No. 672,227. Patented Apr. 16, 1901.

A. C. EINSTEIN.

ACETYLENE GAS GENERATOR.

(Application filed July 23, 1900.)

(No Model.)

Fig. I.

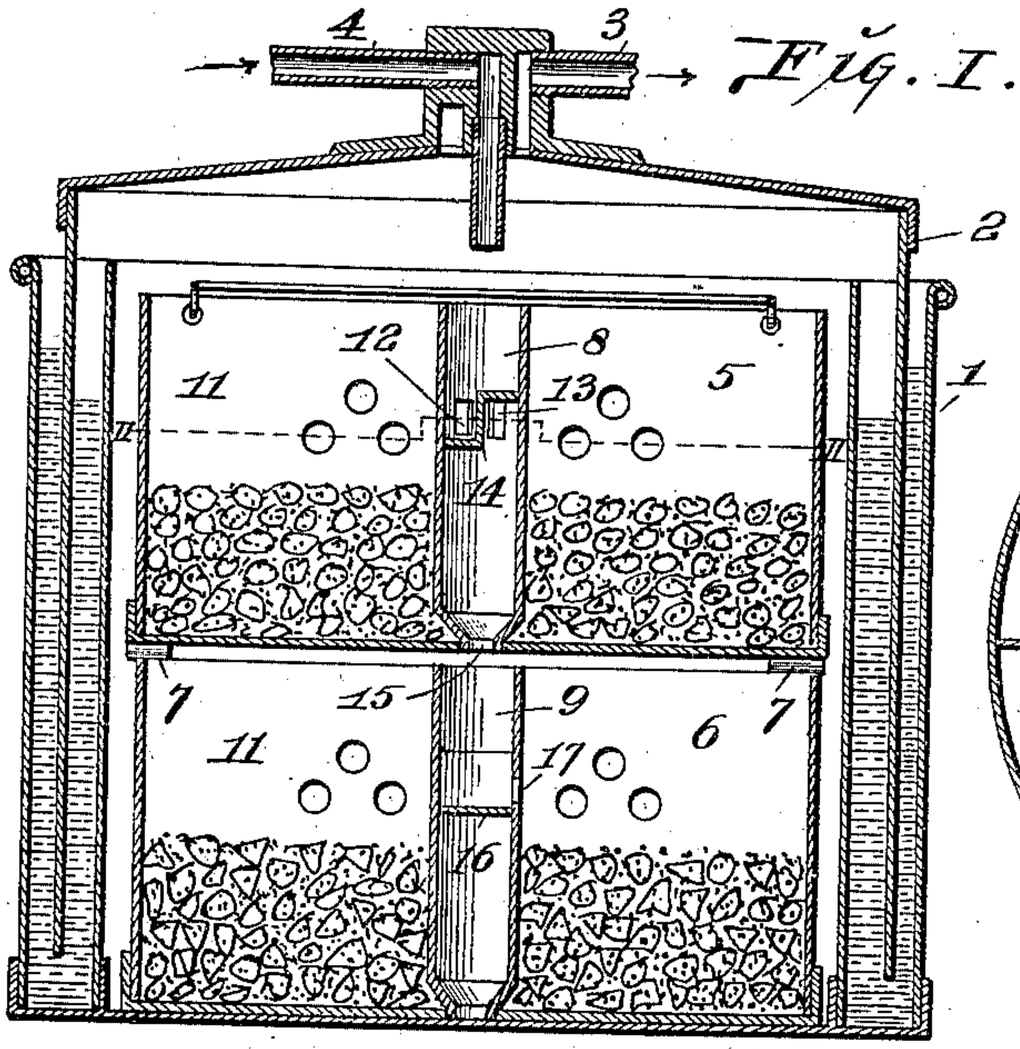


