

UNITED STATES PATENT OFFICE.

CHARLES EMMANUEL YVONNEAU, OF PARIS, FRANCE.

METHOD OF TREATING CARBID OF CALCIUM.

SPECIFICATION forming part of Letters Patent No. 648,348, dated April 24, 1900.

Application filed January 18, 1900. Serial No. 1,928. (No specimens.)

To all whom it may concern:

Be it known that I, CHARLES EMMANUEL YVONNEAU, a citizen of the French Republic, residing at Paris, France, have invented certain new and useful Improvements in Methods of Treating Carbide of Calcium; and I 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.

In the manufacture of carbide of calcium in commercial form for use in apparatus for generating acetylene gas a great waste has resulted from the carbide being necessarily exposed during the crushing operation, which is a necessary step to making the carbide up into tablet or cartridge form, the percentage of loss being dependent upon the hygroscopic condition of the atmosphere.

The object of my present invention is to so treat the ordinary carbide prior to the crushing operation that it will be entirely immune against humidity in the atmosphere during its exposure. Exhaustive experiments have been made by me to discover some method or means for preventing this waste. The carbide has been crushed in a superheated chamber, in a vacuum, and otherwise, with little or no success in proportion to the expense of these methods. I found that the best possible results as regards utility and inexpensiveness were obtained by providing the ordinary carbide with a protective medium, a

practical exemplification of the process being as follows: I take ordinary calcium carbide as furnished to the trade and immerse the same into a substance indecomposable by the carbide, as oil, at a suitable temperature until nearly or completely saturated. The oil penetrates through the pores of the carbide, filling the same and rendering the carbide perfectly immune to a hygroscopic state of the atmosphere. Thus the carbide can be crushed irrespective of surroundings, with no perceptible loss, and at small expense.

Having thus described my invention, I claim—

1. In the process of preparing carbide of calcium, saturating the carbide, preparatory to the crushing operation, with a substance indecomposable by the carbide, to prevent decomposition during the crushing operation, and then crushing it while so protected from decomposition, substantially as specified.

2. In the process of preparing carbide of calcium, saturating the ordinary carbide in oil, and then crushing it while so protected from decomposition, substantially as herein specified.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES EMMANUEL YVONNEAU.

Witnesses:

CHARLES CABANIS,
EDWARD P. MACLEAN.