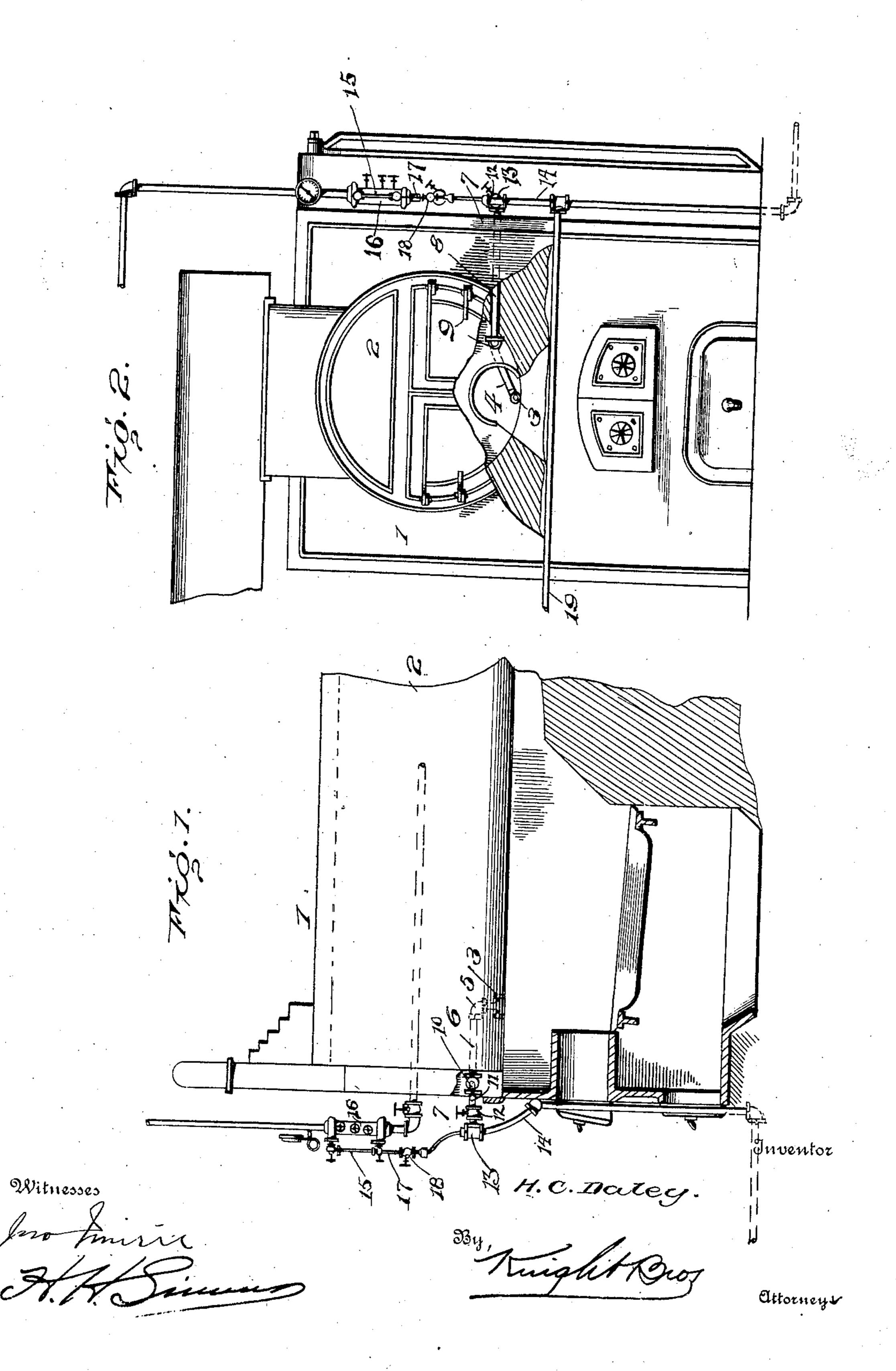
H. C. DALEY.

BOILER CLEANER.

APPLICATION FILED DEC. 8, 1903. RENEWED FEB. 13, 1906.



## UNITED STATES PATENT OFFICE.

## HENRY C. DALEY, OF HOT SPRINGS, SOUTH DAKOTA.

## BOILER-CLEANER.

No. 830,574.

Specification of Letters Patent.

Patented Sept. 11, 1906.

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To all whom it may concern:

Be it known that I, Henry C. Daley, a citizen of the United States, and a resident of Hot Springs, in the county of Fall River and 5 State of South Dakota, have invented certain new and useful Improvements in Boiler-Cleaners, of which the following is a specification.

This invention relates to boiler-cleaners; 10 and it has for its object to provide a piping which connects the bottom of the boiler over the fire-sheet with a point exterior of the boiler, said piping being provided with a valve which when opened permits the steam-15 pressure in the boiler to force the mud and other sediment from the boiler through the pipe.

A further object is to so connect the watergage with the piping so that the water-gage 20 and the boiler may be cleaned independently or both together.

In the drawings, Figure 1 is a side view of the boiler-furnace, partially in section, showing the invention from another position. Fig. 2 is a front view of a boiler-furnace, partially broken away to show my invention.

Referring to the drawings more particularly, 1 indicates the boiler-furnace, which may be of any construction, and 2 the boiler 3° of said furnace. Supported on the bottom wall of the boiler 2 is a T 3, which connects with an inclined pipe 4, extending transversely the boiler, connected by an elbow 5 with a pipe 6, which extends longitudinally 35 of the boiler and through the head thereof, having a screw-threaded connection with said head to where the front wall 7 of the furnace is reached. The pipe 8 is mounted in the furnace-wall and is connected by elbow 9 40 with the pipe 6. At the end of the furnacewall 7 another turn is made by elbow 10 and pipe 11, and a globe-valve 12 is connected with the pipe 11. Connected to the globevalve 12 is another T 13, one end of which 45 connects with a discharge-pipe 14, leading to any suitable place, while another end of the T 13 connects with the lower end of the glass |

tube 15 of the water-gage 16 by pipe 17, a globe-valve 18 being in said pipe. A piping 19 may connect the discharge of all the blow- 50 outs when more than one boiler is used.

When it is desired to take the sediment from the boiler, the globe-valve 12 is opened and the steam-pressure in the boiler forces the water in the lower part of the boiler into 55 both open ends of the T 3, the said T being disposed so that one end faces the back of the boiler and the other end faces the front, thereby the water carries the sediment from each end of the boiler through the discharge- 60 pipe 14. If it is desired to clean the watergage, the valve 18 is opened and the sediment therefrom passes through the T 13 to the discharge-pipe 14. As the globe-valve 18 for the water-gage and the globe-valve 12 for the 65 boiler-discharge are in separate piping in advance of the T 13 it will be seen that the op-

eration of one does not interfere with the operation of the other. Having thus described my invention, what 70 I claim is—

1. In a boiler-cleaner, the combination with the boiler, of a piping leading from the bottom of the boiler, a valve in said piping, a water-gage, a piping leading from the water- 75 gage to the piping from the boiler, and a valve in the water-gage piping.

2. In a boiler-cleaner, the combination with the boiler, of a T resting within the boiler on the bottom thereof and having one 80 of its open ends facing the back of the boiler and the other one the front, a piping leading from the T and passing through the front of the boiler having a screw-thread connection therewith, a valve in said piping, a water- 85 gage, piping leading from the water-gage, a T connecting both pipings, and a dischargepipe also with the last-mentioned T.

The foregoing specification signed this 1st day of December, 1903.

HENRY C. DALEY. In presence of—

G. C. Smith, J. G. Bradley.