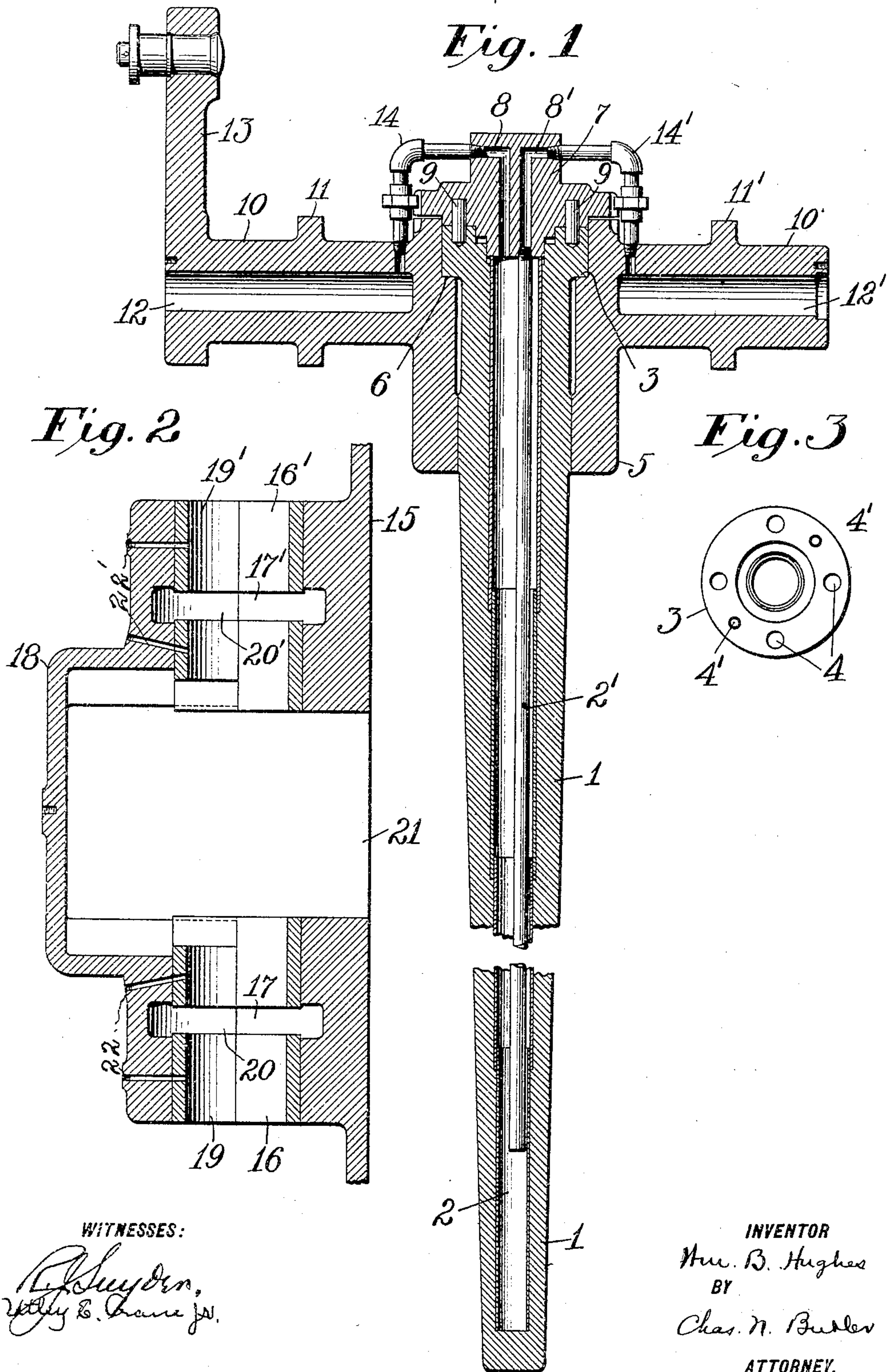


No. 778,827.

PATENTED DEC. 27, 1904.

