## UNITED STATES PATENT OFFICE.

GUSTAVE MICHELET, OF BRUSSELS, BELGIUM.

## IMPROVED METHOD OF SCOURING WOOL.

Specification forming part of Letters Patent No. 58,358, dated September 25, 1866.

To all whom it may concern:

Be it known that I, GUSTAVE MICHELET, of Brussels, in the Province of Brabant and Kingdom of Belgium, have invented certain new and useful Improvements in Scouring Wool, and in extracting the products which it contains; and I do hereby declare that the following is a full and exact description thereof.

My invention consists in the following process:

First, the wool is soaked in vessels arranged in any suitable way, so as to produce a liquor or wash which may be strongly concentrated.

Second, on leaving these vessels the wool is slightly rinsed, so as to deprive it of the larger portion of the earthy matters it contains.

Third, the liquor formed by soaking the wool, after standing in a reservoir in which it deposits part of the insoluble matters it contains, is conducted into a scouring-boiler of the ordinary form heated to a temperature of about 50° centigrade, (106° Fahrenheit.) This liquor serves for scouring the wool without any alkaline addition.

Fourth, the wool, after remaining for some time in this bath, is quite scoured. It is made to pass between rollers which reject into the scouring-boiler the liquor absorbed by the

wool.

Fifth, the wool is rinsed in the ordinary way.

Sixth, the scouring-bath, when overcharged with suint, is emptied into a reservoir, from whence the liquor may be directed into evaporating-pans. The suint obtained by evaporation is then calcined, and furnishes concen-

trated carbonate of potash.

When an interruption in the scouring of the wool has led to the evaporation of the wash contained in the soaking-vessels, as well as in the scouring-bath, or when wool difficult to scour has to be treated, new scouring-baths may be made by dissolving in hot water a sufficient quantity of suint obtained in evaporating-pans.

The most difficult wools may be scoured with baths containing five per cent. of their

gross weight of suint.

A bath capable of scouring two thousand pounds of wool may be made with one hundred pounds of suint. This bath, when evaporated, will yield from three to four hundred pounds of suint, besides the hundred pounds employed for the scouring.

Having now described the nature of my said invention and in what manner the same

is to be performed, I claim—

The combined process for extracting from the wool itself all the elements necessary for cleaning, scouring, or removing the suint from the same, and of obtaining by the same operation liquids free from foreign matters, which would decrease the value of the products derived from them, and sufficiently concentrated for forming these sub-products with advantage, substantially as above described.

GUSTAVE MICHELET.

Witnesses:

EMILE DEZWARTE, OTTO TREBBIN.