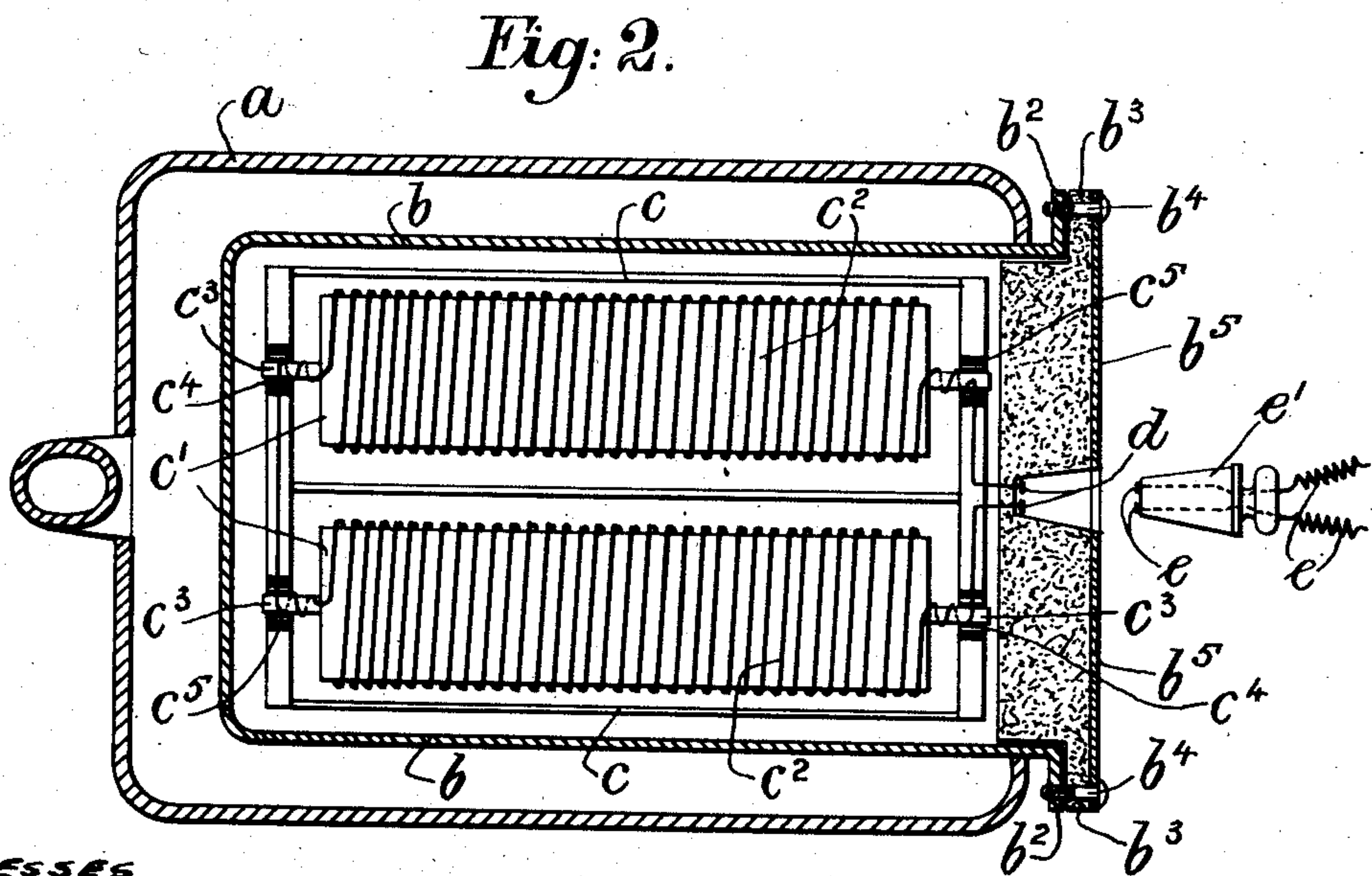
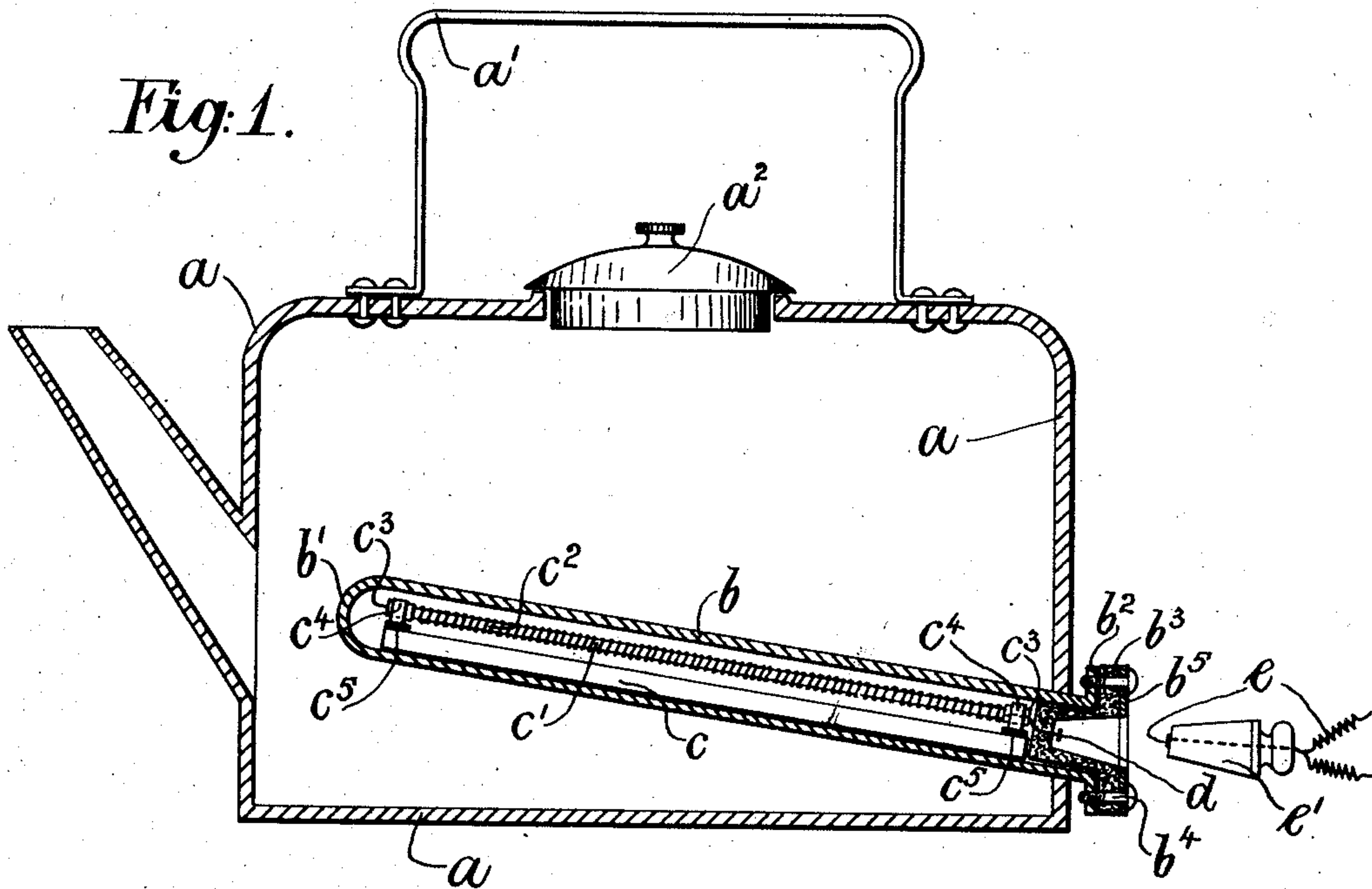


