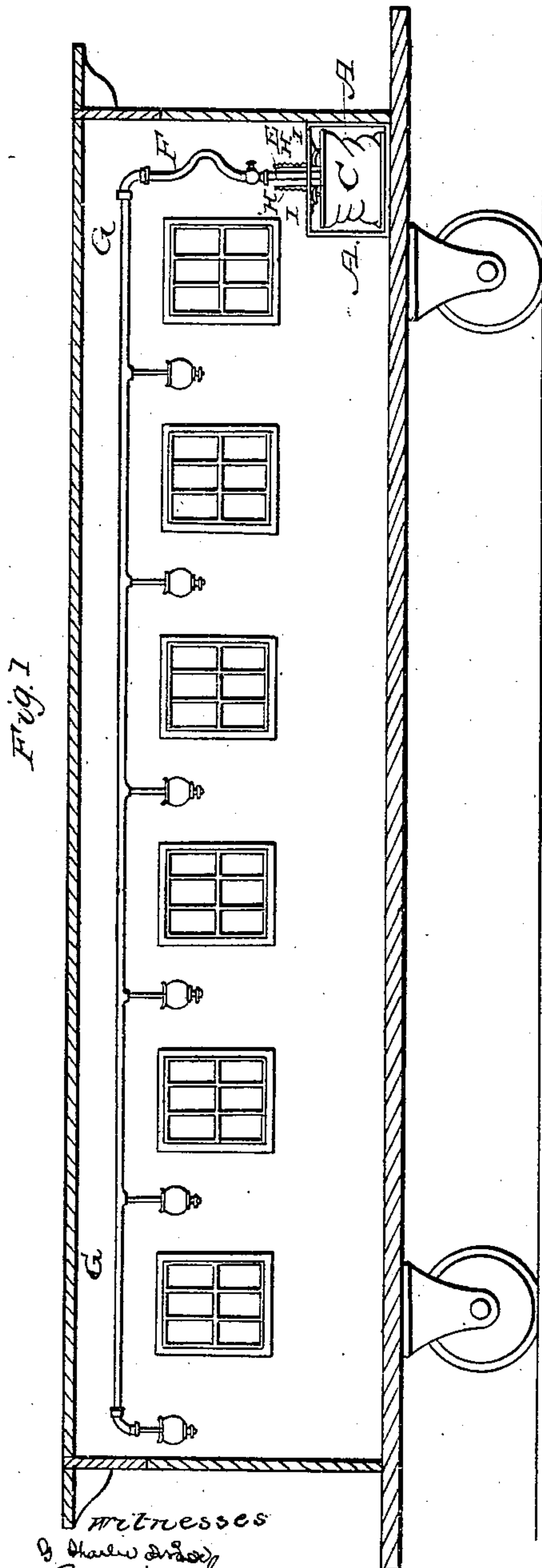


# MILLER & ALBRIGHT.

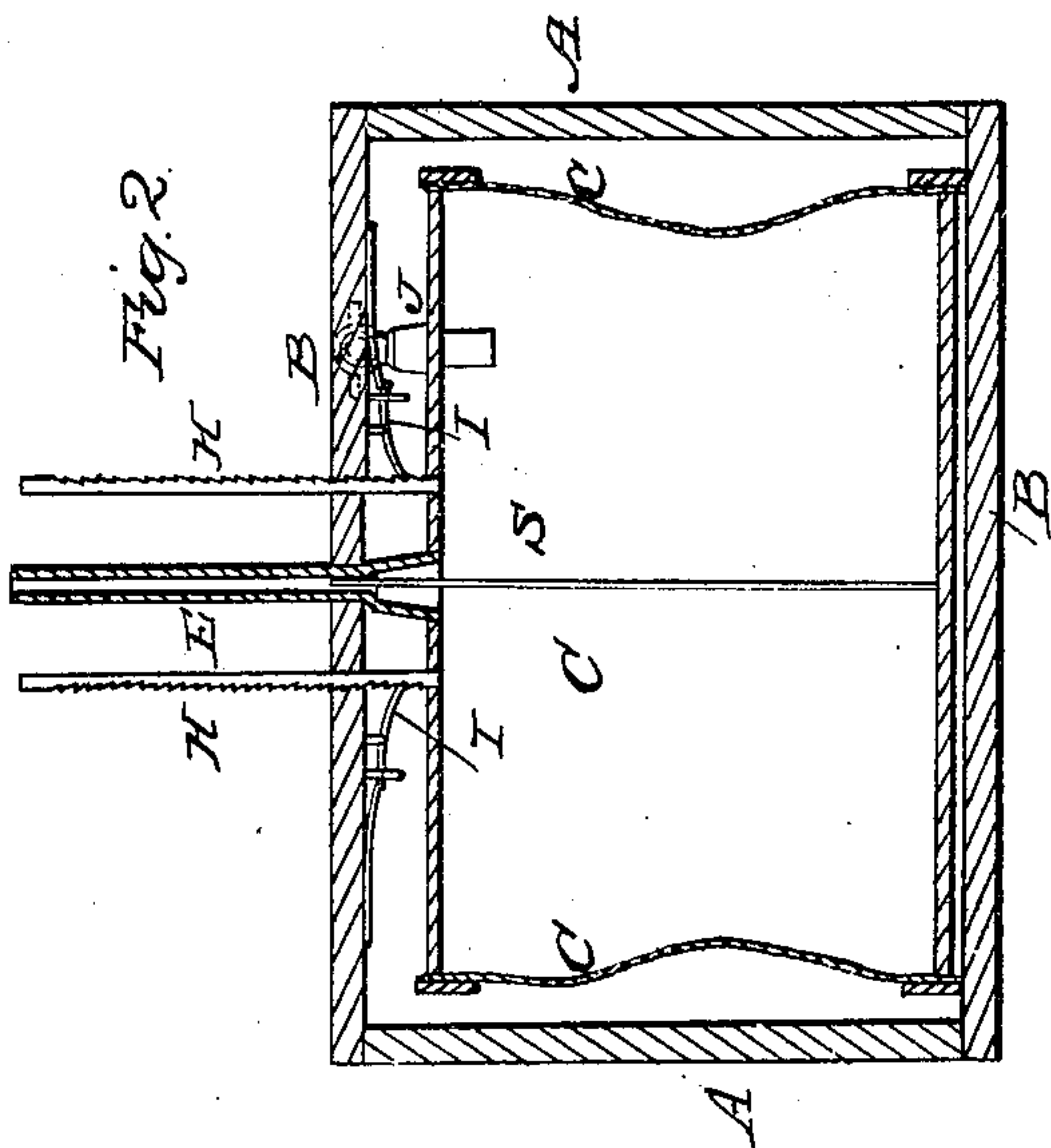
## Gas Holder.

