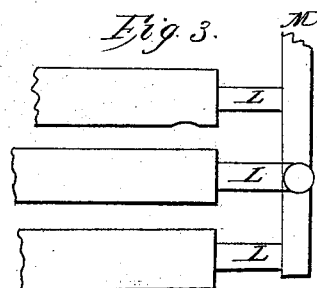
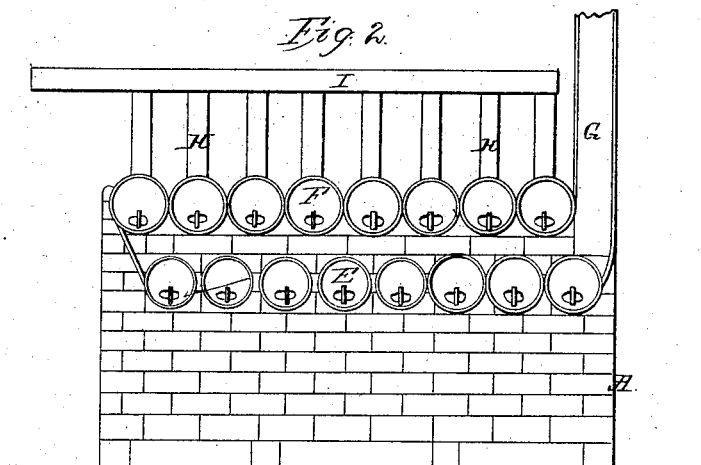
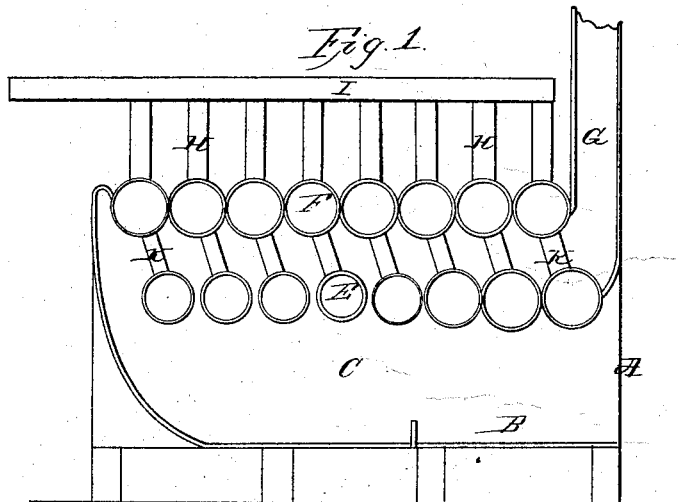


*L. P. Clark,*  
*Steam-Boiler Water-Tube.*  
*N<sup>o</sup> 762.                      Patented May 30, 1838.*



# UNITED STATES PATENT OFFICE.

LEVIN P. CLARK, OF BALTIMORE, MARYLAND.

## IMPROVED SAFETY STEAM-BOILER.

Specification forming part of Letters Patent No. 762, dated May 30, 1838.

*To all whom it may concern:*

Be it known that I, LEVIN P. CLARK, of the city of Baltimore and in the State of Maryland, have invented an Improvement in the Manner of Constructing Boilers for Steam-Engines; and I do hereby declare that the following is a full and exact description thereof.

My steam-boiler consists of a number of cylinders, within which the water is to be contained, which cylinders I have arranged and connected together by means of tubes passing from one cylinder to another in a manner which I believe to be substantially new and which I have found upon trial to be productive of very advantageous results.

Figure 1 is a vertical section of my boiler and furnace from front to back. The furnace-door is situated at A, the grate-bars at B and C, being the body of the furnace. E and F are rows of cylindrical boilers, arranged one row above the other, the centers of the upper boilers being immediately over the adjoining sides of the lower boilers, the draft to the chimney G being from front to back under the lower boilers and thence forward between the two rows. From the middle or from any other preferred part of each of the upper boilers rise tubes H H, which open into the boilers and into a tube or cylinder I, the tubes H and I forming the steam-chamber, from which the cylinders of the engine are to receive their supply. The upper and lower row of boilers are connected at each end by tubes K K, and the lower row of boilers are connected with the supply-pipe by a tube L L, proceeding horizontally from one

end of each of them to the said supply-pipe M, Fig. 3, which is a top view of three of those boilers.

Fig. 3 is a view of one end of the furnace and boilers, with their man-holes, the supply-pipe, and the tubes leading from it into each of the lower boilers being supposed to be at the opposite end.

I have not deemed it necessary to mention any particular dimensions of the respective parts, as these will vary according to the power required and any statement of them is not only unnecessary, but would be useless to a skillful boiler-maker.

I am aware that numerous tubular or cylindrical boilers have been constructed and used, but, as I firmly believe, not combined and connected together, and producing their conjoint action in the same manner or effecting the purpose aimed at as fully and advantageously as by my boiler. Although I do not therefore claim to be the inventor of combined tubular or cylindrical boilers or of any of the parts of the boiler by me described, taken separately,

I do claim—

The combination and arrangement of these parts taken as a whole, when made and constructed with the boilers arranged and connected with the steam-tube, with the supply-pipe, and with each other specifically and substantially as herein set forth.

LEVIN P. CLARK.

Witnesses:

LEWIS G. CURLETT,  
ROBERT H. HARRISON,