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UNITED STATES PATENT OFFICE.

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CORROSION-RESISTING ALLOY.

No Drawing.

Application filed August 11, 1925. Serial No. 49,652.

The invention relates to a corrosion resisting alloy. It has for its primary object the provision of an alloy having high corrosion resisting qualities, and which, at the same time, may be rolled or cold drawn, and which has a high tensile strength suiting it for a wide variety of uses. These qualities make the alloy suitable for service, to which other alloys having corresponding acid resisting qualities, are unsuited, because of their hardness, which permits of their being worked only by grinding, and because of their low tensile strength and brittleness.

The alloy contains preferably the following proportions of copper, aluminum, iron and nickel:

	Per cent.
Copper.....	89
Aluminum.....	7
Iron.....	3
Nickel.....	1

I have found that the use of the nickel in the alloy modifies its properties, so that it

may be hot rolled or cold drawn. For instance, with the same alloy without the nickel, it has not been practicable to roll sheets less than .062 inches in thickness, and the loss in plates of that thickness, due to split edges and the consequent trimming, was very high. Upon adding the nickel, it has been possible to successfully roll sheets .025 inches in thickness, with only the standard trimming required in sheet steel practice. The nickel very clearly increases the ductility and yield point of the alloy to a substantial degree.

What I claim is:

A corrosion resisting alloy comprising about 89 per cent of copper, 7 per cent of aluminum, 3 per cent of iron, and one per cent of nickel.

In testimony whereof, I have hereunto subscribed my name this 27th day of July, 1925.

PEIRCE D. SCHENCK.