A. CUMMINGS.

Copper Bottom for Kettles.

No. 163,747. Patented May 25, 1875.

Fig 2.

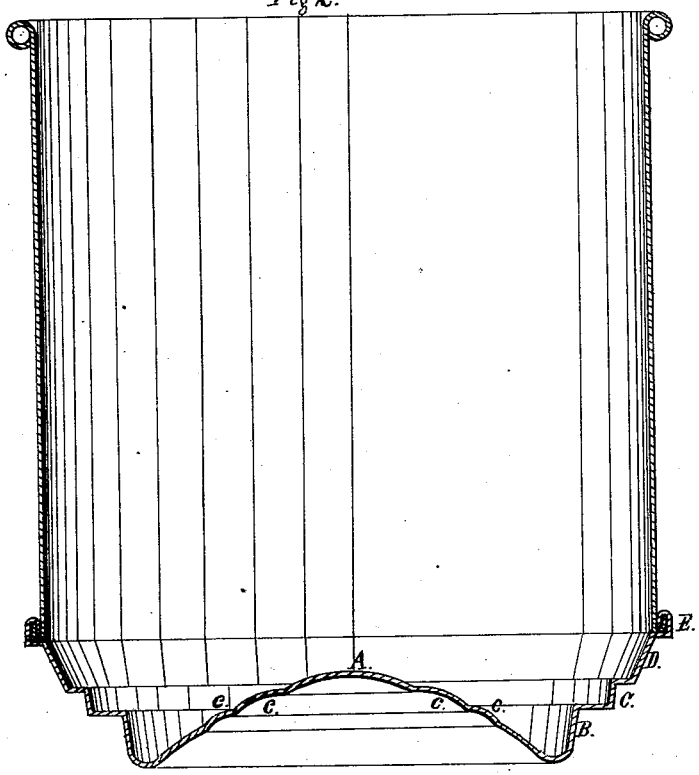
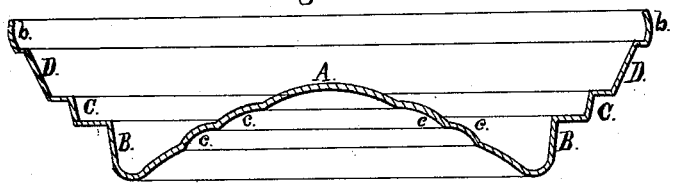


Fig 1.



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UNITED STATES PATENT OFFICE.

ALLAN CUMMINGS, OF NEW YORK, N. Y.

IMPROVEMENT IN COPPER BOTTOMS FOR KETTLES.

Specification forming part of Letters Patent No. **163,747**, dated May 25, 1875; application filed January 30, 1875.

To all whom it may concern:

Be it known that I, ALLAN CUMMINGS, of the city, county, and State of New York, have invented an Improvement in Copper Bottoms for Tea-Kettles, of which the following is a specification:

My invention consists in an improvement in the manufacture of copper bottoms for tea-kettles. They are so arranged and constructed that they possess and have the following-named advantages over the present well-known copper bottom of commerce: They have greater strength, are adapted to fit more than one size of stove-holes, and are provided with an extension at their outer circumference, so that the seam or point of junction with the body of the kettle is carried above the usual bottom of the same. They are also provided at the top of said extension with a suitably-shaped lip ready for attaching to the kettle proper by a double seam, all of which will be fully described, and pointed out in detail.

In the drawings, which form a part of this specification, Figure 1 is a sectional view of a copper bottom for a kettle as embodied in my invention; and Fig. 2 is a sectional elevation of a kettle, showing my improved copper bottom as attached to the body of the same.

Similar letters of reference indicate corresponding parts.

The object of my invention is to provide a new and complete form of copper bottoms for kettles, as a substitute for the common and well-known copper bottoms now supplied to the trade as an article of commerce. It has, in contradistinction to the said ordinary copper bottom, the following advantages: first, increased strength without increasing the quantity of metal; second, it is made adjustable, so as to fit more than one size of pot-holes in stoves; third, it is provided with an inclined extension above the usual point of connection with the body of the kettle; and, fourth, it has, at the top of the extension, a projecting lip arranged for the purpose of, and shaped in proper form for, connecting it with the body of the kettle by means of a double seam.

