UNITED STATES PATENT OFFICE.

EDUARD SALM, OF BERLIN, GERMANY, ASSIGNOR TO AKTIENGESELLSCHAFT FÜR CHEMISCHE PRODUKTE VORMALS H. SCHEIDEMANDEL, OF BERLIN, GERMANY, A CORPORATION OF GERMANY.

METHOD FOR THE PRODUCTION OF SOLID GELATINOUS SUBSTANCES.

1,195,099. Specification of Letters Patent. Patented Aug. 15, 1916.

No Drawing. Application filed February 15, 1916. Serial No. 78,530.

To all whom it may concern:

Be it known that I, EDUARD SALM, a subject of the Queen of the Netherlands, and resident of Berlin, Germany, have invented new and useful Methods for the Production of Solid Gelatinous Substances, of which the following is a specification.

My invention relates to a new method for the production of solid gelatinous substances in a divided condition, and is an improvement of the method described in the pending application Serial No. 56816, filed October 19, 1915.

While in that method the gelatin, glue or similar gelatinous material when in liquid state is brought into contact with a liquid such as benzene unable to dissolve the gelatinous material, according to my present invention non-volatile oil is used as a liquid unable to dissolve such gelatinous material, and able to solidify the material by cooling. The use of non-volatile oil enables a more convenient working and results in a more even and better product. Furthermore it is possible to easily arrange mechanical devices for removing the gelatinized globules from the oil as they are formed. After that, the globules taken out of the oil may be washed with benzene or the like and brought into a warm room for drying; the benzene or the other liquid, by which the material is washed may be recovered. All kinds of non-volatile oils might be used, especially those oils which have a specific gravity of 0, 8—1, 2. For instance my invention is carried on in the following way:

I take a nozzle, or a vessel, the bottom of which has holes conforming in diameter to the desired volume of the globules, and through this device I conduct at a temperature of 40° C. a solution of glue of about 30% into machine oil, or other non-volatile oil, having a specific gravity of 0, 8—1, 2 and a viscosity of 6 by Engler's viscosimeter, at 50 C. The glue entering the oil is subdivided into globules each of which rapidly solidifies within the liquid. It is easy to regulate the process so as to attain globules from the largest diameter down to the finest powder.

Instead of subdividing the solution of glue by impinging a fine jet on the oil, the solution might be brought into the liquid in an atomized form. A transporting device removes the globules out of the liquid. In this manner a small quantity of oil is sufficient to treat great masses of glue.

The globules of glue are cleaned from the oil by a washing process, for instance, by using benzene in a warm room, and the washing medium may be recovered. The glue can be dried within a few hours, while the drying process now used for sheet glue requires several weeks.

I claim:

1. A method for the production of solid gelatinous substances in a divided condition, consisting in bringing such gelatinous material, when in liquid state, into contact with a non-volatile oil.

2. A method for the production of solid gelatinous substances in a divided condition, consisting in bringing such gelatinous material, when in liquid state, into contact with a non-volatile oil, having a specific gravity of 0, 8—1, 2.

3. A method for the production of solid gelatinous substances in a divided form, consisting in bringing the gelatinous material, when in liquid state, into contact with a non-volatile oil and removing the globules of glue by a mechanical device as they are formed.

4. A method for the production of solid gelatinous substances in a divided condition, consisting in bringing such gelatinous material, when in liquid state, into contact with a non-volatile oil, and washing same by benzene or the like.

5. A method for the production of solid gelatinous substances in a divided form, consisting in bringing the gelatinous material, when in a liquid state, into contact with a non-volatile oil and removing the globules of glue by a mechanical device as they are formed, whereupon they are washed by benzene or the like recovering the washing medium and drying the globules in a warm room.

In testimony, that I claim the foregoing as my invention, I have signed my name in presence of two witnesses, this 21st day of January 1916.

EDUARD SALM.

Witnesses:
HENRY HASPER,
ARTHUR SCHROEDER.