

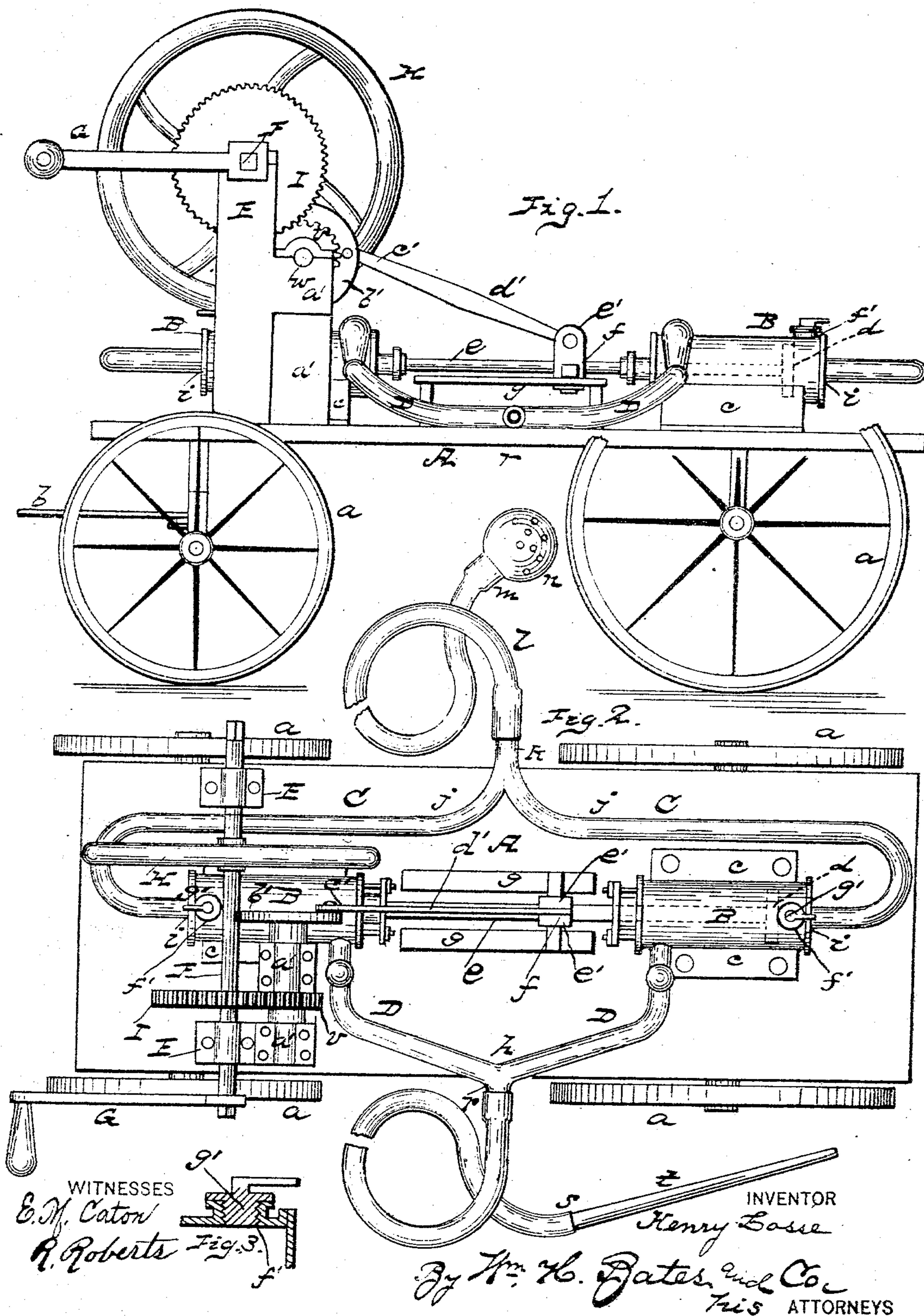
(No Model.)

H. LOSSE.

FIRE ENGINE.

No. 321,510.

Patented July 7, 1885.



UNITED STATES PATENT OFFICE.

HENRY LOSSE, OF PINCKNEYVILLE, ILLINOIS.

FIRE-ENGINE.

