E. N. LIGHTFOOT.

ELECTRIC TABLE STOVE.

APPLICATION FILED OCT. 4, 1916.

1,246,622.

Patented Nov. 13, 1917.

2 SHEETS—SHEET 1.

Fig. 1.

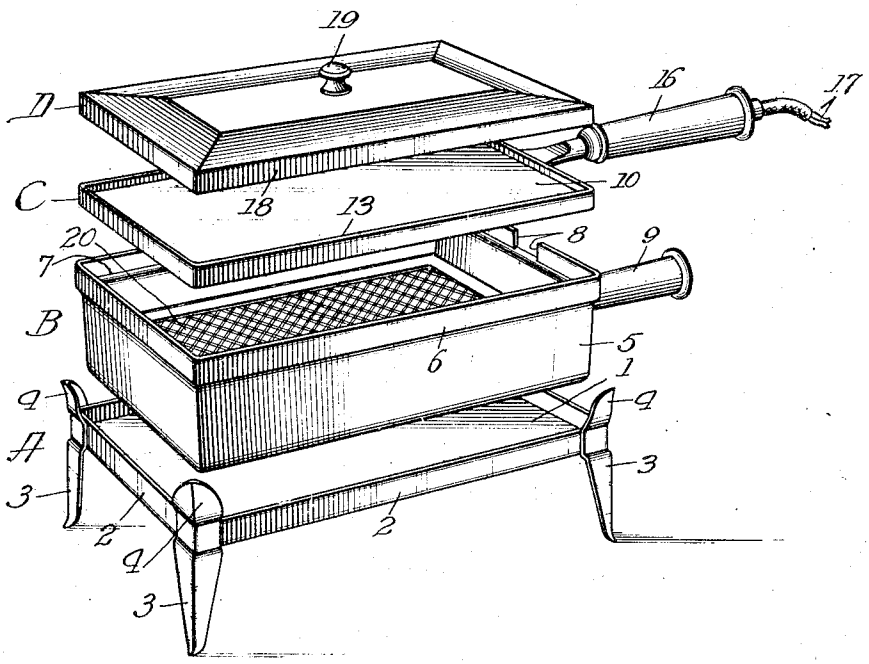
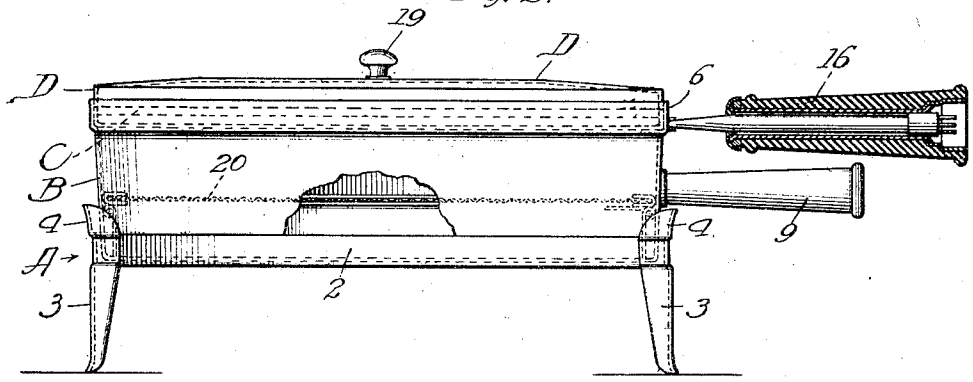


Fig. 2.



Witness

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2 SHEETS—SHEET 2.

Fig. 3.

