UNITED STATES PATENT OFFICE.

CARL HAEGELE, OF GEISLINGEN, WURTEMBERG, GERMANY.

MANUFACTURE OF COPPER-PLATED SHEET-IRON.

SPECIFICATION forming part of Letters Patent No. 244,230, dated July 12, 1881.

Application filed April 14, 1881. (No specimens.)

To all whom it may concern:

Be it known that I, CARL HAEGELE, a subject of the King of Wurtemberg, residing at the city of Geislingen, in the Kingdon of Wurtemberg and Empire of Germany, have invented certain new and useful Improvements in the Manufacture of Plated-Metal Ware, of which the following is a specification.

The object of this invention is the production of copper-plated sheet-iron, which can be substituted in the manufacture of sheet-metal ware with great advantage for pure copper or its alloys.

The process of producing copper-plated sheet metal is carried out as follows: I take a piece of sheet-iron and free the same by treatment with suitable chemicals and by scraping and rubbing off all impurities adhering to its surfaces, and upon this piece of sheet-iron I place a piece of sheet-copper, which must also be carefully freed from impurities, at least on that surface which is to come in contact with the iron. The edges of the sheet-copper are turned over the edges of the sheet-iron, and between these turned edges and the iron I introduce chalk mixed with glue or any other suitable substance, to prevent the copper from adhering to the iron at these places. It is very important that the two metals when placed one upon the other shall be in the closest possible contact throughout, so that in the subsequent process of heating and rolling no gases or air can find their way in between them. The employment of a welding-powder is not required. After the material has been thus prepared it is placed in an oven, by preference into a segmental retort, and heated nearly to a white heat. In this condition the plates are taken out of the oven as rapidly as possible and passed from four to six times through between rollers until they attain the desired thickness. By these means the copper adheres firmly to the iron, and copper-plated sheets are obtained which can be used for manufacturing sheet-metal ware of various description in the same manner in which ordinary sheet metal is generally used.

What I claim as new, and desire to secure by Letters Patent, is—

The within-described mode of uniting a sheet of copper with a sheet of sheet metal to form copper-plated sheet-iron, the same consisting in cleansing the respective sheets, then fixing one upon the other, then heating them in their united condition to a high degree of heat, and while in such condition compressing them together by a rolling or hammering action, substantially as and for the purpose set forth.

This specification signed by me this 19th day of March, 1881.

CARL HAEGELE.

Witnesses:

OTTILIA FORTSCHUNK,

R. WAHL.