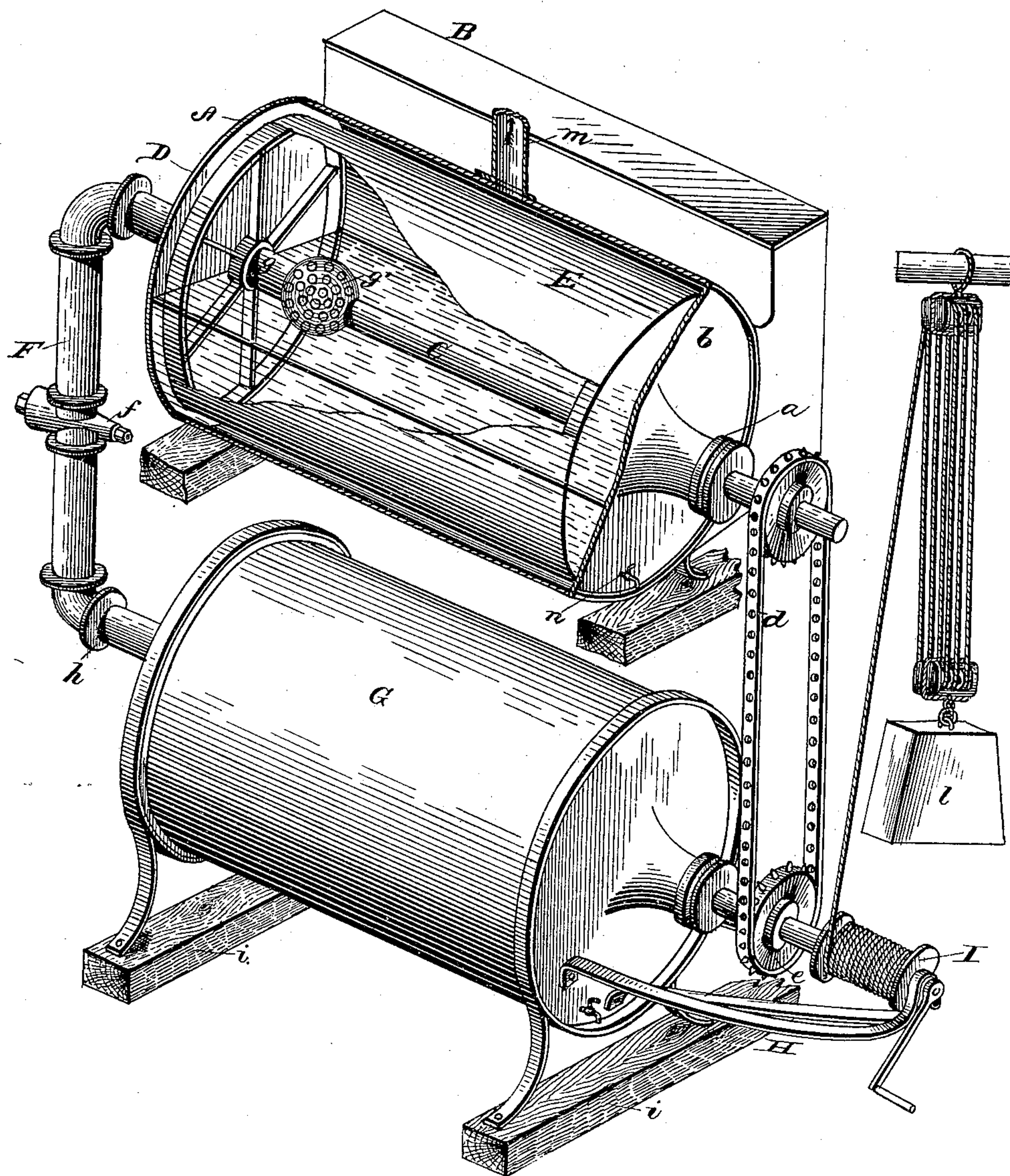


(No Model.)

L. F. McNETT.
CARBURETOR.

No. 329,664.

Patented Nov. 3, 1885.



WITNESSES

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CARBURETOR.

SPECIFICATION forming part of Letters Patent No. 329,664, dated November 3, 1885.

Application filed January 14, 1885. Serial No. 152,925. (No model.)

To all whom it may concern:

Be it known that I, LYMAN F. MCNETT, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Carburetors; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form part of this specification.

This invention relates to that class of apparatus known as "carburetors," by which atmospheric air under uniform pressure is forced into a vessel containing benzole, gasoline, naphtha, or other hydrocarbon fluid, and, becoming admixed with the vapor thereof, is conducted off through pipes for illuminating and other purposes.

The invention consists, substantially, in the construction and arrangement of parts and in the particular combinations to be hereinafter described, and pointed out in the claims.

