

UNITED STATES PATENT OFFICE.

EDWARD POHL, OF NEW YORK, N. Y.

PROCESS FOR LUSTERING SILK THREADS.

947,027.

Specification of Letters Patent. Patented Jan. 18, 1910.

No Drawing.

Application filed November 13, 1908. Serial No. 462,524.

To all whom it may concern:

Be it known that I, EDWARD POHL, a citizen of the United States of America, and a resident of New York, county and State of New York, have invented a certain new and Improved Process for Lustering Silk Threads, of which the following is a specification.

My invention relates to the art of lustering and finishing silk threads.

In the particular branch of the art to which this invention relates, the individual threads are usually drawn through a bath containing a finishing and lustering solution, and are then conveyed directly over an ironing table by means of which they are dried and ironed and are then finally wound up on suitable bobbins. In such a process, it will be readily seen that for practical purposes, it is necessary to run the filaments quickly through the solution and over the ironing table, and if the work is not done quickly, the resulting product in a day's work is so small as to bring the cost up to a prohibitive degree. Furthermore, it will also be seen that in such a process, there is no way of regulating or varying the amount of time during which the threads remain in the bath in proportion to the amount of time in which they travel over the ironing table. This is also disadvantageous because, while it takes about the same length of time to iron threads of different characters, the amount of time during which a thread should be immersed in a solution varies in accordance with the thickness of the threads and the density of the solution.

In my present invention, I propose to first soak the threads in a finishing solution for a predetermined period of time dependent upon the thickness of the threads and the density of the solution, and then to dry, finish and iron the same. I preferably take the silk threads either in the original skein or as wound up upon bobbins or other holders and immerse them directly in a vessel containing a suitable finishing solution, and permit the threads to remain in the solution for a period of time usually varying from thirty seconds to five minutes; the thicker the threads or the thinner the solution, or both, the longer the period of time which is necessary. After the threads have been thus immersed for the proper length of time, I remove them and then preferably permit them to partially dry by means of

evaporation. The drying might be assisted by means of currents of air or they may be so partially dried by merely leaving them exposed to the air. I dry the threads in varying degrees up to about 90% dry. Thereafter, I finish the threads by ironing them in any suitable way as by drawing them across a heated contact surface in a manner well known to those skilled in the art.

In carrying out the foregoing process, it will be seen that I am able to immerse the threads for a period of time in no way dependent upon the period during which they are subjected to the ironing step of the process. The ironing may be effected very rapidly while a large quantity of material may be soaking in bulk in the solution in the meantime. It will also be seen that I can as readily vary the period of time during which the threads receive their preliminary drying before they are subjected to the ironing step of the process, as each of the steps are carried out independently of the others.

What I claim is:

1. The herein described process for lustering silk threads which consists in first soaking the threads in bulk in a finishing solution for a period of time varied in accordance with the thickness of the threads, and then ironing the same.

2. The herein described process for lustering silk threads which consists in first soaking the threads in bulk in a finishing solution for a period of time varied in accordance with the thickness of the threads and the density of the solution, and then ironing the same.

3. The herein described process for lustering silk threads which consists in first soaking the threads in bulk in a finishing solution for a period of time varied in accordance with the thickness of the threads and then drying the same by evaporation and finally in ironing the same.

4. The herein described process for lustering silk threads which consists in first soaking the threads in bulk in a finishing solution for a period of time varied in accordance with the thickness of the threads and then drying the same by evaporation until they are about 90% dry and then ironing the same.

5. The herein described process for lustering silk threads which consists in first immersing the threads in a lustering solu-

tion and retaining them in the solution for a period of time varied in accordance with the thickness of the threads or the density of the solution, in then drying the threads by evaporation and finally in ironing the threads.

6. The herein described process for lustering silk threads which consists in first soaking the threads in a finishing solution while they are wound in mass, and in then unwinding and ironing the same.

7. The herein described process for lustering silk threads which consists in first soaking the threads in a finishing solution while they are wound in mass, in then partially drying the same by evaporation while still in mass, and in then unwinding and ironing the same.

EDWARD POHL.

Witnesses:

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