No. 881,968.

PATENTED MAR. 17, 1908.

D. C. SMITH.
ELECTRIC KETTLE.

APPLICATION FILED JULY 8, 1907.



WITNESSES
W. P. Burke
Chas. C. C. C.

INVENTOR
David C. Smith
By M. J. Hallan

UNITED STATES PATENT OFFICE.

DAVID CURLE SMITH, OF KALGOORLIE, WESTERN AUSTRALIA, AUSTRALIA.

ELECTRIC KETTLE.

No. 881,968.

Specification of Letters Patent.

Patented March 17, 1908.

Application filed July 8, 1907. Serial No. 382,716.

To all whom it may concern:

Be it known that I, DAVID CURLE SMITH, a subject of the King of Great Britain, residing at Kalgoorlie, in the State of Western Australia and Commonwealth of Australia, have invented certain new and useful Improvements in Electric Kettles, of which the following is a specification.

The object of this invention is to construct a kettle or other boiling utensil so that for the boiling of the water or other matter it will by its construction obtain and utilize the maximum of the heat generated by the electric naked coils and also render such naked coils easy of removal for the purpose of renewal or repairs.

The essential features of my kettle consist in the construction of an air and water sealed chamber which is placed within the kettle proper and said chamber contains a removable frame on which is detachably mounted the naked heating coils, said coils being suitably insulated from their frame.

To attain the above results I construct the kettle in the manner as shown in the attached drawings and of which

Figure 1 is a sectional side elevation while Fig. 2 is a sectional plan view.

In these figures the kettle as *a* is preferably made of copper and of a rectangular shape and provided with a handle as *a'* and lid as *a''*. In said kettle is formed a shallow rectangular and open ended chamber as *b*, which is made one with the kettle and water tight and placed at an incline as is clearly shown in Fig. 1 in order to the better induce an active circulation of the surrounding water within the kettle. This chamber at its closed end *b'* extends to almost the full interior width of the kettle while its mouth projects beyond the kettle and is there formed with a flange as *b''* to which is secured the insulating cover *b'''* by the set screws *b''''* said cover being pro-

vided with a face plate of copper or other metal as *b⁵*. In this chamber *b* is placed the metal frame *c* which is adapted to be withdrawable for the purpose of repairing or renewing the heating coils. On this frame are mounted the longitudinal and flat strips of uralite or other insulating material *c'* and around which the resistance or electric heating coils *c''* are wound in a naked manner. These strips are made with metallic contact terminals *c'''* and by said terminals the strips are held on the frame by means of the spring clips *c''''* which upon being eased allow of the strips *c'* to be lifted out. These spring clips being suitably insulated from the frame by the pieces *c''''''*.

The ends as *d* of the coils *c''* are attached to the cover *b'''* above mentioned and so arranged as to make suitable contact with the ends of the outer circuit wires *e*. These ends are held by the plug *e'* which is inserted in the cover *b'''* as shown. This plug is withdrawable from said cover in order to allow of the kettle as a whole to be disconnected from the outer circuit wires *e*. The chamber *b* is made air proof by its cover *b'''* and plug *e'* so as to maintain the heating coils *c''* in an inert atmosphere and to prevent their oxidation.

What I claim as my invention and desire to secure by Letters Patent is

In combination with a kettle, a shallow rectangular chamber therein having one end open and extending outside the kettle, said chamber being inclined in relation to the kettle, a frame removably held in said chamber and electric heating coils on said frame.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

DAVID CURLE SMITH.

Witnesses:

E. THO. RANDALL,

F. J. KINDON.