

UNITED STATES PATENT OFFICE.

JOHN HOLLAND, OF CINCINNATI, OHIO.

IMPROVEMENT IN ALLOYS FOR THE MANUFACTURE OF PENS.

Specification forming part of Letters Patent No. 132,008, dated October 8, 1872.

To all whom it may concern:

Be it known that I, JOHN HOLLAND, of Cincinnati, Hamilton county, Ohio, have invented a certain new and useful Improvement in the Manufacture of Gold Pens, of which the following is a specification:

Nature and Objects of Invention.

My invention consists in a process of manufacture of a metallic alloy, from which gold pens can be made, which secures greater stiffness and elasticity in the pen, giving it the firmness of the steel pen, combined with the durability and freedom from corrosion of the gold one, while the pens formed from the alloy produced by my process can be re-pointed without losing their elasticity in the annealing process, as do the pens formed from the customary alloy of gold, silver, and copper.

General Description.

In the process of preparing my alloy I first take four pennyweights of chemically-pure silver and melt it, to which I add one pennyweight of platinum, together with a piece of

corrosive-sublimate about the size of a pea. Silver having a much higher affinity for platinum than gold, by the use of the corrosive-sublimate the platinum is united to it, and the alloy thus made unites readily with the gold. When this mass is well fused twelve pennyweights of gold and three pennyweights of copper are to be added to it, and the whole subjected to a high heat for about ten minutes, when the alloy is complete, and it is to be poured off and worked in the ordinary manner by hammering and rolling.

Claim.

The herein-described alloy, for the manufacture of gold pens, of the ingredients, and in the proportions, substantially as and for the purpose specified.

In testimony of which invention I hereunto set my hand.

JOHN HOLLAND.

Witnesses:

FRANK MILLWARD,
I. L. WARTMANN.