## United States Patent Office.

BENNO JAFFÉ AND LUDWIG DARMSTAEDTER, OF CHARLOTTENBURG, PRUSSIA, GERMANY.

## MANUFACTURE OF SOAP.

SPECIFICATION forming part of Letters Patent No. 245,955, dated August 23, 1881.

Application filed June 9, 1881. (No specimens.)

To all whom it may concern:

Be it known that we, Benno Jaffé and Ludwig Darmstaedter, both of the city of Charlottenburg, in the Kingdom of Prussia, German Empire, have invented, as joint inventors, Improvements in the Manufacture of Soap, of which the following is a true and clear specication.

Hitherto the large quantities of common salt (chloride of sodium) contained in the waste lye, resulting from the usual method of salting soaps, have prevented the profitable production of glycerine contained in this waste lye.

Our invention consists in replacing the chloride of sodium in the salting of soaps by another salt—to wit, sulphate of soda or other sulphate—and to facilitate by this means the production of glycerine.

We prefer the use of the sulphates of soda 20 and potash, but do not restrict ourselves to the use of these particular salts, as our invenvention comprises the use of any other sulphate in place of chloride of sodium in the salting of soap for the purpose of manufacturing glyc-25 erine.

The process is as follows: After having salted the finished soap produced from any suitable

fat with the aid of the above-mentioned sulphates the resultant waste lye is neutralized by sulphuric acid filtered and concentrated by 30 heat. The sulphates are extracted, and may be again used in the manufacture of soap after being suitably purified. After having so removed the sulphates we obtain a glycerine containing but little impurity, and which may be 35 purified in the usual way.

The proportion of the sulphate added to the soap should be enough to effect the desired separation without dehydrating the soap. It will therefore vary with every different kind of 40 soap.

What we claim as our invention is— The process of salting soaps with sulphate of soda or other sulphate for the purpose of obtaining a waste lye from which glycerine is 45

produced, substantially as described.
This specification signed by us this 3d day of May, 1881.

BENNO JAFFÉ. LUDWIG DARMSTAEDTER.

Witnesses:

CARL T. BURCHARDT, ULRICH R. MAERZ.