

(No Model.)

W. E. PLEADWELL.
MANUFACTURE OF PLATED ARTICLES.

No. 477,265.

Patented June 21, 1892.

Fig. 1.

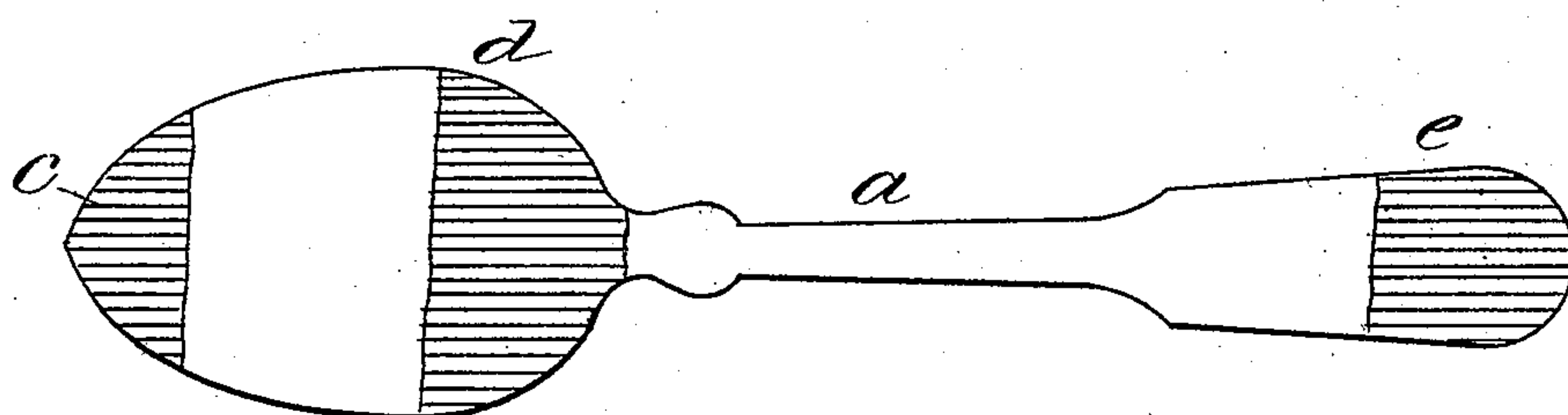
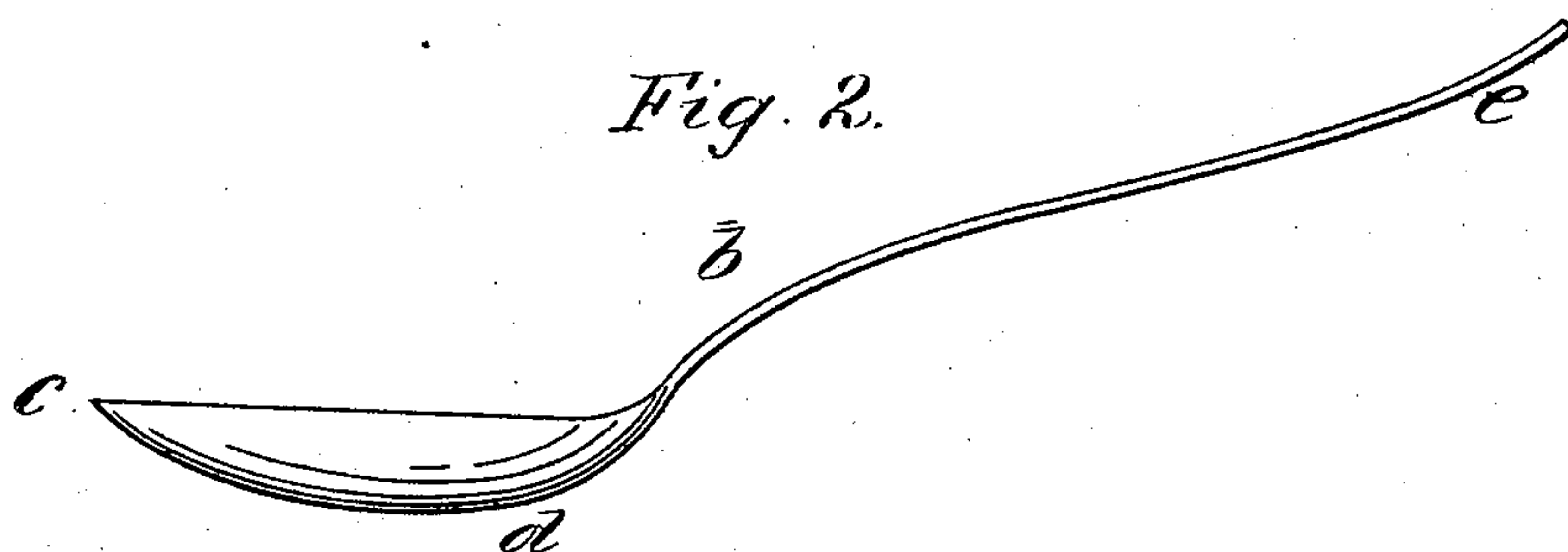


Fig. 2.



