

S. Stucky,
Steam-Boiler Water-Heater,
No 80,516, Patented July 28, 1868.

Fig: 1

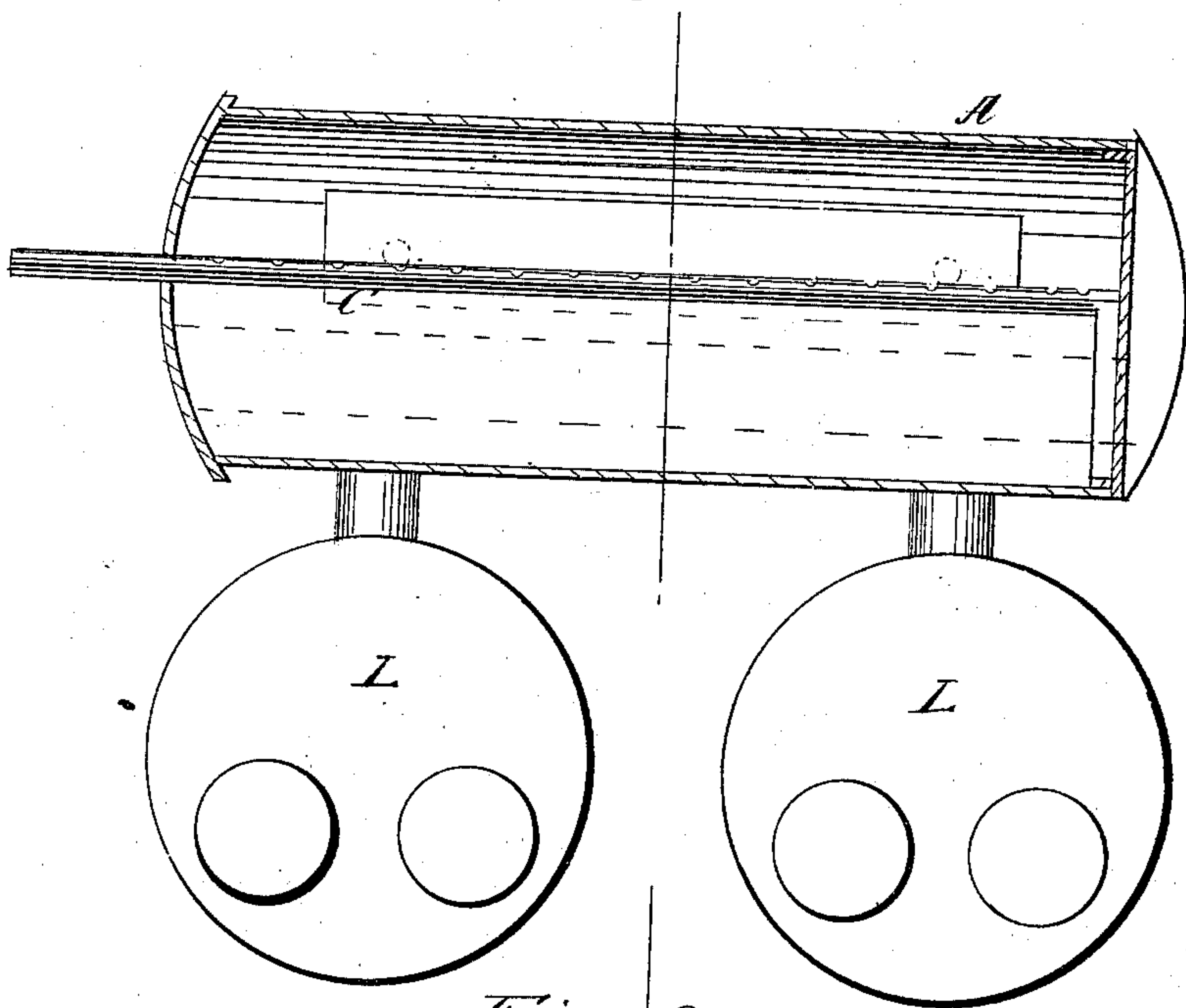
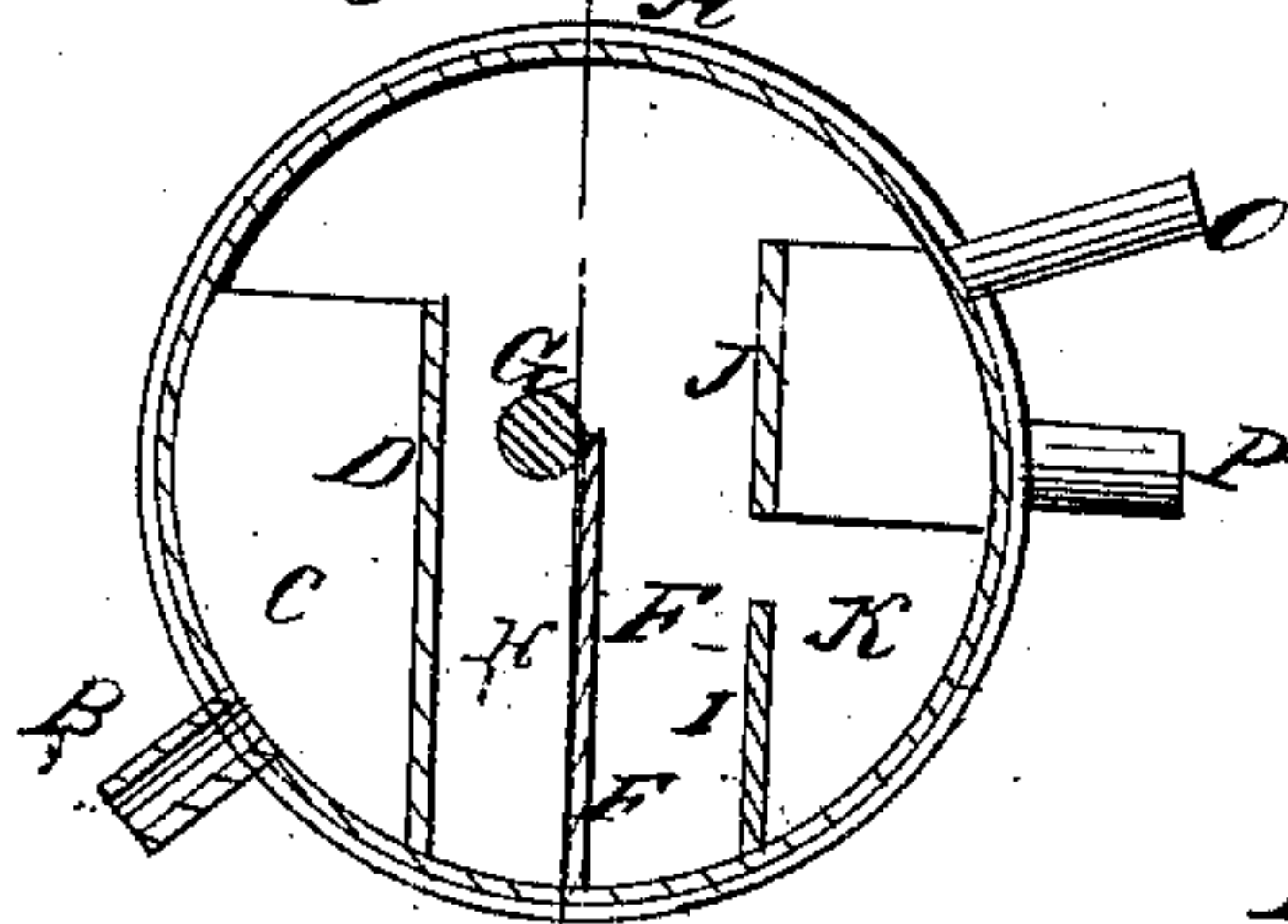


