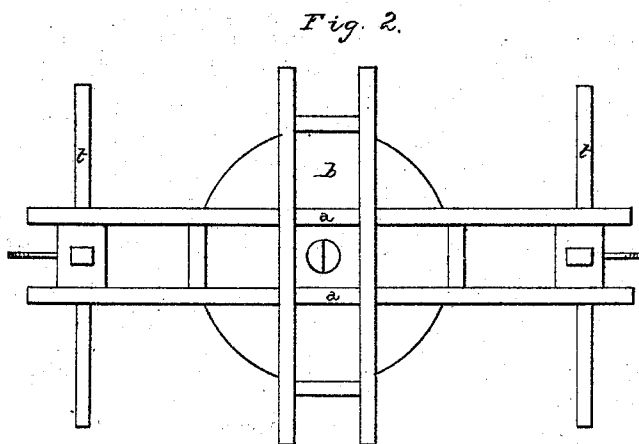
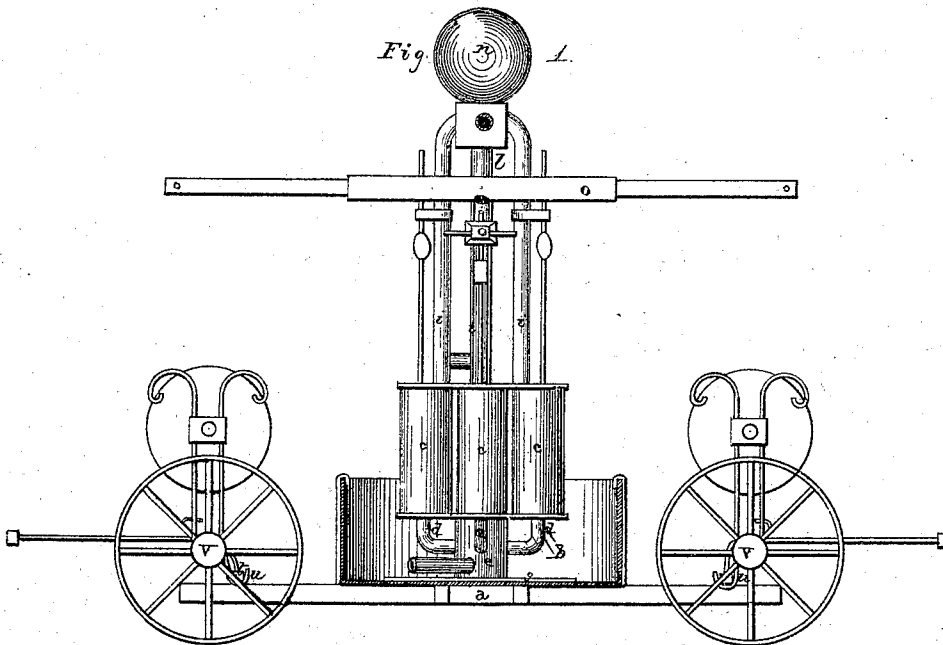


J. A. SINCLAIR.
Fire-Engines.

No. 144,001.

Patented Oct. 28, 1873.



WITNESSES.
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UNITED STATES PATENT OFFICE.

JAMES A. SINCLAIR, OF BRIDGEPORT, OHIO.

IMPROVEMENT IN FIRE-ENGINES.

Specification forming part of Letters Patent No. **144,001**, dated October 28, 1873; application filed February 25, 1873.

To all whom it may concern:

Be it known that I, JAS. A. SINCLAIR, of Bridgeport, county of Belmont and State of Ohio, have invented certain new and useful Improvements in Fire-Engines, of which the following is a specification:

The nature of my invention consists in the construction of a hand fire-engine, which is provided with hooks for attaching it to two hose-carriages for transportation from place to place, and in the construction of the engine for throwing the water, as will be more fully set forth hereafter.

Figure 1 is a side elevation of my invention. Fig. 2 is an inverted view of the frame to which the engine is secured.

a represents the frame, upon which the engine rests, consisting of four bars, arranged and firmly secured together in pairs, and placed at right angles to each other, so as to form a broad and solid base for the engine when at work. Secured to the top of this frame is the water-tank *b*, in which the engine is placed. This engine consists of the four cylinders *c*, connected at their bottoms, by the pipes *d*, with the cylinder *e*, which is in communication with the water in the tank. To the bottom of this cylinder is fastened the flat plate *g*, which, in turn, is firmly secured, through the tank, to the frame *a*, so as to hold the engine erect and steady under the most severe strain. Extending upward from the top of each of the four pumping-cylinders *c* and the receiving-cylinder *e* are the five pipes *i* *l*, which center to-

gether in the air-chamber *n*. When the engine is put in motion by the two hand-levers *o*, the water flows through the four outside pipes *i* into the central one, *l*, from which it is discharged. Pivoted to two ends of the frame *a* are the cross-bars *t*, which are made to catch in the hooks *u*, projecting backward from the axles of the two hose-carriages *v*, so as to raise the engine from the ground, for the purpose of transporting it from place to place. As soon as it is desired to use the engine it is dismounted and set on the ground, so as to have a solid foundation.

This engine is designed to be used especially for small villages in cases of fire, or for watering the grounds and gardens around private residences. The central pipe *l* serves not only as the discharge-pipe, but also supports the two hand-levers.

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

The engine consisting of the cylinders *c* *e*, pipes *d* *i* *l*, air-chamber *n*, and hand-levers *o*, when all are combined to operate substantially as described.

In testimony that I claim the foregoing as my invention I hereunto affix my signature this 21st day of February, 1873.

JAMES A. SINCLAIR.

Witnesses:

J. S. BATES,
J. D. FURNIER.