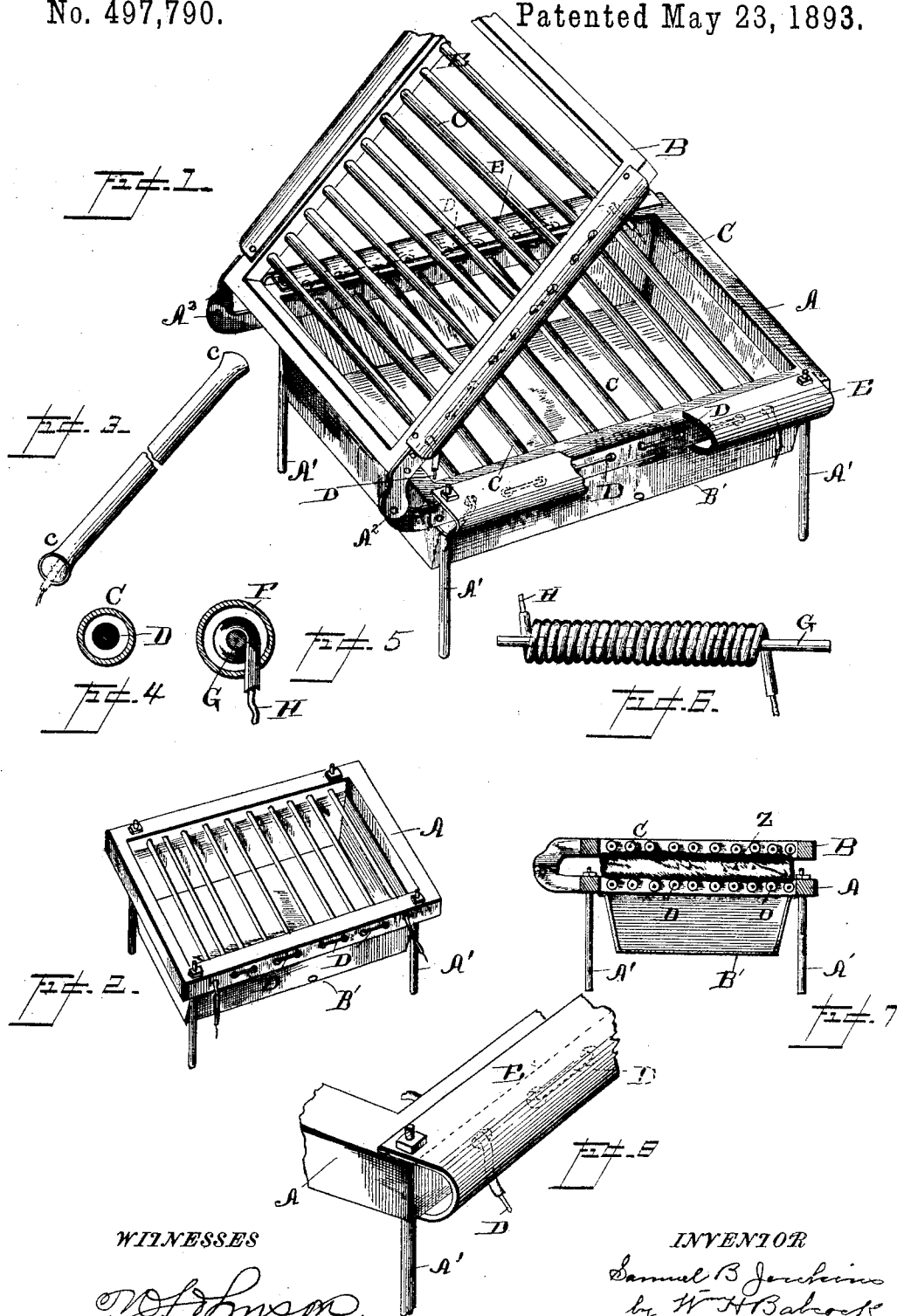


(No Model.)

S. B. JENKINS.  
ELECTRIC BROILER.

No. 497,790.

Patented May 23, 1893.



WITNESSES

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# UNITED STATES PATENT OFFICE.

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AMERICAN ELECTRIC HEATING COMPANY, OF SAME PLACE.

## ELECTRIC BROILER.

SPECIFICATION forming part of Letters Patent No. 497,790, dated May 23, 1893.

Application filed October 14, 1892. Serial No. 448,889. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL B. JENKINS, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Electric Broilers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The principal object of this invention is to provide an improved electrically heated device for broiling meat, said device however being applicable to general heating purposes. I effect this object by the construction and combination of parts hereinafter more particularly set forth and claimed.

In the accompanying drawings, Figure 1 represents a perspective view of a complete broiler with double frame, embodying my invention. Fig. 2 represents a detail perspective view of the lower frame alone, without the shields for the conducting and heating wire. Fig. 3 represents a detail perspective view of one of the tubular bars. Fig. 4 represents a cross-section of the same. Fig. 5 represents a view, similar to Fig. 4 of another form of tube and wire. Fig. 6 represents a detail view of the core and wire wound thereon as used in this latter device. Fig. 7 represents a vertical section from front to rear through my improved broiler with the meat therein; and Fig. 8 represents an enlarged detail view of a part of one of the protecting shields and the proximate portions of the wires and frame.

A designates the lower metallic rectangular frame of my broiler, and B the upper frame which in all respects corresponds thereto, except that the lower frame has legs A' and a drip-pan B'. Tubular bars C extend across each of these frames, being upset at their ends to secure them in holes of said frames. Wires D as shown in most of the figures are threaded through these tubes, preferably one wire to each frame. Each wire is insulated by wrapping with asbestos twine or in any other man-

ner within the said bars or tubes. Where the wire passes from the end of one tube to that of another it is protected by a sheet-metal shield E, which is bolted or otherwise fastened to the said frame. The fastenings of the legs A' may be utilized for this purpose. A direct current of electricity is sent through the said wires D, which are connected in multiple or series in any desired manner; and the usual heating action results. The two frames A and B are connected together by hinges A<sup>2</sup> so that the upper frame B may fold down on the meat Z Fig. 7 which rests on the bars C of the lower frame A. The drip pan B acts also as a reflector of heat up against the meat. If desired, the lower frame A may be used alone; the upper frame being detached from its hinges.

As shown in Figs. 5 and 6 I may substitute for the tubes C and wires D, when an alternating current is to be employed, a larger tube F having within it a rod G the latter serving as a core for a wire H wound helically thereon. This wire is properly insulated. The rod or core G is of magnetic material and the current will generate within it a certain amount of heat due to magnetic induction and lag, besides the normal heat of resistance. This construction will produce more intense heat with the same expenditure of electrical energy than the one first above described.

Either form may be used for cooking other articles than meat and for general heating purposes.

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

1. In an electrically heated gridiron, a frame provided with tubular transverse bars, having their ends set into the sides of the said frame and expanded, magnetizable rods arranged within the said tubular bars, and an insulated wire, forming part of an electric circuit, which is wound on the said rods substantially as set forth.

2. In an electrically heated gridiron, a frame provided with tubular transverse bars, in combination with a heating wire passed

through the said bars and forming part of an electric circuit, a shield fitting against the said frame and covering the said wire where it passes from bar to bar or legs and supports A' 5 for the said frame which are also provided with means of fastening the said shield in place substantially as set forth.

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

SAMUEL B. JENKINS.

Witnesses:

EDWIN W. PIERCE,  
PELATIAH R. TRIPP.