Fig: 2



Witnesses
A. A. Yeaman
Cornelius R.

Inventor:
Stephen Stucky.
per
Alexander H. Mason
Att'y

United States Patent Office.

STEPHEN STUCKY, OF NEW ALBANY, INDIANA.

Letters Patent No. 80,516, dated July 28, 1868.

IMPROVEMENT IN FEED-WATER HEATERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, STEPHEN STUCKY, of New Albany, in the county of Floyd, and in the State of Indiana, have invented certain new and useful Improvements in Steam-Boilers; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the use of a certain apparatus, which will be hereinafter described, for separating from the feed-water of a steam-generator any foreign or sedimentary matter which may be held in chemical solution or mechanical suspension, and depositing such matter where it may readily be removed without serious delay or expense, and where its presence, if not removed immediately, will not cause serious derangement or danger to the generator to which it may be attached.

This apparatus consists of a drum, A, placed above or at the water-line or level of the boiler or generator to which it is to be attached, and made of any suitable material or shape to withstand the pressure at which steam is to be carried in the boiler, and provided with a series of partitions or divisions, which form several chambers for retarding the flow of water, and receiving and retaining such matter as may be precipitated from the water.

In the figures, A represents the drum or reservoir, and L L represent the boilers or generators to which it is attached.

The water is received into this drum through the pipe B, passes into chamber C, and filling it, flows over the partition or side D of said chamber, and into chamber H, all the while being subject to the action of steam which is received into the drum from the boilers, through pipe O. The water, after filling the chamber H, flows over the perforated surface blow-off pipe G and partition F, into chamber E, thence it flows between the partitions J and I, into chamber K, and thence it passes out through pipes P P, to the boiler.

During its tortuous course through the drum, and being subjected to the action of steam, the water is freed of a great deal of matter which is held in solution by it, said matter being precipitated to the bottom of the several chambers, or settling upon the surface. The surface-matter is blown off through the pipe G, while that which is precipitated is blown off through suitable pipes, which lead from the bottoms of the chambers for that purpose.

Having thus fully described my invention, what I claim, is—

The drum A, with pipe G, perforated as described, partitions D F J I, forming chambers C H E K, with the exterior pipes, as described, and with the boilers L L, all constructed and arranged substantially as and for the purposes set forth.

In testimony that I claim the foregoing, I have hereunto set my hand and seal, this 2d day of October, 1867.

STEPHEN STUCKY. [L. s.]

Witnesses:

A. DOWLING,
S. WOODRUFF.