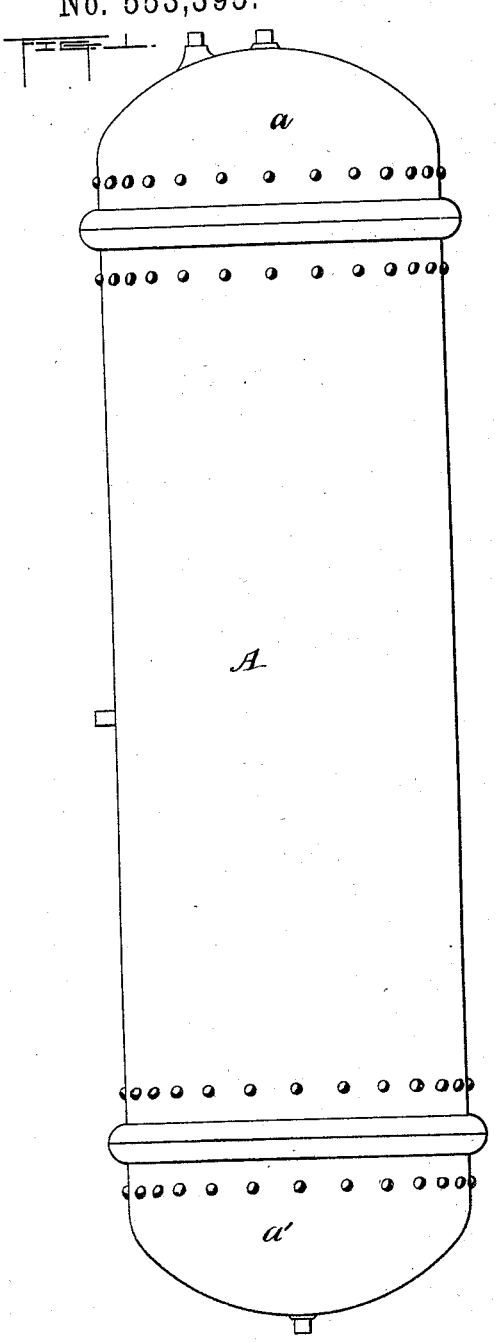
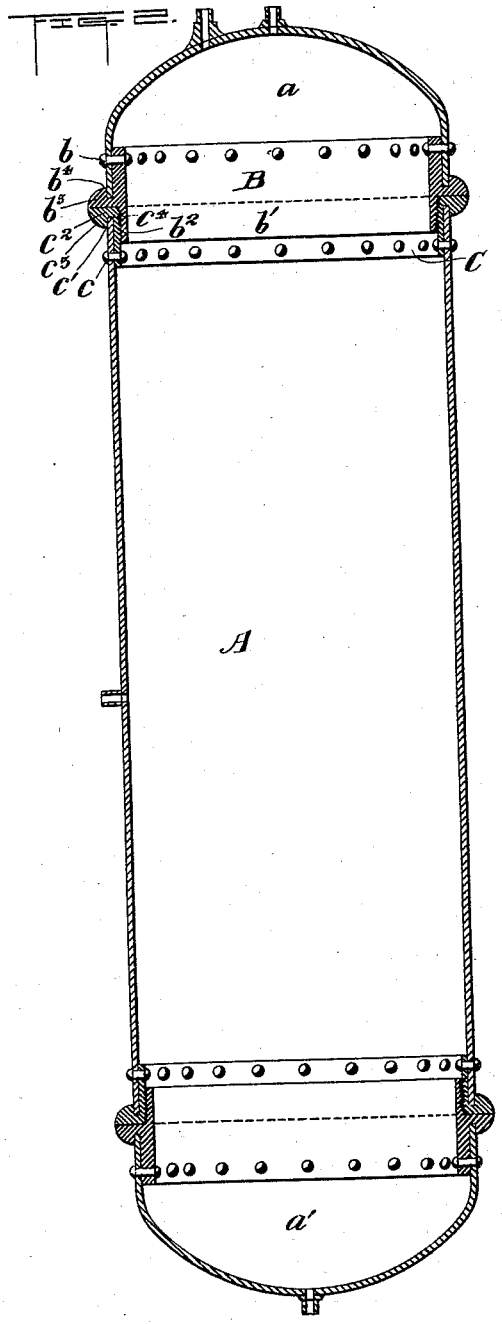
(No Model.)

