

(No Model.)

F. W. JUDD.
SHEET METAL TEA KETTLE.

No. 469,743.

Patented Mar. 1, 1892.

Fig 1.

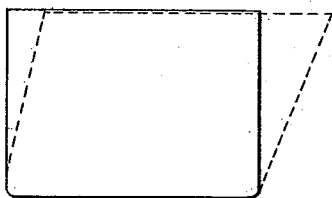


Fig 2.

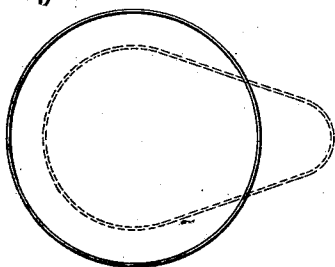


Fig 5.

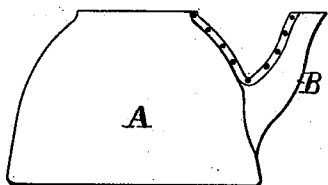


Fig 7.

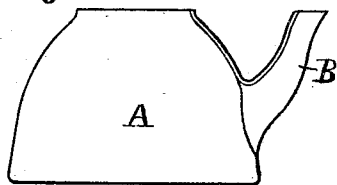


Fig 3.

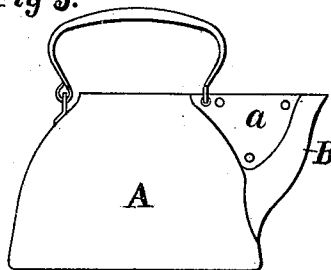


Fig 4.

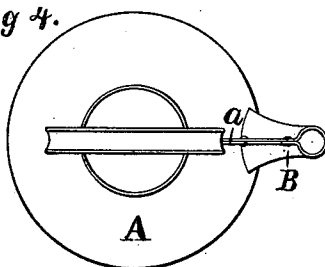


Fig 6.

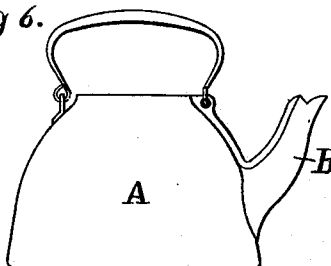


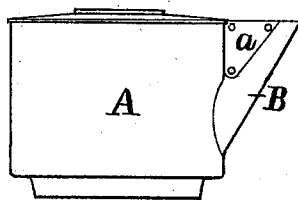
Fig 8.



Fig 9.



Fig 10.



WITNESSES.

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SHEET-METAL TEA-KETTLE.

SPECIFICATION forming part of Letters Patent No. 469,743, dated March 1, 1892.

Application filed April 30, 1891. Serial No. 391,133. (No model.)

To all whom it may concern:

Be it known that I, FRED W. JUDD, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Sheet-Metal Tea-Kettles or Similar Vessels, of which the following is a specification.

I believe that heretofore sheet-metal tea-kettles and other similar vessels having tubular spouts have been made from not less than two independent pieces of metal. Usually when so made the tubular spout is made of one piece of metal and the body of another piece, and the spout has been soldered to the body or secured thereto in some other suitable manner. All sheet-metal tea-kettles have therefore had a joint or seam which lies wholly or partly below the normal level of the water in the kettle. Generally the entire seam lies below the water, because it is necessary to cover the seam with water, in order that the heat from the fire may not melt the solder and thereby cause the seam to part. This seam is always the weak point in a sheet-metal tea-kettle, and it is frequently parted, either through carelessness on the part of the user in allowing the kettle to stand on the stove when it contains too little water or through some accidental blow upon the spout or through some other cause, whereupon the kettle will leak, and be, for the time being, useless.

The object of my invention is to provide a sheet-metal tea-kettle having a tubular spout which shall have only one seam, and that located in a part of the vessel where, if the seam does part, it will not necessarily cause the vessel to leak. In other words, the object of my invention is to produce a strong, light, and durable sheet-metal tea-kettle having a tubular spout.

To this end my invention is first a sheet-metal vessel consisting of a body and a tubular spout, both made integrally from one piece of sheet metal.

