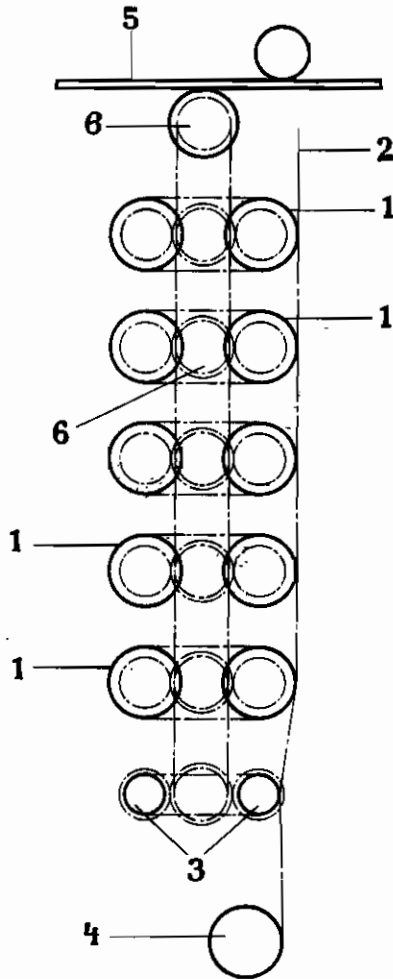


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SPINNING FRAME FOR THE PRODUCTION OF ARTIFICIAL
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SPINNING FRAME FOR THE PRODUCTION OF ARTIFICIAL SILK IN CONTINUOUS OP- ERATION

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The present invention relates to a spinning frame for the production of artificial silk in continuous operation, guide rollers being arranged for each thread in known manner pairwise skewed or crossed the one relative to the other, the thread being conducted in helical windings around these rollers. The arrangement of the pairs of rollers is effected for carrying out the required subsequent treatment. The guiding elements group-wise provided for every thread are at present driven from a common driving shaft extending through the frame. Such an arrangement possesses, however, certain inconveniences and chiefly at the beginning of the spinning, as it is extremely difficult or almost impossible to bring the thread onto the rollers at the high spinning speeds which are usual at present. Spinning speeds up to 100 m are usual to-day as is well known. An other inconvenience of this arrangement consists in that the whole machine must be stopped in case any disturbance should occur in a group.

In an other type of spinning frame it has become known to arrange the delivering rollers so that they can be singly stopped, but also in this instance the rollers are again driven from a common shaft, so that when a single roller is engaged this revolves instantaneously at the full speed. In such a construction the same inconveniences occur consequently, as have already been mentioned above.

By the present invention the above mentioned inconveniences are avoided. The invention consists in that the group of thread guide elements arranged for every individual thread has its separate drive and can be attended independently on the other groups. It is then advisable, to connect with the separate drive for each group the spinning pump provided for each thread, so that also this spinning pump is attended simultaneously with the attendance of the individual groups. This may evidently be extended also to the winding element or, if a twisting spindle is provided, to this spindle.

The advantage of this arrangement consists chiefly in that now a much simpler winding-on

of every individual thread can be carried through, as the possibility exists, to gradually start each group independently on the other groups, so that the spinning speed at the beginning is extremely slow, whereas after the winding on this group can be brought to the normal winding speed. In a machine according to the present invention an absolutely secure and also simple attendance is ensured. An other advantage consists in that, when disturbances occur or at thread breaking or the like, on an individual group, this group can be stopped independently on the other groups, whereby undesired standstills of the frame can be avoided. Herefrom results, that such a machine works considerably more economical.

In the only figure of the accompanying drawing an embodiment of the invention is illustrated, by way of example, and a single group is shown for the subsequent treatment of a thread.

The pairs of rollers are designated by 1 over which rollers the thread 2 coming from the spinning nozzle runs in helical windings, and on which rollers the thread is subjected to the required subsequent treatment such as eliminating of the acid, washing, bleaching, avivating and the like. The lowest pair of rollers 3 serve for the preliminary drying, whereupon the remaining drying of the thread is effected by a suitable arrangement, for instance by an airflow or the like, the thread being then wound on the receiving element 4. The drive of such a group of rollers is effected by a belt 5 by means of sprocket wheels 6, the possibility existing to lift off the belt and to thus interrupt the drive of any individual group. Evidently a pole-reversible motor which admits of the different speeds can be arranged instead of the belt drive. In this arrangement it is essential that each group can be attended alone, and that it is possible to now wind-on at low speeds and to engage the normal spinning speed after the winding-on has been carried out. Any number of such individual groups can be arranged the one at the side of the other in the longitudinal direction of the frame.

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