C. M. GEARING.

AIR-BLOWING APPARATUS FOR CARBURETERS.

No. 169,802. Patented Nov. 9, 1875.

Fig 1

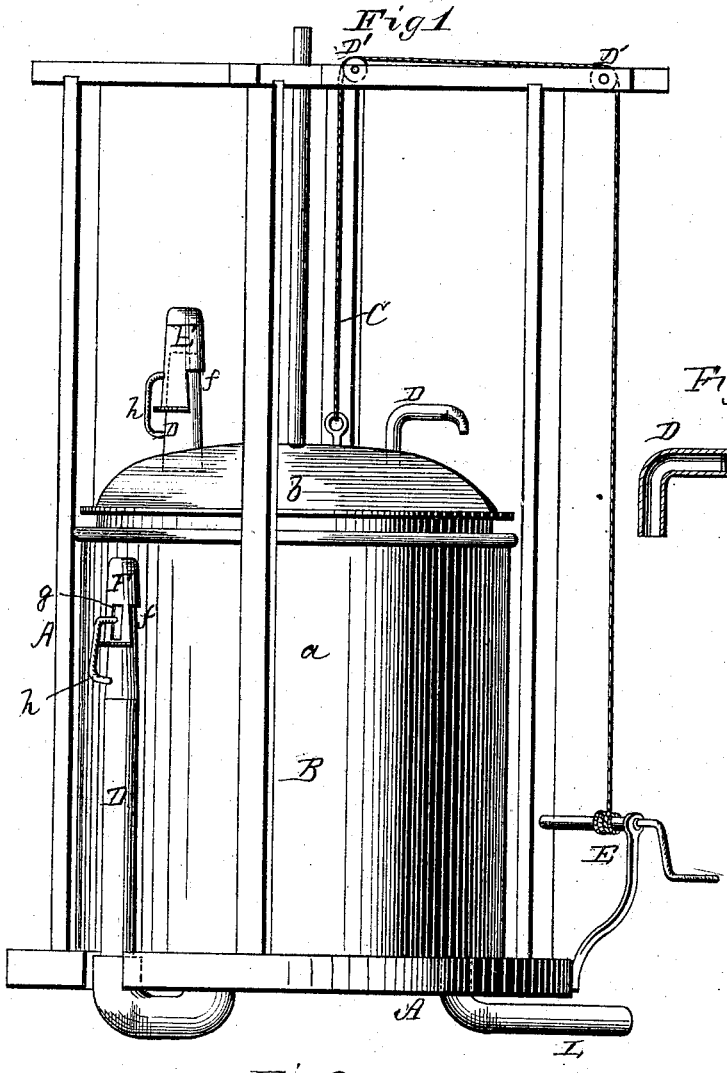


Fig. 3

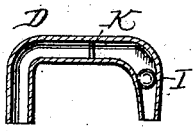
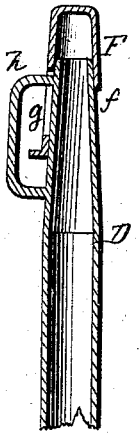


Fig 2



WITNESSES

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CHARLES M. GEARING, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN AIR-BLOWING APPARATUS FOR CARBURETERS.

Specification forming part of Letters Patent No. **169,802**, dated November 9, 1875; application filed August 11, 1875.

To all whom it may concern:

Be it known that I, CHARLES M. GEARING, of Pittsburg, in the county of Allegheny and in the State of Pennsylvania, have invented certain new and useful Improvements in Air-Blowing Apparatus for Carbureters; 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.

This invention relates to certain improvements in that class of blast or blowing apparatus for carbureters in which an ordinary gas-holder is employed to collect the air and supply the same to the carbureting apparatus; and the invention consists in a bent air-inlet pipe secured to the vessel on top of the same, and communicating with its interior, and provided with an interior valve and stop, as more fully hereinafter set forth and described.

In the drawings, Figure 1 represents an elevation of a blast apparatus, showing my improvements; Fig. 2, a detached view of one of the pipes and caps in section; and Fig. 3 a detached view of the air-inlet pipe and automatic valve in section.

The letter A represents a frame-work, within which is located an ordinary gas-holder, B, consisting of the vessel *a*, which contains water, as usual, and the inverted vessel *b* fitting therein. The letter C represents a rope, cord, or chain passing over pulleys D′ secured in the frame A, and attached at one end to the top of the vessel *b*, and at the other to a windlass, E, by means of which the vessel A is elevated when necessary. The letter D represents the air inlet or induction pipe, which may be set directly in the top of the vessel *b*, communicating with the interior of the same; or may extend down the outside of the vessel *a*, and up through the bottom into the same, terminating above the top of the water in the vessel *b*. This latter construction is preferable where the holder is to be buried in the ground, as the air-inlet pipe can thus be brought even with the surface at one side of the apparatus, where it will be under the control of the operator. The said pipe D is provided on its top with a peculiarly-constructed cap or cover, F. Said cap consists of an inverted tubular vessel, cut away at the bottom on one side, as shown at *f*, a slot being formed through the portion left on the opposite side, as shown at *g*, through which slot the cap is fastened to the pipe by means of a staple, *h*, secured to the pipe. This allows the cap to be thrown off the top of the pipe without being detached from the same, thus preventing the said cap from being lost or misplaced. The pipe D is provided, as usual, with a suitable cock or valve, by which it can be opened or closed to the passage of air, as may be desired. A modification of the air supply or induction pipe D is illustrated in Figs. 1 and 3, in which said pipe consists of a bent tube secured at one end to the top of the vessel *b*, and opening into the atmosphere at the other. Said pipe communicates with the interior of the vessel *b*, and is provided with a ball-valve, I, near its outer end, which is seated in the conical portion of the pipe formed at the end of the same. Across the pipe is secured a wire or stop, K, to prevent the pressure of the atmosphere from forcing the valve back through the pipe into the holder when the same is raised. The holder, upon being elevated, takes in the air from the atmosphere, and distributes it, through a pipe, L, to the carbureter upon being depressed.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

In combination with the bent pipe D secured to the outside of the vessel *b* on top of the same, and communicating with its interior, the valve I, seated in the conical end of said tube, and the stop K secured therein, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of August, 1875.

CHARLES M. GEARING.

Witnesses:
H. A. HALL,
C. L. EVERT.