

June 5, 1928.

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NOZZLE FOR SPINNING ARTIFICIAL THREADS

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Fig. 1.

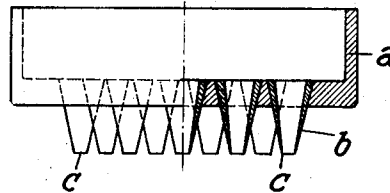
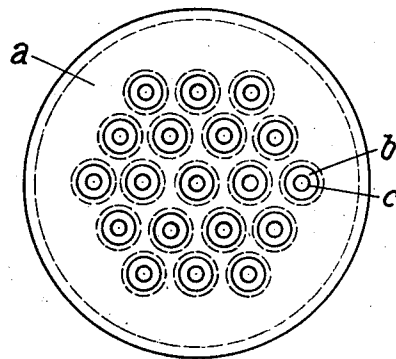


Fig. 2.



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UNITED STATES PATENT OFFICE.

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NOZZLE FOR SPINNING ARTIFICIAL THREADS.

Application filed March 17, 1926, Serial No. 95,220, and in Germany April 6, 1925.

The present invention refers to improvements in nozzles for spinning artificial threads after the stretching spinning process. The improved nozzle is especially suited for threads which are reeled up on bobbins or rollers with a higher velocity than usual, for instance 2-3 m. per second.

The new nozzle is in the way of example shown in the accompanying drawing being part of the present specification, Fig. 1 forming a vertical section, Fig. 2 a plan.

The nozzle has as usual a base common for several nozzles and is characterized by that the nozzles have conical shape and have a sharp cutting edge.

a is the base, on which several nozzles *b* are arranged. The nozzles have conical shape and have at their lower edge a sharp cutting border. The outlet opening of the nozzle has preferably a diameter of 1.5 mm. and more.

The thread is with high security conducted as consequence of the conical shape through the spinning liquor. The streams of the spinning solution are obtained parallel to each other. A sticking of the spinning solution to the interior wall and a choking of the exit openings is prevented from as consequence of the sharp cutting border. The large diameter of the nozzle allows to spin under lower pressure exercised on the spinning solution, the tank of which may be

made of lighter construction than the tanks hitherto used. The quantity of the spinning solution entering into the precipitating bath is increased.

The improved nozzle may be used in combination with the reeling device for which we have executed an application for Letters Patent of the even date herewith.

We claim:—

1. Nozzle device for spinning artificial threads having a common base for a plurality of nozzles, the walls of said nozzles tapering to the outlet opening not only on the outside but also on the inside, the said outlet opening having a diameter exceeding 1 mm., a sharp cutting border being formed there.

2. Nozzles device for spinning artificial threads having a common base for a plurality of nozzles, the inner walls of said nozzles being tapered from the base to the outlet of said nozzles, the outer walls of said nozzles being tapered also in the direction to their outlet, the tapering angle of said outer walls being more acute than that of said inner walls, a sharp cutting border being formed thereby at the outlet.

In testimony whereof we hereunto affix our signatures.

HELMUT HOFFMANN.
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