(No Model.)

D. W. PARKER & L. F. GRISWOLD.

PROCESS OF ORNAMENTING METALLIC SURFACES.

No. 382,661. Patented May 8, 1888.

Fig. 1.

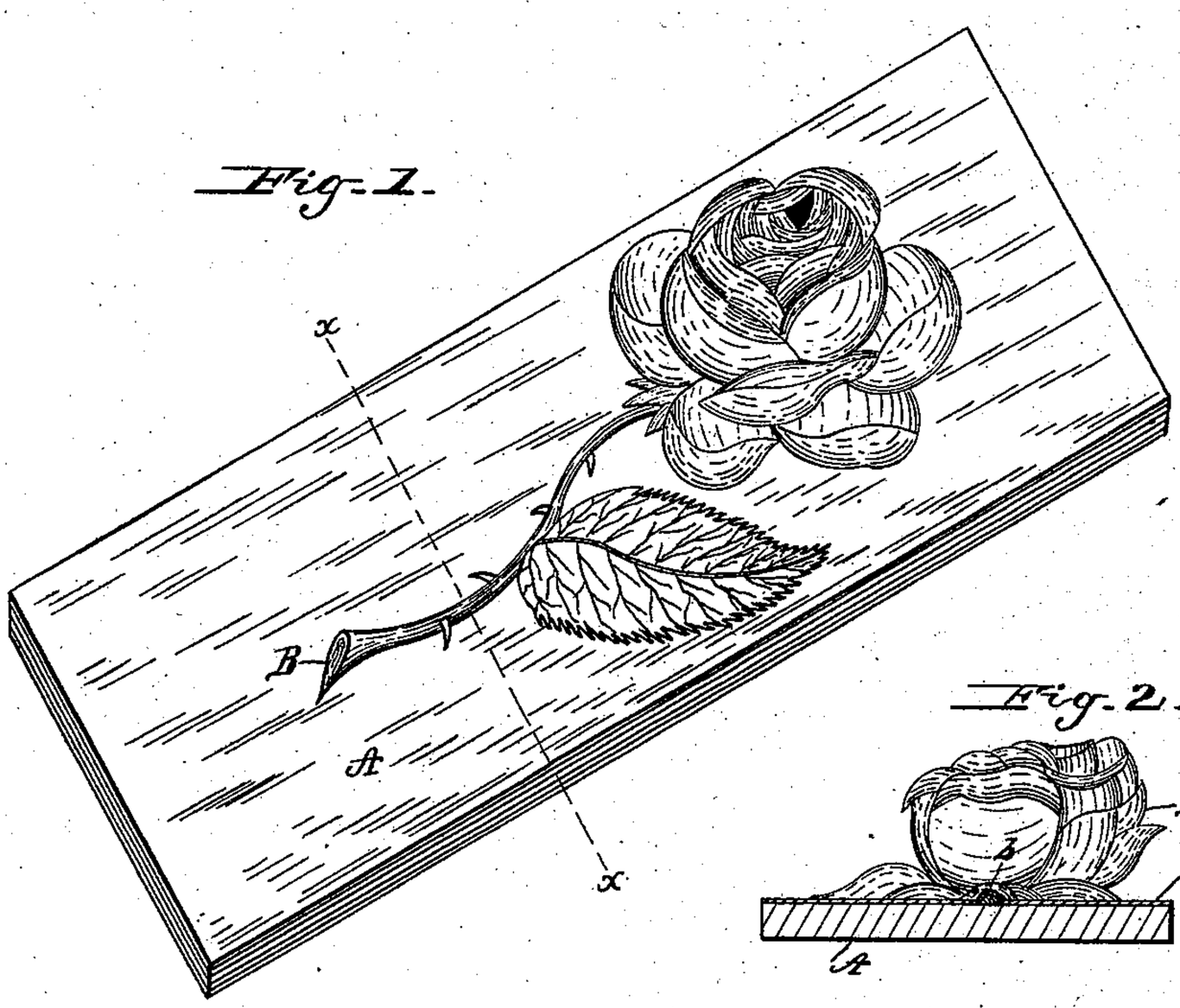

Fig. 2.

Fig. 3.

Fig. 4.

Witnesses.
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UNITED STATES PATENT OFFICE.

DEXTER W. PARKER AND LEWIS F. GRISWOLD, OF MERIDEN, CONNECTICUT, ASSIGNORS TO THE CHARLES PARKER COMPANY, OF SAME PLACE.