Fig. II

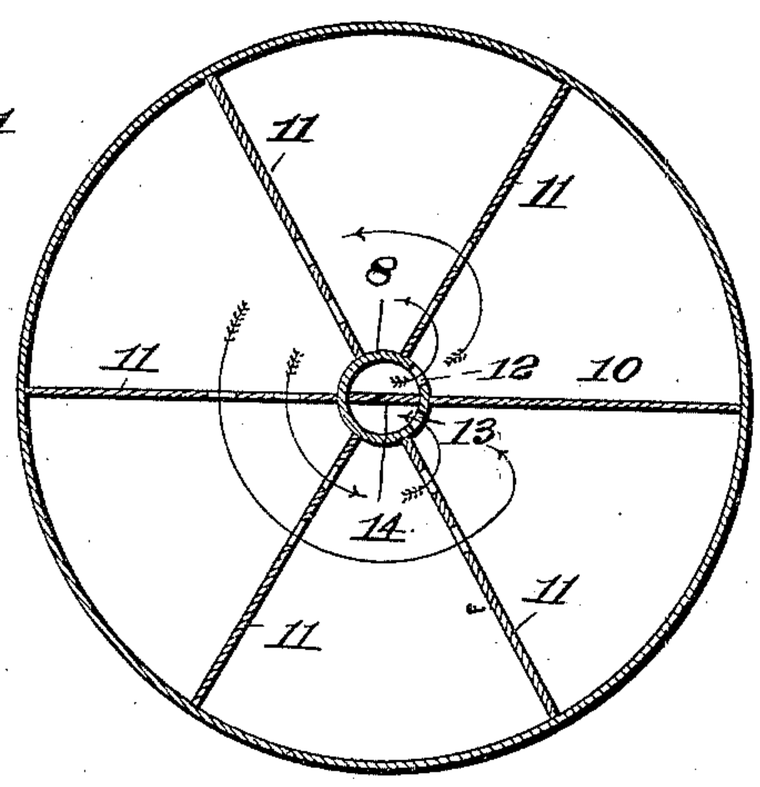


Fig. III.

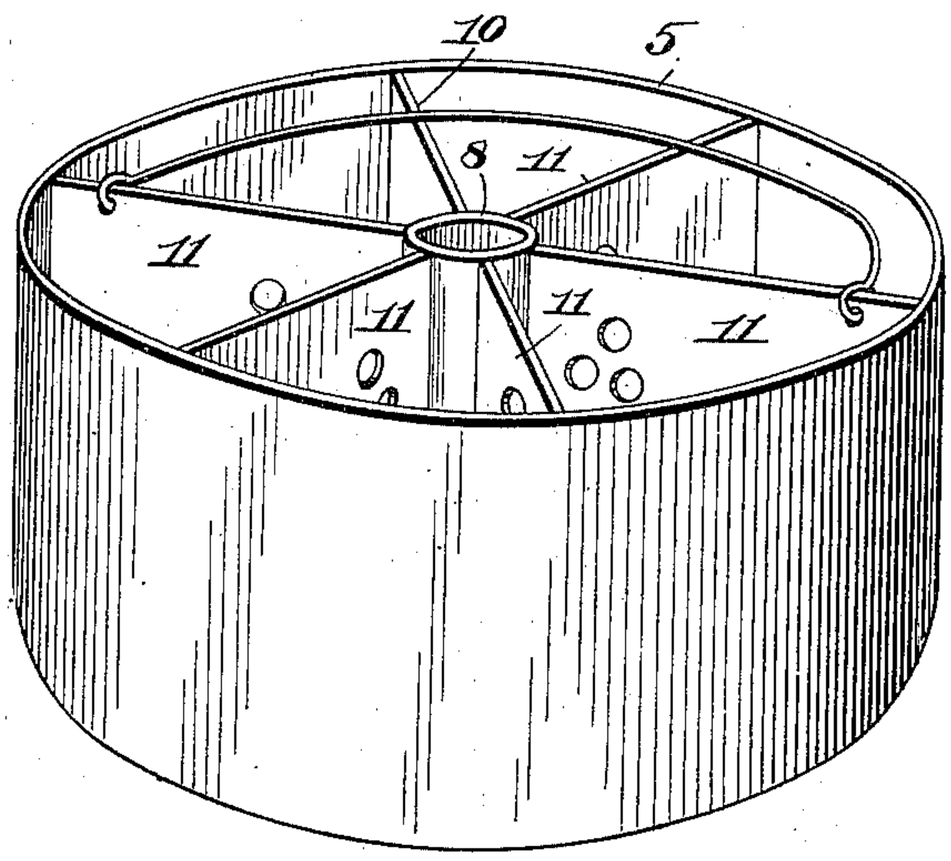
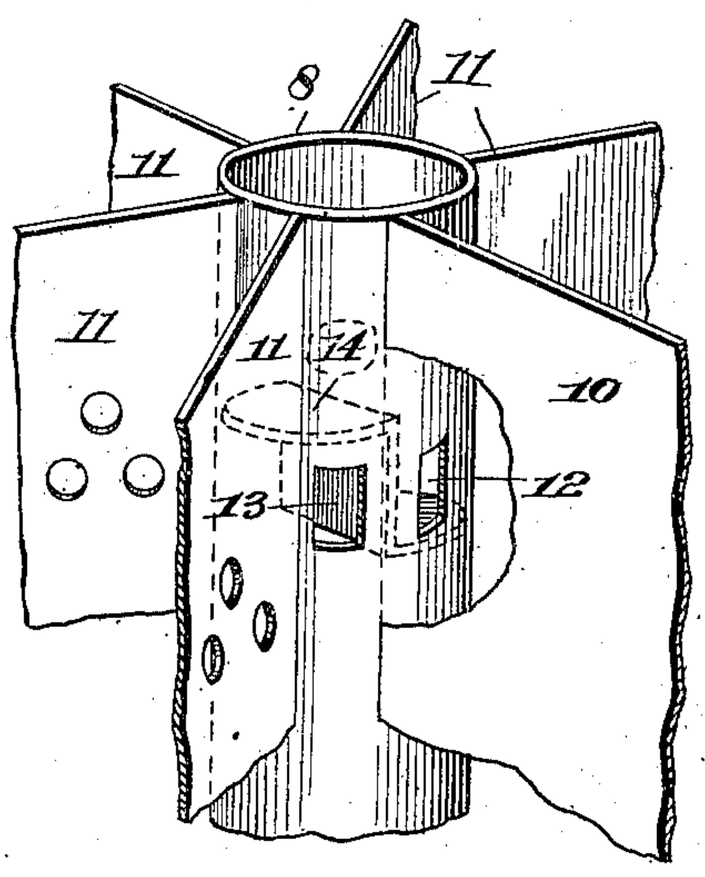


