

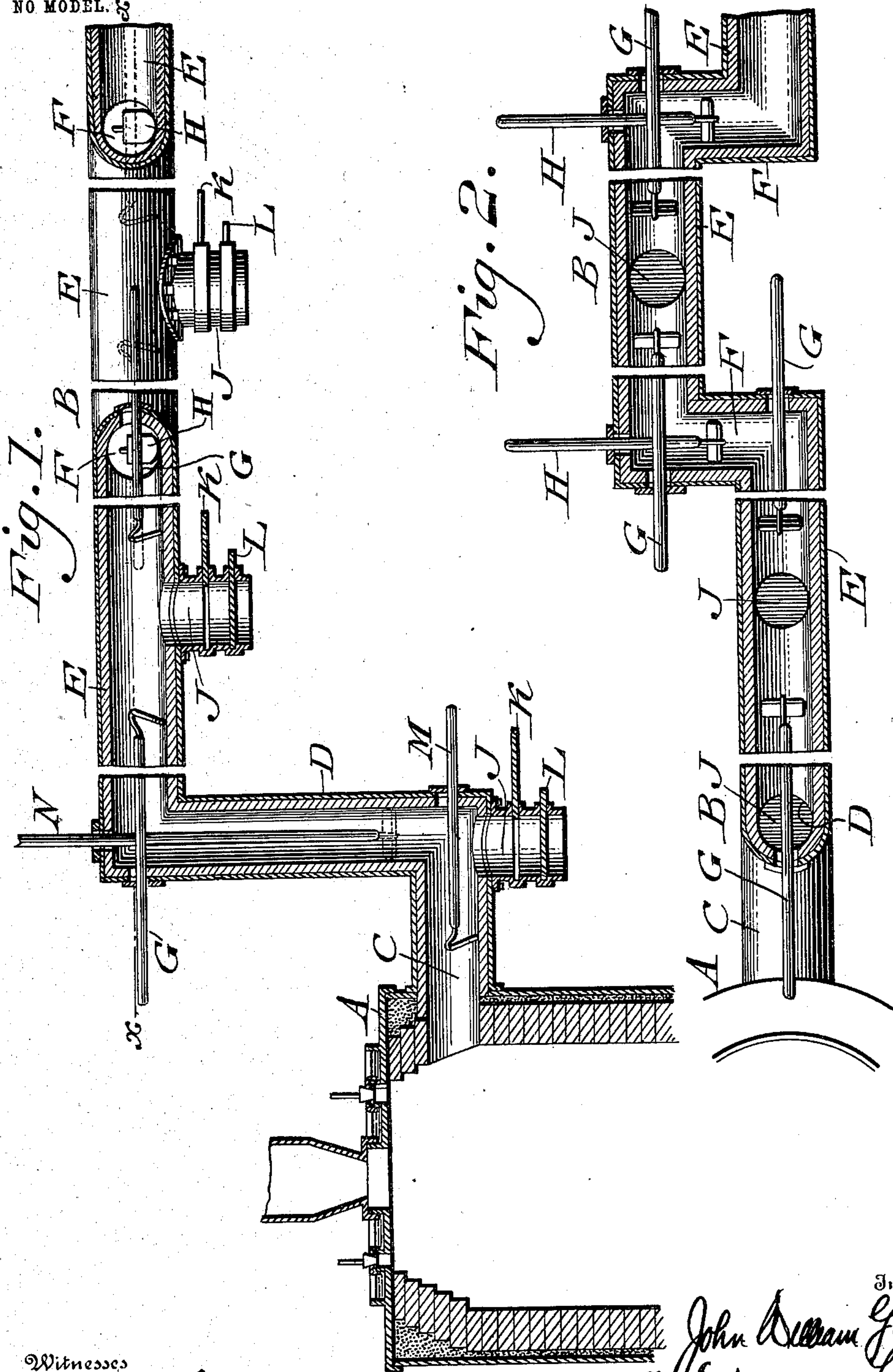
No. 735,493.

PATENTED AUG. 4, 1903.

J. W. GAYNER.
GAS PRODUCER.

APPLICATION FILED SEPT. 18, 1902.

