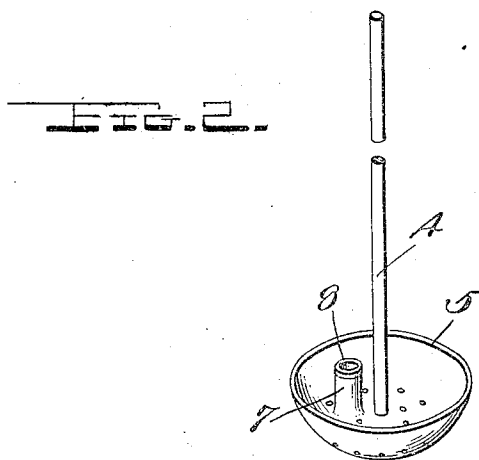
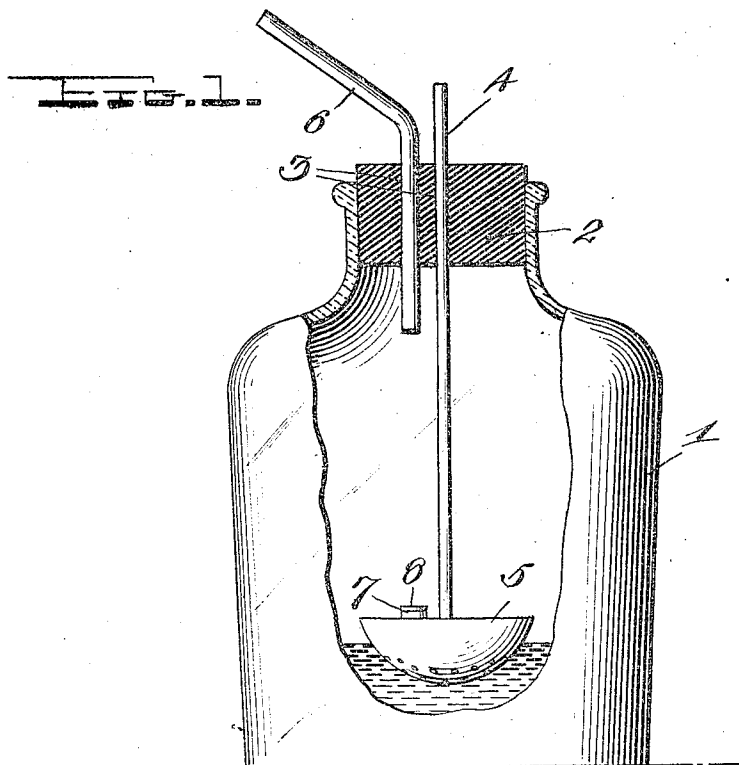


R. BELLAMY.
GAS GENERATOR.
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1,017,495.

Patented Feb. 13, 1912.



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RAYMOND BELLAMY, OF MOORES HILL, INDIANA.

GAS-GENERATOR.

1,017,495.

Specification of Letters Patent.

Patented Feb. 13, 1912.

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To all whom it may concern:

Be it known that I, RAYMOND BELLAMY, a citizen of the United States, residing at Moore's Hill, in the county of Dearborn and State of Indiana, have invented certain new and useful Improvements in Gas-Generators, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to new and useful improvements in gas generators and more particularly to a generator wherein the action of two chemicals combined generates the desired gas, and my object is to provide a device of this character which is of simple, durable and inexpensive construction for particularly laboratory use.

A further object of the invention resides in providing a receptacle for containing any desired liquid and a movable device in connection with the receptacle for containing a solid, whereby when the solid is moved into the liquid, a chemical action will occur to generate the desired gases.

A still further object of the invention resides in providing an outlet for the gas from the receptacle, and a further object resides in providing means to prevent the outlet of the poisonous or obnoxious gases that may be generated.

With these and other objects in view, my invention consists in the novel features of construction, combination and arrangement of parts as will be hereinafter referred to and more particularly pointed out in the specification and claims.

