

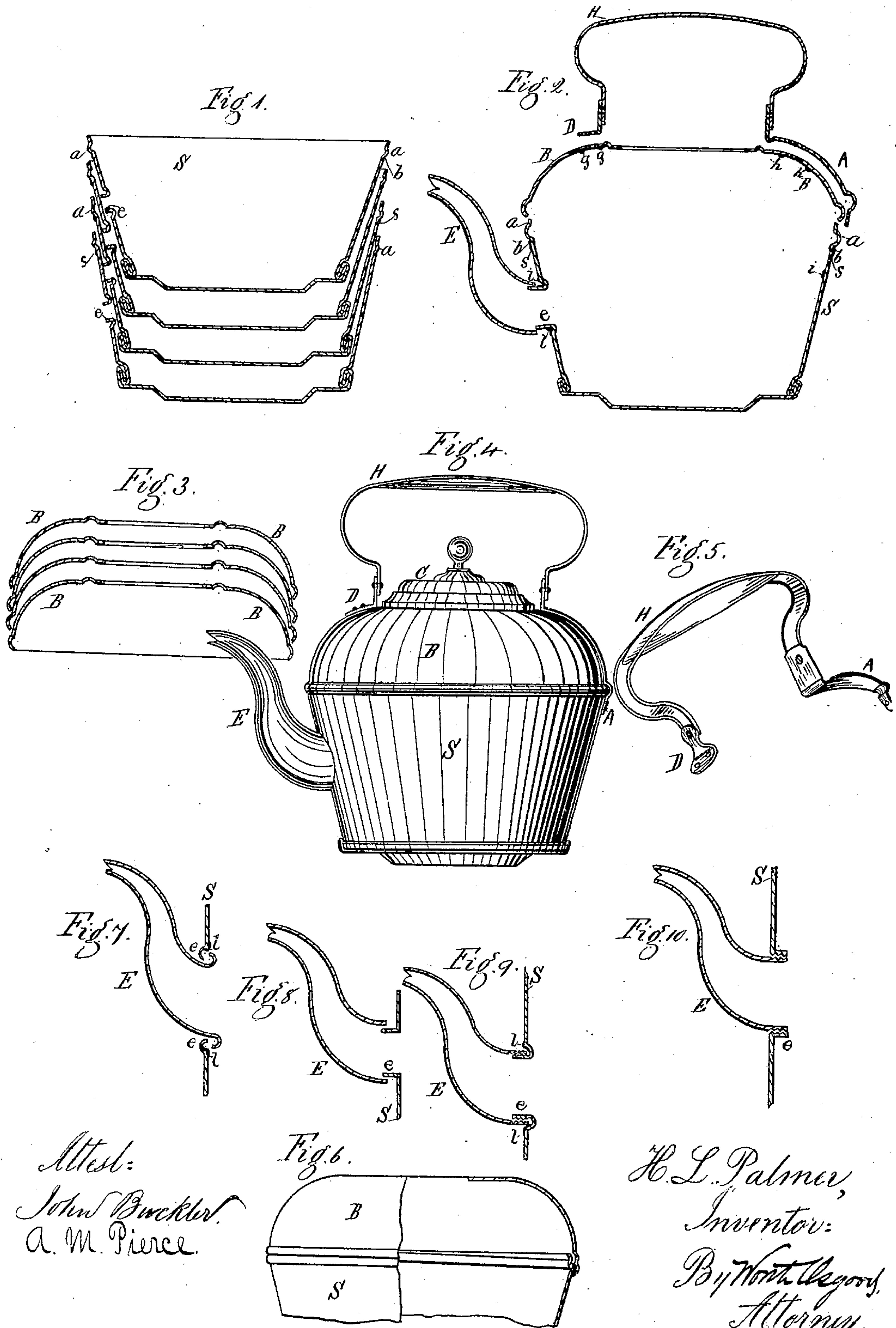
(No Model.)

H. L. PALMER.

TEA KETTLE.

No. 252,963.

Patented Jan. 31, 1882.



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UNITED STATES PATENT OFFICE.

HENRY L. PALMER, OF BROOKLYN, NEW YORK.