W. B. HUGHES.
POKER FOR GAS PRODUCERS.
APPLICATION FILED MAR. 15, 1904.



UNITED STATES PATENT OFFICE.

WILLIAM B. HUGHES, OF WISSAHICKON, PENNSYLVANIA.

POKER FOR GAS-PRODUCERS.

SPECIFICATION forming part of Letters Patent No. 778,827, dated December 27, 1904.

Original application filed October 17, 1903, Serial No. 177,433. Divided and this application filed March 15, 1904. Serial No. 198,324.

To all whom it may concern:

Be it known that I, WILLIAM B. HUGHES, a citizen of the United States, residing at Wissahickon, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Pokers, of which the following is a specification.

This invention relates to pokers designed for stirring the fuel used in gas-producers; and its leading objects are to provide gas-tight and water-tight compartments having simple parts which can be readily made, assembled, and dissociated, permitting a worn or defective element to be readily replaced.

In the accompanying drawings, Figure 1 represents a vertical sectional view of a poker made in accordance with the invention. Fig. 2 represents a vertical sectional view of a housing therefor, and Fig. 3 represents a plan view of the top of the stoking-bar.

As shown in the drawings, the stoking-bar 1, with the hollow interior 2, has its top provided with the external flange 3, the pin-holes 4, and the holes 4' to engage bolts for turning or moving the stoking-bar. A hollow head or socket 5, having the seat 6, is sleeved on the stoking-bar, the flange of the bar resting on the seat in the socket. The top of the stoking-bar and the socket therefor receive the cap 7, having the passages 8 and 8' there-through, communicating with the interior of the bar, and the pins 9, connecting the cap with the head of the bar. The head has projecting therefrom the trunnions 10 and 10', having, respectively, the flanges or rings 11 and 11' and the hollow interiors 12 and 12', the trunnion 10 being provided with the crank-arm 13 for oscillating the poker.

A pipe 14 connects the passage 8 with the passage 12, and the pipe 14' connects the passage 8' with the passage 12'. By these means water may be circulated through the passages 12' 14' 8', the pipe 2' depending therefrom, and the passages 2, 8, 14, and 12 to cool the several parts of the poker.

The housing for the poker comprises the base 15, the journal-bearings 16 16', having the annular channels 17 17', and the hood 18, having the journal-caps 19 19', containing the annular channels 20 20' complementary to the

channels 17 17'. The hood and journal-caps being removably supported by the bearings, the trunnions 10 and 10' are seated in the bearings 16 16', the flanges or rings 11 11' being seated in the channels 17 17', where they are held by securing the hood and journal-caps thereon. As the hood covers the top of the stoking-bar and the aperture 21, through which it works, and as the flanges or rings of the trunnions lie in the annular channels in which they are journaled, means are thus provided for preventing the escape of gas and the longitudinal movement of the trunnions. The channels of the bearings also provide reservoirs for lubricants to be used in lubricating the trunnions and bearings, the ducts 22 and 22' providing for the introduction of the lubricants.

Having described my invention, I claim—

1. A poker comprising a hollow stoking-bar, hollow trunnions connected therewith, and a cap having passages connected with the interior of said bar and trunnions, substantially as specified.

2. A poker having a hollow stoking-bar, a socket engaging said stoking-bar, hollow trunnions connected with said socket, a cap having passages connected with the interior of said bar, and pipes connecting said passages with the interiors of said trunnions, substantially as specified.

3. A poker having trunnions provided with concentric rings, in combination with a housing having bearings provided with concentric channels, said trunnions and rings being journaled in said bearings and channels, substantially as specified.

4. A poker comprising a stoking-bar, a socket sleeved on said stoking-bar, said bar being removable through and independently of said socket, and trunnions fixed to said socket, substantially as specified.

In testimony whereof I have hereunto set my hand, this 11th day of March, 1904, in the presence of the subscribing witnesses.

WM. B. HUGHES.

In presence of—

BERNARD J. O'CONNELL,
CHARLES N. BUTLER.