Sept. 22, 1936. H. E. JOHNS 2,055,440

TOOL FOR APPLYING TRAVELERS TO THE RINGS OF TWISTING MACHINES AND THE LIKE

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FIG. I.

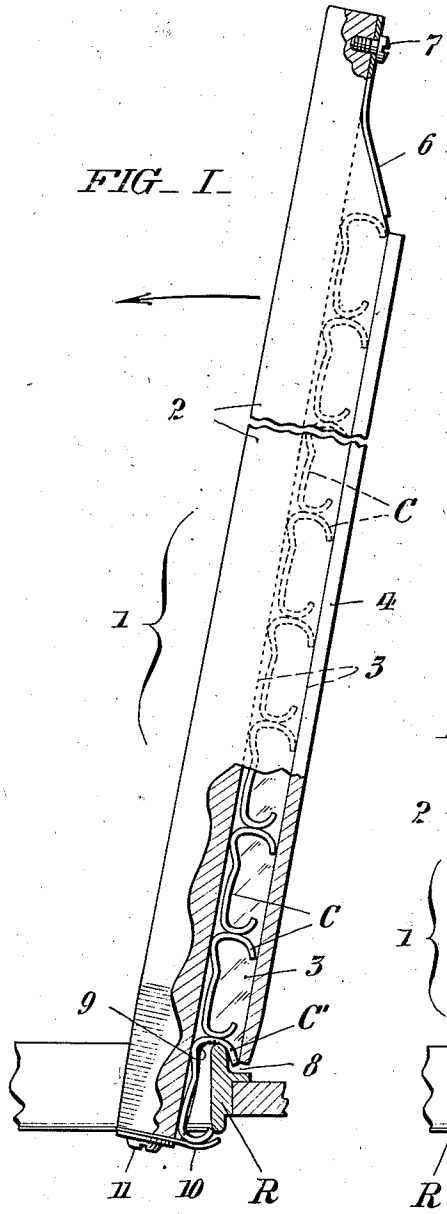


FIG. III.

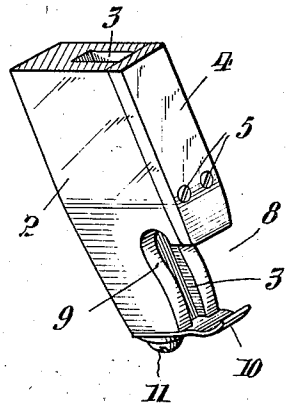


FIG. IV.

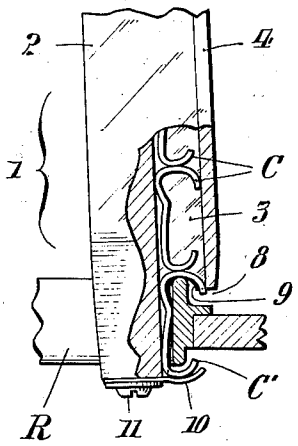
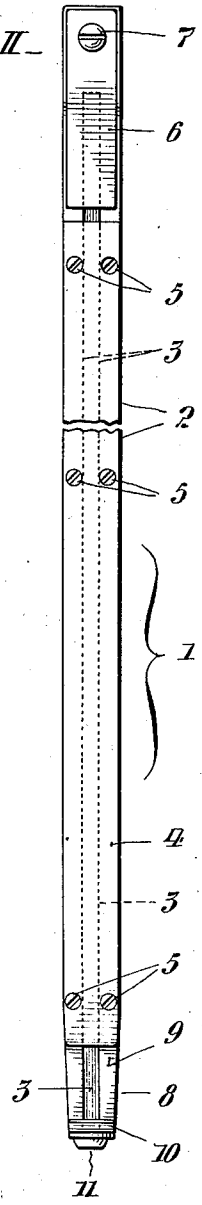


FIG. II.



WITNESSES:
John C. Bergner
Hubert Fuchs

INVENTOR:
Harold E. Johns
BY Fraley & Paul
ATTORNEYS.

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TOOL FOR APPLYING TRAVELERS TO THE RINGS OF TWISTING MACHINES AND THE LIKE

Harold E. Johns, East Lansdowne, Pa., assignor to Clifton Yarn Mills, Clifton Heights, Pa., a corporation of Delaware

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7 Claims. (Cl. 29—84)

This invention relates to implements or tools useful in applying clip-like travelers to the rings of twisting or spinning machines.

