(Model.)

C. H. BAILEY.

JACKET RING FOR HOT AIR FURNACES.

No. 550,241. Patented Nov. 26, 1895.

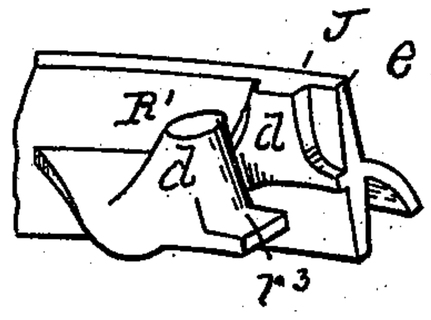

Fig 5

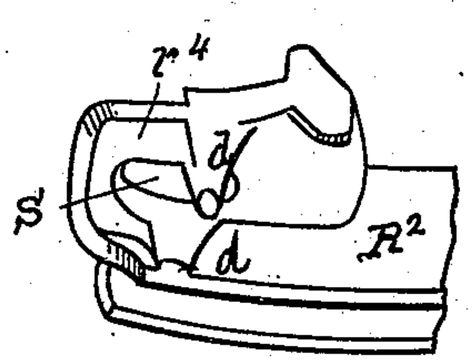

Fig 4

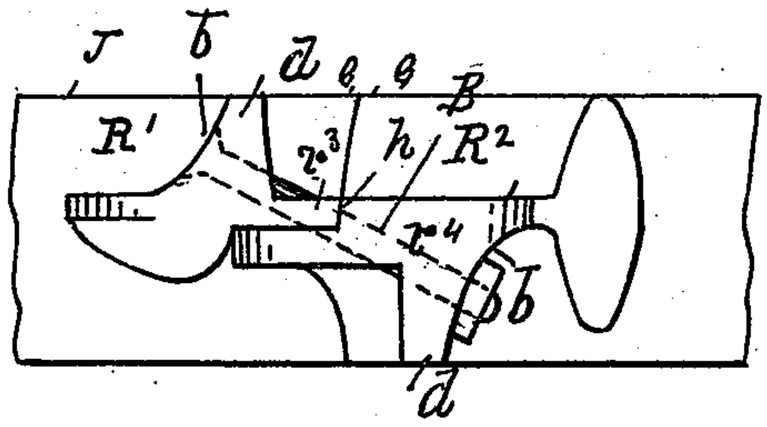

Fig 3

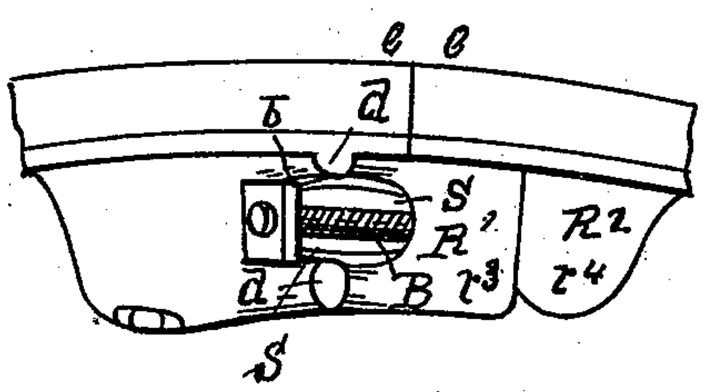

Fig 2

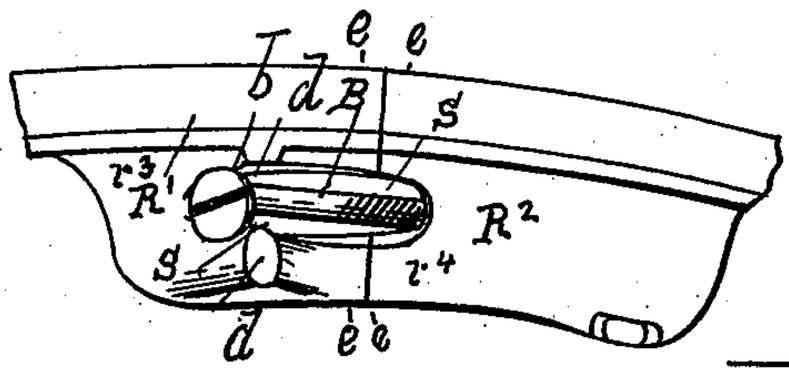

Fig 1

WITNESSES

Charles S. Brintnall
O. B. Collins

INVENTOR

Charles H Bailey
by Webb Vaughan Atty

UNITED STATES PATENT OFFICE.

CHARLES H. BAILEY, OF TROY, NEW YORK, ASSIGNOR TO THE FULLER & WARREN COMPANY, OF SAME PLACE.

JACKET-RING FOR HOT-AIR FURNACES.

SPECIFICATION forming part of Letters Patent No. 550,241, dated November 26, 1895.

Application filed March 15, 1895. Serial No. 541,892. (Model.)

