

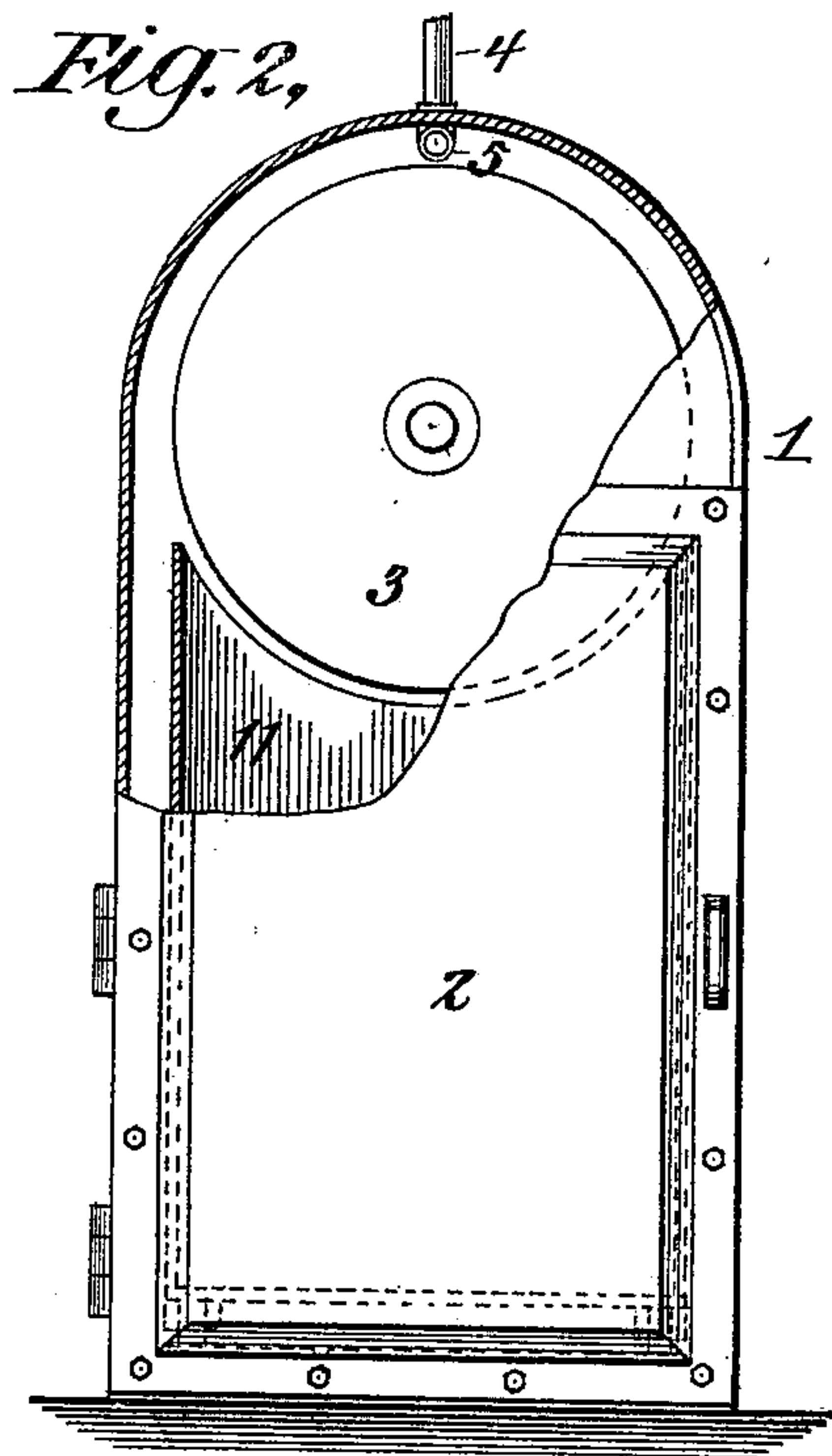