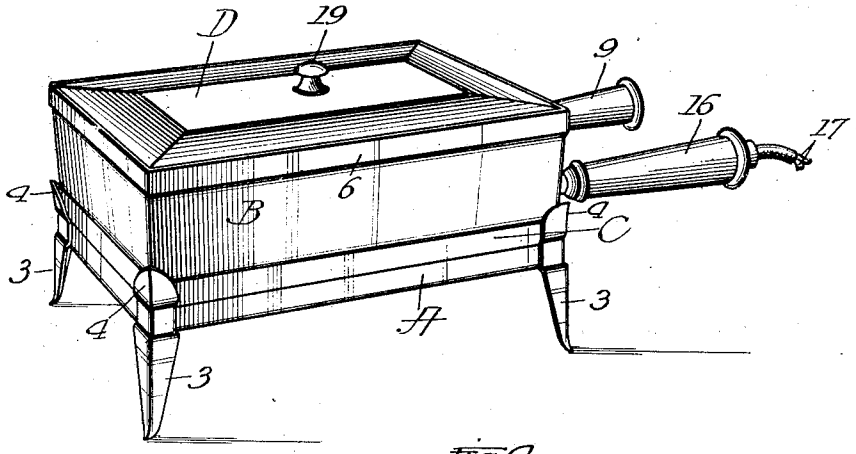


Fig. 4

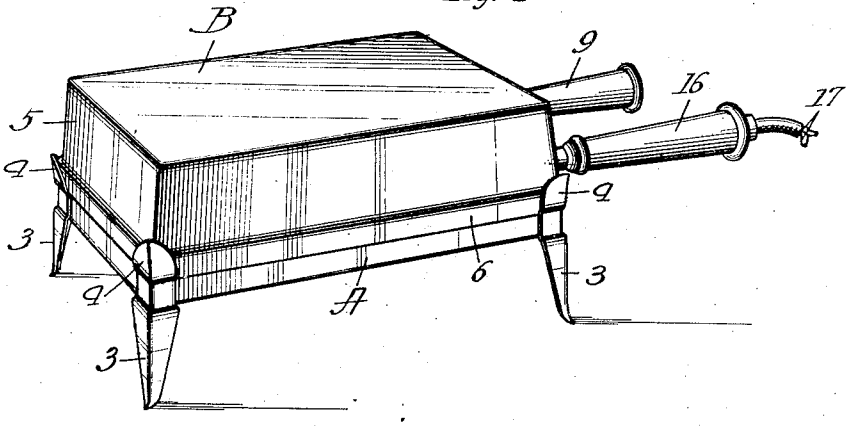


Fig. 5.

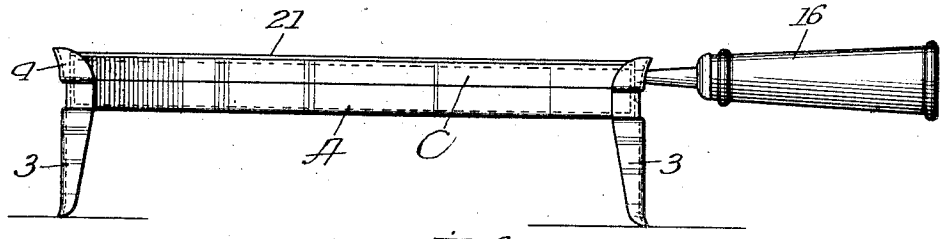
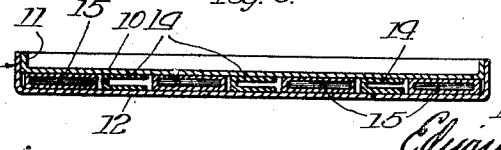


Fig. 6.



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UNITED STATES PATENT OFFICE.

EDWIN N. LIGHTFOOT, OF NEW YORK, N. Y., ASSIGNOR TO THE CUTLER-HAMMER MFG. CO., OF MILWAUKEE, WISCONSIN, A CORPORATION OF WISCONSIN.

ELECTRIC TABLE-STOVE.

1,246,622. Specification of Letters Patent. Patented Nov. 13, 1917.

Original application filed February 6, 1913, Serial No. 746,586. Divided and this application filed October 4, 1916. Serial No. 123,691.

To all whom it may concern:

Be it known that I, EDWIN N. LIGHTFOOT, a citizen of the United States, residing at New York, in the county of Bronx and State of New York, have invented new and useful Improvements in Electric Table-Stoves, of which the following is a specification.

This invention relates to electric table stoves.

An electric stove constructed in accordance with the present invention, is disclosed, but not claimed in my prior Patent No. 1,200,630, of October the 10th, 1916. The present application is a division of the application which resulted in the aforesaid patent, and is intended to cover the stove as an entirety, whereas the above mentioned patent is directed to the construction of the heater employed in the stove.

One object of the invention is to provide a neat and ornamental electric table stove which combines in one compact piece of apparatus a plurality of removable interfitting parts capable of being used in various different arrangements and combinations to perform practically all of the different culinary operations.

Other objects will appear as the specification proceeds.

An embodiment of the invention is illustrated in the accompanying drawings in which—

Figure 1 is a perspective view representing the various parts of the stove in spaced relation to show the general construction of each part;

Fig. 2 is a side elevation partly in section and partly broken away showing the parts of Fig. 1 in assembled relation to form a combination especially serviceable for broiling purposes;

Fig. 3 is a perspective view illustrating the manner in which the parts of the same combination may be superposed in a different order to render the combination especially serviceable for boiling purposes;

Fig. 4 is a perspective view illustrating the manner in which certain of the parts may be combined when it is desired to have the combination serve as an oven;

Fig. 5 is a side elevation illustrating the manner in which another combination of parts may be formed for frying purposes; and

Fig. 6 is a transverse section of the heater.

