

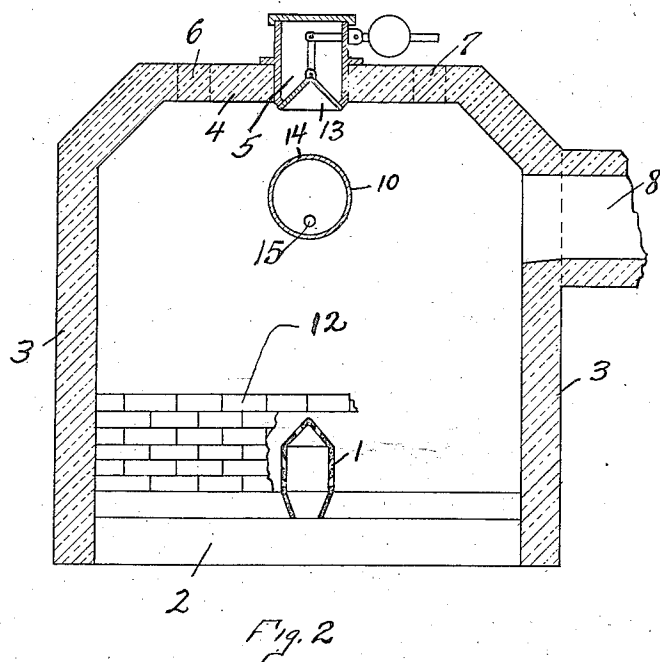
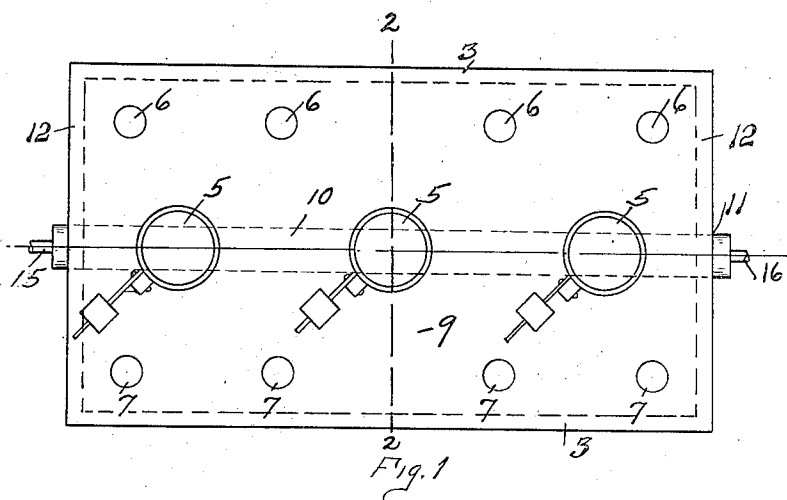
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1,487,985

D. SUDETIC

GAS PRODUCER

Filed March 4, 1922



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INVENTOR

BY *W. H. Hays*
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UNITED STATES PATENT OFFICE.

DAVID SUDETIC, OF YOUNGSTOWN, OHIO.

GAS PRODUCER.

Application filed March 4, 1922. Serial No. 541,182.

To all whom it may concern:

Be it known that DAVID SUDETIC, a citizen of the United States of America, residing at Youngstown, in the county of Mahoning and State of Ohio, has invented certain new and useful Improvements in Gas Producers, of which the following is a specification.

This invention relates to gas producers. The principal object is to provide device having a water-cooled fuel deflector so that as the fuel is fed in from the top of said device, the same comes in contact with said fuel deflector, causing the fuel to be distributed as desired within the gas producer.

The drawing illustrates the preferred embodiment of the invention. However, it is to be understood that in adapting the same to meeting different conditions, various changes in the form, and minor details of construction may be resorted to without departing from the nature of the invention, as claimed and set forth in the drawing.

Figure 1 is a top plan view of the device.

Figure 2 is a sectional view taken on line 2—2 of Figure 1.

Corresponding and like parts are referred to in the following description and indicated in the several views of the drawing by like reference characters.

There is known to the art a number of forms of gas producers. My invention deals with gas producers where the wall construction consists of parallel side walls and parallel ends. One of the difficulties in operating a gas producer efficiently is due to the breaking through of steam. This is usually caused by an uneven distribution of coal, or other fuel used in feeding the combustion within the producer. In some devices known to the art there has been an attempt to distribute the fuel by means of an automatic revolving distributor. When such a device is used the agitation of the fuel causes quantities of small particles to be carried off with the gas before the same has thoroughly burned. These particles in a short time cause a clogging of the exits leading from the gas producer to the point of consumption.

By referring to Figure 2 it will be seen that I have provided an ordinary grate 1, or a plurality of grates 1, located centrally within

the base 2 of the producer under description. The side walls 3 may be constructed of ordinary material used in the construction of devices of this nature, having a semi-arched top 4, provided with fuel hoppers 5, as shown in Figures 1 and 2. These fuel hoppers 5 are of ordinary construction and do not form any particular part of my invention.

By referring to Figure 1 it will be seen that I have provided a plurality of poker holes 6, and 7, which are located at the top of the gas producer, and arranged near the inner sides of the wall 3.

By referring to Figure 2, the exit 8 for the producer gas is shown near the upper portion of one of the side walls 3.

By referring again to Figure 1 it will be seen that the fuel hoppers 5 are arranged centrally and in a straight line in the top 9 of the device. Directly underneath these fuel hoppers positioned in a horizontal manner I have provided a fuel deflector 10 which is round in form, and located at a point 11 in the end wall 12, thus bringing the fuel deflector directly underneath the fuel hoppers 5. In operating the device the fuel is allowed to enter the fuel hoppers 5, and is released by means of the stopper 13. The fuel now falls by gravity, a part of the same striking the upper surface 14 of the fuel deflector 10, thereby directing the same towards the walls 3, thereby causing an economic distribution of the fuel for the manufacture of producer gas. By referring to Figure 1 it will be seen that this fuel deflector 10 is water-cooled and has an inlet pipe 15, and an exit pipe 16.

What I claim is:

A gas producer of ordinary rectangular construction, a semi-arched top, a fuel hopper located in said top, a stationary circular fuel deflector positioned in a horizontal manner underneath said fuel hopper, means for cooling said fuel deflector, substantially as described for the purpose set forth.

In testimony whereof I affix my signature.

DAVID SUDETIC.

Witnesses:

FRANK P. JACKSON,
C. A. HARMAN.