PROCESS OF ORNAMENTING METALLIC SURFACES.

SPECIFICATION forming part of Letters Patent No. 382,661, dated May 8, 1888.

Application filed July 19, 1886. Serial No. 208,396. (No model.)

To all whom it may concern:

Be it known that we, DEXTER W. PARKER and LEWIS F. GRISWOLD, both citizens of the United States, and residing at Meriden, in the county of New Haven and State of Connecticut, have invented a certain new and useful Process of Ornamenting Metallic Surfaces; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to the ornamentation of metallic surfaces by applying raised decorative forms thereto. Heretofore such forms have usually been cast in molds and soldered or bolted to the article to be ornamented. Sometimes the shape of the ornament has been etched on the body of the article and the space thus prepared electroplated, so as to produce a low flat ornament. The sand-blast has also been used to cut down the general surface of a plate of metal and leave an ornament in relief.

The object of our present invention is to furnish an improved substitute for these processes and the articles produced thereby.

In Figure 1 of the accompanying drawings, which represents in perspective a plate of metal ornamented by this process, A designates the body of the plate, and B the ornament attached thereto. Fig. 2, similarly lettered, represents a cross-section of the same. Fig. 3 represents a plan view of the plate after coating it with the resistant, the ornament being removed. Fig. 4 represents a detail perspective view of the ornament alone, the electroplating being partly broken away to show the wax interior.

Of course any metallic article or other article to which electroplating will adhere may be thus ornamented, and any form of ornament may be used, the plate and ornamental flower shown being for illustration only.

In carrying out our process we first mold wax or other adhesive plastic material into the shape of the desired ornament and metallize its surface by coating with plumbago, bronze, or other suitable material. The back of the ornament B is then applied to the surface of the plate or article A. The latter, where not so covered by the ornament, is then painted with an oily resistant, *a*. This resistant is cut away immediately around the ornament, so as to allow the electroplating solution to have access to the surface of the article A. The latter, with the ornament on it, is then immersed in said solution, which adheres only to the metallized ornament B and to the bare surface of the plate or article A next to the outline of said ornament. The electroplating deposit not only gives a metallic shell *b* to the raised surface of the ornament B, but also attaches the said ornament to plate or article A by adhering to both. It thus aids the adhesive quality of the plastic material which makes up the body of said ornament, and may even be used with plastic material which is not adhesive if the electroplating deposit be of considerable thickness.

We sometimes find it convenient before electroplating to cut away at certain points the metallized surface of the plastic ornament B, causing such parts of it to remain bare. This is preferably done along the outline of the ornament, which thus presents an alternation of electroplated and bare spaces, thus separating the ornament from the surface at the cut-away spaces, which gives the ornament a more positive relief. There must be enough electroplating along the outline to hold the ornament B to article A. The process is same where several ornaments are attached, all being put in position on the article before the resistant is applied and plated simultaneously.

By our process an ornament may be conveniently and satisfactorily applied which is not continuous, but has intervals or breaks in it. Each of the separate pieces thus formed would require its own bolts or a distinct soldering operation if these methods were employed. In other respects, also, the advantages of our process are obvious. An ornamental article is easily, cheaply, and expeditiously produced. There are no metallic fastenings which may rust or become loosened. There is no need of melting solder nor applying heat in any way. There is no occasion to reduce the thickness of the plate or article to which the ornaments are attached, nor to abrade its surface in any way.

Instead of covering the surface of the article close to the ornament with resistant and then cutting the latter away, a narrow border may

be left uncoated. The plate may be deposited by other than electrical means.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The process of ornamenting metallic surfaces, which consists of the following steps: first, applying plastic metallized ornaments to the surface; next, coating that part of the surface not covered by such ornaments with a resistant to electroplate, omitting or removing said resistant around the border of the ornament, and, finally, electroplating so as to attach the ornament to the part of the surface thus made or left bare, substantially as set forth.

2. The process of ornamenting surfaces, which consists in applying to a surface a plastic body having the form of the ornament desired, and plating by deposit said plastic body and certain parts of said surface, the plate connecting said surface and the ornament, substantially as set forth.

3. An article having a metallic surface and provided with an electroplated plastic ornament which is attached to said surface by the plating, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

DEXTER W. PARKER.
LEWIS F. GRISWOLD.

Witnesses:
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