## UNITED STATES PATENT OFFICE.

ALFRED HUGUENIN ROBERT, OF PONTS MARTEL, SWITZERLAND, ASSIGNOR TO C. HUGUENIN-THIÉBAUD & FILS, OF SAME PLACE.

## NON-MAGNETIC ALLOY.

SPECIFICATION forming part of Letters Patent No. 388,152, dated August 21, 1888.

Application filed May 25, 1888. Serial No. 275,109. (No specimens.)

To all whom it may concern:

Beit known that I, ALFRED HUGUENIN ROB-ERT, watch - manufacturer, residing at Ponts Martel, in Switzerland, have invented a new 5 and useful Non-Magnetic Alloy, of which the following is a specification.

My invention consists of a new and useful non-magnetic alloyage intended to be used in the manufacture of watches, and especially of balance-wheels for watches. Its hardness and malleability make it suitable for replacing steel, and it is only composed of cheap metals, so as not to increase the price of the watchmovers to which it is applied.

My alloy is composed of tin, copper, lead, zinc, iron, nickel, and manganese. Those metals are suitably combined together in the following proportions: tin, 0.03 part; copper, 58.10 parts; lead, 0.09 part; zinc, 18.90 parts;

iron, 1.28 parts; nickel, 20.62 parts, and man-20 ganese, 0.98 part.

Having thus described my invention, I

1. A metallic alloy composed of tin, copper, lead, zinc, iron, nickel, and manganese, for the 25 purpose specified.

2. The alloyage of 0.03 part of tin with 58.10 parts of copper, 0.09 part of lead, 18.90 parts of zinc, 1.28 parts of iron, 20.62 parts of nickel, and 0.98 part of manganese, for the 30 purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALFRED HUGUENIN ROBERT.

Witnesses:

CHARLES HUMBERT, Fils, ARNOLD CHATILON.