The improved electric stove comprises in general four main parts; namely, a base or stand, a pan, a heater and a top or cover. These parts, as will hereinafter appear, may be arranged in various different ways and may be so selected as to form various different combinations, thus making it possible to accomplish most any kind of cooking with the stove.

Fig. 1 shows the four main parts of the stove in spaced relation so that their general construction may be perceived at a glance. The base or stand is shown at A, the pan at B, the heater at C and the top or cover at D.

The base A comprises a tray 1 formed with a peripheral upstanding flange 2 which is preferably formed as an integral part of the tray. The tray is supported at its corners by means of angle sections 3 which constitute supporting legs for the tray. These may be welded or riveted to the corners of the flange 2. The upper extremities 4 of the legs 3 extend above the tray and are flared outwardly to a slight extent for a purpose which will hereinafter appear. The tray 1 is made rectangular in shape because the parts of the stove herein disclosed that are to be supported by the tray are also rectangular in shape. It will be understood, however, that the base and the parts supported thereby may be made any desired shape.

The pan B comprises a rectangular receptacle 5 which is hollow and capable of holding liquids, such as water. The upper peripheral edge portion of the pan is slightly enlarged to form a flange 6 and an interior shoulder 7. At one end of the pan the flange 6 is provided with an opening 8 to accommodate a portion of the heater handle which will hereinafter be described. A handle 9 is secured to the pan to enable the pan to be readily lifted and transferred from one place to another.

The heater C comprises an upper plate 10 (Fig. 6) having a peripheral upstanding flange 11 and a lower plate 12 also having a peripheral upstanding flange 13. These plates are fitted together and the flanges 11 and 13 welded or otherwise united in such a manner as to leave an intervening space between the two plates. Interposed between

the plates 10 and 12 are a series of spacers 14 and the resistance elements 15.

The specific construction of the heater is described in the patent above referred to and it is not necessary for the present purpose to describe the construction of the heater in greater detail, especially in view of the fact that the specific construction of the heater forms no part of the present invention. It is sufficient to note that the resistance elements 15 when supplied with electric current serve to heat both plates of the heater. Current may be supplied to these resistance elements by means of suitable conductors positioned in the heater handle 16 which conductors may in turn be electrically connected with the lead wires 17. It will also be noted that the heater may be used with either plate 10 or 12 in the uppermost position.

The cover D is provided with a depending peripheral flange 18 and a suitable knob 19 which serves as a handle for positioning and removing the cover.

In addition to the main parts of the electric stove described above there is provided a screen 20 (Fig. 2) which may be positioned in the pan 5 for broiling purposes, as will hereinafter appear, and also a plate 21 (Fig. 5) which may be positioned on the heater when the latter is to be used as a griddle.

It will be noted from Figs. 1 and 2 that the lower portion of the pan 5 is made of such size with respect to the tray 1 that it will fit within and be accommodated by the vertical flange 2 of the tray. The walls of the pan 5 taper outwardly from the bottom of the pan toward the top in order to make the space within the flange 6 slightly greater than the space within the flange 2 of the base. The space within the flange 6 of the pan is made of such size with respect to the heater that the latter will be received by such flange. The heater will then rest upon the interior shoulder 7 of the pan. The flange 18 of the cover D is substantially the same size as the peripheral upstanding portion of the heater.

When the parts are constructed in the above manner they may be assembled as shown in Fig. 2 with the bottom of the pan 5 received by the flange 2 of the base, the heater received by the flange 6 of the pan and the flange 18 of the cover received partly by the flange 6 of the pan but resting upon the peripheral edge of the heater.

The parts are arranged as shown in Fig. 2 when it is desired to use the stove for broiling and similar purposes. A screen 20 is then suitably supported within the pan 5. The material to be broiled is placed upon the screen and has heat imparted thereto from the heater C positioned above the screen. The flange 18 on the cover spaces the top of the cover from the heater to form a heat insulating space above the heater. The screen serves to support the material being broiled above the bottom of the pan so that juices from the broiled material are caught in the bottom of the pan where there is no danger of them catching on fire. While the material upon the screen 20 is being broiled the cover D may be removed and other material may be cooked upon the upper surface of the heater, or the heater may be employed for keeping articles warm while the material within the pan is being broiled.