Witnesses:

J. Stern.
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UNITED STATES PATENT OFFICE.

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MANUFACTURE OF PLATED ARTICLES.

SPECIFICATION forming part of Letters Patent No. 477,265, dated June 21, 1892.

Application filed December 7, 1891. Serial No. 414,227. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. PLEADWELL, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in the Manufacture of Plated Articles, of which the following is a full, clear, and exact description, whereby any one skilled in the art can make and use the same.

The object of my invention is, mainly, to provide a plated article—usually table-ware—with a reinforced wearing-layer of the precious metal with which the article is plated on such parts only as are exposed to the greatest wear.

To this end my invention consists in the method of producing the article and in details of the method, as more particularly hereinafter described, and pointed out in the claim.

Referring to the drawings, Figure 1 is a plan view of a spoon-blank produced in the practice of my invention. Fig. 2 is a detail edge view of a spoon embodying my invention.

My invention is particularly adapted for use in making plated articles of flat ware, including spoons, forks, and the like, used as table-ware, but is equally applicable for producing other plated articles that will be more durable by reason of the extra protection of an additional thickness of the plating at the points most exposed to wear. The method of producing any of such articles in accordance with my invention is similar to that described with reference to the making of a spoon, which is the article selected for illustration.

In the accompanying drawings, the letter *a* denotes a blank cut to proper shape for forming a spoon and of such material as is commonly used in making plated articles.

The letter *b* denotes a spoon formed to shape, and such an article is particularly exposed to wear in use at the point *c* of the spoon, at the back of the bowl at *d*, and at the end of the handle at *e*. It is evident that if such parts of the article can be so protected as to wear for a considerable number of years, the whole spoon can be warranted for such a time, although the layer of more valuable metal used in plating is as to the rest of the surface much thinner and much less durable. Such articles have been protected at a wear-

ing-point prior to my invention by supplying a flange to take the wear, fastening a piece of the precious metal on the surface, or securing it by inlaying; but all such methods are objectionable for special and various reasons. In those articles of the prior art in which a piece is inserted or inlaid difficulty is experienced for the reason that in the first place a piece of soft or annealed silver is used in order that it may be secured by soldering without requiring too great a heat. The article is then struck under a drop and then polished on a wheel that heats the piece to a degree that makes it soft all the way through. Such pieces are often broken away from the openings in which they are fitted by the bending of the spoon or other article to the proper shape and greatly increases the cost of the article.

In the practical manufacture of the articles having inserted protecting-pieces there is a very great waste (at times amounting to forty per cent. of a given product) through faults in construction.

In the practice of my invention as described herein there is a minimum of waste. There is preferably deposited on the article by my process in the first instance a layer of hard silver, which is afterward condensed to an even greater degree by pressure, as by rolls or a hammer. Having made a blank of suitable size and shape of the baser metal, its surface, except at such points as are to be protected, is in the practice of my invention covered with wax, varnish, or like material that will prevent the adhesion of plating in a plating bath, and by exposure in such a bath the remainder of the surface of the article is electropated. By this means a layer of precious metal, as silver, is most intimately united with the metal of the blank, which is then submitted to pressure in rolls or under a press and the layer of almost pure silver that was deposited in the bath is condensed and hardened. This blank is then formed to the final shape of a spoon and faced as to the bowl in the usual manner, and then afterward plated over the whole surface, producing a spoon in this case with a thoroughly-protected surface at the wearing-points and having the several layers of metal almost integral. If such a spoon or other ar-

ticle made in accordance with my invention
be stripped of the last plating-layer at the
protected points, it will expose the first layer
that will stand all the tests of pure silver. It
5 is essential to the practice of my invention
that this protecting-layer of the metal with
which the spoon or other article is plated
shall be applied to the blank and afterward
submitted to the pressure of rolls or dies be-
10 fore applying the final plating to the article.
The spoon or other article is finished in the
usual manner.

I claim as my invention—

The method of producing a plated article
reinforced at the wearing-points, that consists 15
in electroplating such points in a blank and
then subjecting the plated surface to press-
ure, then forming the article to shape, and
finally plating and finishing the surface, in-
cluding those parts previously plated, all sub- 20
stantially as described.

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Witnesses:

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EDWIN F. HALL.