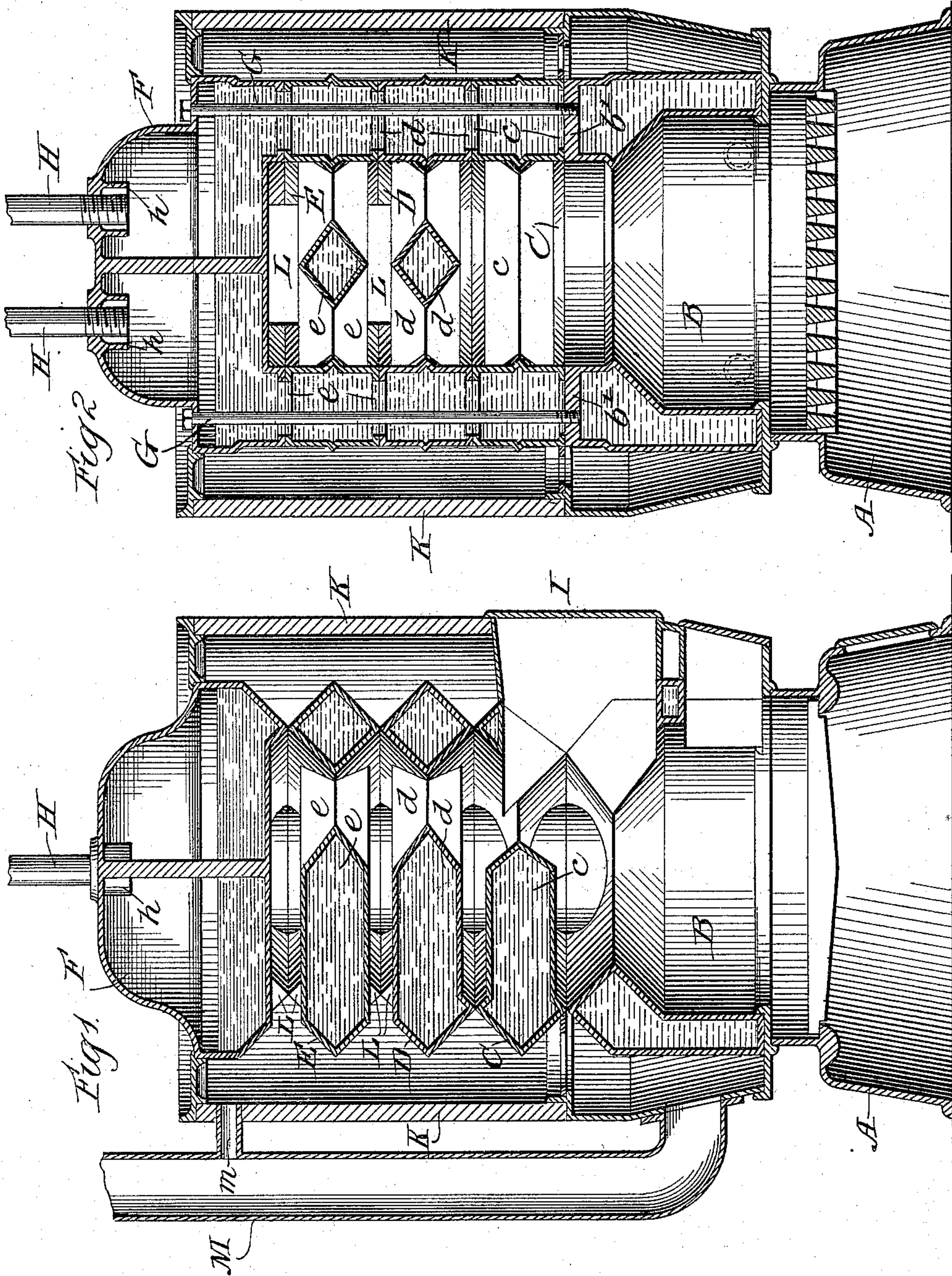


(No Model.)

C. C. MULFORD.
STEAM GENERATOR.

No. 533,137.

Patented Jan. 29, 1895.



Witnesses
Wm. L. Fleming
Wm. H. Hill.

Inventor
Charles C. Mulford
by Rice & Rice his Attys.

UNITED STATES PATENT OFFICE.

CLARENCE C. MULFORD, OF STREATOR, ILLINOIS.

STEAM-GENERATOR.

SPECIFICATION forming part of Letters Patent No. 533,137, dated January 29, 1895.

Application filed July 13, 1893. Serial No. 480,338. (No model.)

To all whom it may concern:

Be it known that I, CLARENCE C. MULFORD, a citizen of the United States, residing at Streator, county of La Salle, and State of Illinois, have invented certain new and useful Improvements in Steam-Generators, of which the following is a specification.

Referring to the accompanying drawings, wherein like reference letters indicate like parts, Figure 1 is a vertical section of a boiler and dome showing my improvement, and Fig. 2 is a similar section at right angles to Fig. 1.

My invention is designed to prevent the passage of water into the steam pipes, and consists in the peculiar construction of the steam dome described, by means of which this result is secured.

At the top of the dome F, is constructed a port (or ports), from which the pipe conducts the steam to the engine or other desired point. Inside the dome and constructed integral therewith a cylindrical collar (or collars) *h* encircles the eduction port and extends downward into the steam space. Any water which by reason of agitation, foaming, or by condensation, aided by the current of steam, tends to creep toward and enter the eduction port and the pipes, is arrested by the collar. The collar extends downward and draws the supply from what is termed the "dry steam" which occupies the dome. This is very important, as in many cases so much water enters the pipes as to seriously interfere with the passage of the steam. It is thus carried into the cylinder of the engine, or into the pipes, and often with serious results.

It is not necessary to set forth at length the advantages gained by thus preventing the passage of water from the boiler into the steam pipes, as these advantages are well known and understood by those skilled in the use of steam.

It is obvious that two collars, one larger and encircling the smaller, may be used if preferred, but ordinarily a single collar as shown in the drawings is sufficient.

I am aware of the patents to Wood and Richmond, No. 294,300, dated February 26, 1884; to Frick, No. 331,488, dated December 1, 1885, and English patent to Brown, No. 11,600, dated July 20, 1889, and I do not claim the inventions therein set forth.

What I do claim, and desire to secure by Letters Patent, is—

1. In a steam boiler, the herein described steam dome having a cylindrical collar, integral therewith, surrounding the eduction port and extending inwardly into the steam space, substantially as and for the purpose set forth.

2. In a steam boiler, the herein described steam dome constructed in a single piece and having one or more cylindrical collars, constructed integral therewith, surrounding the eduction port and extending inwardly into the steam space, substantially as and for the purpose set forth.

CLARENCE C. MULFORD.

Witnesses:

W. C. FLICK,
H. G. YOUNG.