

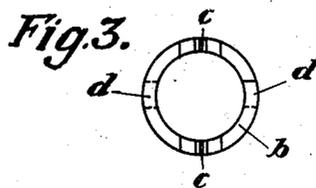
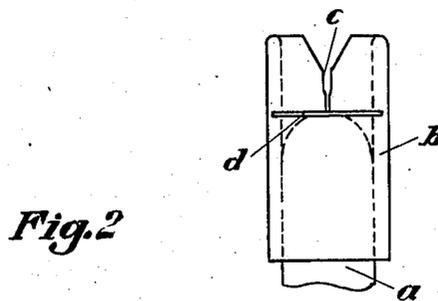
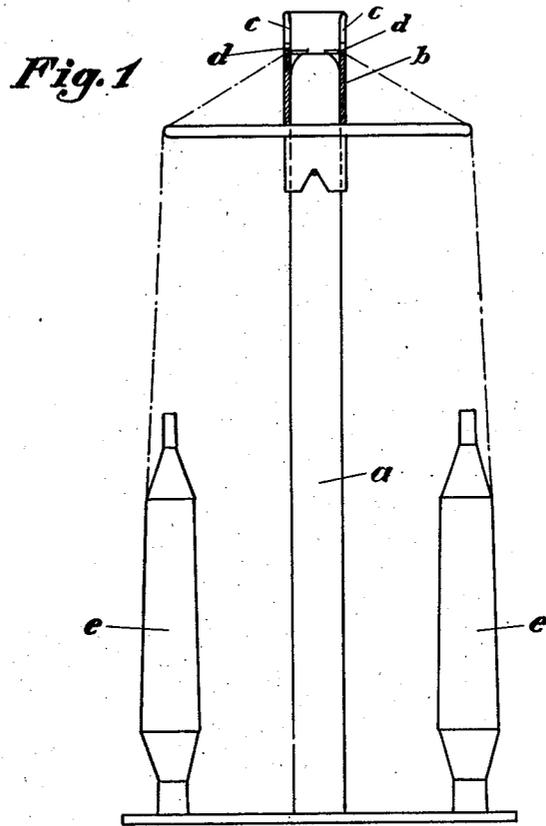
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ARRANGEMENT ON DOUBLE TWIST TWISTING SPINDLES

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## ARRANGEMENT ON DOUBLE TWIST TWISTING SPINDLES

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2 Claims. (Cl. 117--23)

This invention relates to an arrangement on double twist twisting spindles, which carry spinning cops as winding off spools. It has already been proposed to twist off on double twist twisting spindles directly from the cop in order to thus avoid a separate winding operation. It has, however, not been hitherto possible to introduce this simplified method because the yarn coming from the spinning machine still carries impurities, which have been removed during the winding operation by conducting the individual thread through a thread cleaner. If on double twist twisting spindles the cop is used as winding off spool these impurities are twisted into the thread, so that subsequently a defective fabric is produced. For this reason the rewinding of spinning cops has not been abandoned in order to avoid these inconveniences.

The object of the invention is, to enable the employment of spinning cops as unwinding spools on the double twist twisting spool so as to eliminate any winding operation and at the same time to avoid the above mentioned inconveniences.

The invention consists in that the spool holder standing still on the rotary twisting spindle carries an exchangeable thread cleaner through which the individual threads are conducted before entering the twisting spindle. The thread cleaner preferably consists of a cylinder open at both ends, with admission slots and transversely extending cleaning slots. The transversely extending cleaning slots may be adjustable in width to suit the thickness of thread.

The invention presents the advantage that impurities still adhering to the yarn are removed directly on the double twist twisting spindle prior to the first twisting, so that a perfectly clear and uniform twine is obtained and a separate winding operation avoided. The special construction of the cleaner, especially the transversely extending cleaning slots, enable the individual threads to travel from one spinning cop to the other so that they always run off vertically from the spinning cop in question. Another advantage consists in the easy exchangeability in order to en-

able an easy adaptation to the actual yarn thickness. The thread cleaner may also have an adjustable slot so that an easy adjusting to the corresponding thread thickness can be carried through.

An embodiment of the invention is illustrated by way of example in the accompanying drawing in which:—

Fig. 1 shows in elevation the spool holder of a double twist twisting spindle and the thread cleaner placed thereon in section.

Fig. 2 shows the thread cleaner in elevation on an enlarged scale.

Fig. 3 is a top plan view of Fig. 2.

On a spool holder *a* a thread cleaner consisting of a cylinder *b* open at both ends is exchangeably mounted. This cylinder has an admission slot *c* and transversely extending cleaning slots *d*. The individual threads coming from the spinning cops *e* pass through the cleaning slots *d* and only subsequently enter the twisting spindle proper. The individual threads are therefore freed from all impurities before being twisted so that a uniform and perfect twine is obtained.

I claim:—

1. In an arrangement on double twist twisting spindles on which spinning cops are employed as unwinding spools and mounted on a rotary twisting spindle, a thread cleaner exchangeably mounted on the spool holder through which the individual threads are conducted before entering the twisting spindle and consisting of a cylinder open at both ends and having admission slots and transversely extending cleaning slots.

2. In an arrangement on double twist twisting spindles on which spinning cops are employed as unwinding spools and mounted on a rotary twisting spindle, a thread cleaner exchangeably mounted on the spool holder through which the individual threads are conducted before entering the twisting spindle and consisting of a cylinder open at both ends and having admission slots and transversely extending cleaning slots adjustable in width.

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