

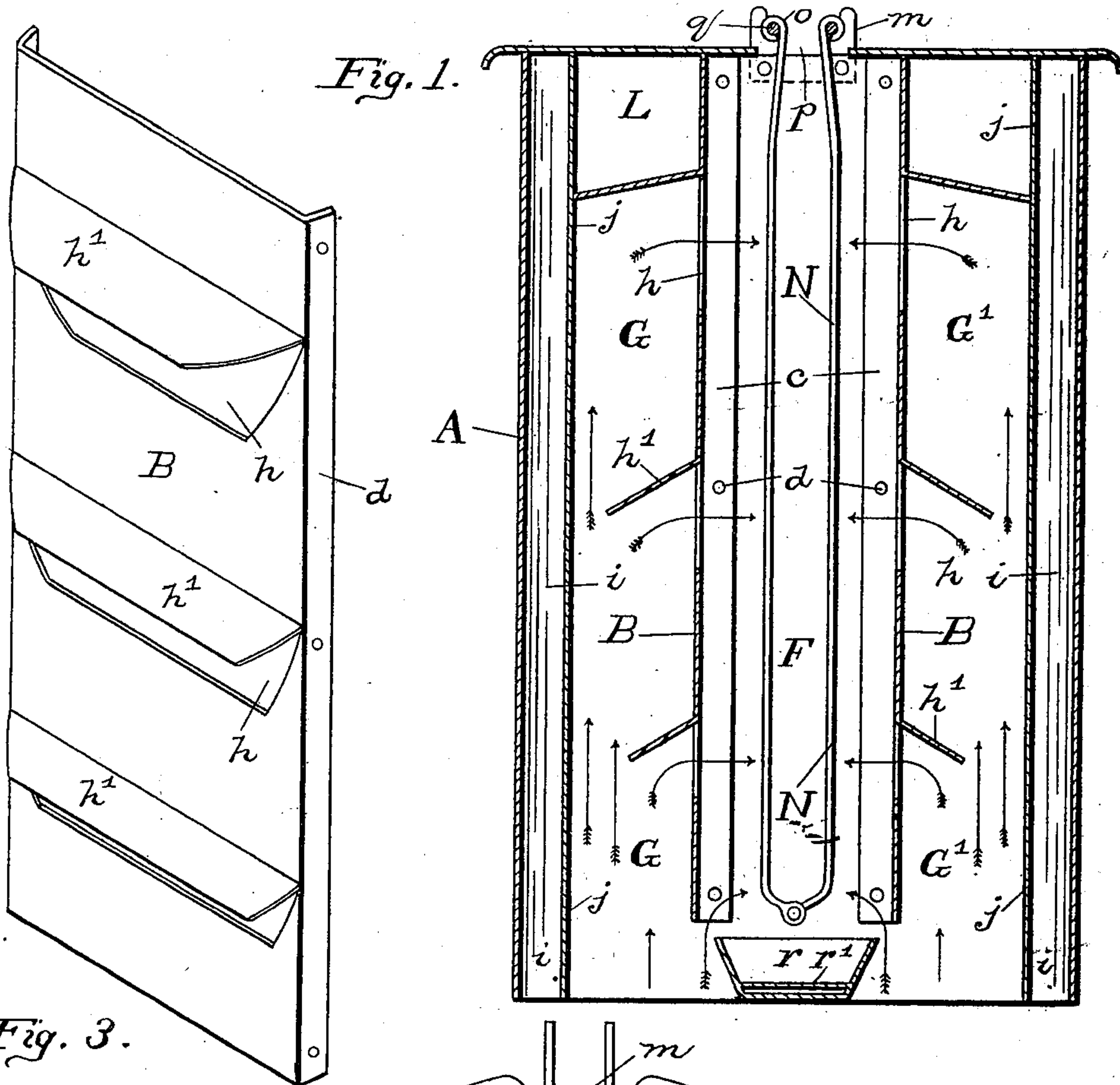
No. 658,189.

Patented Sept. 18, 1900.

