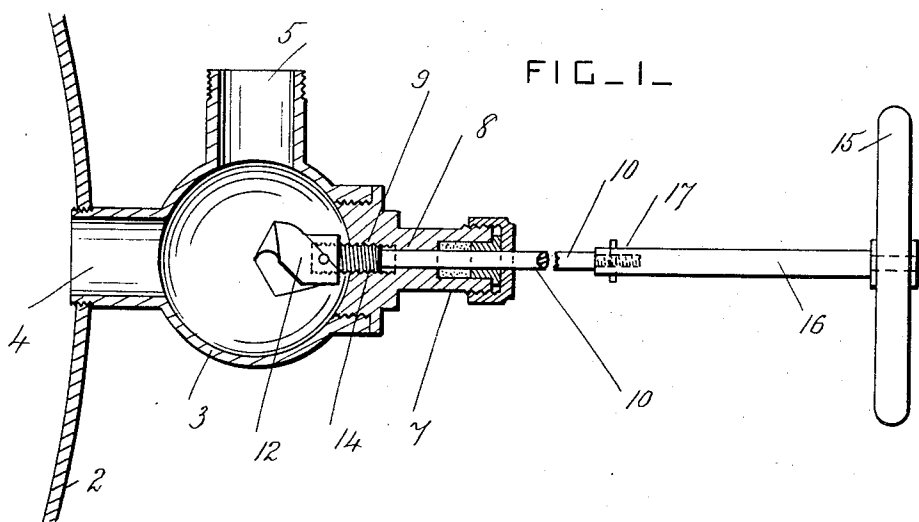
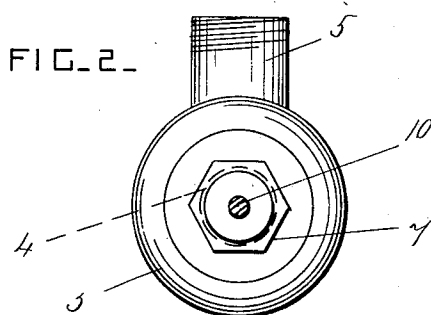


T. A. D. SCHLACHT.
 CLEANER FOR BOILER FEED PIPES.
 APPLICATION FILED FEB. 21, 1914.

1,098,128.

Patented May 26, 1914.



Witnesses

Wm. H. Darg.
R. F. Steward.

By

Frankott A. D. Schlacht.
Herbert W. Jenner

Attorney

UNITED STATES PATENT OFFICE.

TRAUGOTT A. D. SCHLACHT, OF OCHEYEDAN, IOWA.

CLEANER FOR BOILER FEED-PIPES.

1,098,128.

Specification of Letters Patent.

Patented May 26, 1914.

Application filed February 21, 1914. Serial No. 820,187.

To all whom it may concern:

Be it known that I, TRAUGOTT A. D. SCHLACHT, a citizen of the United States, residing at Ocheyedan, in the county of Osceola and State of Iowa, have invented certain new and useful Improvements in Cleaners for Boiler Feed-Pipes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to means for cleaning boiler feed pipes or connections at their points of junction with the boilers, and is more particularly adapted for use in connection with the boilers of traction engines, such boilers frequently being obliged to use impure water which forms deposits of solid matter where the feeding devices are connected to the boiler shell.

This invention consists of a revoluble drilling or cutting bit arranged and supported as hereinafter fully described and claimed.

In the drawings, Figure 1 is a vertical section through a cleaning device constructed according to this invention. Fig. 2 is a front view of the cleaning device.

A portion of the shell 2 of the boiler of a traction engine is shown, and 3 is a casing connected to the shell 2 in any approved manner and at the usual preferred location. The casing 3 has a tubular outlet or feed passage 4 which communicates with the water space of the boiler shell, and 5 is a lateral branch or tubular inlet on one side of the casing.

The usual boiler feed pipe, provided with a stop valve and a check valve, or any other approved feed regulating devices, is connected to the branch 5. The casing 3 is provided with a stuffing-box 7 which is arranged at the front side of it and on the axis of the tubular feed passage 4. This stuffing-box has a bearing 8 which has screwthreads 9 on it for a portion or for the whole of its length.

A driving spindle or stem 10 is provided and is journaled in the stuffing-box 7 and in the bearing 8. A drill-bit 12 or other ap-

proved cutting or boring tool, is secured on the inner end portion of the spindle 10, and is arranged inside the casing so that when the bit is retracted, as shown in the drawing, a free passage for the feed water through the casing is provided, as indicated by the arrows. The spindle 10 has a screw-threaded portion 14 which engages with the screwthreads 9 when the drill-bit is retracted, so that the drill-bit is held in its retracted position and can only be moved or slid forwardly by first forcibly revolving the spindle in the right direction. The spindle 10 is provided with a hand-wheel 15 or any other approved means for revolving it. This hand-wheel may be secured direct to the spindle, or it may be connected to it by an extension spindle 16 which engages with a suitable socket 17 on the main spindle and is removable from it. The spindle or its extension may be revolved by any approved mechanical appliance or motor for that purpose, for instance, a carpenter's brace or any similar device for operating a drill-bit may be connected to the spindle.

The drill-bit 12 is preferably a twist drill-bit, and it is of a diameter which will fit loosely in and pass through the tubular feed passage 4. When this passage becomes obstructed, and solid matter accumulates adjacent to it inside the boiler shell, the spindle is revolved to disconnect it from the screwthreads 9, and is pushed forwardly in the casing until it reaches the passage 4. The drill-bit is then revolved and is fed forwardly, and the solid matter is cut away until the passage affords a free opening for the feed water. When a free passage for the feed water has been provided the drill-bit is retracted and is locked to the casing, by its screwthreaded spindle, in its original position. The whole operation can be performed while the boiler is under steam pressure, and without disturbing any of its feed connections, as the grooved drill-bit substantially fits in the feed passage without wholly obstructing it.

What I claim is:

The combination, with a casing provided with a tubular outlet passage, and an inlet, and having also a stuffing-box arranged

axially in line with its outlet passage and provided with a screwthreaded portion; of a longitudinally slidable operating spindle journaled in the stuffing-box and provided with a drill-bit or boring tool adapted to pass through the said outlet passage, said spindle being also provided with a screwthreaded portion which engages with the

screwthreaded portion on the casing and locks the spindle to it when retracted. 10

In testimony whereof I have affixed my signature in the presence of two witnesses.

TRAUGOTT A. D. SCHLACHT.

Witnesses:

W. J. LINDAMAN,

O. J. FREY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."