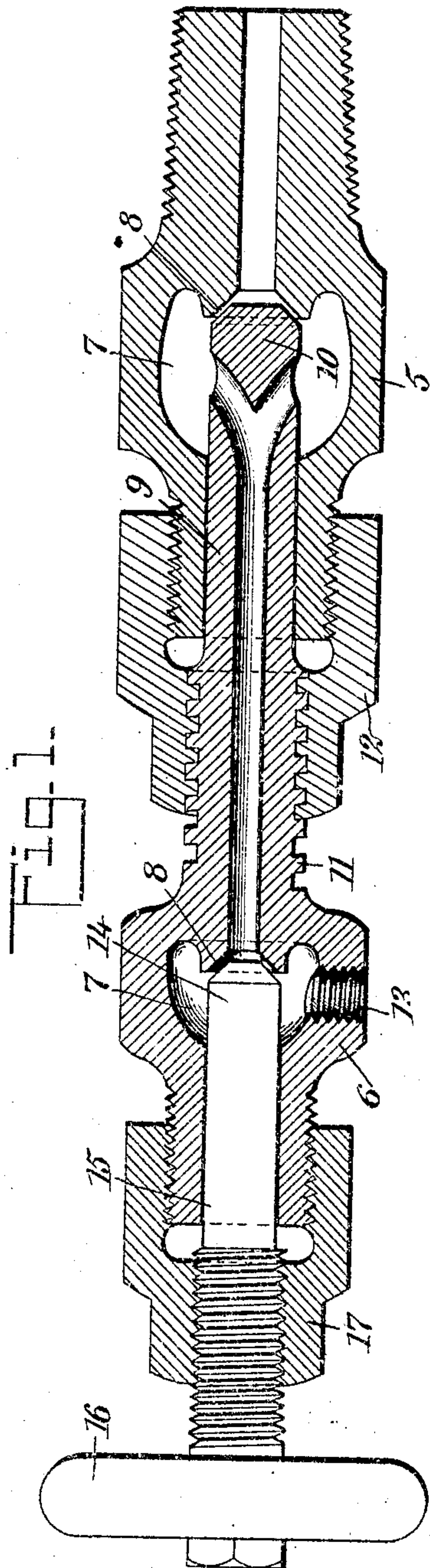


A. H. JETTINGER.
GAGE COCK.
APPLICATION FILED MAY 16, 1908.

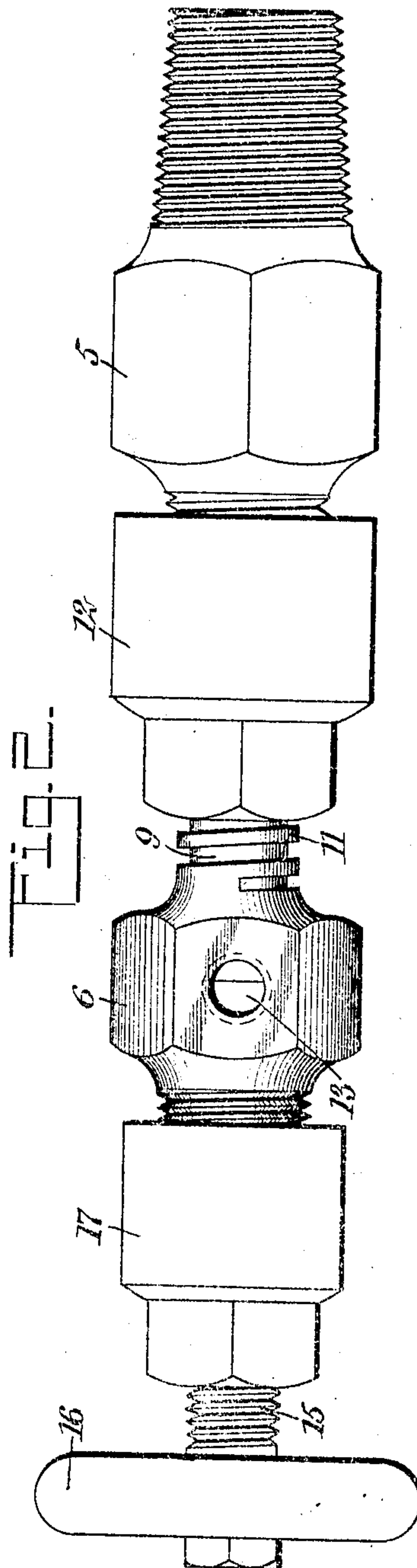
916,163.

Patented Mar. 23, 1909.



WITNESSES

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UNITED STATES PATENT OFFICE.

ALBERT H. JETTINGER, OF DELPHOS, OHIO.

GAGE-COCK.

No. 916,163.

Specification of Letters Patent.

Patented March 23, 1909.

Application filed May 16, 1908. Serial No. 433,163.

To all whom it may concern:

Be it known that I, ALBERT H. JETTINGER, a citizen of the United States, and a resident of Delphos, in the county of Allen and State of Ohio, have invented a new and Improved Gage-Cock, of which the following is a full, clear, and exact description.