S. A. MORGAN.  
MEAT BROILER.

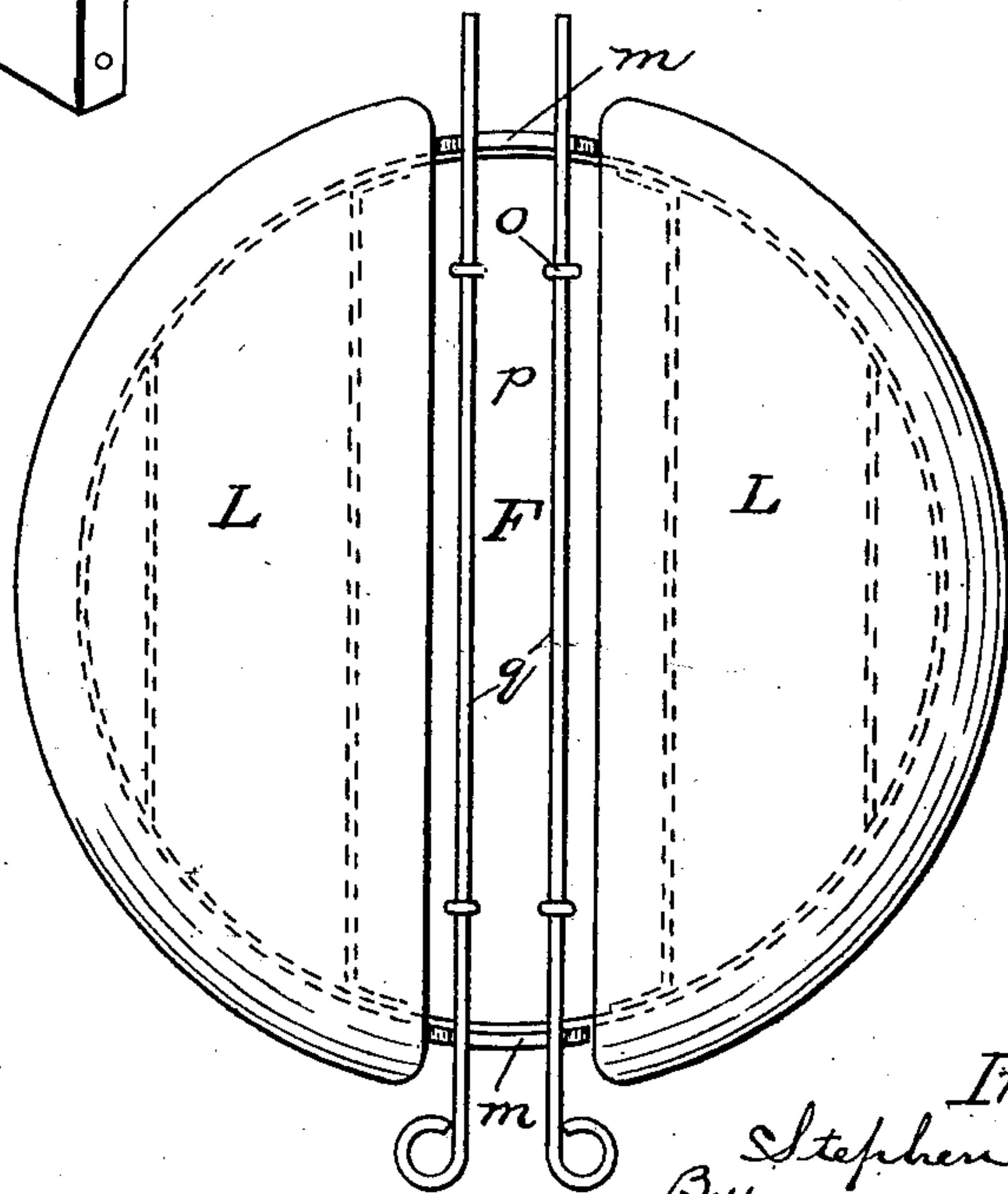
(Application filed May 31, 1900.)

(No Model.)



*Fig. 3.*

*Fig. 2.*



Witnesses.  
H. F. Meyer Jr.  
Charles L. Vietach.

Inventor.  
Stephen A. Morgan  
By Chas. B. Mann  
Attorney.



# UNITED STATES PATENT OFFICE.

STEPHEN A. MORGAN, OF BALTIMORE, MARYLAND.

## MEAT-BROILER.

SPECIFICATION forming part of Letters Patent No. 658,189, dated September 18, 1900.

Application filed May 31, 1900. Serial No. 18,570. (No model.)

*To all whom it may concern:*

Be it known that I, STEPHEN A. MORGAN, a citizen of the United States, residing at Baltimore, State of Maryland, have invented certain new and useful Improvements in Meat-Broilers, of which the following is a specification.

My invention relates to improvements in meat-broilers to be used over any ascending heat and in which a steak or other article to be broiled is vertically suspended in a central chamber on either side of which are flues from which the ascending hot air enters the broiling-chamber by means of slots and flanges, thereby directing the heat simultaneously against both sides of the steak or other article being broiled.