TEA-KETTLE.

SPECIFICATION forming part of Letters Patent No. 252,963, dated January 31, 1882.

Application filed November 2, 1881. (No model.)

To all whom it may concern:

Be it known that I, HENRY L. PALMER, of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Tea-Kettles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings; and to the letters of reference marked thereon.

My invention has relation to the construction of tea-kettles such as are ordinarily used for culinary purposes; and my object is to produce a tea-kettle of which the projecting parts or fittings may be delivered to the purchaser separate from the shell, to be afterward applied thereto to complete the article, and to arrange and adapt the different parts so that they may be assembled and secured by any person and by use of the most ordinary tools.

To this end my invention involves certain novel and useful peculiarities of construction, details of manufacture, arrangements and combination of parts, all of which will be herein first fully described and then pointed out in the claims.

Culinary utensils of the character to which my invention relates are made in large quantities and occupy a great deal of space when packed for shipment. By my improved construction I am enabled to "nest" the shells and breasts, thus effecting a very great economy of packing-space and consequent cost of transportation, and moreover save to the purchaser the cost of assembling the parts, which has heretofore been done only by skilled labor, necessarily increasing the price of the manufactured article.

In the accompanying drawings, forming part of this specification, I have shown at Figure 1 a sectional view of a number of shells provided with bottoms and nested together as for shipment; at Fig. 2, a sectional view of the several parts of my improved kettle, the parts being in position to be united as hereinafter explained. Fig. 3 is a section showing a number of kettle-breasts nested together, and Fig. 4 is an elevation of a kettle having all the parts assembled for use. Fig. 5 is a perspective view of the handle provided with ears for attaching it to the kettle. Fig. 6 is a sectional elevation,

showing screw-connection between the breast and shell. The remaining figures are sectional views, indicating the manner in which the spout may be secured upon the shell by use of a short sustaining-sleeve.

In all these figures like letters of reference, wherever they occur, indicate corresponding parts.

S is the shell or principal part of the tea-kettle. Upon this shell the bottom is firmly secured by any suitable joint, and as this joint is difficult to make properly and secure, requiring special tools and skilled labor for the purpose, I prefer to unite the shells and bottoms at the place of manufacture, so that the two together will constitute one portion of the incomplete kettle. The shells are preferably made wider at top than at bottom, or flaring toward the top, so that a number of them may be located one within the other or nested together, as indicated in Fig. 1. The same result can be obtained by making the shell flaring toward the lower margin and securing the breast in place, leaving the bottom to be afterward affixed. The upper margin of the shell is finished with a bead or corrugation, *a*, over which the lower edge of the breast may be sprung, making a fair-fitting joint between these two parts. Below the bead *a* is a shallow gutter, *b*. Into this gutter the lowermost edge of the breast will tend to hug when the two parts are sprung together, leaving only a close joint to be secured by solder.

The breast may be applied by a screw-connection between it and the sleeve, substantially as indicated in Fig. 6, and this will not materially differ from the above-described joint in point of security and convenience.

B is the breast of the kettle, stamped or otherwise formed up in annular shape. The central opening is for the reception of the cover C. The lower margin of the breast is formed so as to be sprung or screwed over the top of the shell and make a fair joint therewith. Of course, it might be formed to be sprung or screwed inside of the shell if desired to so unite the parts.

The breasts may be nested together, as shown in Fig. 3, all around the gutter *b*, or, if this gutter be not employed, then around the place

where the lower edge of the breast rests when the parts are assembled. I provide a sufficient quantity of solder, as at *s*, to secure the two parts.

5 The purchaser has only to spring or screw the breast to its place and run a hot iron of any form around the joint in contact with the layer of solder. This will secure these two parts.

10 The handle *H* has two ears, *A* and *D*, riveted thereon, so as to make hinges with the handle. The breast is perforated at proper points for the reception of rivets which pass also through the ears. These are to be subsequently applied; and around the margins of the perforations, as at *g*, I place a quantity of solder, ready to be touched with any heated iron, for securing the joint between the rivets and the breast, if desired.

