No. 656,892. Patented Aug. 28, 1900.

S. JOSEPH.

GASOLENE GAS GENERATING DEVICE.

(Application filed Feb. 7, 1900.)

(No Model.)

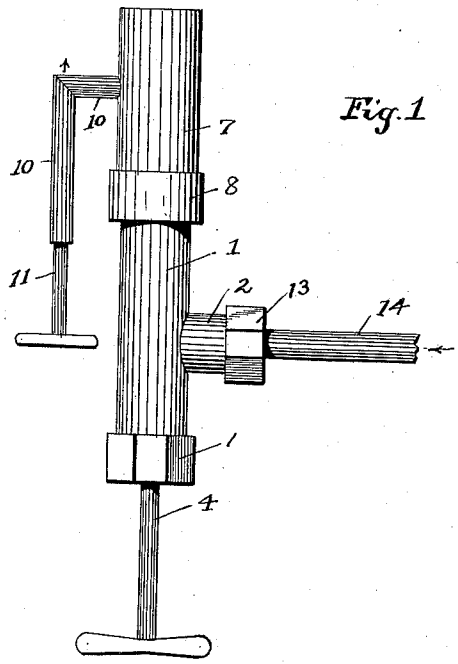


Fig. 1

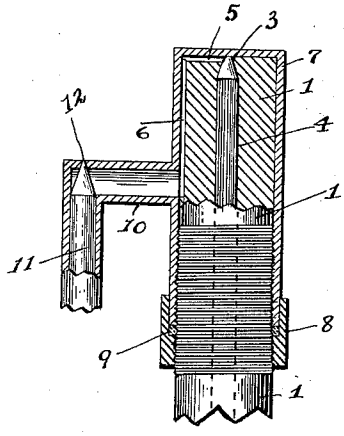


Fig. 2

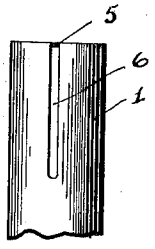


Fig. 3.

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GASOLENE-GAS-GENERATING DEVICE.

SPECIFICATION forming part of Letters Patent No. 656,892, dated August 28, 1900.

Application filed February 7, 1900. Serial No. 4,323. (No model.)

To all whom it may concern:

Be it known that I, SHELDON JOSEPH, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Gasolene-Gas-Generating Devices, of which the following is a specification.

My invention relates to the improvement of gasolene-burning devices; and the objects of my invention are to provide an improved device for generating gas from gasolene and discharging the same to a burning-point; to employ simply-constructed and comparatively-few parts in producing my device, which may be readily disconnected for cleaning purposes; to provide improved gas-tight connections of the parts of the generator, and to produce other improvements, which will be more fully pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a view in elevation of my improved generating device. Fig. 2 is a central vertical section of the upper portion thereof, shown slightly enlarged from Fig. 1. Fig. 3 is a view in elevation of the upper end portion of the main gasolene-conducting tube.

Similar numerals refer to similar parts throughout the several views.

In carrying out my invention I employ a preferably-vertical gasolene-conducting tube 1, which in its lower portion is provided with a short laterally-extending arm 2. The comparatively-small bore or central passage to the tube 1 terminates at its upper end in a needle-point valve-opening 3, this passage being adapted to receive loosely the usual form of needle-valve 4, the downwardly-extending stem of which is threaded in the lower end portion of the tube 1 in the usual manner. As indicated more clearly in Figs. 2 and 3 of the drawings, the needle-point valve-opening 3 communicates with the inner end of a horizontal upper side groove 5 of the tube 1, the latter leading to a vertical peripheral groove or way 6, which extends downward along the head of said tube to a desirable point, as shown.

The upper portion of the tube 1 is adapted to be inclosed, as shown in the drawings, with a cylindrical cap 7, the internally-threaded lower portion of which engages the corresponding externally-threaded portion of the tube 1. In order to insure a suitable gas and gasolene-tight connection between the cap 7 and the tube 1, I cause the lower end of said cap to be seated, as shown in Fig. 2, within the internally-recessed mouth of a packing or coupling ring 8, the thicker lower portion of which is provided with internal threads, as shown, which engage those of the tube 1. Within the bottom of the annular space formed between the upper recessed portion of the ring 8 and the outer surface of the tube 1 I preferably insert suitable packing material 9, upon which the lower end of the cap 7 bears. By the employment of this construction of packing-ring it is obvious that a form of connection is produced between the cap and tube whereby leakage of gas or gasolene is entirely prevented.

In the upper portion of the tube 1 I provide a laterally-projecting and thence downward-turned pipe-arm 10, the inner end of the latter being in communication with the lower end portion of the tube-groove 6. This angular pipe-arm has its vertical outer portion provided with a rotatable needle-valve 11, the upper pointed end of which is adapted to control a needle-point valve-opening 12 in the upper side of said vertical pipe portion.

On the outer end of the tubular laterally-projecting arm 2 of the tube 1 I employ a packing-ring 13, corresponding in construction with the ring 8, this ring and tube-arm having passing therethrough and connected therewith in the manner prescribed for the tube 1 a gasolene-inlet pipe 14, which is intended to be supplied with gasolene from a suitable reservoir located above the height of the generating-body herein shown. This inlet-pipe 14, as indicated in dotted lines, communicates with the internal bore or passage of the tube 1.

In utilizing my improved gas-generating device the gasolene which enters the tube 1 through the pipe 14 passes upward about the needle-valve 4, thence out through the opening 3, from which point it follows the grooves or ways 5 and 6 to the horizontal arm of the pipe 10.

While I have not shown herein means for heating the parts of the generator to convert

the gasolene which passes therethrough into gas, it is obvious that this may be accomplished, first, by applying heat in any desirable manner to the pipe-arm 10, the generator-body being afterward suitably heated from any desirable form of burner with which the outlet 12 may be connected, said burner being arranged sufficiently close to the generator-body to insure a desirable heating thereof. The gas, which is formed as above described, it is obvious, may escape through the gas-outlet 12, the quantity thereof being controlled by the needle-valve 11.

Although I have shown herein but one of the angular arms 10, it is obvious that any desired number of these arms may be made to radiate from the cap 7, the arms thus supplying a plurality of burners, if desired.

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a gasolene-gas-generating device, the combination with the tube 1 having a lateral gasolene-inlet and a needle-point valve-opening at the upper end of its central passage, the upper end of said tube having a groove leading from said valve-opening to a vertical groove in the periphery of said tube and a needle-point valve passing through said tube and controlling said needle-point opening therein, of a cap 7 surrounding the upper portion of said tube and detachably connected therewith, said cap having an angular tubular arm 10 projecting therefrom and communicating with the side groove of said tube, a needle-point valve-opening in said angular arm and a needle-valve controlling the same, substantially as specified.

2. In a gasolene-gas-generating device, the combination with a main tube 1 having a lateral inlet 2, said tube having its central passage terminating in a needle-point valve-opening, the latter communicating with a groove formed in said tube and leading down the side thereof, and a needle-valve extending through the central passage of said tube 1 and controlling said needle-point opening, of a cap 7 surrounding and detachably connected with the upper portion of said tube 1, a packing-ring adjustably secured on said tube 1 and having the upper portion of its inner side recessed to receive the lower end of said cap and a lateral outlet-tube formed with said cap and communicating with the side groove of said tube 1, substantially as specified.

SHELDON JOSEPH.

In presence of—
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