UNITED STATES PATENT OFFICE.

HOMER WRIGHT, OF PITTSBURG, PENNSYLVANIA.

ORNAMENTING METALS.

SPECIFICATION forming part of Letters Patent No. 253,905, dated February 21, 1882.

Application filed December 6, 1881. (Specimens.)

To all whom it may concern:

Be it known that I, HOMER WRIGHT, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Ornamenting Metals; and I do 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.

My invention relates to the coloring and ornamenting of articles made of soft metal.

My invention consists in casting the articles in metallic molds the interior surfaces of which are provided with depressed and elevated portions of the desired design to be given to the article, in countersink and relief, then painting or staining the article of the desired color or tint, and then submitting the article to a cutting or trimming process in a lathe, as will more fully hereinafter appear.

I construct my molds of metal, of any suitable kind to produce the required design upon the article to be cast, which is formed on the inner working-surface of the mold by cutting, etching, or engraving.

The design is produced in the mold partly in countersink and partly in relief, the countersunk portion being left plain, while the relief portion is mottled, pebbled, or provided with any desired design or ornamental finish, so that when the article is properly molded the portion of the mold in relief will appear as the countersunk or depressed portion on the surface of the article, with the mottled or pebbled design imprinted thereon, while the countersunk portion of the mold will produce the raised or elevated portions on the article.

For making articles having perforations therein—such, for example, as covers or tops for salt and pepper bottles—I provide the countersunk portions of the mold with pins or projections of any desired form, which will project far enough inward to entirely penetrate the molten metal, thus producing holes or perforations in the thick portions of the metal, so that there will be a larger body of metal around said pins, and which will insure or allow the metal to run sharp and full at these points, so that when the article is turned on the lathe the holes are brought out sharp and clearly defined, thus adding to the ornamental effect of the design, and leaving the countersunk portion of the article undisturbed. I next coat the surface of the article thus produced with a brilliant-colored lacquer, japan, or other suitable coloring-matter of a permanent nature, and permit it to dry. The article so colored is next placed in a lathe-chuck, and the raised or relief surface of the soft-metal article is turned or trimmed off by suitable chisels or scrapers, care being taken to remove only the surface of the ornamental design which was formed by the countersunk portion of the mold. That portion of the design which forms the relief portion of the mold and which forms the countersunk portion of the article is not touched by the chisels or tools in turning the article—consequently the colors are not removed—and forms a clear cut and brilliant contrast with the turned and polished surface of the metal.

My invention is specially adapted to the ornamentation of Britannia and white-metal jug-tops, pitcher-lids, pepper and salt bottle caps, and also to other articles which are susceptible of being turned on a lathe and finished as described. Any metal which will not tarnish or become discolored will be found to produce the result desired, as no coating is needed to protect the surfaces which have been left bright by the action of the chisels. It will be further noted that to produce the best results the article on the lathe-chuck should be rotated at a high velocity while being subjected to the action of the chisels or other tools.

I am aware of the patent to Hiram Tucker, No. 89,523, April 27, 1869, in which he proposes to ornament the surface of articles made of the baser metals, or metals susceptible of rust and tarnish, by coating the same with coloring-matter, removing such coating from the raised or salient points to form a basis on which to electroplate and produce bright surfaces in contrast with the colored portions, and such process I disclaim.

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

As a new article of manufacture, tops for sirup-jugs, pitchers, salt and pepper receptacles, &c., of soft metal, ornamented in colors, in contrast with the polished surface of the metal produced by turning or trimming off a portion of the metal.

In testimony whereof I affix my signature in presence of two witnesses.

HOMER WRIGHT.

Witnesses:
THOS. J. FORD,
SAMUEL MCCLAY.