

UNITED STATES PATENT OFFICE.

MARK HENRY LACKERSTEEN, OF CHICAGO, ILLINOIS.

PROCESS OF MANUFACTURING SOAP AND GLYCERINE.

SPECIFICATION forming part of Letters Patent No. 353,566, dated November 30, 1886.

Application filed March 10, 1886. Serial No. 194,722. (No specimens.)

To all whom it may concern:

Be it known that I, MARK HENRY LACKERSTEEN, a subject of the Queen of Great Britain, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in the Process of Manufacturing Soap and Glycerine, of which the following is a specification.

This invention is an addition to the process of treating fats and oils patented to me in Letters Patent No. 284,862, issued on the 11th day of September, 1883. When I desire to manufacture only soap and glycerine without candles, I use the same process, based on the same principle, as before described, with the exception of first emulsifying the neutral fats and oils with either an alkali, and then treating the compound with dilute acid, or directly emulsifying the neutral fats and oils with the solution of a saline electrolyte having an alkaline base before subjecting the emulsion to electrolytic action.

My plan of using my invention consists, essentially, in making a saturated solution of a chloride, preferably of the chloride of sodium in water, of mixing this solution with the melted fats and oils until I obtain a perfect emulsion, and then of electrolyzing the emulsion.

The elements of the water and the chloride of sodium are simultaneously dissolved and set free, the stearine, palmitine, and oleine of

the neutral fats and oils combine with the water elements, forming tri-stearic, tri-palmitic, and tri-oleic acids, together with glycerine, and the fat acids so formed combine with the oxidized sodium to form soap, while the chlorine becomes disengaged and escapes from the surface of the emulsion.

The tank in which I practice my invention is provided with two compartments divided by a diaphragm, within which are placed the electrodes. That at which the glycerine formation proceeds isolates this product from contact with the mass of the surrounding emulsion, and thus protects it from contamination, while the opposite electrode, at which the fat acids combine with the alkaline base, sets free newly-formed quantities of soap, which may be ladled off from time to time for further treatment in the usual way well known to soap-manufacturers.

I claim as my invention—

The application of electro-motive force in the manufacture of soap and glycerine by first emulsifying the neutral fats and oils with a solution of a saline electrolyte having an alkaline base, preferably the chloride of sodium, and then subjecting the emulsion to electrolysis, substantially as specified.

MARK HENRY LACKERSTEEN.

Witnesses:

H. M. MUNDAY,
EDW. S. EVARTS.