

(No Model.)

J. CLOUD.  
CULINARY UTENSIL.

No. 486,157.

Patented Nov. 15, 1892.

FIG. 1.

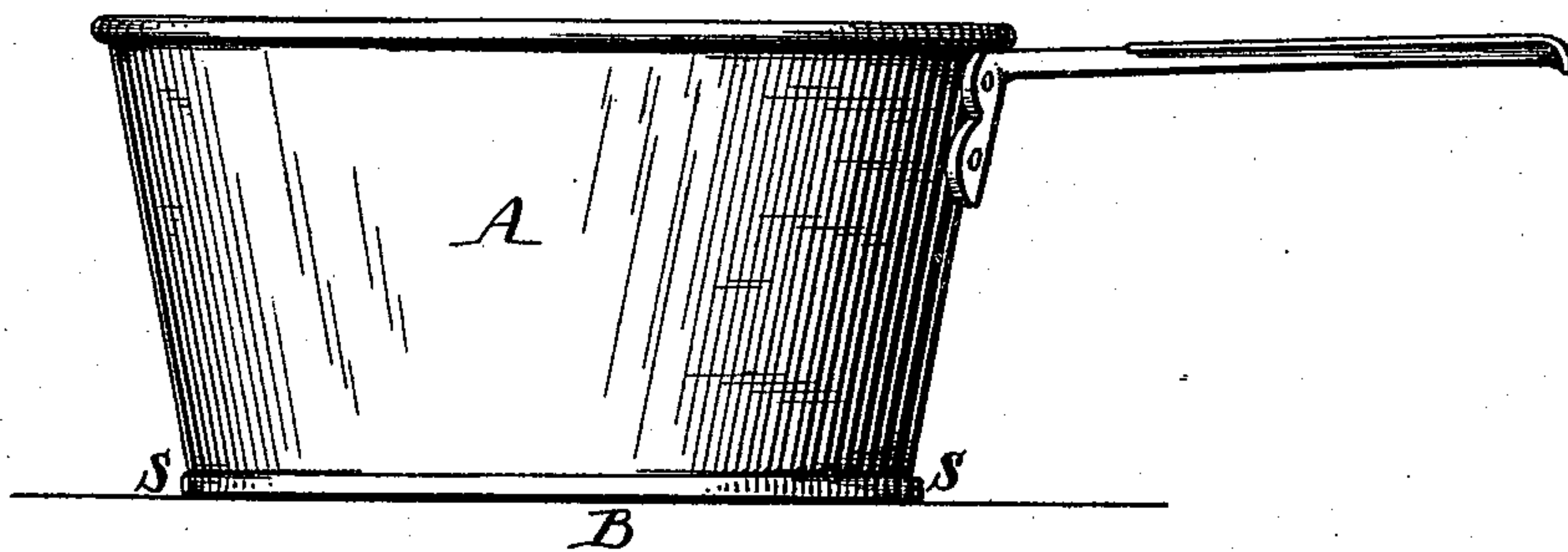


FIG. 2.

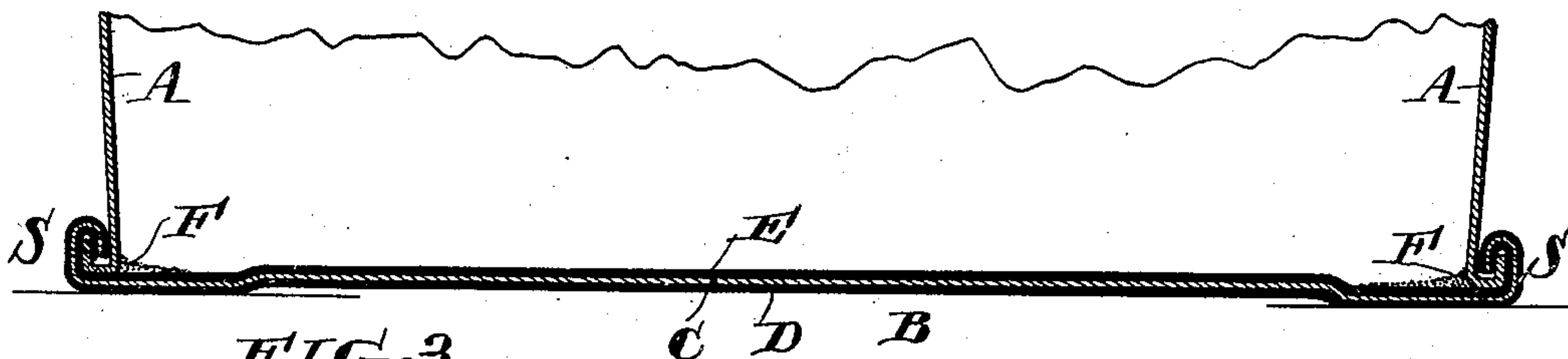


FIG. 3.

