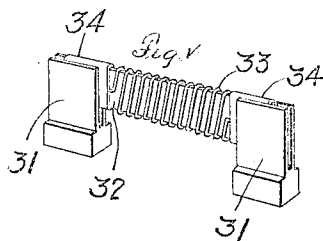
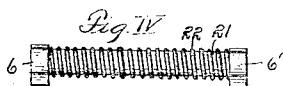
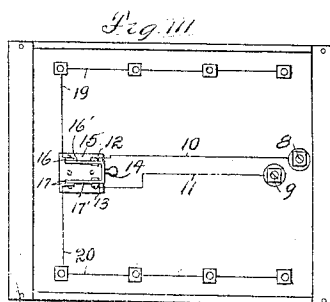
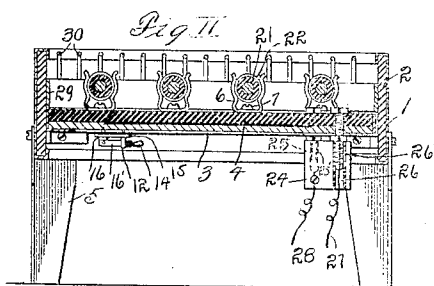
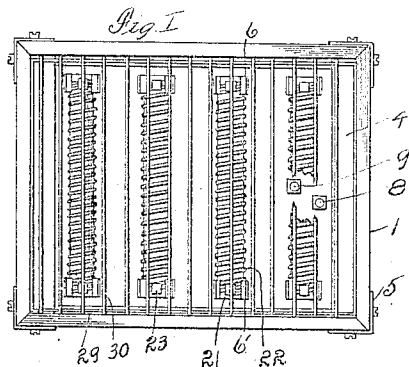


T. M. CAVEN.
ELECTRICAL COOKING APPARATUS.
APPLICATION FILED SEPT. 24, 1907.

933,622.

Patented Sept. 7, 1909.



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ELECTRICAL COOKING APPARATUS.

933,423.

Specification of Letters Patent.

Patented Sept. 7, 1909.

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To all whom it may concern:

Be it known that I, TREVOR M. CAVEN, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Electrical Cooking Apparatus; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to electrical cooking apparatus, and more particularly to an apparatus for toasting, broiling etc.

It is the object of my invention to provide an apparatus of that class which is simple and economical in construction and operation, and which may be easily repaired if necessary.

A further object is to provide an improved heating unit mounting which will enable individual heating units to be easily removed from and inserted into said apparatus; and to so arrange said mountings that should one or more of said units become inoperative, the remainder would not be affected thereby.

A further object is to provide improved details of structure which will presently be fully described and pointed out in the claim, reference being had to the accompanying drawings forming part of this specification, in which like reference numerals refer to like parts throughout the several views, and in which—

Figure I is a top plan view of an apparatus constructed according to my invention. Fig. II is a central vertical section of same. Fig. III is a circuit diagram, taken from below the bottom lining. Fig. IV is a detail view in side elevation of one of the heating units with its mountings. Fig. V is an enlarged perspective view of a modified form of heating unit and mounting.

Referring more in detail to the parts—1 indicates the body of the apparatus which is provided with a non-heat conducting lining 2 at the ends and sides, and with a bottom 3 of asbestos or similar material, having the insulation lining 4; such body being supported by legs 5. Supported on lining 4 along the longitudinal sides are the spring clips 6-6', having open tops and provided

with base portions which are secured to said lining by bolts 7, of suitable conductive material, the ends of which terminate between the lining and bottom 3. Projecting through lining 4 and bottom 3, are the studs 8-9 which are secured in position by suitable nuts, and connected with each of said studs are the wires 10-11, which extend to and are connected with the depending free studs 12-13, of a switch 14 depending from 65 and having a support 15 secured to the bottom 2 of the apparatus. On support 15 are the depending pivot studs 16-17 to which the switch arms 16'-17' are pivoted. Connected with the switch stud 16 is a wire 19, 70 which extends to and has a contact with each of the bolts 7 on one side of the apparatus, and connected with switch stud 17 is a wire 20, which extends to and has a contact with each of the bolts 7 on the opposite side of the 75 apparatus, the wiring being arranged in this manner in order that all of the clips 6 are energized, when a circuit is made by connecting one of the clips 6 with a clip 6'.

21 indicates a core, of porcelain or other suitable non-conductive material, adapted to extend across the apparatus and fit at opposite ends within the spring clips 6-6', and wrapped on said core is a wire 22, the ends of which are secured at opposite ends of the 85 core by clamps 23, such wire being adapted to complete a circuit between the poles and serve as a heating unit when the circuit is so completed.

24 indicates a plug having sockets 25-26, 90 adapted to fit over studs 8-9; such sockets having a partial lining 25'-26' of conductive material, to which the feed wire terminals 27-28 are secured, in order that when the plug 24 is fitted on studs 8-9, current may pass from the feed wires to said studs and on to the switch through wires 10-11.

Fitting within the apparatus at the sides and ends is a band 29, preferably of metal, 100 which supports a grate formed of parallel wires 30, upon which bread may be deposited for toasting, or meat for broiling, etc.

In assembling the apparatus, the parts are wired and connections made as described, 105 and a heating unit, comprising a core and coil, positioned across the apparatus and held at the ends by the clips 6-6', with the coils in contact with said clips, the plug 24 fitted over studs 8-9 and the feed wires con- 110

nected with a suitable source of energy supply.

If it is desired to use the apparatus for 5
toasting bread, the slices are placed on the
wire grating over the heating units, and the
switch closed to enable the current to pass
through wires 10—11, and through the bolts
7 and clips 6—6'. The coils on cores 21
being in contact with the clips 6—6', a cir-
cuit is completed through the parts which
10 heats the coils, and toasts the bread resting
on the grate, which is supported directly
thereover. Should one or more of the indi-
vidual coils burn out or become inoperative
15 from any cause, the remaining coils are not
affected, as the opposite poles are in contact
with each individual clip, and the circuit
remains closed as long as a single coil is in
engagement with its opposite end clips. By
20 mounting the grate loosely over the coils, it
may easily be lifted out, and the heating
unit be removed by lifting the core from the
clips, and replaced by one with a fresh coil,
thereby obviating the usual necessity of re-
25 placing the entire coil set, should one or
more coils need repairing.

If so desired, a cover containing similar
heating units may be provided, in order that
heat may be applied to an object on the grate
30 simultaneously from both top and bottom.

In the modified form shown in Fig. V, 31
designates a mounting clamp, 32 a core, 33
a coil wound on core 32, and 34 keepers on

the core 32 which secure the ends of the coil
thereto. The use of the modified heating 35
unit is the same as that of the principal form
with the exception that the keepers 34, in-
stead of the coil, come in contact with the
mountings and conducts current therebe-
tween. 40

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

An electrical cooking apparatus compris-
ing a body having a bottom and an insula- 45
tion lining located upon the bottom, spring
clips having base portions and supported
upon the lining, bolts whereby the clips are
secured to the lining, studs projecting
through the lining and the bottom, wires 50
connected with the projecting studs, a switch
having free studs and pivot studs, a wire
extending from one pivot stud to a bolt, a
wire extending from the other pivot stud to
the other bolt, a core mounted in the spring 55
clips, a wire wrapped on the core and se-
cured at opposite ends of the core and a
plug having sockets receiving the depending
studs.

In testimony whereof I affix my signature 60
in presence of two witnesses.

TREVOR M. CAVEN.

Witnesses:

JOHN F. WADE,
HAROLD E. RICHARDS.