In the construction of my apparatus I employ an oblong stationary cylinder, of iron or other suitable material, for containing the hydrocarbon fluid, and in which concentrically revolves a suitable frame having stretched thereon from end to end of the main cylinder a covering of wire gauze or netting, felt, flannel, or other porous absorbent material. The said inner revolving frame is fixed upon a central shaft, which has its bearing in the ends or heads of the main cylinder, and over which extends into the cylinder for a short distance a hollow sleeve, that communicates on the exterior with the air-supply pipe and terminates at its inner extremity with a hollow perforated bulb or sphere, through which the air escapes into the vessel for admixture with the fluid vapor, and is thence conducted off to the place of consumption or use.

Referring to the annexed drawing, the figure represents in perspective an apparatus constructed in accordance with my invention, the cylinder or carburetor being partly broken away to more clearly indicate the construction and arrangement of parts.

Reference being had to the several portions by letters marked thereon, A represents an oblong stationary cylinder, that is suitably supported or mounted upon a supporting stand or frame, B. Extending through the cylinder centrally from end to end is a shaft, C, which has its bearing in projecting offsets *a*, provided on the ends or heads *b* of said cylinder, and is provided at one of its outer ends with a sprocket-wheel or belt-pulley, *c*, by which connection is made by belt *d* with a similar wheel or pulley, *e*, on the shaft of the blower beneath, and by which connection motion from the blower-shaft is communicated to the shaft C, to cause the inner gauze frame to revolve. Secured to the shaft C within the cylinder A and at or near each end of the latter is a wheel, D, constructed of a series of radial arms or spokes, whose ends are surrounded by a band or hoop, as shown, the same constituting an inner revolving frame. Upon this frame is stretched from end to end of the main cylinder a covering of wire-gauze, felt, flannel, or other absorbent material, E, and located upon or surrounding the shaft C to a short distance from one end thereof is a hollow sleeve, *g*, terminating within with a hollow perforated sphere or bulb, *g'*, and which communicates without with the air-supply pipe.

F represents the air-supply pipe, which connects with the sleeve *g*, as explained, and which may be provided with a suitable cut-off valve, *f*. This air-supply pipe connects at its lower end with a hollow tube, *h*, which communicates with the interior of the blower and projects from one end or head thereof, as shown.

G represents an ordinary blower mounted on a suitable supporting-base, *i i'*, and having projecting from one end or head thereof a suitable bracket, H, to furnish additional bearing for the end of the blower-shaft. Said shaft at this end is provided with a drum, I, on which a cord or rope is wound, that runs up through a pulley-block, *k*, suitably suspended or supported, this cord and the weight *l* being the means by which the blower shaft is operated.

The cylinder A is kept supplied with fluid from a suitable tank, and is provided with an outlet, *m*, through which the carbureted air escapes to the pipes that conduct it to its place

of use or consumption. The said vessel is also provided with a cock or faucet, *n*, through which the contents may from time to time be emptied. The vessel is kept about half full of the fluid, and the inner frame revolving therein tends to spray the same, thereby enhancing vaporization.

In operating the apparatus the blower is first started, the shaft C being in turn operated to revolve. Air, being forced through the perforations in the bulb *g'*, is impinged against the saturated absorbent material carried by the inner frame, and, becoming admixed with the vaporizing fluid, escapes through the outlet *m*. The gauze frame by continued revolutions keeps the material thoroughly saturated with the fluid, and also keeps constantly exposing a new or freshly-supplied surface to the incoming air.

With the above description the novelty, simplicity, and usefulness of my apparatus will be readily apparent. The whole structure is placed in a suitable locality from where the carbureted air is to be consumed, and can easily be erected in the cellars of houses.

I am aware it has been proposed to provide the vaporizing-chamber of carburetors with a rotating wheel journaled upon a shaft perforated throughout its entire length, the rotating wheel having a lacing of cotton wicking, and that heated air is caused to pass through the perforated shaft and discharged into the vaporizing-chamber. I do not claim these means, as they are different from mine in operation and construction.

Having thus described my invention, what I claim is—

1. In a carburetor, the combination, with the blower having central revolving shaft, and provided at one end with the tube *h*, of the stationary cylinder A, bearing a central revolving shaft, and having outlet *m*, a frame secured to said shaft, covered with absorbent material, a hollow sleeve extending a short distance through one end of the cylinder surrounding the shaft, and terminating in a hollow perforated sphere, and the air-supply pipe connecting with said sleeve and the tube *h*, all substantially as described.

2. In a carburetor, the blower-cylinder, and the carbureting-cylinder with their valved connection at one end and hollow trunnions at the other, the shaft C, hollow at one end and adapted to carry the rotary skeleton cylinder, and the perforated sphere or globe *g'*, for the uniform distribution of air, whereby the air becomes thoroughly saturated with hydrocarbon, substantially as described.

3. The combination, in a carburetor, of the cylinder A, provided with hollow trunnions in its heads, and the shaft C, having the sleeve and perforated sphere, with the inner revolving skeleton cylinder covered with wire-netting and flannel or other porous material, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

LYMAN F. McNETT.

Witnesses:

JOHN L. M. BREWSTER,
LOUIS S. PHILLIPS.