## United States Patent Office.

CHARLES W. HELD, OF BROOKLYN, NEW YORK.

## IMPROVED ENAMEL FOR LEATHER.

Specification forming part of Letters Patent No. 34,366, dated February 11, 1862.

To all whom it may concern:

Be it known that I, CHARLES W. HELD, of Brooklyn, Eastern District, in the county of Kings and State of New York, have invented a new and Improved Lacquer for Enameling Leather, &c.; and I do hereby declare that the following is a full, clear, and exact description of the same.

My lacquer is a composition of the following ingredients, viz: linseed-oil, paris-blue, 2 (2KCyFeCy)×3(3FeCy2Fe<sub>2</sub>Cy3,) gum-arabic, acetate of lead, litharge, Bremen green, (a sort of verdigris manufactured in Bremen, Germany, the exact composition of which is kept secret,) and gamboge. The proportion in which these ingredients are mixed together is about as follows: unboiled linseed-oil, sixtyfour ounces; paris-blue, four ounces; gumarabic, two ounces; acetate of lead, two ounces; litharge, one-half ounce; Bremen green, one-fourth ounce; gamboge, one-fourth ounce. For the purpose of mixing these ingredients the oil is poured into an iron kettle, and all the other ingredients are reduced to an impalpable powder and intimately mixed with the oil. During this process some of the gums dissolve in the oil, which can be observed by the bright foam appearing on the surface. The kettle is now placed on a fire and its contents made to boil for four hours, taking care, however, that the mixture does not boil up too much and that the vapors are left to escape in small bubbles. During these four

hours the several ingredients are pretty well dissolved and the mixture appears nearly black. The heat is now increased, and by and by a profuse foam forms on the surface and white vapors escape from the mixture, which now commences to boil up. At this point the process of perfect solution and combination of all the ingredients commences, and said process is completed after about two hours. During this time the mixture must be continuously stirred. The furnace must be so arranged that the heat can be regulated at pleasure, in order to prevent the mixture boiling over, whereby the best and finest parts would be lost. The mixture is now kept boiling slowly for two hours more, thus completing the entire process in about eight hours.

By increasing or diminishing the quantity of oil in proportion to the other ingredients, the lacquer can be made thicker or thinner, as may be desired.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A lacquer for enameling leather, &c., composed of the within-named ingredients, mixed together in about the proportion herein set forth.

CH. W. HELD.

Witnesses:

JAMES LAIRD, J. W. COOMBS.