

UNITED STATES PATENT OFFICE.

PHILIPP LEWY, OF BERLIN-WILMERSDORF, GERMANY.

MAKING CLEAR AND DURABLE HEMAGLOBIN PREPARATIONS.

1,048,185.

Specification of Letters Patent.

Patented Dec. 24, 1912.

No Drawing.

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To all whom it may concern:

Be it known that I, PHILIPP LEWY, apothecary, a subject of the King of Prussia and German Emperor, residing at Berlin-Wilmersdorf, in the Kingdom of Prussia and Empire of Germany, have invented certain new and useful Improvements in Making Clear and Durable Hemaglobin Preparations, of which the following is a specification.

In the following description the term "hemaglobin" is applied to a certain compound of the red blood corpuscles after being liberated from the serum and clarified.

In the manufacture of hemaglobin preparations the following process is generally resorted to: The cloudy hemaglobin is first clarified by means of ether, chloroform, spirit, or the like, the clarifier being afterward separated from the hemaglobin preparation by heating or by any other suitable method. The clarified hemaglobin solution is thereupon preserved by adding to the same a suitable quantity of glycerin. It is evident that the blood corpuscles which are easily decomposed, are not favorably affected by these numerous reactions. The color of the hemaglobin, for instance, which is originally red, is turned into brownish-red by the process, *i. e.*, a conversion to oxyhemaglobin and met-hemaglobin takes place.

The present invention relates to a process of clarifying and preserving the hemaglobin which process, apart from being simpler than the ordinary processes, retains the original color of the hemaglobin.

The viscid and cloudy hemaglobin, sepa-

rated from the serum by centrifugal action, is directly mixed with a quantity of chemically pure glycerin and then centrifuged together with the latter so that an intimate contact of the different molecules takes place. The glycerin, of which, owing to the centrifugal action to which the solution is subjected, only a small quantity is required, clarifies the hemaglobin at the same time as it serves as a preservative for the same. For instance 100 parts of hemaglobin are mixed with 25 parts of glycerin. The mixture having passed the centrifuge is perfectly clear, but no separation of glycerin has taken place. In this manner the hemaglobin is only subjected to one single reaction and it retains its original red color. Therefore the present process is particularly suitable in the preparation of such extracts which, owing to the small quantity of glycerin needed, can be made to contain a larger percentage of hemaglobin.

I claim:

A process for making clear, hemaglobin-containing preparation, consisting in separating the blood corpuscles from the serum by centrifugal action, then mixing the clarified mass with a relatively small quantity of glycerin, centrifuging this mixture, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two witnesses.

PHILIPP LEWY.

Witnesses:

HENRY HASPER,
WOLDEMAR HAUPT.