

UNITED STATES PATENT OFFICE.

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METAL-ETCHING COMPOUND.

1,418,253.

Specification of Letters Patent. Patented May 30, 1922.

No Drawing.

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To all whom it may concern:

Be it known that I, HARRY C. GLEOCKLER, a citizen of the United States, residing at Schuylkill Haven, in the county of Schuylkill and State of Pennsylvania, have invented certain new and useful Improvements in Metal-Etching Compounds, of which the following is a specification.

This invention relates to a compound for the etching of metals generally, and more particularly to the etching of steel, and has for its object to provide for a simple and inexpensive compound capable of being expeditiously mixed, one ingredient thereof with the other, and applied to the article or object to be etched.

In the accomplishment of the objects and purposes of the invention, I make use of the following ingredients, and in the approximate proportions, as stated:—

Bluestone (pulverized) -----	1 oz.
Salt (common) -----	1 oz.
Cider vinegar -----	2 oz.
Water -----	1 oz.

In the use of the compound or solution thus provided, the surface of the metal to be etched is first cleaned and then coated with a suitable film of common soap, or the like. This coating or film of soap is now to be stencilled, or otherwise acted on for the outlining, in the same of the desired data, design or wording, and in a manner to expose the surface of the metal to the action of the compound or etching solution, which is to be applied to the outline in any suitable or desired manner. After the compound or solu-

tion has been applied, the article or object is allowed to stand for a short or otherwise suitable period of time, when the coating or film of soap can be removed, together with any and all traces of the compound or solution which may remain in deposited or un-evaporated state.

It is to be noted that the proportions of the several ingredients of the compound or solution may be other than as stated; that equivalents of certain of the ingredients may be substituted one for the other, as for instance, acetic acids in solution and of a corresponding strength may be used in lieu of the cider vinegar; other forms of salines in lieu of common salt; and that more or less of the water may be used or otherwise entirely eliminated, depending upon the character of the etching to be done, a strong solution being required for the production of heavy prominent etching, and a weaker solution for fine lined or less coarse and heavy etching.

Having thus fully described the invention, what is claimed, is:—

1. A metal etching compound consisting of bluestone, a saline substance, an acid, and water mixed in the approximate proportions as stated.

2. A metal etching compound consisting of bluestone one ounce, common salt one ounce, cider vinegar two ounces, and water one ounce.

In testimony whereof, I affix my signature hereto.

HARRY C. GLEOCKLER.