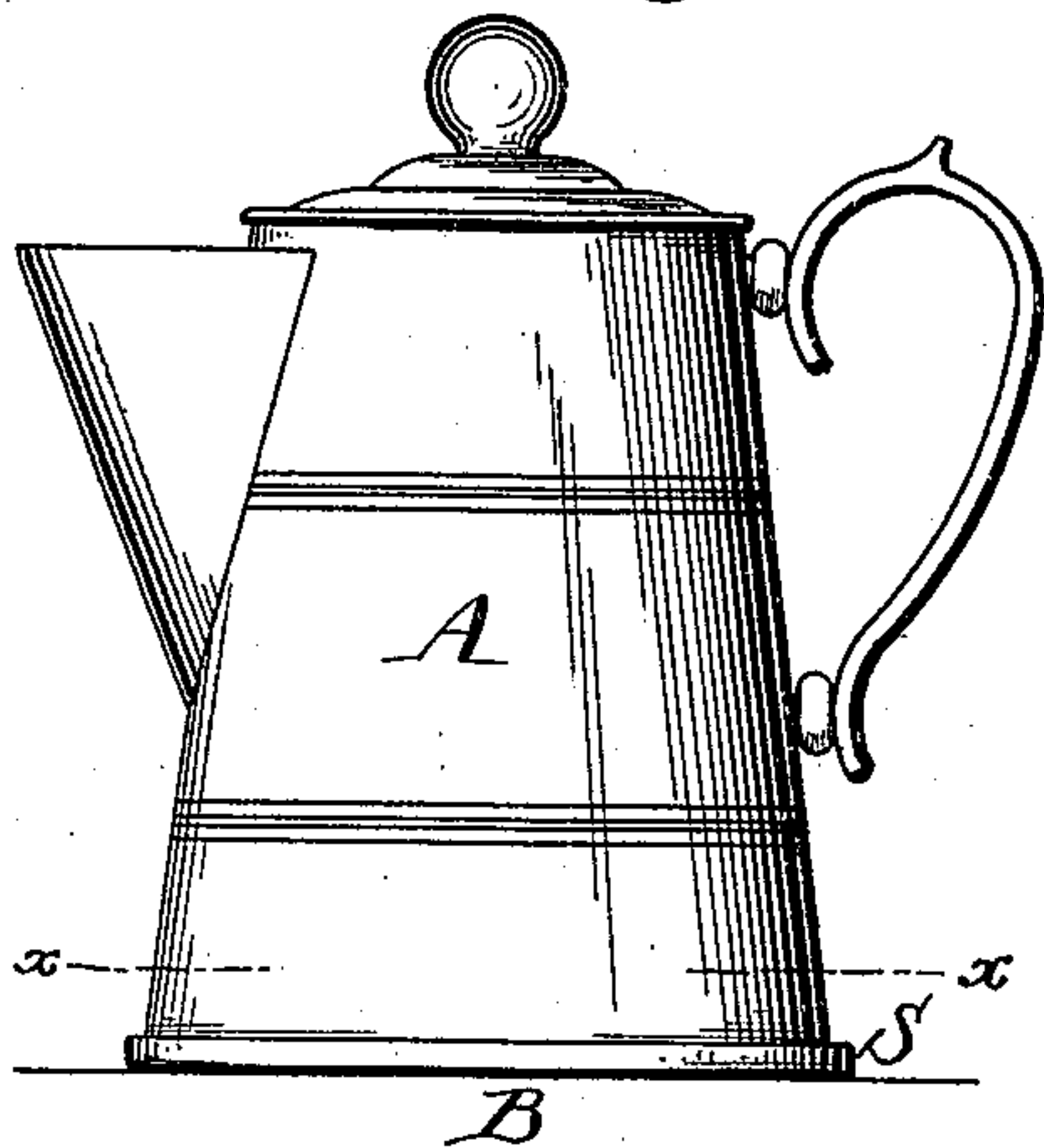
