J. W. COOK.

THREAD GUIDE FOR SPINNING MACHINES.

APPLICATION FILED NOV. 5, 1906.

919,697. Patented Apr. 27, 1909.

FIG. 3.

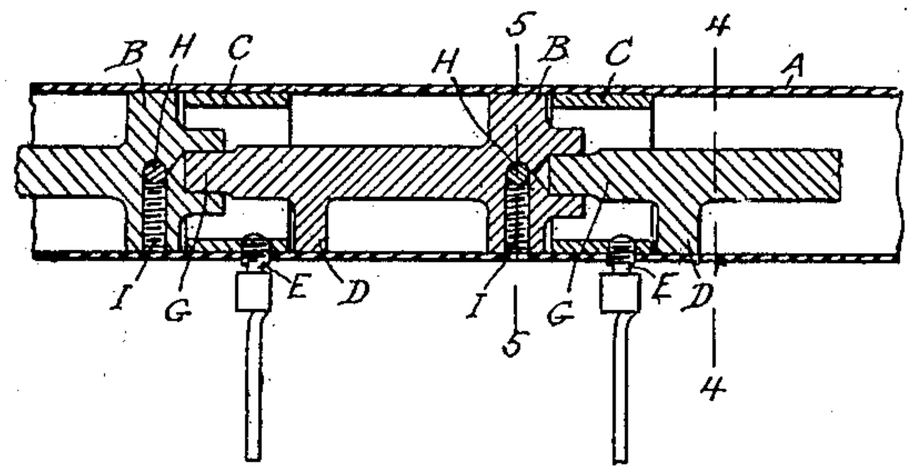


FIG. 5.

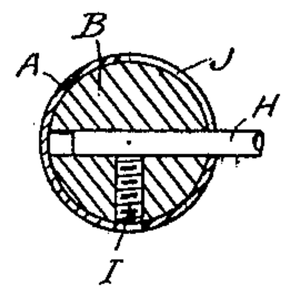


FIG. 2.

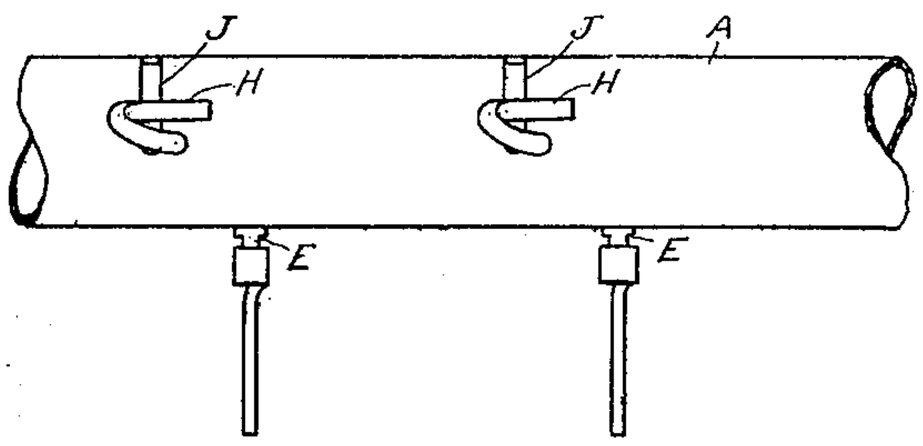


FIG. 4.

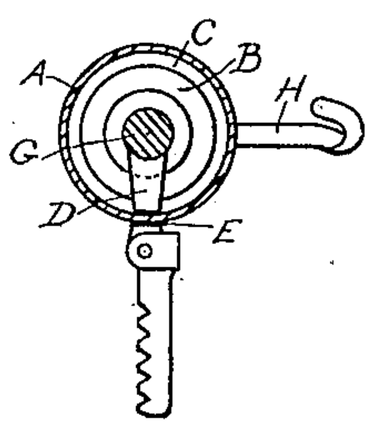
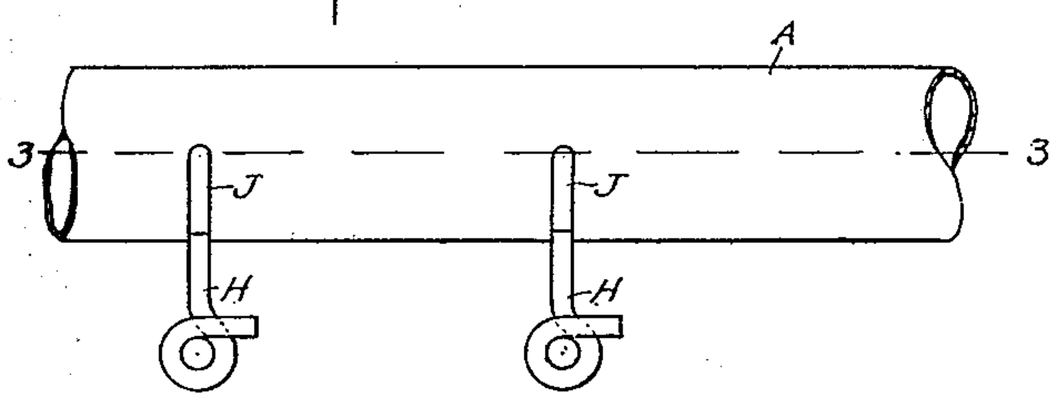


FIG. 1.



