## United States Patent Office.

CHAS. W. COOPER, OF BROOKLYN, E.D., NEW YORK.

## IMPROVEMENT IN TREATING GLUE-STOCK.

Specification forming part of Letters Patent No. 49,383, dated August 15, 1865.

To all whom it may concern:

Be it known that I, CHARLES W. COOPER, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Treating Glue-Stock; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to fully understand and make use of the same.

The object of this invention is to extract from the residuum of glue-stock such grease which, after said glue-stock has been acted upon by lime, remains in chemical combination with said lime, and which, being of a pasty consistency and not soluble at boiling-heat, remains mixed with the hair and other waste portion of the stock after the glue has been extracted.

This residuum of hair, grease, lime, &c., is usually employed as fuel or manure, and large quantities of grease are thus wasted by the glue-manufacturers. This loss or waste is obviated by this present invention, which consists in treating the residuum of glue-stock with sulphuric or other suitable acid for the purpose of decomposing the lime and grease, after which the grease is easily separated from the residuum by mechanical means.

The manner in which I carry out my process is as follows: After the glue has all been extracted from the stock in the usual manner I place the residuum in a vessel filled with water and heat the mass to a boiling-heat. I then mix in sulphuric or other acid equal to or slightly in excess of the quantity which will be neutralized, and keep the whole mass well stirred until all the lime previously in combination with the grease has been converted into a sulphate or other salt, according to the kind of acid used. The grease, being thus set free, resumes the ordinary condition of animal oils, and I separate the same from the residuum by skimming off that portion which rises to the surface and squeezing out the remainder by means of any suitable press.

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

Treating the residuum of glue-stock after the glue has been extracted with sulphuric or other acid and removing the grease set free by such acid, substantially in the manner described.

CHAS. W. COOPER.

Witnesses:

M. M. LIVINGSTON, C. L. TOPLIFF.