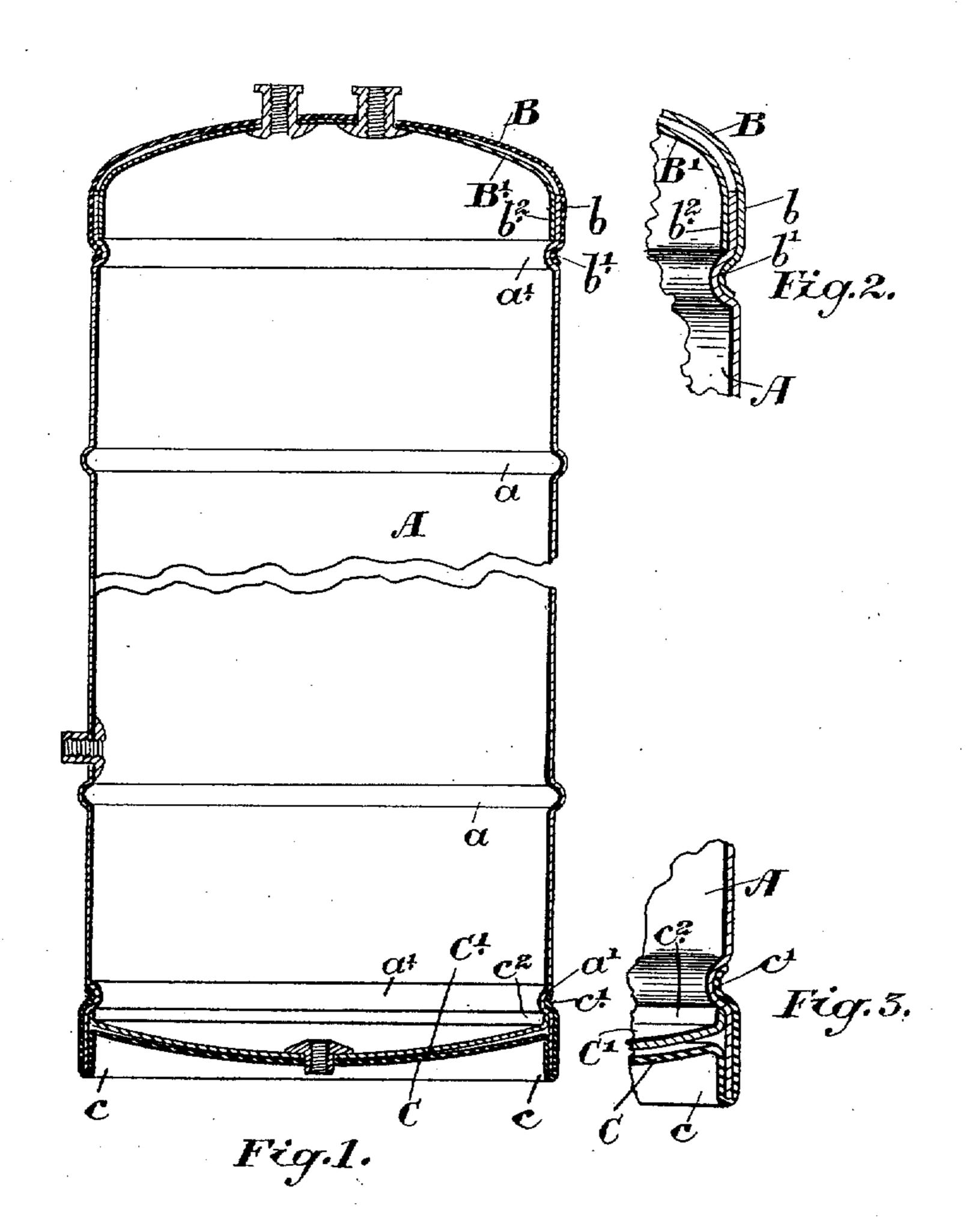
No. 628,680.

Patented July II, 1899.

J. H. STONE. RANGE BOILER.

(Application filed July 30, 1898.)

(No Model.)



Witnesses.

Inventor.

United States Patent Office.

JOHN HENRY STONE, OF TORONTO, CANADA.

RANGE-BOILER.

SPECIFICATION forming part of Letters Patent No. 628,680, dated July 11, 1899.

Application filed July 30, 1898. Serial No. 687,317. (No model.)

To all whom it may concern:

Be it known that I, JOHN HENRY STONE, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Rauge-Boilers, of which the following is a

specification.

My invention relates to improvements in range-boilers; and the object of the invention is to design a simple form of head to the boiler which will be capable of withstanding a maximum amount of pressure in a minimum size of boiler and otherwise strengthen the construction of the boiler; and it consists, essentially, of making the heads of the boiler in peculiar form with large flanges designed to fit against and into a bead formed in the cylindrical body of the boiler, the body being also provided with circumferential beads intermediate of its length, as hereinafter more particularly explained.

Figure 1 is a sectional view of a range-boiler intermediately broken away to show the parts involved in my invention. Fig. 2 is an enlarged detail showing the form of joint and means for attaching the top head to the body. Fig. 3 is a similar view in refer-

ence to the bottom head.

In the drawings like letters of reference in-30 dicate corresponding parts in each figure.

A is the cylindrical body of the boiler, which is provided intermediate of its length with strengthening-beads a, preferably extending outwardly, and end beads a'. The body A is preferably made of very light metal and the beads a serve to prevent it from collapsing, such beads being swaged or otherwise formed up in the body, which is jointed in the usual manner from end to end with the seam on the inside and merely a crease on the outside.

The top head is made in two portions B and B', the outer portion B being formed up, so as to have an outer flange b, which is provided with an inwardly extending edge bead b', which fits into the bead a'. The inner portion of the head is provided with a flange b^2 ,

which abuts the bead α' on the inside. The two portions B and B' touch each other in the center of the head.

The lower head is comprised of two portions 50 C and C'. The portion C is convex on the exterior and has a downwardly-extending folded flange c, into which the body A extends, the outer portion of the flange having a bead c', formed at its edge, which fits into the bead a'. 55 The portion C' has a flange c^2 , which abuts the bead a'. The flanges b and b^2 of the two portions of the top head and the flanges c and c' of the two portions of the lower head are swaged to the main cylinder with any suitable liquid metal specially prepared for the purpose.

What I claim as my invention is—

1. In a range-boiler, in combination, the cylindrical body portion having end inwardly- 65 projecting beads and flanges extending beyond said beads, and a two-part head for said boiler, the inner part of said head fitting within the flange of the body portion with the edge of said part resting upon the said bead, 70 whereby the head is positioned by the bead and the outer portion of the head fitting around the flange of said body, said outer portion being provided with an edge bead fitting within the bead of the body, substan- 75 tially as described.

2. In a range-boiler, in combination the cylindrical body having end inwardly-projecting beads and flanges extending beyond said beads, and a two-part head, the inner part 80 thereof fitting within the flange of the body and resting upon said bead, and the outer portion of the head fitting around the flange with its ends beaded to fit within the heads of the body, said outer portion of the head 85 being bent to conform to the flange of the body.

JOHN HENRY STONE.

Witnesses:

B. BOYD,

E. P. FETHERSTONHAUGH.