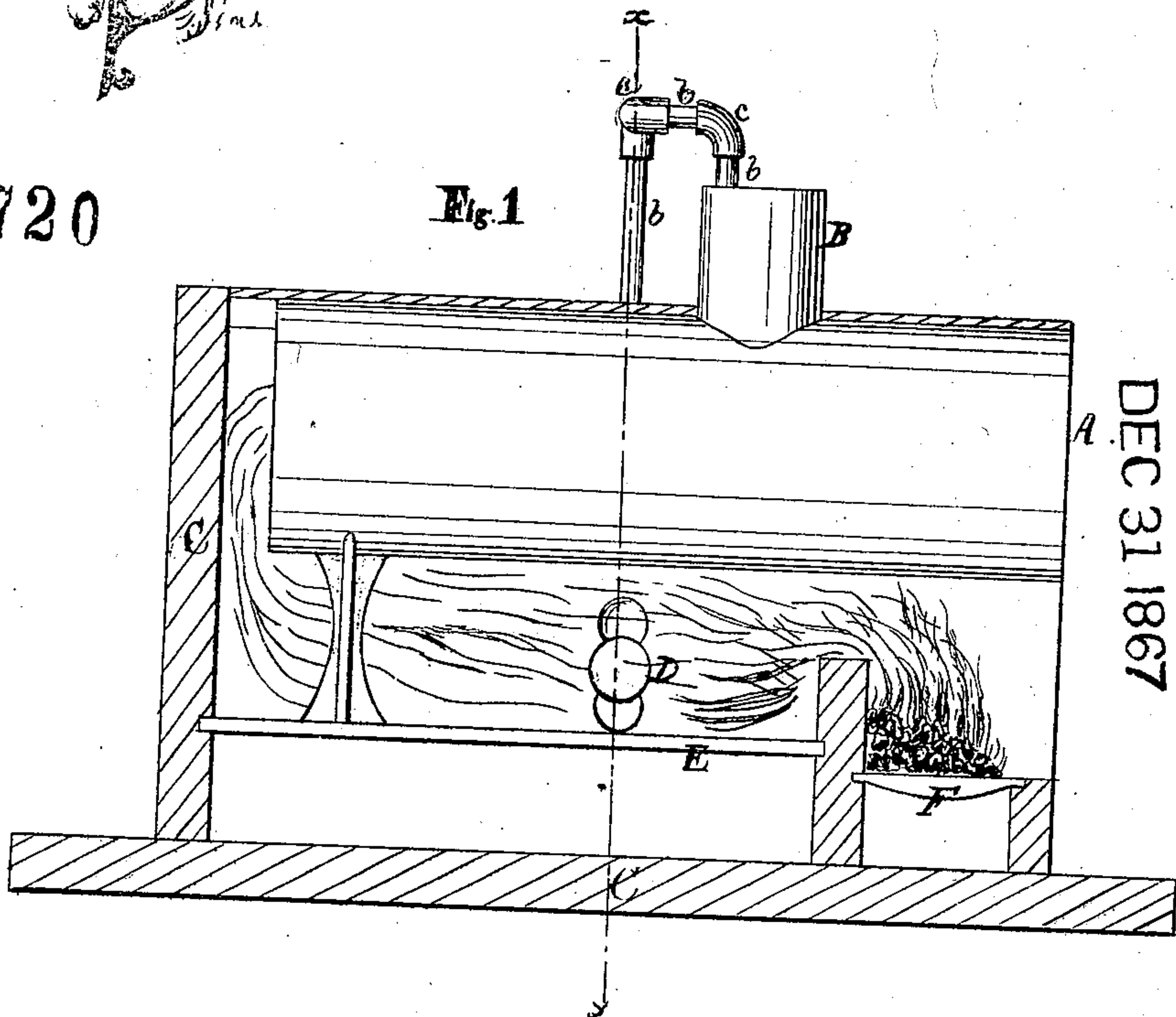


George H. Clarke's Improvement in SUPERHEATERS

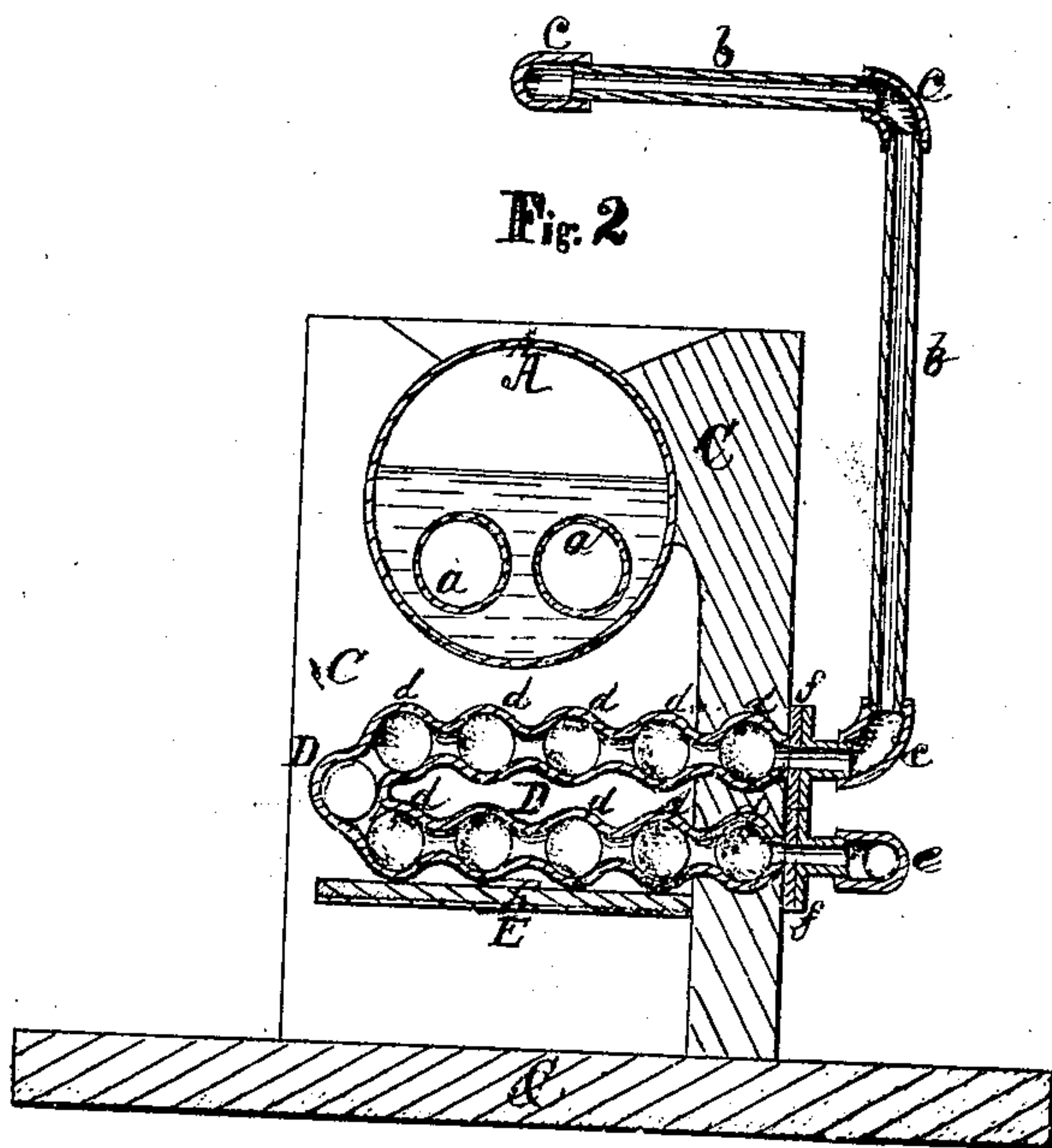
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Fig. 1



PATENTED
DEC 31 1867

Fig. 2



Witnesses { *Edw. Duggin*
Edward C. Osborn } *Geo. H. Clarke.* } Inventors

United States Patent Office.

GEORGE H. CLARKE, OF BROOKLYN, NEW YORK.

Letters Patent No. 72,720, dated December 31, 1867.

IMPROVEMENT IN STEAM-GENERATORS.

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, GEORGE H. CLARKE, of Brooklyn, Kings county, New York, have invented a new and useful Improvement in Superheaters; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, figures, and letters of reference thereon, making part of this specification. Of the said drawings—

Figure 1 is a side elevation.

Figure 2 is a sectional view through line *xy*.

Similar letters of reference indicate like parts in all the drawings.

My invention consists in the arrangement, with a boiler, of a series of hollow balls, connected together by tubes, through which the steam passes, so that the fire shall pass around the balls, and superheat the steam therein before it is used, as will be fully set forth.

To enable others skilled in the art to make and use my invention, I will proceed to describe the construction and operation thereof.

A represents the boiler, which may be of any desired pattern; D represents the ball-pipe or series of balls united to the tube; *b b* are pipes, connected by joints *c c*, for conducting the steam from the dome B of the boiler to the superheating-apparatus; *e* is the pipe for conveying the superheated steam to the cylinder of the engine; all of which parts are plainly shown in the drawings. I construct the ball-pipe of cast iron, casting the same with a core, in a manner well known to iron-founders.

By the use of the series of ball-pipes, as shown and described, I am enabled to get a great heating-surface, and to superheat the steam rapidly and efficiently, and render the apparatus simple, and easily attached to boilers of any kind.

Claim.

I claim the arrangement of the series of hollow balls, constructed substantially as described.

GEO. H. CLARKE.

Witnesses:

C. A. DURGIN,
EDWARD E. OSBORN.