In the accompanying drawing forming a part of this application, Figure 1 is a side elevation partly in section of the device set up for operation, and, Fig. 2 is a detail perspective view of the movable device for containing the solid substance used in the generation of the gas.

In carrying out my invention, I shall refer to the drawing in which similar reference characters designate corresponding parts throughout the several views and in which—

1 indicates a receptacle such as a bottle or the like, preferably formed of glass, and of any desired size and shape, said bottle-like receptacle having snugly fitting within the neck thereof, a rubber stopper or closure 2. This bottle receptacle is adapted to contain an acid or other liquid, such as would

have a chemical effect upon certain matter, and said stopper or closure 2 is provided with a pair of openings 3 extending vertically therethrough, one of said openings having extending therethrough, a rod 4, the lower end of which is secured in any desired manner to a foraminous bowl or cup-shaped member 5.

When the stopper 2 has been properly positioned in the neck of the bottle 1, the walls of the opening through which the rod 4 extends, will grip tightly around said rod and retain the same in any adjusted position, but it will be appreciated that said rod may be raised or lowered to correspondingly raise or lower the bowl 5 with respect to the liquid in the bottle 1. This bowl-shaped member 5 is adapted to contain a solid of any desired character which, when commingled with the liquid in the bottle, will generate the gas, and in order to provide for the escape of the gas from the bottle or receptacle 1, after the same has been generated, a tube 6, preferably of glass, is mounted in the other of the openings 3. The lower end of the tube 6 extends a short distance below the stopper 2, and it will be appreciated that when the rod is lowered so as to allow the contents of the bowl-shaped member 5 to be commingled with the liquid in the bottle, the gas will be generated and allowed to flow through said tube 6, and it will also be understood that when it is desired to stop the generation of gas, the rod 4 may be raised to raise the member 5 above the liquid. In order to entirely stop the flow of the gases from the receptacle, which are often poisonous and obnoxious, the bowl-shaped member 5 is provided with a sleeve member 7 formed therein which is adapted to receive the lower end of the tube 6, as the rod 4 is raised to discontinue the generation of gas. This sleeve member 7 may be provided with a rubber lining or bushing 8, if desired, so as to fit snugly about the lower end of said tube to prevent any possible escape of gas, and from this construction, it will be seen that both the generation and the flow of gas may be entirely cut off through the one vertical movement of the rod 4.

From the foregoing, it will be seen that I have provided an improved gas generating device which is particularly adapted for use in laboratories wherein a solid is adapted to be lowered into a liquid, the chemical ac-

tion of which results in the generation of a gas.

It will further be seen that by providing a foraminous bowl-shaped member, a solid 5 may be readily carried therein, and when raised above the liquid, will allow any of the matter which is being dissolved, to drop therefrom into the liquid and at the same time, allow the remaining portion of the solid to be saved for use at a further time. 10 Furthermore, it will be seen that by providing a rubber stopper or closure, as described, and movably mounting the rod which carries the bowl-shaped member thereon, said rod 15 may be adjusted and retained in any desired position.

It will still further be seen that by providing a means on the bowl-shaped member for the closing of the lower end of the outlet 20 tube, both the generation and the flow of gas may be cut off with one movement of the rod.

It will still further be seen that the device is extremely simple and durable in construction, whereby the same may be readily and 25 cheaply manufactured, and one which is very effective in operation.

What I claim is:—

1. A device of the class described, comprising a receptacle, a removable closure 30 therefor, said closure being provided with a restricted outlet, a foraminous bowl-shaped member disposed within said receptacle, means to raise and lower the same, and means on said bowl-shaped member for closing 35 the restricted outlet when the same is raised.

2. A device of the class described, comprising a receptacle, a closure therefor, a tube mounted in said closure having the 40 lower end thereof disposed a short distance within said receptacle, a rod slidably mounted in said closure, a bowl-shaped member mounted on the lower end of said rod, and a sleeve member mounted within said bowl- 45 shaped member and adapted to receive the lower end of said tube to close the same when said rod is raised.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

RAYMOND BELLAMY.

Witnesses:

JOHN F. SPENCER,
GEORGE F. HYATT.