J. E. DEVER & C. A. COTTER.

BOILER.

No. 553,395. Patented Jan. 21, 1896.





Witnesses.
Robert Bacon Lovett
George Barry

Inventors.
John E. Dever and
Charles A. Cotter
by their Attorneys.
Brown & Seward

UNITED STATES PATENT OFFICE.

JOHN E. DEVER AND CHARLES A. COTTER, OF WATERBURY, CONNECTICUT, ASSIGNORS TO RANDOLPH & CLOWES, OF SAME PLACE.

BOILER.

SPECIFICATION forming part of Letters Patent No. 553,395, dated January 21, 1896.

Application filed April 22, 1893. Serial No. 471,419. (No model.)

To all whom it may concern:

Be it known that we, JOHN E. DEVER and CHARLES A. COTTER, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Boilers, of which the following is a specification.

Our invention relates to an improvement in boilers, and more particularly to hot-water boilers for use in connection with a kitchen range or heater.

Our object is to provide a boiler in which the body may be formed of sheet metal, either drawn or seamed, and in which either one or both of the heads may be removed at pleasure for cleaning or other purposes, and to further provide a boiler which shall present an attractive outward appearance and one that can be manufactured at a low cost.

With these ends in view our invention consists in certain features of structure and combination of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of a boiler embodying our invention in side elevation. Fig. 2 is a vertical central section of the same.

The body of the boiler is denoted by A and the head portions by a and a'. The body portion A may be spun or drawn into seamless tubular form, or it may be formed of a sheet of metal having its edges connected by a seam, as is common. The ends are drawn into cup-shaped form, as shown. At their edges they are provided with a reinforcing-rim B adapted to extend within the open end of the head and to be secured thereto by means of rivets b. The reinforcing-piece B is provided with an extended portion b' of lesser diameter than the part B and provided with an exterior screw-thread b^2. Said rim B is further provided with an outwardly-extended rib b^3, the outer face of which is curved over toward the exterior surface of the head a, and a space b^4 is left between said curved faced portion b^3 and the body of the rim B, for the reception therein of the edge of the head a, as clearly indicated in Fig. 2.

The body portion A is provided with a reinforcing-rim C, adapted to fit within its end and to be riveted thereto by a series of rivets c. The rim C is provided with an interior screw-thread c', adapted to register with the exterior screw-thread on the neck b' of the rim B, and said rim C is further provided with an extended rib c^2, corresponding to the rib b^3 on the rim B, which projects outwardly and is provided with a curved exterior face c^3, which extends over toward the exterior surface of the body A and forms between it and the body of the rim C a recess c^4 for the reception of the edge of the body A. The head is secured to the body by screwing the threaded neck b' into the threaded rim C until the adjacent faces of the ribs b^3 and c^2 abut against each other. When so assembled, the curved-face ribs together produce a complete curved-face rib around the exterior of the boiler, as shown in Fig. 1, completely concealing the meeting edges of the body and head and forming at the same time an attractive finish. To enhance the attractiveness, the reinforcing-pieces B and C may be made of material which will contrast with that of which the body and head of the boiler are made—as, for example, if the body and head be made of copper the reinforcing-pieces may be made of brass.

We have shown the head a' secured to the body A in the same manner in which the head a is secured, so that either end of the boiler may be removed at pleasure. If desired, however, the removable feature may be confined to one end, and the opposite end may be secured to the body in any well-known or approved manner.

What we claim is—

1. The combination with the body portion of a boiler having a reinforcing rim secured in its end, of a head portion having a reinforcing rim secured in its end, the reinforcing rims in the body and head having a removable connection with each other and said rims being each provided with an outwardly extending rib, which ribs when the parts are in assembled adjustment combine to form an exterior bead around the boiler, substantially as set forth.

2. The combination with the body portion of a boiler having a reinforcing rim secured in its end, of a head portion having a reinforcing rim secured in its end, the reinforce-

ing rims in the body and head having a removable connection with each other and said rims being each provided with an outwardly extending rib and with an annular socket between the rib and the body of the reinforcing rim for the reception of the end of the head and body, the ribs when the parts are in assembled adjustment combining to form an exterior bead around the boiler, substantially as set forth.

JOHN E. DEVER.
CHARLES A. COTTER.

Witnesses:
GEO. W. BOWERS,
B. F. BRUSSTAR.