

UNITED STATES PATENT OFFICE.

WILLIAM J. MILES, JR., OF TERRE HAUTE, INDIANA.

ALLOY.

SPECIFICATION forming part of Letters Patent No. 467,329, dated January 19, 1892.

Application filed October 10, 1891. Serial No. 408,362. (No specimens.)

To all whom it may concern:

Be it known that I, WILLIAM J. MILES, Jr., a citizen of the United States, residing at Terre Haute, in the county of Vigo and State of Indiana, have invented a new and useful Alloy, of which the following is a specification.

My invention relates to metallic alloys; and it has for its object to provide a combination of metals to produce a new and useful alloy that is particularly designed to supplant the use of ordinary plated wares and to serve as a valuable substitute therefor, said alloy being especially adapted for use in the manufacture of surgical instruments and all kinds of cutlery and ornamental articles, and to this end to provide an alloy that will possess superior qualities and advantages over those now in use, inasmuch as the same is unaffected by the atmosphere, and is therefore entirely non-oxidizing and will not rust.

With these and many other objects in view, which will readily suggest themselves as the nature of the invention is fully understood, the same consists in the combination of the following-named metals, to wit: osmium, iron or steel, tungsten, (metallic,) manganese, nickel, and aluminium.

The proportions in which the above-named metals are combined in manufacturing the

desired articles are entirely optional, and depends wholly upon the nature of the article to be produced in order to accommodate the strength of the alloy to the qualities of said article.

In preparing the alloy all of the metals, except the aluminium, are fused together in a suitable crucible; and when the fusion of the same is complete the aluminium is then added to complete the alloy, inasmuch as if the same had been previously added it would have been destroyed. When all of the metals have been intimately combined in this manner, the fused alloy is then ready to be cast in suitable molds to construct the desired article.

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

The herein-described non-oxidizing alloy, composed of osmium, iron or steel, tungsten, manganese, nickel, and aluminium, combined in suitable proportions.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM J. MILES, JR.

Witnesses:

S. E. MARTIN,
JNO. H. SIGGERS.