

S. R. SCHARF.

Machines for Cleaning Privy-Vaults.

No. 158,743.

Patented Jan. 12, 1875.

Fig. 1.

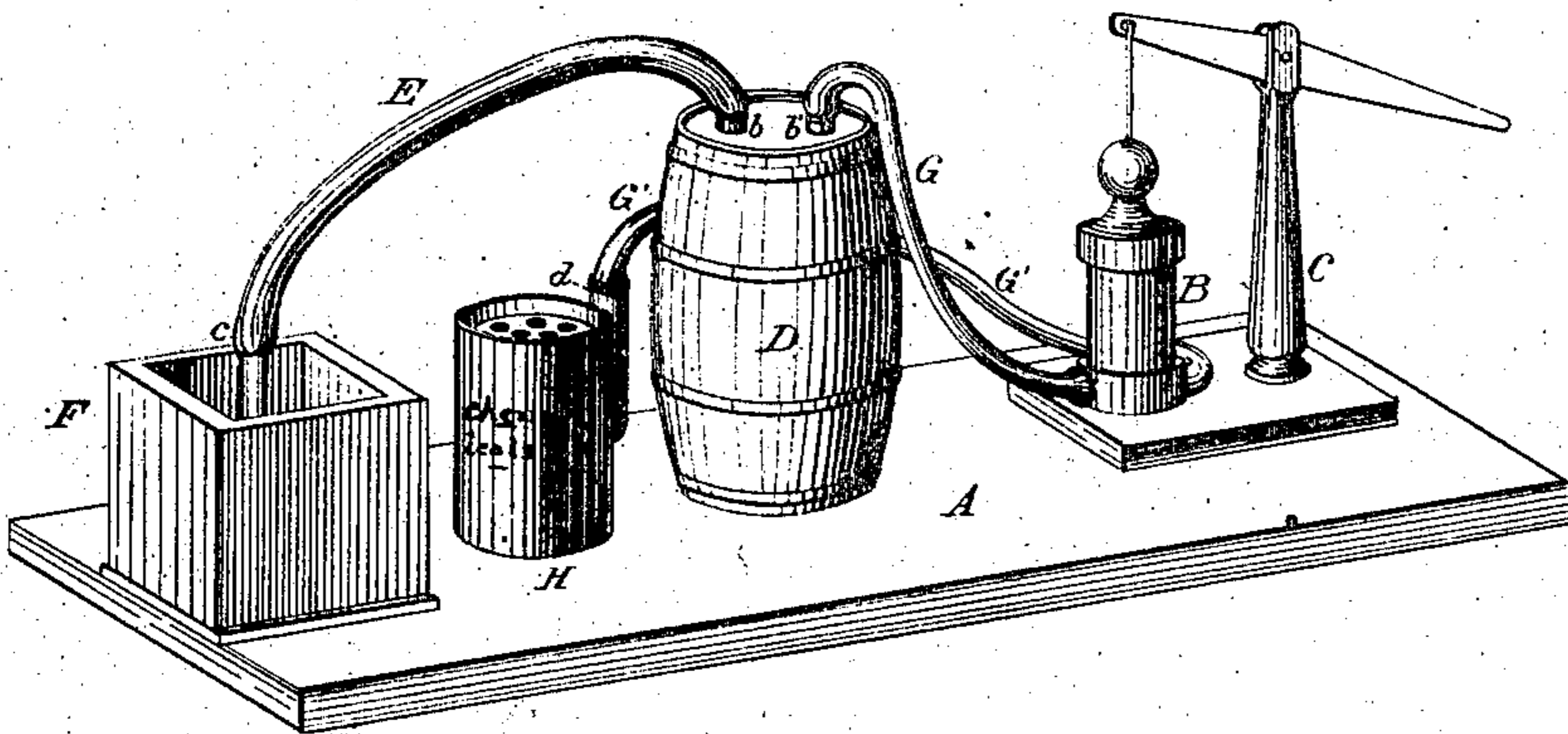
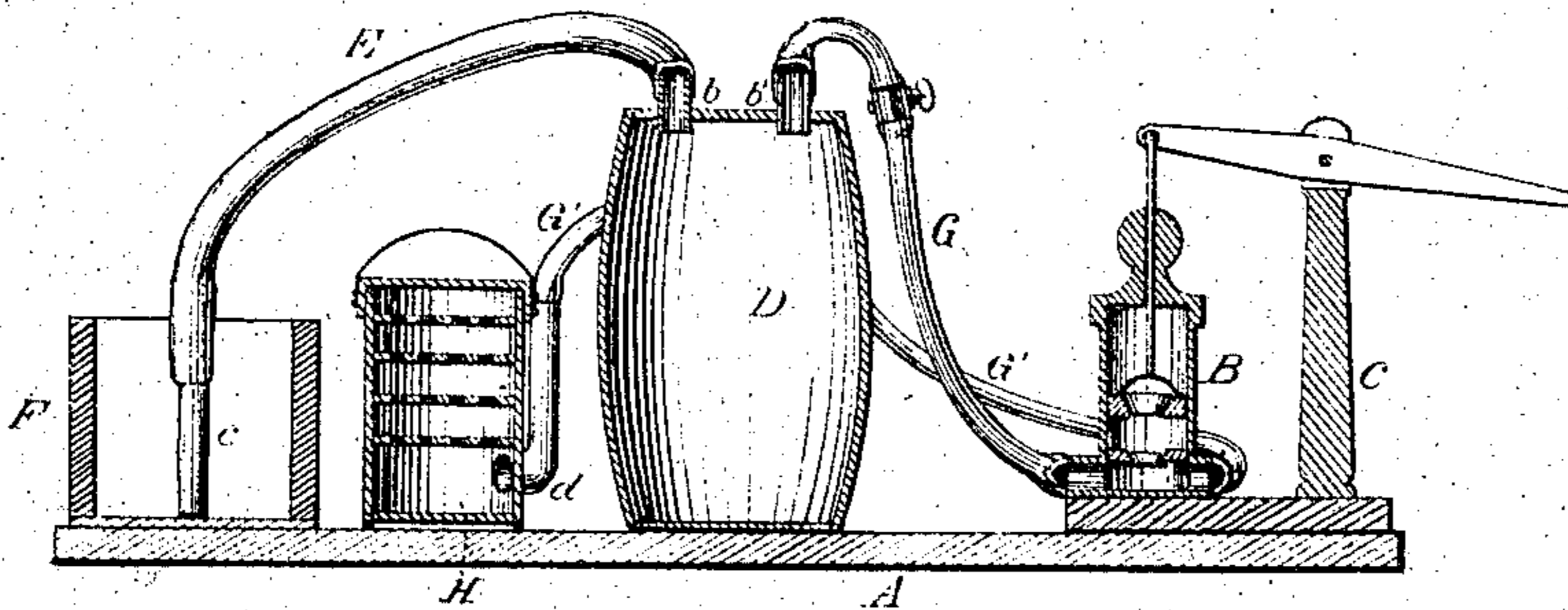