To all whom it may concern:

Be it known that I, CHARLES H. BAILEY, of the city of Troy, county of Rensselaer, and State of New York, have invented a new and useful Improvement in Jacket-Rings for Hot-Air Furnaces, of which the following is a specification.

My invention relates to the joints which are used to connect the arc-form parts of rings which are used to receive and hold in place the sheet-metal jackets of hot-air furnaces. These flanged rings are often too great in circumference to be cast conveniently, and consequently are made in arc-form parts formed to abut and where abutting to connect; and to form this connection of the ring parts is the object of my invention.

Accompanying this specification, to form a part of it, there is a plate of drawings containing five figures illustrating my invention, with the same designation of parts by letter reference used in all of them.

Of the illustrations, Figure 1 is a top view of portions of two heater jacket-ring parts connected by my improved joint at one end of each part. Fig. 2 is a view of the same parts shown at Fig. 1, but with what is its under side when in position shown as uppermost. Fig. 3 is an elevation of the connected parts with what is their inside face when in position shown as fronting the view. Fig. 4 is a perspective of one of the end parts, and Fig. 5 is a perspective of the other end part, with the end parts illustrated at Figs. 4 and 5 shown as detached.

The several parts of the jacket-ring and those forming their connection are designated by letter reference, and the function of the parts is described as follows: The letter R′ designates one of the ring parts, R^2 another of them, each of which is made with the upwardly-projecting jacket-flange J, which when the ring parts connect is in circular alignment to receive the jacket. Each of these ring parts at the ends where they connect is made with an inwardly-projected rib part, the latter where upon the ring part R′ being designated at r^3 and where upon the ring part R^2 designated at r^4. The rib part r^4 underlaps the rib part r^3, with the latter abutting against a shoulder *h*, formed on the rib part r^4 when connected, the line of the abutment being diametrically coincident with that of the edges *e e* of two ring parts where in abutting contact. Each of the rib parts r^3 and r^4 is slotted at S for the passage of a stove-bolt B, and upon opposite sides each of the ribs r^3 and r^4 is made with slotted bolt-studs *d*, vertically projected oppositely therefrom, and each of the latter has an outwardly-beveled face *b*, the incline or bevel of these two bolt-studs being parallel. As thus made, when the ends *e e* of the ring parts are brought together and a stove-bolt is passed upwardly on an incline through the slots S of the ribs, with the rib r^3 overlapping the rib r^4, with the head of the bolt bearing upon the inclined face of the stud on the ring part R′, and the nut on the threaded end of the bolt is screwed on so as to bear on the inclined face *b* of the slotted stud *d* of the ring part R^2, the parts are drawn closely together and firmly held by the connection thus made.

The leading feature of my invention is to hold the abutting ring ends firmly connected by means of a screw-stud vertically and oppositely projected from a rib at each of the ring part ends, said screw-studs being each provided with a slotted passage for a stove-bolt, and each having an inclined surface or bevel adapted to receive either the screw-bolt head or nut, with the bolt intermediately passed up through the ribs on an incline. I do not limit my improvement to the precise construction of these elements which I illustrate and describe, but do limit it to the use of parts that perform the same function in substantially the same manner.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a joint for connecting the parts of hot-air furnace jacket rings, the combination with a slotted bolt stud arranged upon and vertically projected oppositely from each of said ring-parts; with each of said studs having an outer face made with a beveled surface that is parallel to that of the other stud; and a headed and threaded bolt adapted to be inserted within the slots of said studs on an incline and by means of a nut on the

threaded end of the bolt to connect the parts, substantially in the manner as and for the purposes set forth.

2. In a device for connecting the parts of a hot-air furnace jacket ring, the combination of a rib projected inwardly from each of the ring-parts near their ends, and made with a bolt passage, and to lap past each other when the ends of the ring parts are in abutting contact; a slotted stud oppositely projected from the sides of each rib; said studs having coincidently beveled outer faces, and a stove bolt made with a head and threaded end and adapted to be passed through said lapping ribs, and to connect said studs by means of a nut on the threaded end of the bolt, substantially in the manner as and for the purposes set forth.

3. In a joint for connecting the arc-form parts of a hot-air furnace jacket ring, the combination with the ring-part R′, made with the laterally projected rib-part r^3, having a central bolt passage, and provided with a slotted screw bolt stud, formed with an outer beveled face; of the ring-part R^2, made with the laterally projected rib-part r^4, a central bolt passage, and having a slotted screw bolt stud made with an outwardly beveled face, with the ring-part R^2, constructed to underlap the ring-part R′, at its contact end, and a threaded bolt B, adapted to be inserted in the bolt studs and intermediately to pass through the lapping rib-parts and to connect the studs, substantially in the manner as and for the purposes set forth.

Signed at Troy, New York, this 16th day of November, 1893, and in the presence of the two witnesses below written.

CHARLES H. BAILEY.

Witnesses:
W. E. HAGAN,
CHARLES S. BRINTNALL.