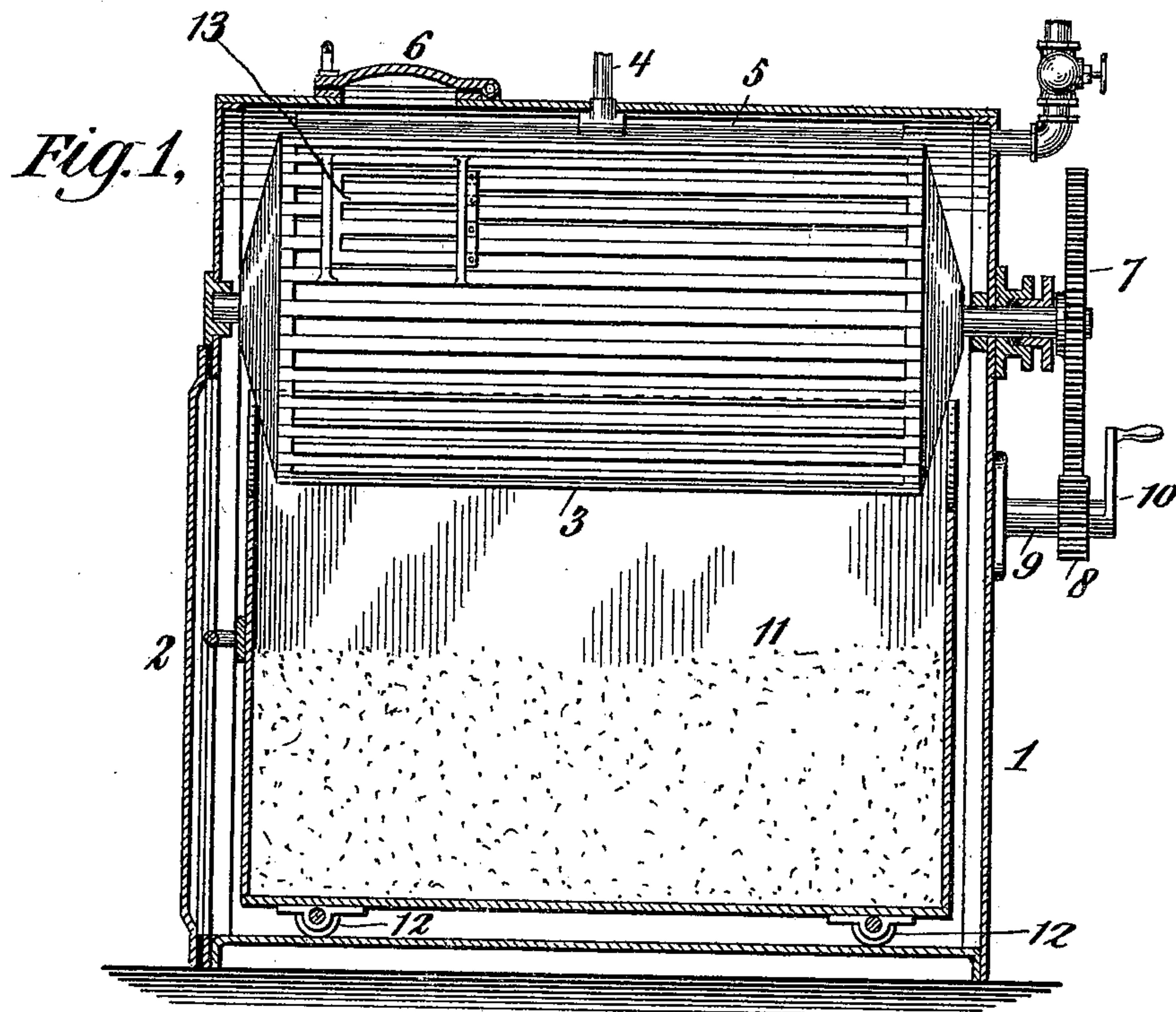
No. 623,994.