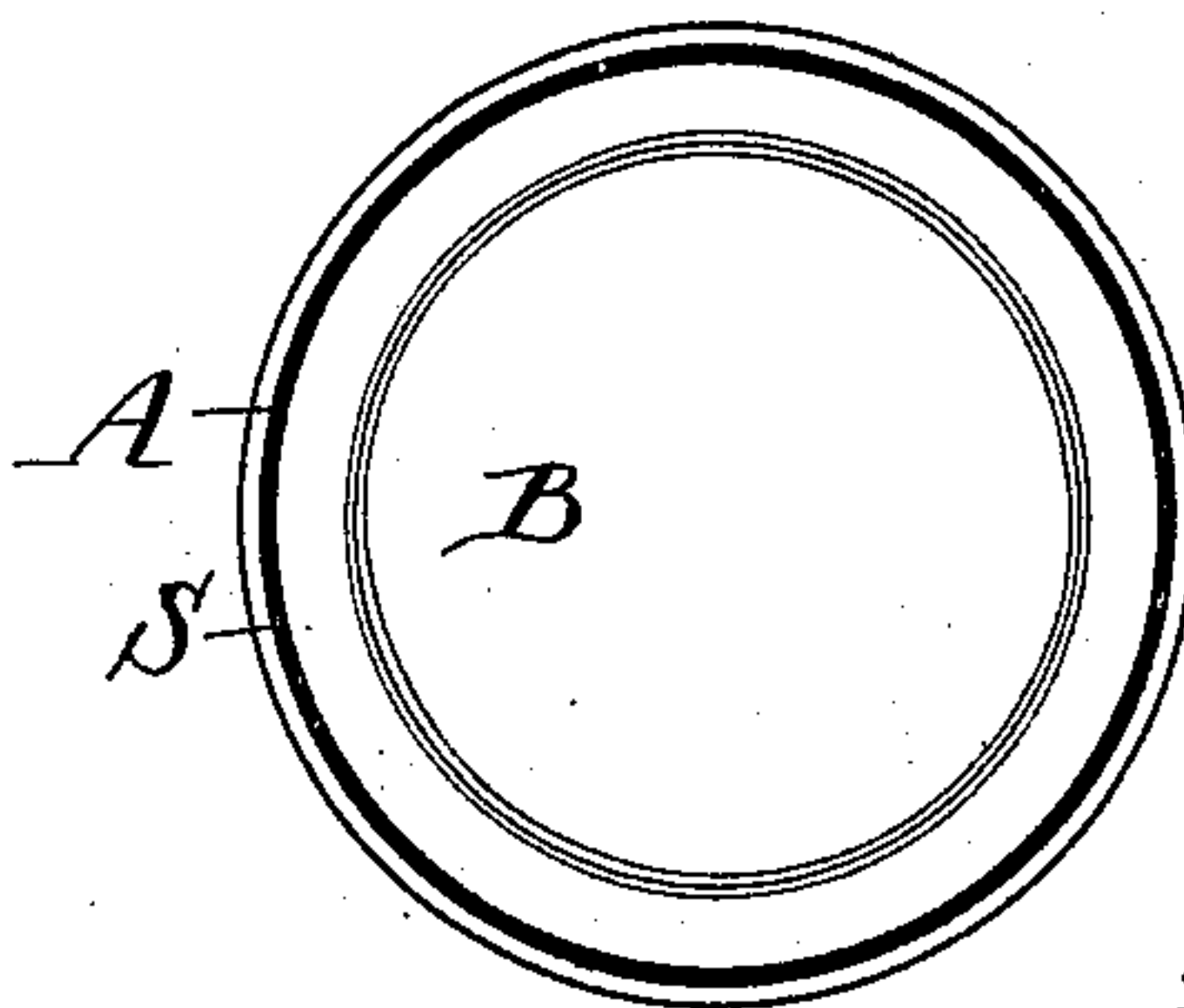


