

UNITED STATES PATENT OFFICE.

HENRI SCHNEIDER, OF CREUSOT, FRANCE.

STEEL ALLOY.

SPECIFICATION forming part of Letters Patent No. 560,150, dated May 12, 1896.

Application filed March 9, 1896. Serial No. 582,453. (No specimens.) Patented in France December 24, 1895, No. 250,058.

To all whom it may concern:

Be it known that I, HENRI SCHNEIDER, of Creusot, (Saône-et-Loire,) France, have invented a new and useful Improvement in Steel Alloys and Application of the Same to the Manufacture of Armor, which is fully set forth in the following specification, and which has been patented in France, No. 250,058, dated December 24, 1895.

10 The present invention has reference to the production of an alloy of steel with molybdenum and chromium in proportions substantially as hereinafter stated and to the application of such alloy to the manufacture of armor-plate of all kinds and dimensions and of any thickness.

15 The investigations and experiments which I have made have led to the discovery that the introduction of chromium in the proportion of 20 from 0.2 to three per cent. into molybdenum steel, containing from 0.2 to five per cent. of molybdenum, gives to such steel, after hardening, the property of greatly-increased resistance to penetration without increase of 25 fragility. At the same time the addition of chromium in the proportion stated does not

impair or modify the other desirable properties of molybdenum steel, such as its aptitude for forging and rolling and for the work of tools or for undergoing the cementation treatment.

This alloy on an industrial scale may be obtained in the crucible, or in the converter, or upon the hearth, by the well-known processes, introducing the chromium in the state of chromium or as ferro-chromium and the molybdenum in the metallic state or as an alloy.

I claim as my invention—

The within-described alloy of steel with molybdenum and chromium, in the proportions of 0.2 to five per cent. of the former and 0.2 to three per cent. of the latter, substantially as described.

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

HENRI SCHNEIDER.

Witnesses:

CHARLES LAURENCE,
HIPPOLYTE OLIVIER.