Fig. 3 shows the parts arranged for boiling purposes. The heater C is then supported directly by the base A and the pan B is placed upon the heater. As the size of the heater is made substantially the same as the size of the flange 2 on the base, the heater will rest on the upper edges of the flange 2 and be accommodated between the flared out upper ends of the legs 3. The lower portion of the pan 5 being slightly smaller than the upstanding peripheral edge of the heater will lie within and be accommodated by said upstanding peripheral edge. When the parts are arranged in this manner water or any other liquid to be boiled may be placed in the pan 5. When it is desired to use the heated liquid for cooking other material, such material may be placed directly in the liquid or in suitable receptacles positioned in the liquid.

In Fig. 4 the heater C is supported directly by the base and the pan B is inverted over the heater. By this arrangement the stove acts as an oven for baking purposes.

In Fig. 5 the heater C is supported directly by the base but the pan B is not employed. The heater may then be used to perform the function of an ordinary frying pan or griddle. When used as a frying pan the heater is so positioned upon the base that the peripheral projecting portion formed by the flanges 11 and 13 on the heater plates is disposed upwardly. This side of the heater may also be employed to perform the function of a griddle but preferably for this purpose the heater is inverted as shown in Fig. 5 and a plate 21 positioned thereon. When this plate is made of such material as aluminum, the material being cooked will not stick to the plate. The use of the plate therefore eliminates the necessity of applying grease to the surface of the heater.

If desired the screen 20 or a similar screen may be positioned on the heater for such purposes as toasting bread. The heater is then preferably used with the projecting edge portion disposed upwardly, so that the screen will be supported in spaced relation with the actual surface of the heater a suffi-

cient distance to impart just enough heat to the bread or other material upon the screen to properly brown the same.

It will now be seen that the improved stove is simple and compact in construction notwithstanding the fact that it combines in one apparatus all the utensils necessary to perform practically every kind of culinary operation. Each part of the stove is constructed with due regard to the construction of other parts so that they will properly fit together to produce the proper combination as above described. No skill is required to assemble and re-arrange the various parts to produce the various arrangements and combinations, as the construction of the parts permits them to be readily fitted together and readily suggests the manner in which they may be combined.

Obviously I do not wish to limit myself to the specific construction of the parts herein disclosed as they may be made in various different ways without departing from the scope of the invention as defined in the accompanying claims.

What I claim and desire to secure by Letters Patent of the United States is:—

1. An electric stove comprising a base having a vertical flange, a pan adapted to fit within said flange, said pan having an upper vertical flange, and a heater adapted to fit within the top of said pan or on top of said base whereby said heater may be supported by said base alone or by said base and said pan.

2. An electric stove comprising a base, a pan adapted to be supported thereby, a heater adapted to be received by the upper portion of said pan, and a cover having a vertical flange to rest on said heater whereby a heat insulating space may be provided above said heater.

3. An electric table stove comprising a base, a heater of substantially the same size as the base and adapted to be supported thereby, a pan adapted to be inverted over the heater with the edge portion of the pan inclosing the heater, a plurality of legs for supporting the base, the said legs being extended above the base and having their upper ends flared outwardly, and said edge portion of the pan being larger than the base but adapted to be received within said flared upper ends of the legs.

4. An electric stove comprising a heater having at least one heating surface upon which material may be cooked by direct contact therewith, a pan adapted to support said heater and a base adapted to removably support said pan, said base being capable of supporting said heater independently of said pan for the purpose described.

5. An electric stove comprising a base, a pan adapted to be supported thereby, an electric plate-like heater adapted to be removably supported by the upper portion of said pan and a screen adapted to be positioned in said pan.

6. An electric stove comprising a base, a pan adapted to be supported thereby, an electric plate-like heater adapted to be removably supported by the upper portion of said pan, a screen adapted to be positioned in said pan and a cover forming a heat insulating space above said heater.

7. An electric stove comprising a base, a heater adapted to be supported thereby, a pan removably supported on said heater and having an upper vertical flange adapted to receive said heater whereby the pan may support the heater in said flange or the pan may be inverted over the heater with said flange inclosing the same.

8. An electric stove comprising a base designed to support either a pan or an electric heater, a pan adapted to be supported by said base and having an upper vertical flange, an electric heater adapted to be supported by said base or to be positioned in said pan and a cover designed to be applied to said pan, said pan being capable of being inverted over the heater when the latter is carried by the base, for the purpose described.

In witness whereof, I have hereunto subscribed my name in the presence of two witnesses.

EDWIN N. LIGHTFOOT.

Witnesses:
G. P. Brockway,
W. E. Addicks.