Fig. IV.



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UNITED STATES PATENT OFFICE.

ALFRED C. EINSTEIN, OF ST. LOUIS, MISSOURI.

ACETYLENE-GAS GENERATOR.

SPECIFICATION forming part of Letters Patent No. 672,227, dated April 16, 1901.

Application filed July 23, 1900. Serial No. 24,466. (No model.)

To all whom it may concern:

Be it known that I, ALFRED C. EINSTEIN, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Acetylene-Gas Generators, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My present invention relates to an acetylene-gas generator having a carbid-holder provided with a central water-tube and which is divided into a series of compartments by perforated partitions, the water passing through an opening in the central tube into one of the compartments and thence successively into the other compartments.

My present invention further consists in combining with such a carbid-holder a second carbid-holder of like construction and into the tube of which water is delivered from the tube of the first-mentioned holder.

My invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a vertical section of my improved generator. Fig. II is a horizontal section of the upper carbid-holder, taken on line II II, Fig. I. Fig. III is a perspective view of one of the holders. Fig. IV is an enlarged detail perspective view of the water-tube of the upper holder, part of the partitions being shown.

1 represents the tank of the generator, having, as usual, an outer and an inner wall, forming a water-chamber, within which the bell 2 of the generator fits. The bell has an ordinary gas-discharge pipe 3 and a water-inlet pipe 4.

5 represents an upper carbid-holder, and 6 a lower carbid-holder, the latter resting on the bottom of the tank 1 and the former resting on top of the lower holder, with blocks 7 interposed, so that the gas can escape from the lower holder. The upper holder is provided with a water-tube 8 and the lower holder with a water-tube 9. The tube 8 receives water from the pipe 4. Each holder is divided into a number of compartments by an imperforate partition 10 and perforated partitions 11, radiating from the water-tube to the inner surface of the holder. The water-tube 8 is provided with two openings or perforations 12 and 13 at an elevation somewhat above the carbid contained in the holder. These openings 12 and 13 are separated by a partition 14, located within the tube 8, as seen in Fig. I and in dotted lines in Fig. IV. This partition divides the tube 8 into upper and lower compartments. As the water enters the tube it escapes through the opening 12 into the compartment of the upper holder that is located between the imperforate partition 10 and one of the perforated partitions 11. When the carbid in this compartment is consumed, the water passes through the perforations in the partition 11, and so on around through the various compartments until it reaches the compartment located between the last partition 11 and the imperforate partition 10. When the carbid in this compartment has been consumed, the water passes through the opening 13 into the lower chamber of the water-tube 8 and is conducted by this tube, which has an opening 15 at the bottom, into the water-tube 9 of the lower holder. The tube 9 is preferably provided with a bottom 16 about midway of its height, and above this bottom the tube is formed with a perforation or opening 17, through which the water will pass into the compartment of the lower holder that is located between the imperforate partition and one of the perforated partitions of the lower holder. When the carbid in this compartment of the lower holder is consumed, the water passes through the perforated partition into the next compartment, and so on around the holder, as in the case of the upper holder.

I claim as my invention—

1. In an acetylene-gas generator, upper and lower carbid-holders having central water-tubes and having perforated partitions forming carbid-compartments; the tube of the upper holder having a water-outlet and a water-inlet opening separated by a partition, and said tube being open at its lower end to deliver water into the tube of the lower holder, substantially as set forth.

2. In an acetylene-gas generator, upper and lower carbid-holders having water-tubes, the tube of the upper holder having a water-outlet and a water-inlet opening separated by a partition, the lower end of said upper water-

tube communicating with said lower water-tube, substantially as set forth.

3. In an acetylene-gas generator, upper and lower carbid-holders having water-tubes; the tube of the upper carbid-holder being constructed to discharge water into its holder and to receive water therefrom and deliver it to the water-tube of the lower holder, substantially as set forth.

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In presence of—
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