

G. Thomas,
Steam Fire Engine.

N^o 44,055.

Patented Aug. 30, 1864.

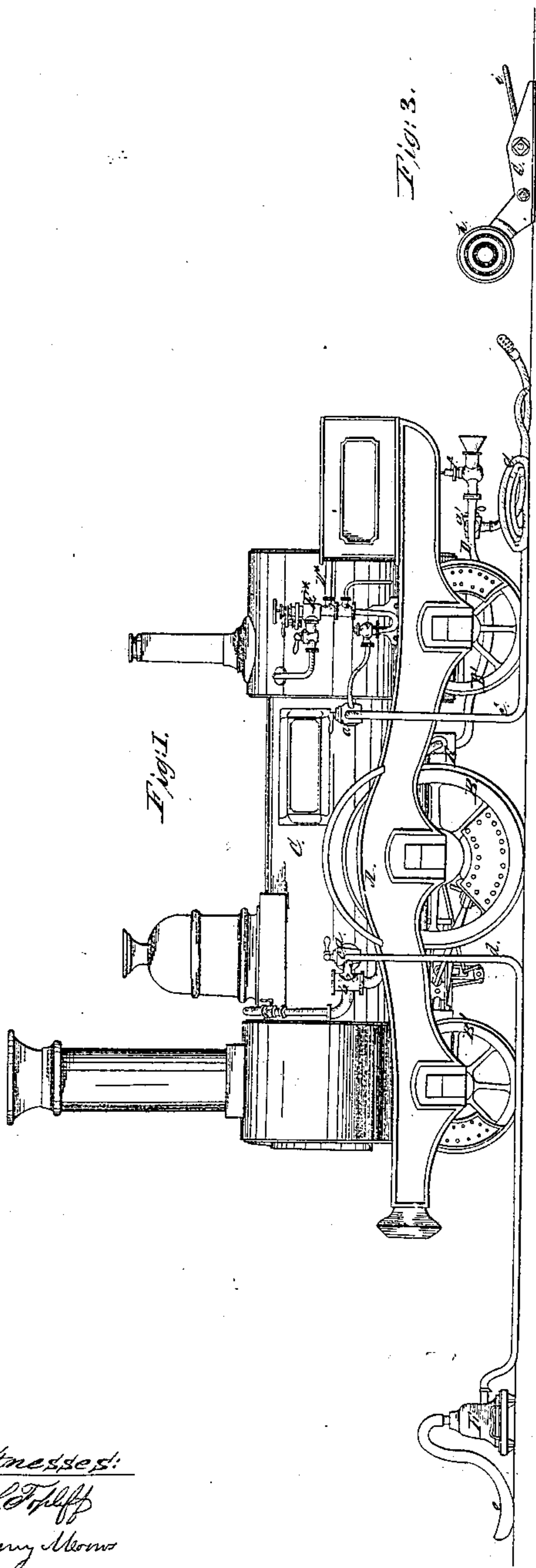


Fig. 3.



Fig. 2.

