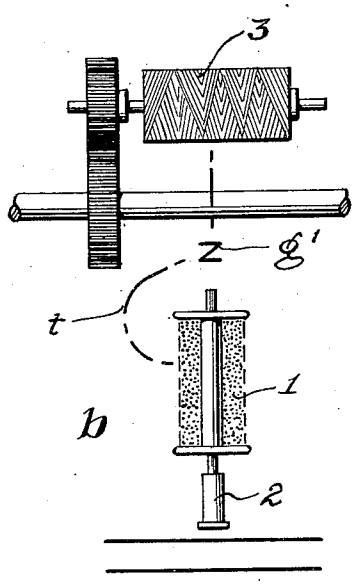
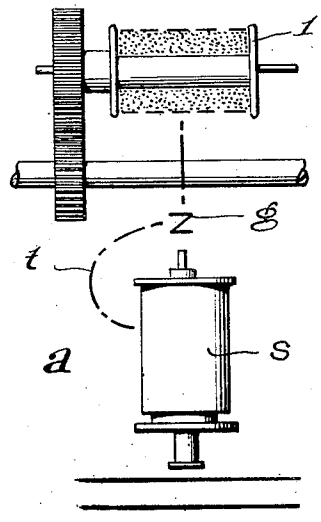
May 30, 1933. H. WEGMANN 1,911,864

TWISTING PROCESS

Filed April 20, 1932





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UNITED STATES PATENT OFFICE

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TWISTING PROCESS

Application filed April 20, 1932, Serial No. 606,425, and in Germany December 27, 1930.

This invention relates to a twisting process with double or fore- and after-twisting on deck twisting machines. In the known process of this kind the tendency is always to draw off or wind up the thread, in the preliminary twisting as well as in the final-twisting, with unchangeable speed, so that not only a uniform final-twist but also a uniform preliminary twist is obtained.

According to the present invention first a preliminary twist is obtained with a uniformly declining twist which is after-twisted to the required uniform final-twist. In the new process the thread which receives the preliminary twist is drawn off by a thread spindle revolving with invariable speed, and wound up also on a spool revolving with invariable speed, whereupon the preliminary twist thus gained, showing a uniformly declining twist, in consequence of the increasing diameter of the take-up spool, and is twisted after in the same way, the spool on which the thread was wound up during the preliminary twisting being in the second or final twisting process put as a thread spool upon the thread spindle.

The invention is clearly illustrated in the accompanying drawing in which the figure shows diagrammatically the double twisting stages of the invention.

Referring now, more particularly, to the accompanying drawing wherein the first or fore-twisting stage is indicated at *a* and the second or final twisting stage is indicated at *b*, the thread *t* which receives the preliminary twist is drawn from a spool *s* on a spindle through a thread guide *g* by a positively driven spool 1 having the same diameter as the spool *s* and revolving at the same speed so that the preliminary twist thus obtained, shows a uniformly declining twist in consequence of the increasing diameter of the take up spool. The spool 1 with the wound thread thereon is now transferred to the thread spindle 2 and used as a thread spool in the second twisting stage *b* where the thread receives the second or final twisting in the same manner as the first twisting, that is, it is wound through a guide *g'* onto a positively driven spool 3 rotating with invariable speed and having the same diameter as the spool 1.

The advantages of this process are first of all the fact that in using it, the take-up spools can be driven in a simple manner positively and with invarable speed, so that complicated differential speed gears may be dispensed with.

Having now particularly described the said invention what is claimed and desired to be secured by Letters Patent is:—

A twisting process with preliminary and final-twisting, consisting in drawing the thread to be preliminarily twisted from a thread spool revolving with invariable speed and winding the same upon a spool also revolving with invariable speed, whereupon the prelimary-twist thus gained shows a uniformly decreasing number of turns in consequence of the increasing diameter of the take-up spool, again twisting the thread in order to obtain the required uniform final-twist by placing the spool on which the thread was first wound during the preliminary twisting on the thread spindle in the second twisting process, and the spool and the spindle of the second twisting process revolving at invariable speed, substantially as described.

In testimony whereof I affix my signature.

HERMANN WEGMANN.