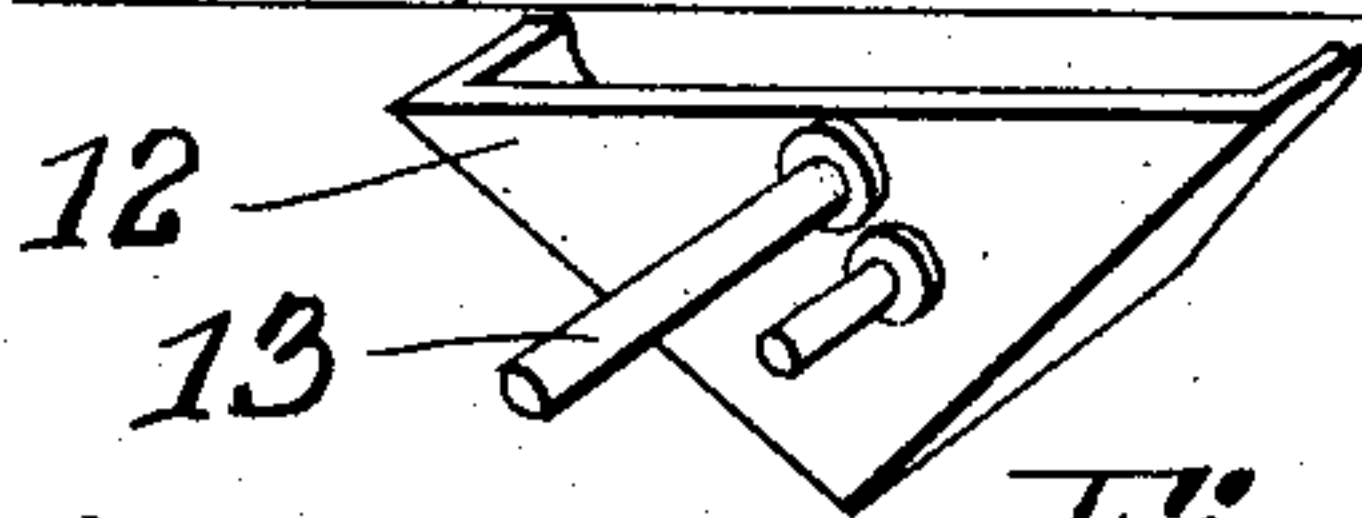
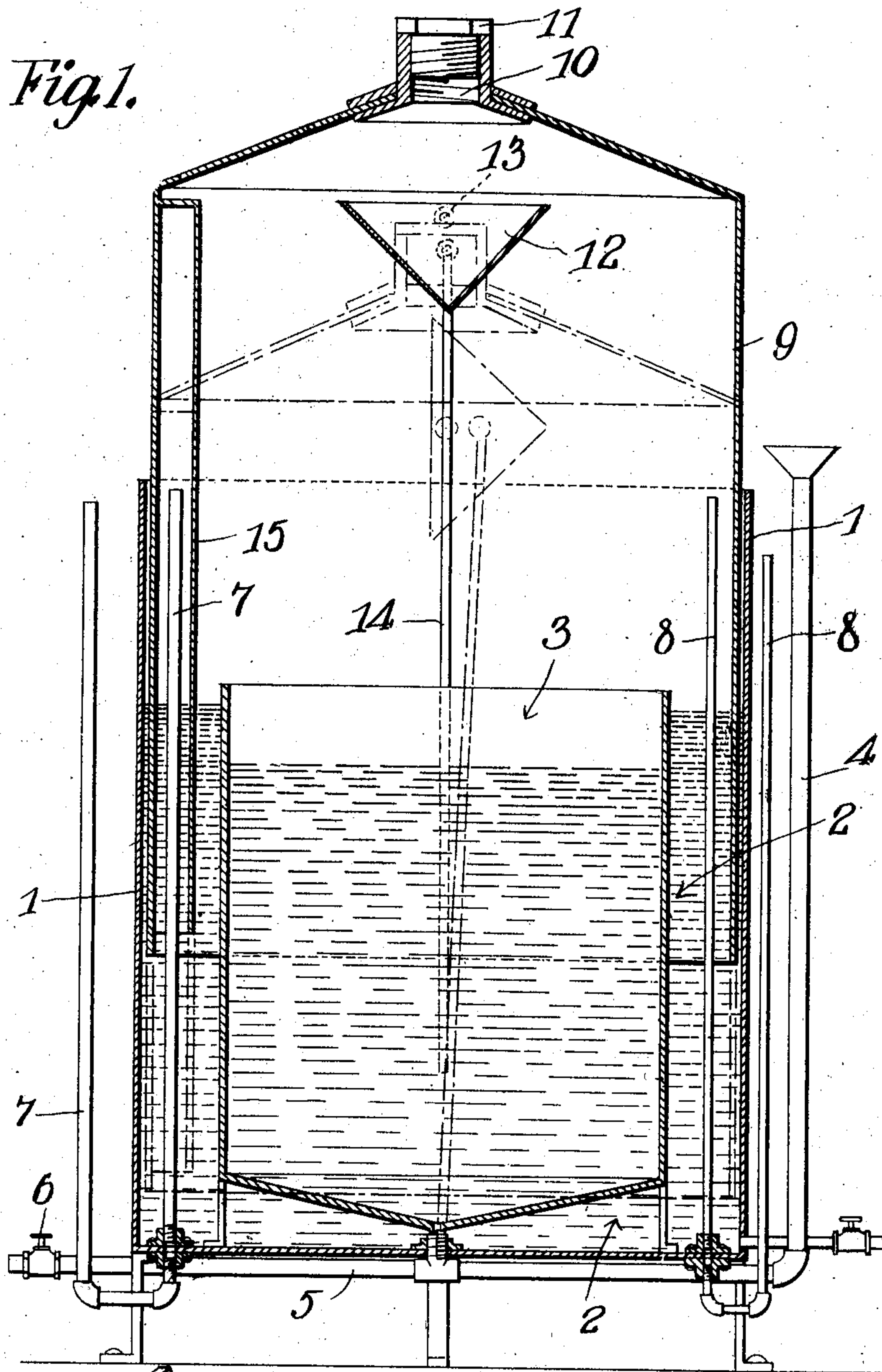


No. 835,033.