It also consists of a sheet-metal vessel consisting of a body and a tubular spout made integrally from one piece of sheet metal and having only one seam, which is formed by joining together the double web formed on

the upper side of the spout and on the part of the body above and adjacent to said spout.

It also consists of a sheet-metal vessel consisting of a body, a tubular spout, and a double web connecting said spout and body, the upper edges of said web lying substantially in line with the upper edge of the body, said body-spout and web being made integrally from one piece of metal.

In the drawings, Figure 1 is a side view, and Fig. 2 is a plan top view, of a bowl which may serve as the blank from which my improved vessel is made. Fig. 3 is a side view, and Fig. 4 a plan view, of the best embodiment of my invention in my opinion. Figs. 5, 6, 7, and 10 are side views of modified forms thereof, which will be hereinafter fully explained. Figs. 8 and 9 are sectional views showing two forms of seams with which the two parts of the web may be joined.

Referring to the parts by letter, A represents the body of the kettle; B, the tubular spout, and *a* a double web formed along the upper side of the spout and the side of the body adjacent to and above the spout. These several parts are made integrally of one piece of sheet metal, and thus the only seam in the vessel is that by which the two parts of the web are connected.

In the kettle shown in Figs. 3 and 4 the top edges of the web *a* lie substantially at the level of the top of the kettle. When so constructed, or, to more exactly state the conditions, when the lowest point in the edge of said double web is above the surface level of the water in the kettle, it matters little whether the two parts of the web are connected to form a water-tight joint or not, because the water cannot leak through it. For this reason, and for the further reason that when so constructed the kettle is stronger, I regard this as the best construction. The two parts of the web may be riveted or secured together in any other appropriate manner. The web, instead of extending to the top of the kettle, may consist of two flanges, which may be united by rivets, as shown in Fig. 5, or they may be welded by electricity or otherwise brazed or soldered, as desired, as shown in Fig. 6, or the two parts of the web may be lapped, as shown in Fig. 7, and secured by

rivets or other suitable means. The seam between the two parts of the web may be made water-tight by enameling the kettle or galvanizing it or treating it in any suitable manner.

5 The shape of the body or of the spout is not material to the invention. They may be of any shape which suits the fancy of the maker. Fig. 10 shows a kettle in which the body has straight sides and in which the spout is also
10 straight. As shown, the breast of this kettle is of a separate piece secured to the top of the body in any suitable manner.

I am not yet satisfied that I have hit upon the cheapest and most practical method of
15 making the kettles described. They may, however, be made from a blank of the form of a straight-sided bowl, as follows: first, by drawing the walls thereof to one side, thereby forming a nose, as shown by the dotted
20 lines in Figs. 1 and 2. The sides of the nose are then pressed together to form the web and the spout pressed into shape over a removable core. The parts of the web close
25 together and the body then drawn into shape. In forming the style of kettles shown in Figs. 3 to 7 the top sides of the kettle require very little compressing when this general method
30 is followed, since the distance around the top of the kettle along the webs and around the spout is very little less than the circumference of the straight-sided bowl which serves as the blank.

I do not desire to limit my invention herein
35 claimed to the described method of forming

the kettles, and I reserve the right of claiming in a separate patent the method substantially as described, or with such modifications and improvements therein as I may discover by experiment and experience.

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

1. As a new article of manufacture, a sheet-metal vessel consisting of a body and a tubular
45 spout springing from the side of said body, both made integrally from one piece of sheet metal.

2. As a new article of manufacture, a sheet-metal vessel consisting of a body and a tubular
50 spout springing from the side of said body, both made integrally from one piece of metal, said vessel having only one seam, which is formed by joining together the double web
55 extending from the upper side of the spout and from the part of the body adjacent to and above the spout.

3. As a new article of manufacture, a sheet-metal vessel consisting of a body, a tubular
60 spout, and a double web connecting said body and spout, the upper edges of said web lying substantially in line with the upper edge of the body, said body, spout, and web being
made integrally from the same piece of sheet metal.

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Witnesses:

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E. L. THURSTON.