

UNITED STATES PATENT OFFICE.

OSCAR DOEBNER, OF BERLIN, PRUSSIA, AND WILHELM VON MILLER, OF
MUNICH, BAVARIA, GERMANY.

FORMATION OF THE HYDROBASE OF CHINALDINE.

SPECIFICATION forming part of Letters Patent No. 316,249, dated April 21, 1885.

Application filed February 14, 1884. (No specimens.) Patented in Germany August 19, 1882, No. 24,317, and October 2, 1883, No. 29,819; in Belgium February 21, 1883, No. 60,517; in France February 21, 1883, No. 153,873; in Italy February 21, 1883, XXX, 157; XVI, 15,147; in England February 21, 1883, No. 956; in Luxemburg February 22, 1883, No. 255, and in Austria-Hungary September 16, 1884, No. 26,849 and No. 41,286.

To all whom it may concern:

Be it known that we, OSCAR DOEBNER, a subject of the Duke of Saxe-Meiningen, residing at Berlin, Prussia, German Empire, and
5 WILHELM VON MILLER, a subject of the King of Bavaria, residing at Munich, Bavaria, German Empire, have invented certain new and useful Improvements in the Production of Oxyhydrochinaldine and the Methyl and
10 Ethyl Combination of Same; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

15 This invention relates to the production or formation of hydrobases of chinaldines and oxychinaldines as well as of methyl and ethyl derivatives thereof. To this end we treat the bases with reducing agents, preferably with
20 tin and hydrochloric acid.

In an application for patent filed February 23, 1883, Serial No. 85,968, and patented No. 309,935, we have described a method of obtaining or forming chinaldine bases, which bases
25 may, however, also be produced from the chinaldines obtained from coal-tar; and in an application for patent of even date with this we have described certain methods of converting these bases into oxychinaldine bases and
30 their methyl and ethyl derivatives. In the conversion of these into hydrobases we boil the chinaldine bases or the oxymethoxy and althoxy chinaldines with tin and concentrated

35 sulphuric acid for several hours. The product is then freed from tin, and the hydrobase separated by treatment with soda lye and distilled. The properties of these bases may be enumerated as follows: Hydrochinaldine forms an aromatic fluid, the boiling-point of which is about 246° centigrade. Methoxy hydrochinaldine enters into ebullition at about
40 269° to 270° centigrade. All these bases are secondary bases, and may, therefore, by treatment with the halogen combinations of methyl, ethyl, and amyl, be converted into methyl,
45 ethyl, and amyl combinations which also form aromatic fluids. From these grey coloring-matter may be obtained by treatment with benzo-trichloride, and they may also be employed
50 as antiseptic and medicinal agents.

Having thus described our invention, what we claim is—

As a new chemical product, the herein-described hydrobase of chinaldine, substantially
55 as set forth.

In testimony whereof we affix our signatures in presence of witnesses.

OSCAR DOEBNER.
WILH. v. MILLER.

Witnesses:

ADOLF DEMELIUS,
B. ROE,
JOS. W. HARPER,
EMIL HENZEL.