SPECIFICATION forming part of Letters Patent No. 321,510, dated July 7, 1885.

Application filed March 11, 1885. (No model.)

To all whom it may concern:

Be it known that I, HENRY LOSSE, a citizen of the United States, residing at Pinckneyville, in the county of Perry and State of Illinois, have invented certain new and useful Improvements in Fire-Engines, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has relation to improvements in fire-engines; and it consists in the construction and novel arrangement of devices, as hereinafter fully explained, and particularly pointed out in the appended claim.

The annexed drawings, to which reference is made, fully illustrate my invention, in which Figure 1 represents a side view of my device. Fig. 2 is a plan view of the same, and Fig. 3 is a detail view.

Referring by letter to the accompanying drawings, A designates the body of the device or bed, which is supported by the transporting-wheels *a*, having the draft-tongue *b*, by which the engine is drawn.

B B represent two cylinders, which are supported in suitable bearings or supports, *c c*, that are secured to the bed aforesaid. These cylinders are constructed exactly alike, and each of which is provided with a piston or plunger, *d*, that is secured to the opposite ends of a single piston-rod, *e*, which latter is provided at its center with a cross-head, *f*, that slides upon the slideways *g*, which are secured to the upper face of the bed and between the two cylinders, and is operated by mechanism hereinafter explained.

C C indicate the curved inlet-pipes, the inner ends of which are connected to the ends of the cylinders, as shown at *i i*, and the two branches *j j* meet one another and connect with a single short pipe, *k*, to which the hose *l* is secured, the free end *m* thereof being provided with a perforated cap or rose, *n*, whereby sand, gravel, and the like are prevented from entering the cylinders when the water is drawn through said hose when the engine is in operation.

D D represent the discharge-pipes, which are connected to the side of each cylinder, respectively, and near the end thereof opposite to the inlet-openings. These pipes meet at *p*,

and connect with a single pipe, *r*, to which the hose carrying the stream of water is attached. Said hose, as shown at *s*, is provided with a suitable nozzle, *t*.

E E designate two uprights or standards, which are secured to the bed or frame of the engine near the forward end thereof, on which is journaled a transverse shaft, F, having crank G at each end, and provided with a fly-wheel, H, as well as a gear-wheel, I. The latter engages a pinion, *v*, secured to a transverse shaft, *w*, journaled in bearings in the short uprights *a'*, secured to the bed, as shown in the drawings. This shaft is provided at one end with a crank, *b'*, to which is connected one end, *c'*, of a pitman, *d'*. The end of said pitman is pivoted in bearing *e'*, secured to the cross-head, which latter in turn is secured to the center of the piston-rod, as aforesaid.

Each cylinder is provided at its inlet end with an opening, *f' f'*, which is female screw-threaded to receive a screw-threaded plug, *g'*, which closes said opening when in place.

It will be observed from the above description, and by reference to the annexed drawings, that when the cranks are operated the mechanism described and shown causes the pitman to operate upon the piston-rod, giving it a backward and forward movement, thus alternately, by means of the plungers, drawing water into the cylinders at their ends, and discharging it in a similar manner through the discharge-pipes, the stream therefrom being a continual one as long as the operating mechanism is worked.

The openings in the ends of the cylinders are designed to be used in pouring a small quantity of water therein, in order to start the stream, and an engine constructed as herein described and shown is easily operated, durable, cheap to manufacture, and will throw a powerful stream of water.

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

The fire-engine herein described, consisting of the frame or bed A, having the transporting-wheels and draft-tongue, and provided with the standards E E, shaft F, having the cranks, fly-wheel H, gear-wheel I, pinion *v*

on the shaft *w*, crank *b'*, pitman *d'*, the double
or twin cylinders B B, piston-rod *e*, having at
each end the plungers *d d*, and provided at its
center with the cross-head *f*, the inlet-pipes C
5 C, outlet-pipes D D, the hose, and the cylin-
ders having the openings in their ends and
provided with the removable plugs *g' g'* for
closing the same, the whole operating as de-
scribed, and arranged as specified.

In testimony whereof I affix my signature in 10
presence of two witnesses.

HENRY LOSSE.

Witnesses:

H. S. BROWN,
JAS. H. TROVER.