The center of this copper bottom is made conical in shape, as shown at A. It is also provided with a series of corrugations, *c*, at as many points as may be desired, for the purpose of gaining strength. The amount of additional strength secured by this construction is such that the life of the bottom is more than doubled compared with that of the old form of construction. It also obviates and prevents the bruising or perforating of the metal when it is set down into the coals of which the fire is composed. It also better and more readily cleans itself therefrom. An additional heating-surface is also secured. This bottom is also made so as to adjust itself to more than one size of pot-holes in a stove by the forming of the two shoulders or flanges B and C, as plainly shown in the drawings.

The copper bottom now in use (and none other is manufactured for the trade) has but a single shoulder, and fits but one pot-hole in a stove. It has grown to be a necessity to make a change in the construction of copper bottoms for kettles, in order to remedy various faults in present construction, and to dispense with the use of the adjusting or contracting rings now furnished with all cooking-stoves or ranges. These rings are now in general use, and are the cause of many accidents. They are in fact dangerous to handle, as no place or arrangement is provided for lifting them from the stove. By reason of the expansion of the metals these rings usually cling fast to the bottom of the pots or kettles, are lifted with them from the stove, and afterward drop therefrom at a slight jar, thus rendering it unsafe to use them. To do away with the use of these rings is a great desideratum, and it is effectually accomplished by the use of my invention.

D is an extension of the copper bottom carried above the usual point at which it is attached, and fastened to the body of the kettle. This extension is inclined at a suitable angle—say at about twenty degrees—in order to prevent any moisture accumulating or remaining at the seam E, as is always the case with the ordinary seam in the common tea-kettle. At the upper edge or outer circumference of the extension D of the copper bottom, I form a projecting lip, *a*, (see Fig. 1,) for the purpose of uniting the bottom to the body of the kettle. This I do by means of a double seam, as shown plainly at E in Fig. 2. This form of double seam is such that, when it is properly

made, it cannot catch or retain the drip from the sides of the kettle after it has been used and imperfectly dried out. In such cases the inclined angle of the extension D carries all such drip to the bottom of the pit.

The main purpose, object, and intent of my invention is to provide as a new commodity of commerce a specific form of copper bottoms for tea-kettles which shall be struck out of a single sheet of metal, be seamless, and completely finished in all particulars in readiness for immediate attachment to the body of a kettle—such form of copper bottom to possess as its distinguishing features from the present kettle bottom double strength, additional heating-surface, to be adjustable to more than one pot-hole in a stove, to have inclined extension sides, and to be provided at the top of the extension with a projecting lip ready for double-seaming to the base of the body of a kettle. None of these points or advantages are embodied in any copper bottom for tea-kettles now made for or known to the trade. In addition to the advantages as hereinbefore named, I also avoid all the wastage of copper plate which now occurs to a great extent with every copper bottom used.

My improved bottom is furnished in various sizes, and is complete in every point for instant use without trimming or re-forming. This results in a large saving of labor in the course of a year.

I am aware that seams are now made in the upper part of the body of tea-pots, and above the usual bottom; but these seams are not made as shown in my invention, as the two parts—body and bottom—are simply slipped by each other, "peaned," and soldered together. I make no claim to forming the seam above the usual bottom of a tea-kettle; but

What I do claim as new, and desire to secure by Letters Patent, is—

In a seamless extension copper bottom for tea-kettles, the combination of the conical recess A, with corrugations *c c c* and one or more shoulders or flanges, B and C, with the inclined extension D, provided with the flanged lip *b*, arranged for forming one-half of a double seam when attached to a kettle-body, the whole bottom being struck out of sheet metal in a finished state for use, substantially as and for the purposes as herein shown and described.

ALLAN CUMMINGS.

In presence of—

A. L. MUNSON,

HOMER S. BEARDSLEY.