PATENTED NOV. 6, 1906.

J. F. PHILLIPPI.  
ACETYLENE GAS GENERATOR.  
APPLICATION FILED JULY 9, 1906.



WITNESSES:  
*E. J. Hunt*  
*Hubert D. Lawson*

*Joseph F. Phillippi*  
INVENTOR,  
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ATTORNEYS



# UNITED STATES PATENT OFFICE.

JOSEPH FRED PHILLIPPI, OF WEST VALLEY, NEW YORK.

## ACETYLENE-GAS GENERATOR.

No. 835,033.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed July 9, 1906. Serial No. 325,358.

*To all whom it may concern:*

Be it known that I, JOSEPH FRED PHILLIPPI, a citizen of the United States, residing at West Valley, in the county of Cattaraugus and State of New York, have invented a new and useful Acetylene-Gas Generator, of which the following is a specification.

This invention relates to acetylene-gas generators, and more particularly to means for feeding carbide to the channeled tank when the bell of the generator has moved downward to a predetermined point.

The object of the invention is to provide simple mechanism whereby the carbide will be positively discharged from its holder when the supply of gas within the bell is reduced to a predetermined quantity.

With the above and other objects in view the invention consists of a tank having a bell movably mounted thereabove in any usual or preferred manner, and this bell carries a carbide-holder which is pivotally mounted and has a depending actuating-rod connected thereto adjacent its pivot and hanging into the tank. The parts are so assembled that when the bell moves downward the rod will be forced against the bottom of the tank and will tilt the holder so that a portion of its contents will be discharged into the tank.

The invention also consists of certain other novel features of construction and combinations of parts, which will be hereinafter more fully described, and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings, Figure 1 is a section showing in dotted lines the positions of the parts when the bell is lowered, and Fig. 2 is a detail view of a portion of the holder.

Referring to the figures by characters of reference, 1 is a receptacle having the usual water seal 2, formed around an interior tank 3 for receiving carbide deposited within the tank. A feed-pipe 4 extends from the upper portion of the tank down into the bottom thereof, and a drain 5 extends from the bottom of the tank and has a suitable valve or closure 6. A blow-off pipe 7 extends from a point adjacent the top of the tank, and an outlet-pipe 8 for the gas also extends from the upper portion of the tank.

A bell 9 of any preferred construction is mounted above the tank and within the water seal and has an opening 10 in the top thereof, which is normally closed by a cap 11. This opening is disposed directly above the

center of a preferably inverted conical carbide-holder 12, supported by trunnions 13, which are journaled within opposite portions of the bell. The holder is balanced on these trunnions and has a rod 14 pivoted to it slightly below and to one side of it, said rod being of sufficient length to contact with the bottom of the tank when the bell moves downward to a predetermined position. A tube 15 is secured longitudinally within the bell and is arranged telescopically upon the blow-off pipe 7, so that when the end of the guard-tube is within the receptacle and is submerged the gas within the bell cannot escape through the blow-off pipe. When, however, this guard is raised to a predetermined point, the guard-tube is raised above the level of the water and the gas is therefore free to flow upward through the guard-tube and thence outward through the blow-off pipe 7.

In using this apparatus the carbide is placed within the holder by first removing the cap 11 and then dropping the carbide through the opening 10 and into the holder. The cap is then replaced and the receptacle and tank are filled with water through the pipe 4. By depositing a portion of the carbide within the tank gas will be generated and will obviously move the bell upward. As the holder is balanced upon its trunnions, the carbide will of course be retained therein. The gas will be drawn from the bell through the pipe 8, and should the gas be generated too rapidly the bell will rise a sufficient distance to bring the guard-tube 15 above the level of the water and allow the gas to blow off through the pipe 7. As the supply of gas diminishes the bell will of course move downward, and when it reaches a predetermined point the rod 14 will move into contact with the bottom of the tank 1, and the holder will therefore be tilted and a portion of its contents discharged into the water. The gas thus generated will promptly raise the bell, and the holder will return by gravity to its initial position.

It will be seen that the apparatus is very simple in construction and that there are no parts which can get out of order.

The preferred form of the invention has been set forth in the foregoing description; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing the advantages therein, and I therefore reserve the right to make such changes as fairly fall within the scope of the claims.



What is claimed is—

1. In a generator of the character described the combination with a tank and a bell having a normally closed opening therein; of an inverted conical holder within the bell and below the opening, trunnions extending from the holder and journaled in the bell, and a holder-tilting rod pivoted to the holder adjacent one of the trunnions and adapted to contact with the bottom of the tank when the bell descends to a predetermined level.

2. The combination with a tank having a carbid-receiving device therein, an outlet-pipe and a blow-off pipe; of a bell, a guard-tube therein mounted telescopically upon

the blow-off pipe, an inverted conical holder within the bell, trunnions extending therefrom and journaled within the bell, said holder being normally balanced upon the trunnions, and a holder-tilting rod pivotally connected to the holder adjacent one of the trunnions and adapted to contact with the bottom of the tank when the bell descends to a predetermined level.

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

JOSEPH FRED PHILLIPPI.

Witnesses:

ROSE PHILLIPPI,  
CLARENCE L. JOHNSON.