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JOHN WILLIAM COOK, OF DIDSBURY, NEAR MANCHESTER, ENGLAND.

THREAD-GUIDE FOR SPINNING-MACHINES.

No. 919,697. Specification of Letters Patent. Patented April 27, 1909.

Application filed November 5, 1906. Serial No. 342,074.

To all whom it may concern:

Be it known that I, JOHN WILLIAM COOK, of Didsbury, near Manchester, in the county of Lancaster, England, have invented certain new and useful Improvements in Thread-Guides for Spinning-Machines, of which the following is a specification.

This invention consists in apparatus adapted to allow various objects to be attained in the construction of lappets or the supports for the thread guides in spinning, doubling, and twisting machines.

The objects are, first, to simplify the construction of the lappets; secondly, to construct the lappets without projections, so that they will not retain "fly" fluff or other similar waste matter; and thirdly, to apply means whereby the thread-guides can be readily adjusted in two directions.

In order that my present invention may be more clearly understood, I have appended a sheet of drawings, whereon—

Figure 1 represents a top plan view of my improved lappet. Fig. 2 represents a front elevation of the same. Fig. 3 represents a section on line 3—3 of Fig. 1. Fig. 4 represents a section on line 4—4 of Fig. 3. Fig. 5 represents a section on line 5—5 of Fig. 3.

The same reference characters indicate the same parts in all the figures.

My apparatus comprises a circular tubular support, and solid pieces of metal placed therein, the latter supporting the thread-wires in such a manner that they may be easily adjusted.

In carrying my invention into effect, I employ a tube A, circular in section, made of metal or other suitable material. The tube extends across the front of the spinning, doubling, or twisting machine to which it is applied, and takes the place of the ordinary lappet-board. At intervals approximating to the gage of the spindles of the machine, I cut slots or suitable openings J in the tube, of suitable size to allow the thread-guide H to pass through freely so that the blocks or supports therefor may be rotatively adjusted. Opposite to these slots or openings J, and inside the tube, I place suitably shaped pieces of metal, either of solid or tubular section. In Fig. 3, I show pieces of solid section, and they are marked at different parts as B and G. The portion B has a hole drilled in its face, into which the end or shank of the thread-guide H fits. At an angle to the hole in the part B, I drill a second hole, and tap it to receive a grub-screw I, which I employ to secure and hold in position the thread-guide H. The portion of the piece of metal before described, which is drilled to receive the shank of the thread-wire, has its end recessed or drilled out, to receive the part G of the next piece of metal which lies adjacent to it. By this means, I prevent any endwise movement of the thread-guide supporting pieces taking place. I also form, fix, or cast on the thread-guide supporting pieces B and G, a further projection D, which is for the purpose of preventing endwise movement. The head of the grub-screw employed to secure the thread-guide can be reached through the slot or opening J in the tube, or a suitable hole can be drilled to reach it. A second set of slots or openings are cut in the tube A, behind each of which a tubular collar C, of metal or other suitable material, is placed. The snarl-catcher E is secured into C by any suitable means. The projection D on the part G and the end of B prevent any lateral movement of the part C.

Having now described my invention I declare that what I claim is:—

1. A lappet for spinning, doubling or twisting machines, said lappet comprising a tubular support having a transverse slot, and a thread guide pivotally mounted inside said tubular support and extending through said slot, said tube having no openings to permit access of fluff.

2. A lappet for spinning, doubling or twisting machines, said lappet comprising a tubular support having transverse slots at intervals, thread guides extending through said slots, and supports for said thread guides in the tubular support.

3. A lappet for spinning, doubling or twisting machines, said lappet comprising a support circular in cross-section and having transverse slots at intervals, cylindrical blocks or supports located in the tubular support, and thread guides connected with said blocks and projecting through the slots of the said tubular support.

4. A lappet for spinning, doubling or

twisting machines, said lappet comprising a tubular support having transverse slots, a series of independent blocks within said support and bearing against each other and free to rotate relatively to each other, and thread guides mounted in said blocks and projecting through said slots.

In testimony whereof I have affixed my signature, in presence of two witnesses.

JOHN WILLIAM COOK.

Witnesses:
FRANK LASMITT,
THOS. E. LEIGH.