FIG. 4.



Witnesses:  
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By his atty  
*[Signature]*



# UNITED STATES PATENT OFFICE.

JOSEPH CLOUD, OF PHILADELPHIA, PENNSYLVANIA.

## CULINARY UTENSIL.

SPECIFICATION forming part of Letters Patent No. 486,157, dated November 15, 1892.

Application filed March 14, 1892. Serial No. 424,739. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH CLOUD, of the city and county of Philadelphia, and State of Pennsylvania, have invented an Improvement in Culinary Utensils, of which the following is a specification.

My invention has reference to culinary utensils; and it consists of certain improvements which are fully set forth in the following specification and shown in the accompanying drawings, which form a part thereof.

My invention has particular reference to vessels formed of sheet metal and designed for cooking purposes.

In carrying out my invention I provide the bottom of the vessel with a double bottom consisting of a comparatively-heavy sheet-iron copper-covered lower portion and a tin upper lining or covering, which latter is soldered upon the inside of the vessel to make a liquid-tight joint. The tin lining rests directly upon the sheet-iron bottom and is supported thereby, but has no positive connection with the surface thereof. It consequently may be made of very light material. Its functions are to permit a separation of the adjacent surfaces of the metal when the vessel is subjected to heat due to the difference of the expansibility of the two metals, whereby the inner tin lining is saved from burning to permit the heavy bottom to be removed when burned and replaced by another piece without necessarily removing the inner tin sheet if the same is uninjured and to give a clean tin interior with a strong soldered joint, which latter is not subjected to any of the strains which might be exerted in a tendency to separate the bottom from the sides of the vessel, since the sheet-iron copper-covered bottom is securely fastened to the sides of the vessel, preferably by bending the several layers of metal together in the form of a bent joint. The finished article has a copper-faced bottom with a fine bright tin interior.

The particular shape of the utensil is immaterial, as my improved bottom may be applied to tins, pans, coffee-pots, or in fact any of the ordinary cooking utensils formed of sheet metal. The iron copper-covered bottom may, if desired, be made very heavy and the tin lining interior made exceedingly light, but well covered with tin, so as to make it du-

rable and maintain a fine clean interior. By this construction the heat is directly received by the copper-covered heavy iron bottom and the products of combustion never come in contact with the light tin interior lining, thus making the vessel one of durability as well as cleanliness. In place of the iron copper-covered bottom a bottom of copper alone may be used.

In the drawings, Figure 1 is a side elevation of a cooking-utensil pan shaped with a handle embodying my invention. Fig. 2 is a sectional elevation through the lower portion thereof, showing the construction of the bottom. Fig. 3 is a side elevation of a coffee-pot, illustrating another form of cooking utensil to which my invention may be applied; and Fig. 4 is an inverted plan view of the cooking utensil shown in Figs. 1 and 2.

A are the sides of the vessel composing the body portion.

B is the heavy iron bottom, which has a lower coating of copper C.

D is preferably a thin sheet-tin interior lining for the bottom, which rests against the heavy iron bottom B, but is unconnected with the upper surface thereof. The edges of the sheet-tin and copper-covered iron bottom and lower edges of the body part A are formed with a bent joint at S, so that the bottom is positively secured to the body of the vessel and at the same time holds the interior sheet-tin lining in place. The interior sheet-tin lining D of the bottom is soldered to the sides of the body at F, thus making a perfectly-liquid-tight joint and maintaining the soldered joint out of contact with the fire.

It is immaterial to my invention what the thickness of the metals employed for a bottom may be; but it is evident that the copper-covered iron bottom should be thicker than that of the tin inner bottom, as the former has all the weight to support, as well as the duty of resisting the direct action of the flame, while the latter is simply to maintain a clean interior surface and form by a soldered joint, a liquid-tight vessel.

My invention may be carried into effect either by providing the lower part of the iron bottom with a very thin sheet of copper or by copper-plating the bottom of the iron. The vessel so produced has a copper bottom while



maintaining a clean bright tin interior, thus giving great durability, combined with beauty and finish. Furthermore, the copper is kept from the interior of the vessel, and thus under no conditions of cooking can an objectionable copper compound—such as verdigris—be formed during the cooking operation. If the copper bottom be made sufficiently heavy, the iron may be omitted and the tin rest directly against the copper. It is also evident that the tin lining D need not extend into the joint S, but may terminate at the soldered joint F. The adjacent face of the inner tin bottom and the lower copper-faced bottom being without positive connection together, they may be separated when the utensil is subjected to heat, owing to the difference of the expansibility of the metals. This separation of the adjacent surfaces forms a slight intermediate space and prevents the burning of the tin. Another advantage of this construction is that the lower copper-faced portion of the bottom may be removed when injured and replaced by a new piece without removing the inner tin bottom,

which is positively fastened to the body of the utensil.

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

A cooking utensil consisting of a body part, an inner tin bottom positively connected with the body part, and a second outer and comparatively-heavy bottom composed of sheet-iron, with an external copper face, the outer bottom extending over the under surface of the inner tin bottom and having its rim connected with the body portion of the utensil, but having its upper face unconnected with the adjacent under surface of the upper tin bottom, so that the adjacent faces may be free to separate slightly when the utensil is subjected to heat.

In testimony of which invention I have hereunto set my hand.

JOSEPH CLOUD.

Witnesses:

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