20 The ear *A* is made longer than *D*, and its lower end extends down far enough to be attached to the shell. The breast is perforated for the reception of rivets which pass through this ear, and the shell is also perforated to receive a rivet passing through the projecting end of ear *A*. Any desired number of these rivets may be applied. On the breast and shell is placed a quantity of solder, as at *h* and *i*, to secure the rivets in ear *A* as in ear *D*. The ear *A* being connected with the breast and also with the shell gives increased support to the handle and increases the rigidity of the union between shell and breast.

For attachment of the spout *E* to the shell
35 I form in or on the shell a short sleeve, as at *e*. This is formed outside or inside of the shell and is made by striking or drawing up the material of said shell, so that it and the shell are of one continuous piece, firm, durable, and
40 easy to make. It enters the base of the spout or engages with the end thereof in such manner as to form a firm union between the spout and shell.

In Fig. 2 the sleeve *e* is shown as upon the
45 exterior of the shell, and in Fig. 7 upon the interior. Around the sleeve is a shallow gutter, in which I place a quantity of solder, as at *l*, for the subsequent uniting of the parts, the same as in respect to the breast and shell
50 above explained. If the gutter be omitted then the solder is placed in proper position around the sleeve, so that it may be employed in the manner intended.

Instead of making the sleeve plain, it may
55 be made in the form of a screw, upon which the spout may be turned, as in Fig. 9, or it may project inwardly and receive the end of the spout within its walls, as in Fig. 10. In either of these forms solder may be applied
60 upon the shell in the region of the sleeve, same as above explained, in connection with the plain sleeve.

In Fig. 8 the exterior sleeve is shown as formed without the surrounding gutter. The
65 parts so made and ready to be afterward ap-

plied and united may be easily packed, as will be readily seen. They may be secured by any ordinary workman, and without special tools.

The shell is shown as made of one piece, but
70 it may be made of two or more pieces, if desired, the usual horizontal or other joints being employed.

In this class of articles it is found that a
75 tinned shell united with a copper bottom will gradually become impaired at the joint; and to obviate this I apply an extra coating of tin all around the lower margin of the shell, covering at least all those portions which will
80 come in contact with the copper when the joint is finished. This extra coating is applied in the ordinary way of tinning. It is not necessary to supply the extra coating to the entire shell. After recoating the bottom part of the
85 shell the joint with the bottom is finished in the usual manner.

The numerous advantages of the improved kettle will be apparent to almost any one, and in the form shown the improved device is found to answer all the purposes and objects
90 of the invention, as previously stated.

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

1. In a tea-kettle, the ear *A*, extending from
95 the breast down upon the shell of the kettle, the same being arranged to be riveted or otherwise secured to the breast and shell, and to sustain the hinged handle, substantially as shown and described. 100

2. In a tea-kettle, the shell made flaring toward its top, and provided with a projecting seat for the spout formed of the material of the shell, said shell being constructed, substantially as described, so that another shell of
105 similar construction may be nested with it and fitted for the attachment of a breast, substantially as and for the purposes set forth.

3. In combination with a shell of a tea-kettle, a sleeve for attachment of the spout formed
110 of the material of the shell and the surrounding gutter for the reception of the solder, substantially as shown and described.

4. The tea-kettle shell, the projecting sleeve for holding the spout, made continuous with
115 the material of the shell and the spout, combined and arranged substantially as shown and described.

5. The tea-kettle shell having the bottom secured thereon, and having a seat for the
120 spout formed of the material of the shell and a seat for the breast, the shell being constructed to be united with spout, breast, and handle, substantially as shown and described.

6. The herein-described partly-finished tea-
125 kettle, composed of a shell having inclined walls and an attached bottom, a separate breast-piece, handle, and spout, all constructed to be subsequently united, substantially as shown and described. 130

7. The herein-described tea-kettle, in which
the shell is provided with an extra coating of
metal at the region of the joint with the cop-
per bottom for the purpose of preventing cor-
5 rosion, substantially as and for the purposes
set forth.

In testimony that I claim the foregoing I

have hereunto set my hand in the presence of
two witnesses.

HENRY L. PALMER.

Witnesses:

WORTH OSGOOD,
F. W. HANAFORD.