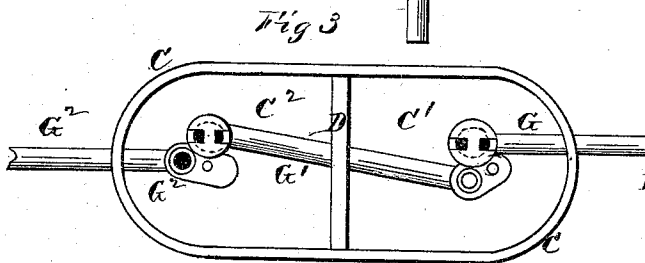
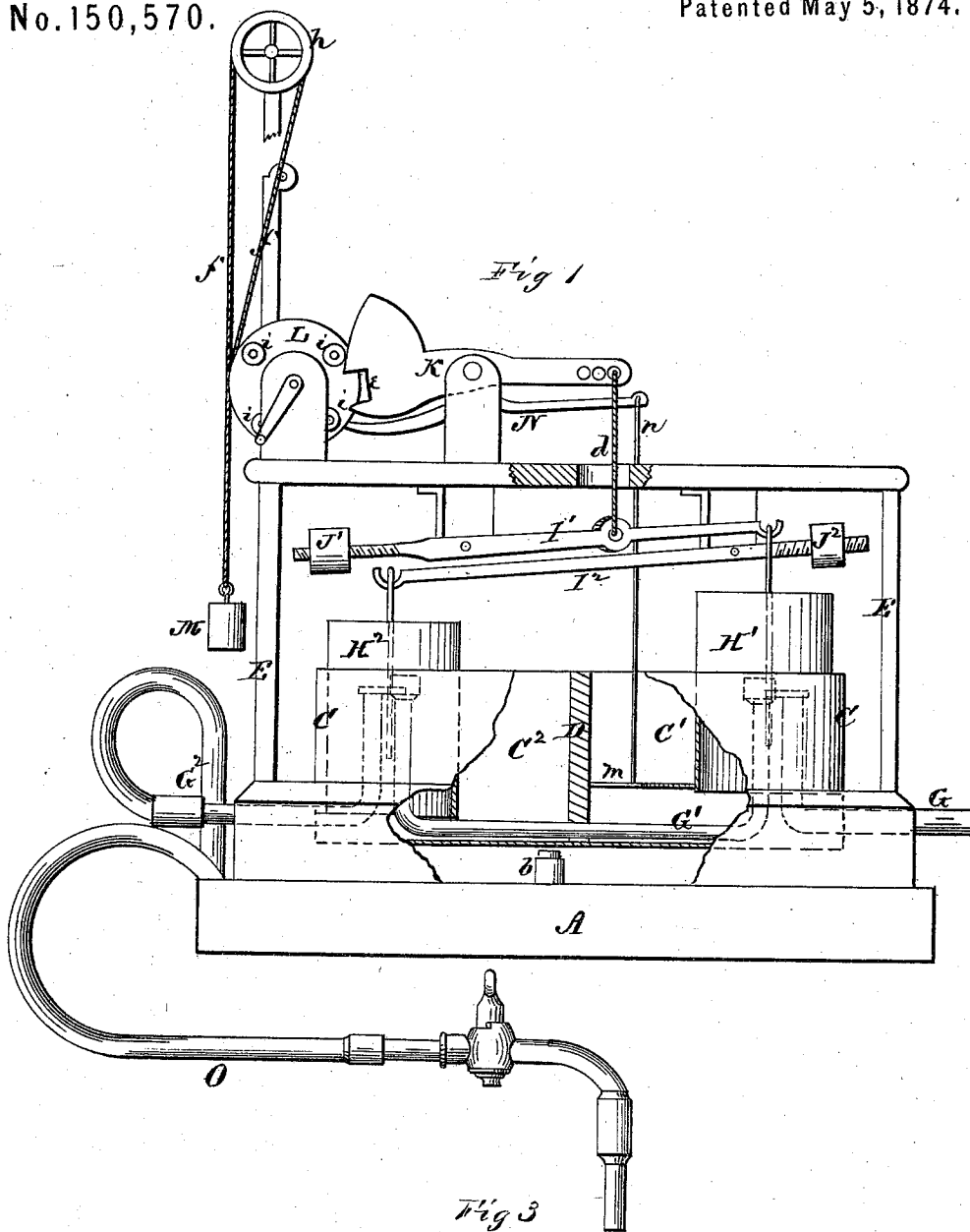


U. HASKIN.
Carbureter Gas-Machines.

No. 150,570.

Patented May 5, 1874.



WITNESSES.
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C. L. Ewert.

INVENTOR.