No. 26,042.

Patented Nov. 8, 1859.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JNO. H. MILLER AND SAML. ALBRIGHT, OF GRAFTON, VIRGINIA.

## PORTABLE GAS APPARATUS.

Specification of Letters Patent No. 26,042, dated November 8, 1859.

*To all whom it may concern:*

Be it known that we, JOHN H. MILLER and SAMUEL ALBRIGHT, of Grafton, in the county of Taylor and State of Virginia, have invented a new and Improved Method of Lighting Railroad-Cars, &c., by Gas; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1, represents a longitudinal section of a rail-road car with the gasometer applied to it, and Fig. 2, a vertical section of the gasometer.

Similar letters of reference, in each of the several figures indicate corresponding parts.

The nature of our invention consists in a portable gasometer C, furnished with a central gas discharge pipe, a central guide rod, a flexible connecting pipe and one or more ratchet bars, and arranged in a frame which is provided with one or more spring pawls; for use in a rail-road car or other traveling apparatus which is subject to a jolting or vibrating motion, for the purpose of supplying gas to a series of gas burners, in the manner hereinafter described. This arrangement admits of the gasometer being taken from the car to the works where the gas is made to be charged, and then again placed in the car, in its appropriate place, and by the flexible connection or tube which allows for the descent of its top as the gas is consumed, made to communicate with and supply gas uniformly to a pipe having ordinary gas burners suspended from it, and thus light the car or other traveling apparatus, while in motion, with the same perfection as a house is lighted by means of gas supplied through pipes communicating with the ordinary gas mains of the streets of a city.

To enable others, skilled in the art, to make and use our invention, we will proceed to describe its construction and operation.

A, A, are two standards connected together at the top and bottom by two cross-pieces B, B; within the space thus inclosed is placed the gasometer C, the top and bottom of which are made of wood and the upright walls or sides of india-rubber cloth, securely fastened to the top and bottom in a manner to prevent any leakage of the gas.

The form of this gasometer may be either square or round as best suits the space in which it is to be placed.

In the center of the top is placed an upright metal tube E, communicating with the gas inside the gasometer and passing up through the cross piece A. To the top of this metal tube is attached a flexible tube F, with a valve near the lower end by which the gas can be shut on or off, as may be required. The other end of this tube is attached to the gas pipe G, which is stationary in the car and from which the burners are supplied. When the gasometer is full, this flexible tube will be bent aside from a direct line between the two ends in consequence of being made of sufficient length to nearly or quite reach the bottom of the gasometer when the gasometer is empty, and thus still keep up the connection between the gasometer and the burners. On each side of this central upright tube are placed two upright ratchet bars H, H, which are attached by their lower ends to the top of the gasometer and pass up loosely through holes in the top cross piece A. To the underside of this cross-piece and near to each ratchet are fastened small spring pawls I, I, one end of each of said spring pawls catching in the teeth of the ratchets and thus holding the top of the gasometer firmly as it settles down—by reason of consumption of the gas, and preventing it from vibrating, as the car rocks, and thus securing a uniform pressure at all times. Should the top of the gasometer not afford sufficient pressure to force out the gas, additional weight should be placed on it.

In the top of the gasometer, we place a supply cock J, with the usual gas valve, by which the gasometer can be charged.

A central steady or guide rod S, is placed within the gasometer so as to extend up some distance into the discharge pipe. This rod should be smaller in diameter than the discharge pipe so as not to interfere with the escape of the gas. When this rod is used, one pawl and ratchet bar will answer as well as two.

What we claim as our invention and desire to secure by Letters Patent, is—

A portable gasometer C, furnished with a central gas discharge pipe E, a central guide rod S, a flexible connecting pipe F,

and one or more ratchet bars H, H, and arranged in a frame A, A, B, B, which is provided with one or more spring pawls I, I, for use in a rail road car or other traveling  
5 apparatus which is subject to a jolting or vibrating motion, for the purpose of supplying gas to a series of gas-burners, substantially as and for the purposes set forth.

The above specification of our impt. in gas holders and burners, signed by us.

JOHN H. MILLER.  
SAMUEL ALBRIGHT.

Witnesses:

G. Y. AT LEE,  
THOS. SMOUSE.