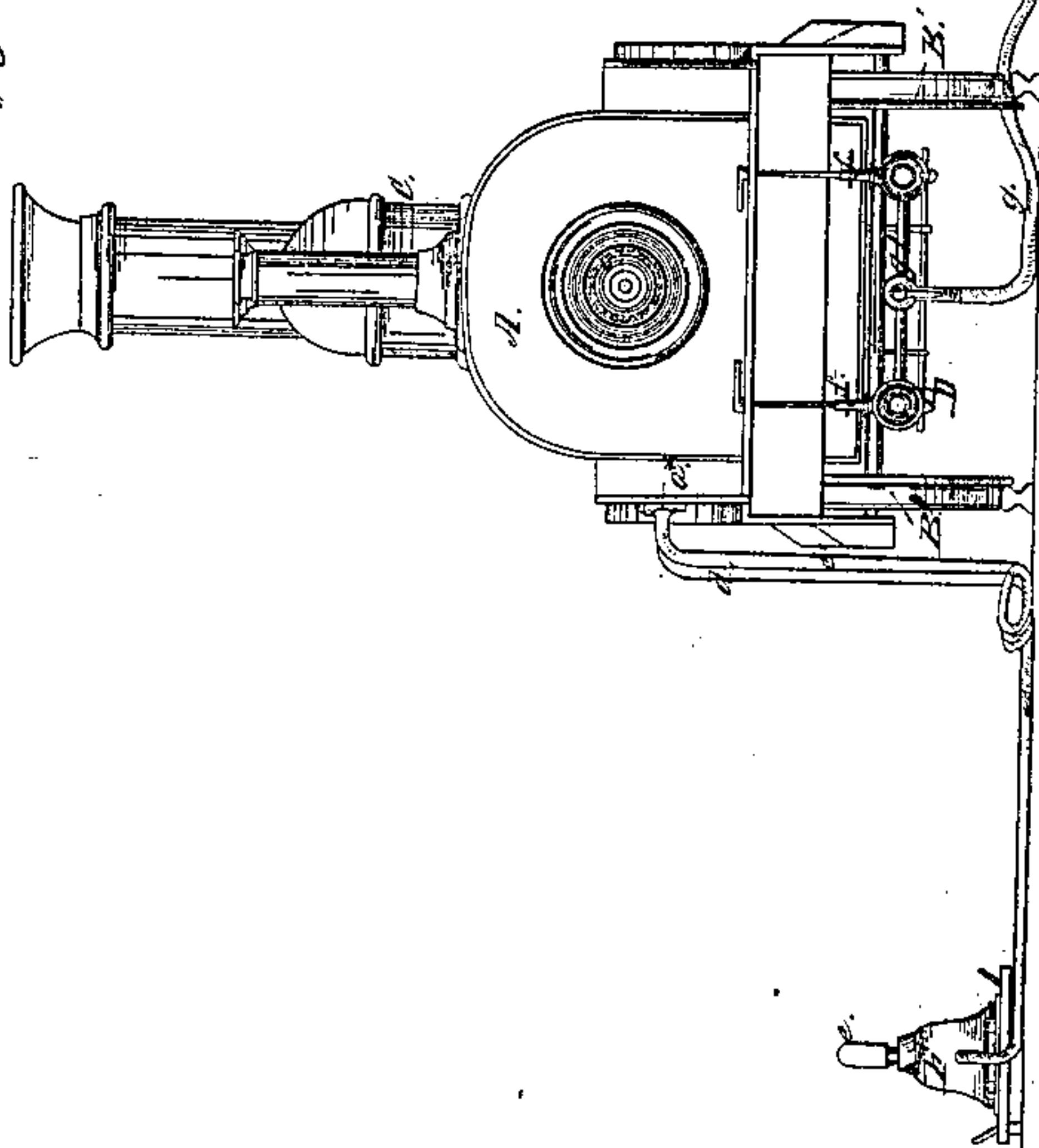


Fig. 4.



Witnesses:

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GEORGE THOMAS, OF FRANKFORT-ON-THE-MAIN, GERMANY, ASSIGNOR
TO BERNHARD SCHAFFER AND CHRISTIAN BUDENBERG, OF NEW
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IMPROVEMENT IN LOCOMOTIVES.

Specification forming part of Letters Patent No. 44,055, dated August 30, 1864.

To all whom it may concern:

Be it known that I, GEORGE THOMAS, of Frankfort-on-the-Main, free city of Frankfort-on-the-Main, have invented a new and useful Improvement in the Application of Locomotives as Steam Fire-Engines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a side elevation of a locomotive constructed according to my invention. Fig. 2 is a front elevation of the same. Fig. 3 is a detached side elevation of the shoe which I use to elevate the driving-wheels from the ground. Fig. 4 is a front elevation of the same.

Similar letters of reference indicate like parts.

A represents a locomotive constructed in the ordinary manner, and supported by the usual number of wheels B B'. These wheels have their bearings on suitable axles, and the wheels B, which form the drivers connect with the steam-pistons in any of the well-known methods, either under the boiler C, as shown in the drawings, or in any other suitable manner.

D D* are the feed-pipes, which lead from the boiler to the tender, and the water drawn from the tender is forced into said boiler, either by the action of the force-pumps E or by injectors E*.

When force-pumps are used, a three-way cock is placed between the check-valve *b* and the boiler, and a nipple, *c*, projecting from one side of the shell of the three-way cock, connects by a hose-pipe, *d*, with the air-chamber F, which is put upon a separate platform, either stationary or movable, or which may be connected to some portion of the locomotive. Another hose, *e*, with a suitable nozzle, throws or carries the water to the desired spot.

The connection between the tender and force-pumps is closed by stop-cocks *f*, and the connection between the hose *g* and feed-pipes is opened by a cock, *g'*. This hose extends to a well or reservoir, and forms the suction-pipe. The water elevated through this pipe or hose is driven by the action of the force-pumps into the air-chamber F, and a jet of water of considerable power can be obtained.

In order to operate the pumps without propelling the locomotive, the driving-wheels B have to be blocked up, and this purpose I effect by means of the shoe G, detached views of which are shown in Figs. 3 and 4. If desired, this shoe may be furnished with wheels *h* and a handle, *i*, so that it can be used as a hand-car for the transportation of the air-chamber F, or of other articles from one place of the road to the other. A drum, *j*, mounted on the axle of the wheels *h*, serves to wind up the hose in carrying the same from one place to another.

If instead of the pumps E the injector E* is used, the air-chamber can be dispensed with. The suction-pipe is connected to the pipe D*, and the communication between the boiler and injector is closed by a three-way cock, *a**, which, in closing said communication, opens that between the injector and hose *e**. By the action of the steam admitted from the boiler to the injector a current of water will be forced through the hose *e**, and by the application of a suitable nozzle a jet of considerable power will be produced.

What I claim as new, and desire to secure by Letters Patent, is—

The application to a locomotive of hose-pipes *d e* g*, with or without an additional air-chamber, F, and with suitable stop-valves, *a a* g'*, in the manner and for the purpose substantially as herein shown and described.

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Witnesses:

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