This invention is an improvement in gage cocks such as are used on steam boilers for determining the height of water. The passage in these cocks frequently becomes obstructed, or the valve fails to seat, in which case with cocks of the ordinary construction it is necessary to cool the boiler down before the obstruction can be removed or the valve ground or otherwise repaired.

My invention belongs to that class in which any corrosion or other foreign matter may be removed from the cock or repair made to the valve while the pressure is on the boiler. To this end I preferably construct the cock of two plugs or shells, each having a valve seat, and one of them provided with a hollow stem carrying a valve adapted to seat on the seat of the other plug. The plug having the hollow stem, which is the outer plug, has the usual opening for the discharge nozzle or nipple and carries the customary valve for controlling the communication through the hollow stem and opening.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views.

Figure 1 is a central longitudinal section through the preferred form of my improved gage cock; and Fig. 2 is a side view of the same.

The cock embodies in its construction, two plugs or shells, an inner plug 5 and an outer plug 6, each plug having an intermediate chamber 7 and a valve seat 8. The plug 5 is exteriorly threaded at each end and has an intermediate angular wrench-engaging portion, as clearly shown in Fig. 2. That end of the plug 5 adjacent to the valve seat 8 is made of such size as to be screwed into the gage cock opening of the boiler. The opposite end of the plug receives in its bore a hollow stem 9 which is integral or otherwise rigid with the inner end of the plug 6. The bore or port in this stem leads from the valve seat 8 and terminates in two branches connecting at opposite sides with the chamber 7 of the plug 5. The extremity of the stem

is made in the form of a valve 10 adapted to seat on the seat 8 of the plug 5 and cut off communication between its chamber 7 and the boiler. The stem 9 at the outside of the casing 5 has a thread 11, preferably of coarse square form, which screws into a packing nut 12, which in turn is threaded on the outer end of the plug 5.

The plug 6 has a threaded opening 13, in the side thereof, leading from the chamber 7, for receiving the usual nipple or nozzle, and is provided with a valve 14 adapted to seat on its seat 8 and control the communication between the tubular or hollow stem 9 and the opening 13. The stem 15 of the valve 14 extends through the outer end of the plug 6, where it has an operating handle 16, and is threaded at the inside thereof for screwing through a packing nut 17, the latter being screwed on the outer threaded end of the plug 6. The plug 6, like the plug 5, has an angular wrench-engaging portion intermediate its threaded ends by which it is operated in closing and opening the valve 10. Should the bore or port in the stem 9 become obstructed by corrosion or otherwise, or the valve 14 fail to seat, it is unnecessary to wait until the pressure is removed from the boiler, but repair may be made with a full or moderate boiler pressure. This is done by removing the packing nut 17 and withdrawing the valve stem 15 after the plug 6 has been turned to close the valve 10. By running a wire or other like device through the bore of the stem 9 the obstruction may be punched out, the wire being deflected either through one or the other of the branches of the port in passing in the chamber 7 of the plug 5. While the valve 10 remains closed, the valve 14 and its seat may be ground if desired. When the plug 6 is turned to again open the valve 10, the obstruction loosened will be blown out by the boiler pressure.

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

1. In a gage cock, the combination of two plugs each having a valve seat and one of said plugs having a tubular stem provided with a valve adapted to seat on the seat of the other plug, and a stem fitting into the outer end of the plug having the tubular stem and provided with a valve adapted to seat on the seat of the last mentioned plug.

2. In a gage cock, the combination of two plugs each having an intermediate chamber

and one of said plugs having a tubular stem passing into the end of the other plug provided with a valve for controlling the communication between its opposite end and its
5 chamber, and a stem passing into the plug having a valve for controlling communication between the chambers.

3. In a gage cock, the combination of two hollow plugs each having a valve for controlling the passage of a fluid therethrough,
10 and with one of said valves rigid with one of said plugs.

4. In a gage cock, the combination of two hollow plugs, valves for controlling the passage of a fluid through said plugs, with one of
15 said valves rigid with one of the plugs, and a packing nut carried by each of the plugs through which its respective valve is threaded.

5. In a gage cock, the combination of an
20 inner plug and an outer plug each having threaded ends with intermediate angular wrench-engaging portions, a tubular stem rigid with the outer plug having a valve for

controlling the passage of a fluid through the inner plug, a packing nut threaded on the
25 outer end of the inner plug through which said stem is threaded, a packing nut threaded on the outer end of the outer plug, and a stem threaded through the last mentioned packing nut having a valve for controlling
30 the passage of a fluid from the inner plug to the outer plug through said stem.

6. In a gage cock, the combination of a plug, a second plug having a tubular stem, the bore of which terminates in two branches
35 near its extremity and provided with a valve for controlling the flow through the first mentioned plug.

In testimony whereof I have signed my name to this specification in the presence of
40 two subscribing witnesses.

ALBERT H. JETTINGER.

Witnesses:

OLIVER M. ROSSELIT,
FRED S. WILCOXEN.