The objects of my improvements are, first, to provide a convenient and practical broiler to be used over Bunsen burners, gas and oil stoves, and other heating devices; second, to obviate scorching, smoking, and "bittering" the steak so common with most broiling devices, and, third, to insure uniformity in the cooking of all parts of the steak and the retention of the normal juiciness and flavor. I attain these objects by the construction illustrated in the accompany drawings, in which—

Figure 1 is a vertical section of the entire broiler. Fig. 2 is a top view, and Fig. 3 is a perspective view, of one of the inner walls separating the hot-air flues from the broiling-chamber.

The casing A is a cylinder and stands upright. Within this case are two parallel upright walls B, of sheet metal, having side vertical flanges c, by which they are secured to the cylinder, rivets d being used for this purpose. These two walls form a central chamber F, in which the meat or other article to be broiled is suspended, and also form side flues G G', up which the heat-currents ascend. Each wall B has a series of openings h—any desired number, in the present instance three in number. Above each opening an inclined flange h' projects from the wall and serves to direct or deflect the heat-currents into the opening, as indicated by darts. The construction to produce this wall, openings, and deflecting-flanges is really immaterial and may vary from that shown; but I prefer the construction shown, where each flange h' is formed by

merely bending outward the sheet metal that forms the flange and which is cut at three sides to form the opening h, leaving uncut the upper part of the opening, where the flange is attached. It will be observed that the three deflecting-flanges in each flue are of gradually-increasing width from the lower one to the uppermost one. Thereby the lower flange does not obstruct the upward passage of the heat-currents to the upper flanges. The topmost flange entirely closes the heat-flue.

At each of two sides is formed an insulated air-space i by means of a vertical plate j, secured in the cylinder. These plates j form one side of the hot-air flues. The space i insulates the heat on the outer sides of the case and prevents exterior radiation.

The broiler has a cover L, made in two separate parts and which when in position on the top of the cylindric case leaves a central opening or space p.

The top end of the cylinder has two forked lugs m, one diametrically opposite the other and projecting a little above the plane of the cover L.

A suitable wire clamp N, similar to an ordinary wire bread-toaster, is employed to hold the meat or whatever is to be broiled. This clamp has two sides which may be hinged at the lower end and its upper end provided with eyes o, which project through the central opening between the two parts of the cover, and two cross-wires q take through the eyes of the clamp and rest in the said two forked lugs m.

In operation the steak, fish, or whatever is to be broiled is first placed in the clamp holder N, with the cross-wires q in position, and then the clamp and steak are inserted down into the central chamber F, the cover adjusted, and the cross-wires seated in the forked lugs. The broiler is then ready to be set over the stove or burner. A drip-pan r, having an insulated bottom r' to protect the contents of the pan from intense heat, is then placed in position at the bottom of the central chamber below the meat-clamp N, so as to catch the drippings or meat-juice. As the heat-currents ascend the flues they are deflected from both sides into the central chamber against the surfaces of the steak, and every part of the meat is cooked uniformly.



There will be no rare spots, scorching, smoking, or bittering. The drip-pan deflects the severe heat from the bottom of the steak and also catches the juices.

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

10 1. A broiler comprising a case having an upright central chamber; a clamp or holder in said chamber; and two vertical heat-flues one on each side of the said chamber, each flue having a vertical series of openings leading to the chamber and a deflector-plate over each opening adapted to direct a portion of  
15 the heat-currents to said chamber, as set forth.

20 2. A broiler comprising a case having an upright central chamber; a cover on top of said case; a meat clamp or holder in said chamber suspended from said cover; two parallel upright walls B, one at each side of said chamber, each wall having a vertical series of openings leading to the chamber and a de-

flector-plate over each opening adapted to direct a portion of the heat-currents to said chamber; and a drip-pan in the bottom of  
25 the central chamber.

3. A broiler comprising a case having an upright central chamber; a cover on top of said case; a meat clamp or holder in said chamber suspended from said cover; two parallel upright walls B, one at each side of said chamber, each wall having a vertical series of openings leading to the chamber and a deflector-plate over each opening adapted to direct a portion of the heat-currents to said  
30 chamber; a drip-pan in the bottom of the central chamber; and insulated air-spaces, one being at each side of the heat-flues.

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

STEPHEN A. MORGAN.

Witnesses:

CHARLES B. MANN, Jr.,  
CHARLES L. VIETSCH.