NO MODEL.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN WILLIAM GAYNER, OF SALEM, NEW JERSEY, ASSIGNOR TO AMERICAN PRODUCER-GAS FURNACE COMPANY, A CORPORATION OF NEW JERSEY.

GAS-PRODUCER.

SPECIFICATION forming part of Letters Patent No. 735,493, dated August 4, 1903.

Application filed September 18, 1902. Serial No. 123,810. (No model)

To all whom it may concern:

Be it known that I, JOHN WILLIAM GAYNER, a citizen of the United States, residing in the city and county of Salem, State of New Jersey, have invented a new and useful Improvement in Gas-Producers, of which the following is a specification.

My invention consists of improvements in gas-producers and conduits for leading the gas therefrom, the object being to provide a construction by which the soot and accumulation can be removed from the conduit without shutting down the gas-producer and also for permitting this to be done in an expeditious manner without regard to the length of the conduit.

My invention further consists of details of construction, as will be hereinafter specifically described and claimed.

Figure 1 represents a vertical section of a portion of a gas-producer and a conduit constructed in accordance with my invention. Fig. 2 represents a horizontal section thereof, taken on the line $x x$.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a gas-producer, and B the conduit leading therefrom, the latter being of that class known as "overhead" conduits.

In United States Letters Patent No. 645,719, granted to me on March 20, 1900, I have shown means for removing the accumulations from the conduit of a gas-producer without shutting down the latter; but it will be understood that where the gas must be led some distance to the place of consumption it is not practical to manipulate a hoe with a handle of the length required to reach all parts of the conduit, and to overcome this difficulty I have in the present case devised an offset conduit which consists of angular sections, by which the length of each section is reduced, so as to make it practical to manipulate the hoes throughout the entire length thereof.

In an overhead system of the kind illustrated the outlet-pipe C from the gas-producer extends a short distance to where it joins the upright pipe D, which communicates at its upper end with the conduit proper,

B. This conduit proper, B, consists of parallel longitudinal sections E, that are joined at their ends by transverse sections F. Thus the ends of the longitudinal sections E are free and unobstructed, so that the hoes or scrapers G, whose handles extend through openings in the ends of the sections E, can be manipulated. At the end of each transverse section F is also an opening through which the handles of hoes H extend, so that the accumulations in the transverse sections may be moved into the longitudinal sections. About midway between each of the longitudinal sections and in the bottom thereof is a compartment or chamber J, in which are placed two valves K and L one above the other. The pipe C, leading from the gas-producer, is also provided at its outer end and below the lower end of the upright pipe D with a chamber J, having valves K and L, and in the outer end of this pipe C is an opening through which the handle of hoe M extends. At the upper end of the upright pipe D is an opening through which the handle of hoe N extends.

The operation is as follows: When it is desired to clean out the conduit, the upper valves K are first opened. Hoes M and N are manipulated to convey the soot from the pipes C and D into the chamber J, while the hoes G and H are manipulated to convey the soot in the main conduit into the chambers connected therewith. The soot falls upon the lower valve L, and when the conduits are cleaned the upper valves K are closed and the lower valves L opened, which permits the removal of the soot.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A conduit for conveying gas from gas-producers, consisting of longitudinal sections connected at their adjacent ends by transverse sections, said sections being provided with outlet-openings, and independent means in said sections for conveying the accumulations therein to said outlet-openings.

2. A conduit for conveying gas from gas-producers, consisting of longitudinal sections connected at their adjacent ends by trans-

verse sections, said sections being provided with outlet-openings, and scrapers in said sections provided with handles extending through openings in the ends thereof.

5 3. A conduit for conveying gas from gas-producers, consisting of longitudinal sections connected at their adjacent ends by transverse sections, said longitudinal sections being provided with valved outlet-openings,
10 and independent means in each of said sections for conveying the accumulations therein to said valved outlet-openings.

4. A conduit for conveying gas from gas-

producers, consisting of longitudinal sections connected at their adjacent ends by transverse sections, outlet-openings in said longitudinal sections, openings in the ends of each of said longitudinal and transverse sections, and scrapers situated in said sections and provided with handles extending through
15 said openings. 20

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