By

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Fig 3

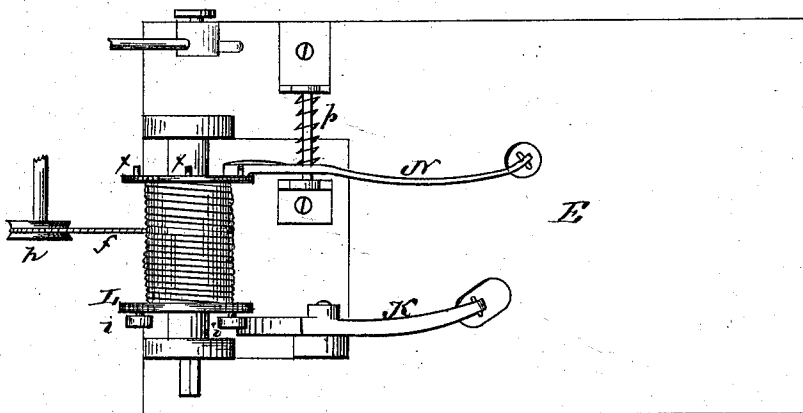
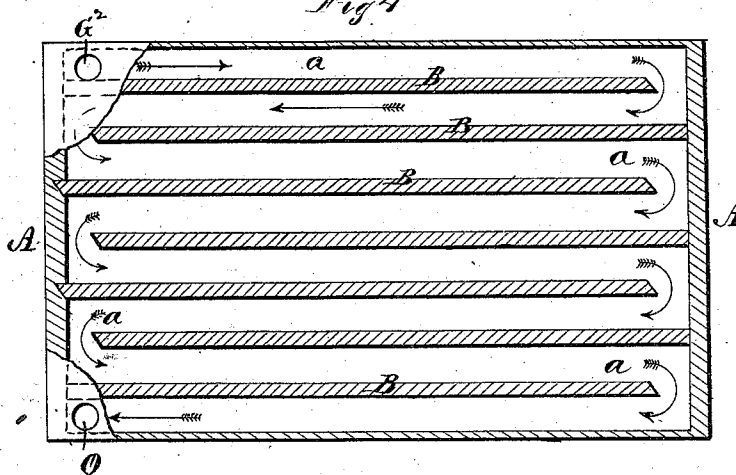


Fig 4



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UNITED STATES PATENT OFFICE.

URI HASKIN, OF CHATTANOOGA, TENNESSEE.

IMPROVEMENT IN CARBURETER GAS-MACHINES.

Specification forming part of Letters Patent No. **150,570**, dated May 5, 1874; application filed February 6, 1874.

To all whom it may concern:

Be it known that I, URI HASKIN, of Chattanooga, in the county of Hamilton and in the State of Tennessee, have invented certain new and useful Improvements in Gas-Machines; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a gas-machine, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings.

Figure 1 is a side elevation of my entire machine, part in section. Fig. 2 is a plan view of the same. Fig. 3 is a plan view of the water-tank, and Fig. 4 is a horizontal section of the evaporator.

A represents a shallow rectangular tank of any suitable dimensions, provided with interior longitudinal vertical partitions B B, alternating from one end to near the other end, as shown in Fig. 4, forming a zigzag passage, *a*, through which air is forced. This tank is filled, through an inlet-pipe, *b*, with gasoline or other suitable hydrocarbon liquid, and the air, being forced through the same, forms carbureted-hydrogen gas. Upon the tank or carbureter A is placed a suitable casing, E, upon the bottom of which is located a water-tank, C, having a central vertical partition, D, forming two chambers, C¹ and C². G represents the air-inlet pipe, passing from the outside into the chamber C¹ of the water-tank, and within the same it extends vertically upward to near the top of the tank. G¹ is a vertical pipe in the chamber C¹, extending from near the top thereof to the bottom, through the partition D into the chamber C², and vertically upward in the same to near the top thereof. G² is the air-discharge pipe, leading from near the top of the chamber C² through the side thereof, and through the exterior casing E into the carbureter A at one end of

the zigzag passage *a*. Within the chambers C¹ C² are suspended receivers H¹ H², respectively, which surround the pipes in said chambers. These receivers are suspended, respectively, upon or from pivoted levers I¹ I², provided upon their other ends with adjustable weights J¹ J², and all arranged above the water-tank C within the casing E. The lever I¹ is connected by a cord, *d*, with a lever, K, pivoted to a suitable standard on top of the case E. The other end of this lever has a curved edge, as shown, and is provided with a notch, *e*. It acts as a detent against friction-rollers *i i* upon the end of a reel, L, which is also mounted on the top of the case E. *f* is a cord or chain wound around the reel, and, passing over a pulley, *h*, at a suitable elevation above the machine, has a weight, M, attached to it. To the side of the receiver H¹ is attached a plate, *m*, from which a rod, *n*, extends up through the top of the case E, and connects with a pivoted regulating-lever, N, pressed by a spring, *p*, against the opposite end of the reel L. In this end of the reel are inserted pins *x x*, against which the lever is to work. These pins are beveled on one side, and the end of the regulating-lever is similarly beveled on the under edge to allow of the cord or chain *f* being wound up on the reel. O is the pipe conveying the gas to the burners.

The machine being wound up, and the tank A supplied with the requisite amount of gasoline or other suitable hydrocarbon liquid, the lever K is rocked up and down four times during each revolution of the reel L. Each roller *i*, as it enters the notch *e*, brings this end of the lever down, raising the receiver H¹, and as soon as the roller passes out of the notch the receiver H¹ falls of its own weight.

During the upward movement of the receiver it acts as a suction-pump to draw air in through the pipe G, and during its downward movement it forces the air previously drawn in, through the pipe G¹, into the receiver H², which rises from the pressure of the air. As the receiver H¹ is again elevated, the receiver H², overbalancing the pressure of the air, passes downward, and forces the air through the pipe G² into the carbureter A, where it passes through the zigzag passage *a*, and becomes

thoroughly carbureted, and passes out of the pipe O in the form of illuminating-gas.

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

1. The counterbalanced receivers H¹ H², suspended from the pivoted levers I¹ I², and operating in combination with the water-tank C and pipes G G¹ G², substantially as and for the purposes herein set forth.

2. The combination, with the receiver H¹ and pivoted lever I¹, of the lever or detent K,

with notch e, regulating-lever N, with spring p, reel L, with rollers i and pins x, the cord or chain f, and weight M, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 8th day of January, 1873.

URI HASKIN.

Witnesses:

OTTO FISCHER,
C. L. EVERT.