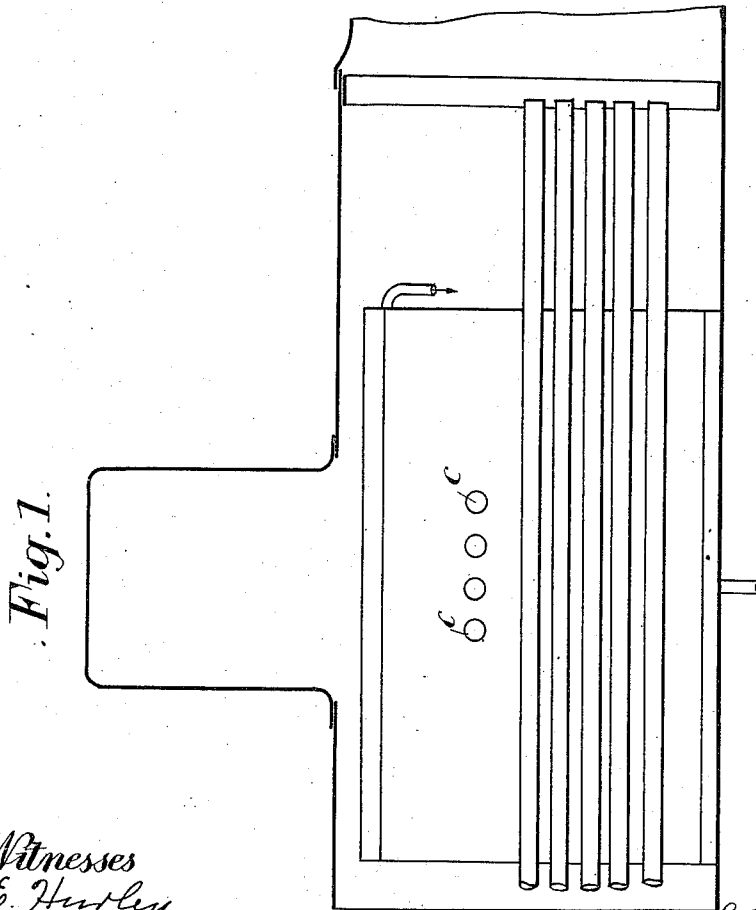
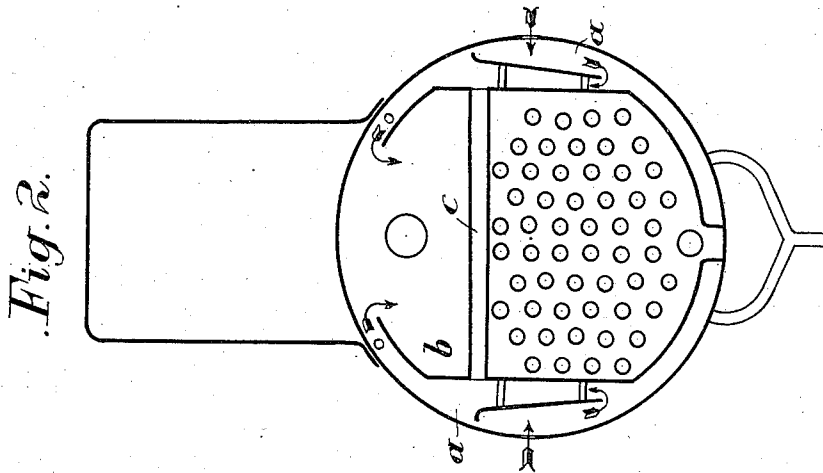


E. PIELOCK.
 WATER PURIFIER FOR FIRE TUBE BOILERS.
 APPLICATION FILED JUNE 19, 1911.

1,011,133.

Patented Dec. 5, 1911.



Witnesses
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UNITED STATES PATENT OFFICE.

EDUARD PIELOCK, OF BERLIN, GERMANY.

WATER-PURIFIER FOR FIRE-TUBE BOILERS.

1,011,133.

Specification of Letters Patent.

Patented Dec. 5, 1911.

Application filed June 19, 1911. Serial No. 633,999.

To all whom it may concern:

Be it known that I, EDUARD PIELOCK, a subject of the Emperor of Germany, and resident at Landshuterstrasse 14, Berlin W. 30, Germany, have invented certain new and useful Improvements in Water-Purifiers for Fire-Tube Boilers.

The invention has for its object a device for purifying the feed water of steam boilers, in a fire tube boiler equipped with purifying chambers, disposed on each side of the fire tubes.

According to this invention the purifying chambers are in communication with each other by tubes which traverse the inner space of the boiler, whereby the heating surface of the purifier is considerably enlarged, which is a very important advantage in fire tube boilers with limited space for accommodating a purifier.

In the annexed drawing, given by way of example, a form of the device has been shown mounted within a locomotive boiler.

Figure 1 is a longitudinal and Fig. 2 a transverse section of such a boiler.

Within the interior of a boiler are formed the two purifying chambers *a* by means of the shell and plates *b*. According to this

invention, the two chambers *a* are connected by a number of tubes *c* so as to form a complete purifier and permit of the feed water to enter at the side of the boiler. Moreover the heating surface of the purifier is considerably increased by the tubes *c*.

I claim:

1. In a boiler, the combination with a shell therefor, of a nest of fire tubes therein, plates forming with the shell purifying chambers at opposite sides of said tubes, and transversely disposed tubes establishing communication between said chambers, substantially as described.

2. In a boiler, the combination with a shell therefor, of a nest of fire tubes therein, plates forming with said shell purifying chambers at opposite sides of said tubes, and tubes extending through said shell and above said fire tubes for establishing communication between said chambers, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two witnesses.

EDUARD PIELOCK.

Witnesses:

WILLY BEYER,

WILHELM SCHULTZE.

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