

No. 801,858.

PATENTED OCT. 17, 1905.

W. EICHELBERGER.  
SOOT CLEANER FOR BOILERS.  
APPLICATION FILED DEC. 8, 1904.

Fig. 1.

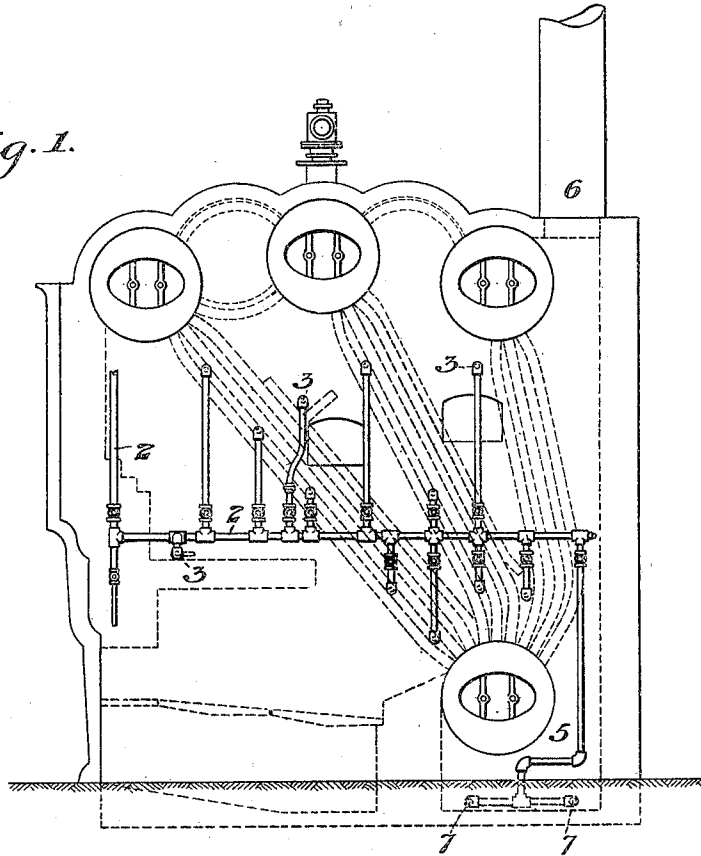
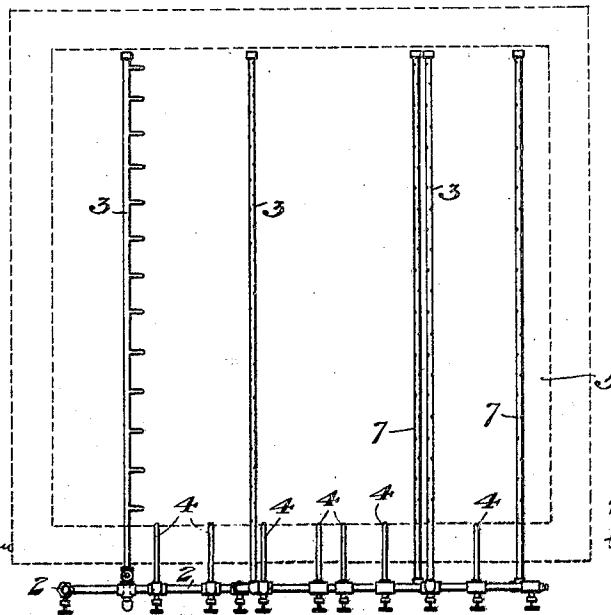


Fig. 2.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

WILLIAM EICHELBERGER, OF DUBOIS, PENNSYLVANIA, ASSIGNOR TO  
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## SOOT-CLEANER FOR BOILERS.

No. 801,858.

Specification of Letters Patent.

Patented Oct. 17, 1905.

Application filed December 8, 1904. Serial No. 235,954.

*To all whom it may concern:*

Be it known that I, WILLIAM EICHELBERGER, of Dubois, Clearfield county, Pennsylvania, have invented a new and useful Soot-Cleaner for Boilers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical section of a steam-boiler constructed in accordance with my invention. Fig. 2 is a horizontal section of the boiler-setting, showing the steam-pipes by which the tubes are cleaned.

My invention is an improvement on the steam-boiler cleaner described and claimed in my Letters Patent No. 705,912, dated July 29, 1902.

In the drawings I show my invention applied to a boiler of the well-known Sterling type; but it will be understood that the invention may be modified and may be applied to boilers of other types and constructions.

In the drawings, 2 2 are the main steam-supply pipes by which the steam required for blowing the soot from the boiler-tubes is supplied. From this pipe branch pipes 3 3 extend through the boiler-setting between the water-tubes and are provided with perforations, so that jets of steam can be discharged therefrom against the boiler-tubes in such manner as to blow soot therefrom. I also provide in addition to the pipes 3 3 supplemental jet-pipes 4 4, which terminate at the boiler-setting and are adapted to discharge jets of steam across the setting and among the tubes for the purpose of stirring up the soot which has been dislodged from the tubes and carrying it over into the final chamber 5 of the boiler-setting, which communicates with the stack 6. In this chamber 5 I employ upwardly-directed steam-jets 7, which create a blast of steam directed toward the stack of the boiler, thus making a strong draft which will carry out through the stack the soot which has been dislodged from the tubes.

The invention which I intend to cover herein resides in the use of the pipes 4 4, which terminate at or near the boiler-setting, and also in the use of the jets 7, which create an upward draft through the stack. By means of these devices the boiler may be cleaned readily while it is still in use, all that is necessary being to turn on the steam through the several jet-pipes, which will blow soot from the tubes and by creating an upward draft, as above stated, will discharge the dislodged soot out of the stack of the boiler.

Those skilled in the art will be able to modify my invention in various ways, since

What I claim is—

1. In combination with a steam-boiler having jet-pipes arranged among the tubes of the boiler and adapted to dislodge soot from the tubes, supplemental jet-pipes terminating at or near the walls of the boiler-setting and adapted to discharge cross-blasts of steam to hold the dislodged soot in suspension and aid in its removal; substantially as described.

2. In combination with a boiler and jet-pipes for dislodging soot therefrom, supplemental jet-pipes arranged to create a draft through the stack for the purpose of carrying off the dislodged soot from the boiler; substantially as described.

3. In combination with a boiler and jet-pipes for dislodging soot from the tubes of said boiler, supplemental jet-pipes terminating near the walls of the boiler-setting and adapted to discharge blasts of steam among the tubes and supplemental jet-pipes arranged to create a draft in the stack to carry off the dislodged soot from the boiler; substantially as described.

In testimony whereof I have hereunto set my hand.

WILLIAM EICHELBERGER.

Witnesses:

G. M. VIERS,  
H. M. CORWIN.