Fig. 2.



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UNITED STATES PATENT OFFICE.

SAMUEL R. SCHARF, OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN MACHINES FOR CLEANING PRIVY-VAULTS.

Specification forming part of Letters Patent No. 158,743, dated January 12, 1875; application filed November 28, 1874.

To all whom it may concern:

Be it known that I, SAMUEL R. SCHARF, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Machine for Cleaning Privy-Vaults and like places; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of my invention is an improvement in machines for cleaning privy-vaults and like places in a more convenient, expeditious, and neat manner, avoiding the noisome stench consequent upon such cleaning; and my invention herein consists principally in the combination of the receiving tank or vessel with an air-pump and the connections in a particular manner; in the means used for deodorizing; and in the combination and arrangement of the deodorizer in connection with the other principal operative parts, all as more fully hereinafter described.

In the drawings, Figure 1 is an elevation of my apparatus; and Fig. 2 a vertical longitudinal section of the same.

Like letters denote similar parts in each figure.

My apparatus is most conveniently used upon a wagon drawn by one or more horses, the letter A denoting such wagon-body. Upon the front end of this body is placed an air-pump, B, the handle of which is properly pivoted in a standard, C. Upon the body A may be placed a sufficient number of proper tanks, vessels, or receptacles, a convenient form of one of which is a strong barrel, D. Through the head of this barrel are inserted two metallic pipes, *b* and *b'*, projecting a short distance above and below said heads, with the upper ends threaded. A flexible pipe, E, provided with a suitable metallic mouth-piece, *c*, and attached by a convenient swivel-coupling to the pipe *b*, is of sufficient length to reach into the vault or receptacle F intended to be emptied. Another flexible pipe, G, attached in the same manner to the pipe *b'*, extends into the air-pump. A third flexible pipe, G', extends from the air-pump to a metallic tube, *d*, extending from the bottom on one side of the deodorizer H. This

flexible pipe should be of sufficient length to be placed in the room where the vault to be cleaned is placed.

The deodorizer is a metallic vessel, conveniently cylindrical, divided by several perforated diaphragms, *e*, and should have a cover to close it tightly, and a bail by which it may be carried. In this deodorizer, before it is put in use, there is placed chloride of lime, or manganese, or other suitable disinfectant, or chlorine, generated in the various ways upon one or more of the diaphragms.

In order to ascertain when the tank or receptacle D is sufficiently filled, there may be placed in its head an ordinary float, with its stem projecting through the head, or the ordinary mode of striking upon the tank from time to time may be used, in which mode the progress of the filling may be determined from the sound.

In the use of my apparatus, the pipe E, with its metallic end, being inserted in the vault to be cleaned, the pump is started, and thereby a vacuum created in the tank D, the effect of which is to draw up the contents of the vault into said tank.

The air drawn into the pump, which is very offensive in odor, passes from the tank D into the pump, through the tube G into the pump, and is expelled from the pump through the tube G' into the deodorizer H, where the air, passing through the disinfectants, becomes deodorized.

By placing the deodorizer in the room where the vault is, all unpleasant smell arising from said vault is prevented by the proximity of the deodorizer, and the process of cleaning the vault becomes inoffensive.

Of course, as soon as one tank, D, is filled, another similar one is substituted in its place, and when all are filled they may be emptied in any convenient way.

Having thus described my apparatus, what I claim as new therein and my invention is—

1. In a vault-cleaning apparatus, the combination of the vessel D, flexible pipes from the vault to the upper part of the tank, and from the upper part of the tank to the air-pump, and an air-pump, whereby vessel and pump are independently movable about the vault.

2. The tank D, the air-pump, and the de-

odorizer H, the several parts being connected by the flexible pipes F, G, and G', whereby the noisome air is drawn from the tank, passed through the air-pump, and deodorized, substantially as described and shown.

3. The process described, wherein the noisome air drawn from a vault, in the act of cleaning it, is taken into a tank, thence into an air-pump, and discharged through a de-

odorizer containining chlorine or chlorides, substantially as described.

This specification signed and witnessed this 23d day of November, 1874.

SAML. R. SCHARF.

Witnesses:

G. L. DYER,
R. N. DYER.