Patented May 2, 1899.

E. N. DICKERSON.
ACETYLENE GAS GENERATING APPARATUS.

(Application filed June 17, 1897.)

(No Model.)



WITNESSES:

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ACETYLENE-GAS-GENERATING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 623,994, dated May 2, 1899.

Application filed June 17, 1897. Serial No. 641,095. (No model.)

To all whom it may concern:

Be it known that I, EDWARD N. DICKERSON, of the city, county, and State of New York, have invented a certain new and useful Improvement in Acetylene-Gas-Generating Apparatus, of which the following is a specification.

The present invention relates to improvements in acetylene-gas-generating apparatus, and has for its object to provide a generating apparatus comprising a closed vessel in which is rotatably mounted a receptacle for carbid and a box-like receptacle located beneath the carbid-receptacle for the purpose of receiving the refuse matter incident to the decomposition of the carbid in the generation of the acetylene gas.

In the drawings I have illustrated a construction embodying my invention, in which—
Figure 1 is a central longitudinal section, certain parts being shown in full; and Fig. 2 is a view partly in vertical section and partly in end elevation.

Like letters of reference refer to like parts in both views of the drawings.

Referring to the drawings in detail, 1 represents a closed vessel, which is provided at one end with a suitable door 2. In the upper portion of the vessel is journaled a rotatable cage 3, adapted to contain carbid. Fluid is admitted to the carbid through a supply-pipe 4, communicating with the transverse spray-pipe 5. Carbid is supplied to the rotatable cage 3 through a door 6. A suitable opening 13 is provided in the receiver 3, which can be opened and closed at will, by means of which carbid is supplied to it. On the journal of the cage, upon the exterior of the vessel, is keyed a gear-wheel 7, meshing with which is a gear-wheel 8, mounted on shaft 9, said gear-wheel being provided with a hand-lever 10, whereby the cage is rotated.

In the lower portion of the vessel and located underneath the carbid-cage is a box-like receptacle 11, provided with rollers 12. This box-like receptacle is for the purpose of receiving the refuse lime incident to the decomposition of the calcium carbid and is adapted to be drawn out of the vessel 1 when filled with refuse to discharge the contents and be returned in position to receive further

refuse. The receptacle 11 is shaped approximately so as to fit the cage 3, whereby the material which falls from the cage is received in the removable box.

To charge the apparatus, the door 6 is opened, the opening 13 in the cage is brought opposite the door 6, and the carbid inserted into the cage 3. The receptacle 11 is now drawn out through the door 2 to empty the refuse lime contained therein when necessary, and on being replaced the doors 2 and 6 of the casing are tightly closed. The apparatus is now ready to generate gas. This may be accomplished by supplying water through the pipe 4 to the transverse pipe 5, from which it drops upon the carbid, and the gas produced is drawn off by a suitable pipe. The cage may be rotated through the gear 7 by hand or any ordinary means to keep a fresh surface of the carbid exposed to the water and to cause the emptying of the refuse lime into the receptacle below, the form of which prevents the refuse from falling outside of the receptacle.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of a closed vessel, a cylindrical receptacle for carbid mounted therein, and a removable box-like receptacle located inside the vessel for receiving the refuse, the said box being shaped at its upper portion to conform to the cylindrical cage or receptacle, and an opening in the exterior casing greater in size than the removable receptacle substantially as described.

2. The combination of a closed vessel, a cylindrical receptacle for carbid mounted therein, and a removable box-like receptacle provided with rollers located inside the vessel for receiving the refuse, said box being shaped at its upper portion to conform to the cylindrical cage or receptacle, and an opening in the exterior casing greater in size than the removable receptacle substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

E. N. DICKERSON.

Witnesses:

W. LAIRD GOLDSBOROUGH,
H. COUTANT.