

# UNITED STATES PATENT OFFICE.

HEINRICH OSTERMANN AND CHARLES LACROIX, OF GENEVA, SWITZERLAND, ASSIGNORS TO THE USINE GENEVOISE DE DÉGROSSISSAGE D'OR, OF SAME PLACE.

## METALLIC ALLOY.

SPECIFICATION forming part of Letters Patent No. 388,147, dated August 21, 1888.

Application filed April 25, 1888. Serial No. 271,841. (No specimens.)

*To all whom it may concern:*

Be it known that we, HEINRICH OSTERMANN, chemist, and CHARLES LACROIX, director of the Usine Genevoise de Dégrossissage D'or, both residing in the city of Geneva, in Switzerland, have invented a new and useful Non-Magnetic Metallic Alloy, of which the following is a specification.

The invention consists of a new non magnetic metallic alloy, the purpose of which is to replace steel in the manufacture of different parts of watch-movements, and especially of watch-escapements.

The present alloy has proved to secure in a most perfect manner the compensation of the balance-wheel and hair-spring in variable temperatures when used in place of steel. It is composed of a combination of gold, palladium, copper, silver, cobalt, wolfram, rhodium, and platine, which are suitably combined together in the following proportions: thirty to forty parts of gold, thirty to forty parts of palladium, ten to twenty parts of copper, 0.1 to 5 parts of silver, 0.1 to 2.5 parts of cobalt, 0.1

to 5 parts of wolfram, 0.1 to 5 parts of rhodium, and 0.1 to 5 parts of platine.

Having thus described our invention, we claim—

1. A metallic alloy composed of gold, palladium, copper, silver, cobalt, wolfram, rhodium, and platine, for the purpose specified.

2. A metallic alloy composed of thirty to forty parts of gold, thirty to forty parts of palladium, ten to twenty parts of copper, one-tenth of a part to five parts of silver, one-tenth of a part to two and a half parts of cobalt, one-tenth of a part to five parts of wolfram, one-tenth of a part to five parts of rhodium, and one-tenth of a part to five parts of platine, for the purpose specified.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

HEINRICH OSTERMANN.  
CHARLES LACROIX.

Witnesses:

E. IMER-SCHNEIDER,  
L. T. ADAMS.