

(No Model.)

C. A. RICHARDSON.
DEFLECTOR FOR HEATING STOVES.

No. 509,948.

Patented Dec. 5, 1893.

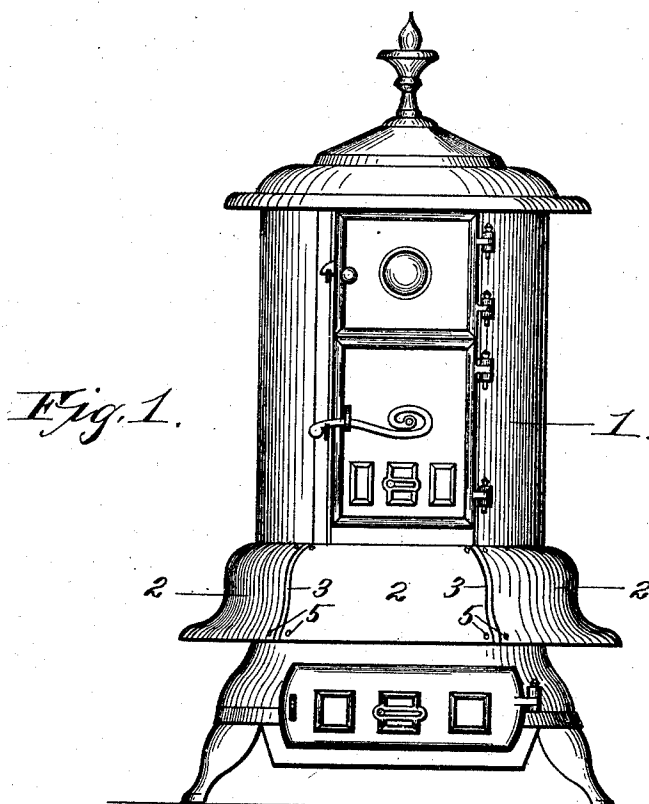


Fig. 3.

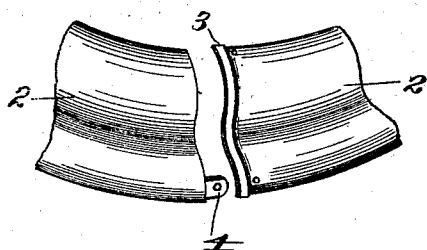
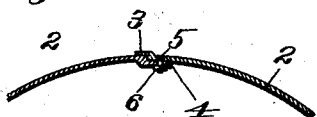


Fig. 4.

Fig. 5.

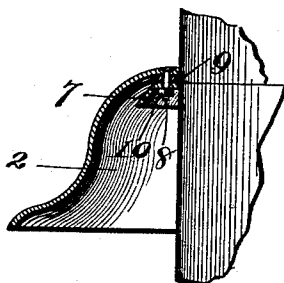


Fig. 2.

Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES A. RICHARDSON, OF KANSAS CITY, KANSAS.

DEFLECTOR FOR HEATING-STOVES.

SPECIFICATION forming part of Letters Patent No. 509,948, dated December 5, 1893.

Application filed May 1, 1893. Serial No. 472,592. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. RICHARDSON, of Kansas City, Wyandotte county, Kansas, have invented certain new and useful Improvements in Deflectors for Heating-Stoves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in deflectors for stoves, and the object of the invention is to provide a deflector which is very ornamental of appearance, also which will from its location upon the barrel or body of the stove deflect a greater part of the heat to the floor, and which forms a foot-rest or rail. Furthermore to provide a deflector which is simple, durable and inexpensive of construction, and which can be easily attached to or detached from a stove when desired.

To the above purposes, my invention consists in certain peculiar and novel features of construction and arrangement as will be hereinafter fully described and claimed.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1, is a front elevation of a heating-stove, and provided with a deflector constructed in accordance with my invention. Fig. 2, is a vertical sectional view of the deflector and the supporting ring therefor, and showing a portion of the stove-body in elevation. Fig. 3, is a horizontal section to show the manner of securing the sections comprising the deflector together. Fig. 4, is a perspective view of the adjacent ends of two of the segmental sections composing the deflector; and Fig. 5, is a detail perspective view of the asbestos gasket or ring, adapted to be interposed between the deflector and the supporting ring therefor.

Before entering upon a detailed description of the invention, I will state that the use of my deflector, entirely obviates the necessity of an interior lining for the barrel of the stove, because the discoloration of the stove-body or barrel is entirely hid from view by the deflector which surrounds it, the stove-body at that point.

Referring to the drawings, 1 designates a

heating stove, which may be of the construction shown or may be of any other desired or preferred construction. An annular deflector is formed of a series of segmental sections 2, the side margins of which converge upwardly from their lower to their upper ends or edges, as shown. These sections 2 are preferably of S-shape in cross-section, but may be of any configuration which will, when secured together and to the stove, leave a space between the deflector and the outer side of the stove-body, without departing from the spirit of my invention.

The outer surface of the sections composing my deflector may be nickel-plated or ornamented in any other suitable or desired manner. The adjacent side margins of these sections 2, are provided one with a flange extending from the upper to the lower edge as shown at 3, and the other with an ear or lug 4 at its lower edge, which is adapted to fit under the adjacent side margin of the first-named section, as shown in Fig. 3, and a bolt 5 is passed through aligned holes or apertures in the ear or lug 4 and the overlapping side margin of the first-named section, and a nut 6 engaging the projecting end of the bolt binds them firmly together. The upper ends of the sections 2 of the deflector are secured upon the supporting ring 7 of the stove, by bolts 8, which, passing vertically downward through holes or apertures in the sections composing the pendent deflector through the asbestos packing ring 9 which is interposed between the inner side of the upper end of the deflector and the upper side of the supporting ring, and through the said supporting ring 7, are engaged by the nuts 10 which bear firmly against the under side of the supporting ring, and thus secure the deflector firmly around the stove in a pendent position. The object in thus providing the interposed asbestos ring, is to make a perfectly air-tight joint between the upper side of the supporting ring and the inner side of the upper end of the deflector, and also to prevent the direct contact of the deflector with the stove, as the nickel-plate or other ornamentation of the deflector might thereby suffer injury. It will thus be seen that the heat radiating from the lower portion of the stove against the under side of the radiator, is deflected downward

thereby to the floor, thus effectually comingling the heated air from the stove with the cooler air in the lower portion of the room, which rising as it is heated is replaced by colder air, this operation continually taking place as long as the stove emits heat.

From the above description, it will be seen that I have produced an effective deflector for the heat radiating from the stove, and also a deflector which forms a foot-rest or rail, which is very ornamental of appearance, and which can be applied to or detached from a stove without trouble.

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

1. The combination with a heating stove, having a supporting ring 7, of an annular deflector surrounding the stove-body and supported by said ring, a packing-ring of asbestos interposed between the upper end of the deflector and the upper side of said ring, and bolts passing through the deflector, the pack-

ing-ring and the stove-ring, and nuts engaging said bolts so as to draw or clamp the upper end of the deflector upon the packing-ring so as to form an air-tight joint and cause the heat to pass downward, substantially as set forth.

2. An annular deflector, comprising a number of segmental sections having converging side margins provided each with a flange, adapted to overlap the adjacent end of the adjoining section, and an ear carried by said adjoining section and adapted to underlie or fit against the under side of the first named section, and a bolt adapted to pass through said first-named section and said ear, and a nut adapted to engage the projecting end of the bolt, substantially as set forth.

In testimony whereof I affix my signature in the presence of two witnesses.

CHARLES A. RICHARDSON.

Witnesses:

MAUD FITZPATRICK,
M. P. SMITH.