(No Model.)

T. E. JONES.

BOILER CLEANER.

No. 456,894. Patented July 28, 1891.

FIG. 1.

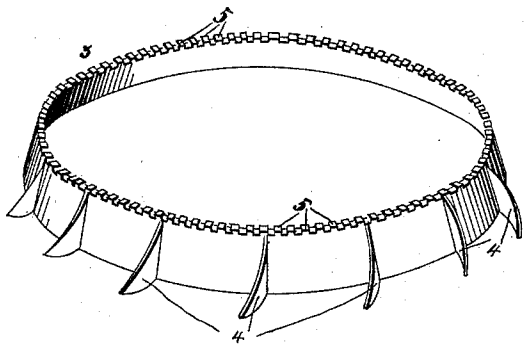


FIG. 2.

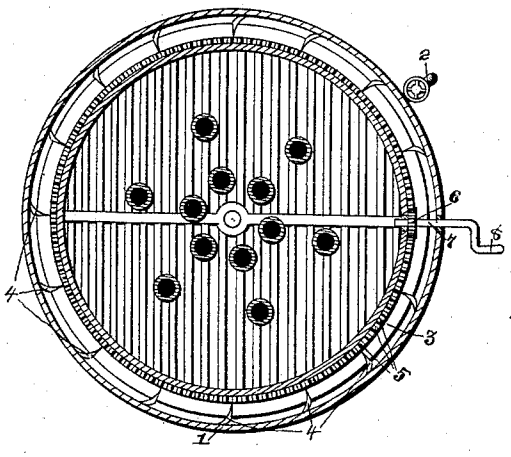
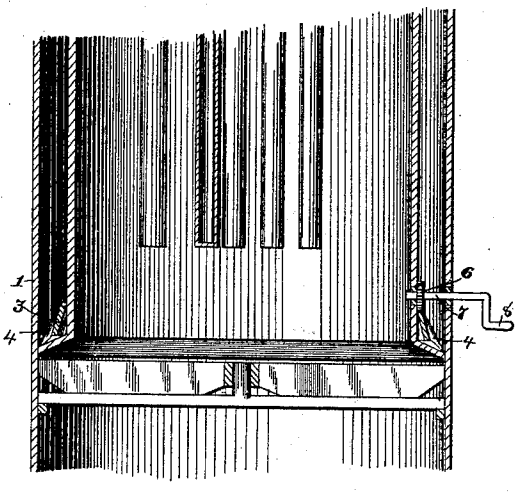


FIG. 3.



Witnesses

E. S. Duvall Jr.

Percy C. Bowen.

Inventor

Thomas E. Jones.

By his Attorneys,

C. A. Snow & Co.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

THOMAS E. JONES, OF BRISTOL, TENNESSEE, ASSIGNOR OF ONE-HALF TO S. D. SESSLER, OF SAME PLACE.

BOILER-CLEANER.

SPECIFICATION forming part of Letters Patent No. 456,894, dated July 28, 1891.

Application filed March 17, 1891. Serial No. 385,406. (No model.)

To all whom it may concern:

Be it known that I, THOMAS E. JONES, a citizen of the United States, residing at Bristol, in the county of Sullivan and State of Tennessee, have invented a new and useful Boiler-Cleaner, of which the following is a specification.

This invention relates to devices for cleaning boilers, and it has particular reference to devices for cleaning vertical or upright boilers.

The invention consists in a revoluble ring mounted in the boiler and having scrapers adapted to convey the mud and similar deposits to the blow-out opening, as will be hereinafter fully described, and particularly pointed out in the claim.

In the drawings hereto annexed, Figure 1 is a perspective view of my improved boiler-cleaning device. Fig. 2 is a horizontal sectional view of a boiler equipped with the said device. Fig. 3 is a vertical sectional view of the same.

Like numerals of reference indicate like parts in all the figures.

1 designates the boiler-casing, which is provided with the blow-off cock 2.

3 designates a ring, which is fitted in the lower end of the boiler and which is provided at its lower edge with a series of scrapers 4. The upper edge of the ring 3 is provided with a circumferential series of teeth of cogs 5, which are adapted to be engaged by a pinion 6, mounted upon the shaft 7, which is journaled in suitable bearings in the boiler-casing. Suitable packing-boxes are provided to prevent leakage around the said shaft. The outer end of the shaft 7 is provided with a handle or crank 8, by means of which it may be conveniently manipulated to rotate the ring 3.

The operation of this invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. When it is desired to clean the boiler, the blow-off cock is opened and the shaft 7 is then manipulated to rotate the ring 3. The scrapers upon the latter will serve to loosen the mud and other accumulated deposits and to convey the latter toward the blow-out opening, through which they are forced by the escaping steam.

This device, as will be seen, is exceedingly simple in construction and may be very readily operated with satisfactory results.

Having thus described my invention, I claim as an improvement in boiler-cleaners—

The combination, with a vertical boiler, of a ring supported upon the bottom of the same, said ring being provided with teeth or cogs at its upper edge and with downwardly-extending scrapers, a shaft extending transversely through the boiler-casing and having a pinion meshing with the teeth of said ring, and a crank or handle at the outer end of said shaft, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

THOS. E. JONES.

Witnesses:
C. B. COOK,
JOSEPH H. BURROW.