The aim of my invention is to enable application of the travelers to the rings of twisting or spinning machines quickly and positively with expenditure of a minimum of manual effort in the operation.

The above objective I attain, as hereinafter more fully disclosed, in a tool adapted to be used as a lever and having the form of a bar with a longitudinal gravity feed magazine channel through it accommodating a multiplicity of the travelers upright in serial order, and having a lateral outlet opening at its bottom end for release of the travelers one at a time, said opening being shaped to correspond with the internal configuration of the clips and defined jointly by a notch in the bar and a keeper capable of yielding to permit springing of the traveler clips over the rings of the spinning or twisting machines for retention by said rings.

Other objects and attendant advantages will appear from the detailed description which follows of the attached drawing, wherein Fig. I is a view partly in side elevation and partly in section showing the tool of my invention and the manner in which it is used in applying a traveler to the ring of a twisting machine.

Fig. II is an edge view of the tool looking from the right of Fig. I.

Fig. III is a fragmentary perspective view of the bottom end of the tool showing more particularly the outlet through which the travelers are individually released; and

Fig. IV is a view corresponding to Fig. I showing the tool in its final position with the traveler in place on the ring of the twisting machine.

With more specific reference to these illustrations, the letter R designates the ring of a twisting or spinning machine, while the numeral 1 comprehensively designates the tool which I have devised for applying clip-like travelers of the type indicated at C to said ring. As shown, the tool 1 comprises a bar 2 with a narrow longitudinal groove 3, and a cover plate 4 which is secured to the bar by screws 5 with resultant provision of a gravity feed magazine channel for accommodation of a multiplicity of the travelers C upright in serial order. The magazine channel is accessible for filling from the top of the tool upon swinging aside a cover 6 which is fulcrumed on a screw 7 engaged in the bar 2. At its lower end the tool 1 is provided with a lateral outlet 8 which is shaped to correspond to the internal configuration of the travelers C, said opening being defined jointly by a corner notch 9 in the bar 1, and a keeper having the form of a spring tongue 10 secured by a screw 11 to the bottom face of said bar.

In use, the tool 1 is applied to the ring R of the spinning or twisting machine as shown in Fig. I, with the upper edge of its notch 9 resting on the top edge of the ring and with the upper bight of the lowermost traveler C′ hooked over said edge. With the tool 1 so placed, it is swung inward of the ring R as indicated by the arrow in Fig. I about the upper edge of the ring as a fulcrum. During manipulation of the tool as just explained, the traveler C′ is expanded lengthwise as the end of its lower bight is forced around the bottom edge of the ring R, such expansion of the traveler being permitted by the yielding action of the keeper tongue 10. As the swing of the tool is continued to the position of Fig. IV, the traveler C′ finally snaps into place whereupon the tool is withdrawn by swinging it in the opposite direction, incident to which the keeper tongue 10 will again yield to free itself from the mounted traveler.

While the tool herein illustrated is designed for use with a specific type of traveler, it will be obvious to those skilled in the art that, through suitable modification within the scope of the appended claims, it can be readily adapted for applying various other types of travelers commonly used in connection with ring spinning and twisting machines without sacrifice of any of the advantages hereinbefore pointed out.

Having thus described my invention, I claim:

1. A tool in the form of a bar useful as a lever in applying clip-like travelers to the rings of twisting machines and the like after the manner described, and having a longitudinal gravity magazine channel therein accommodating a multiplicity of the travelers upright in serial order, and a lateral opening at its bottom for release of one traveler at a time, said opening being shaped to correspond with the internal configuration of the travelers, and being defined jointly by a side notch in the bar and a keeper capable of yielding to permit springing of the traveler clips over the rings for retention by the latter.

2. A tool, according to claim 1, for applying clip-like travelers to the rings of twisting machines and the like, wherein the keeper has the form of a spring tongue.

3. A tool, according to claim 1, for applying clip-like travelers to the rings of twisting machines and the like, wherein the magazine chan-

nel is defined by a longitudinal slot in the bar, and a plate secured across said slot.

4. A tool, according to claim 1, for applying clip-like travelers to the rings of twisting machines and the like including a retractable cover for closing the upper end of the magazine.

5. A tool in the form of a bar useful as a lever in applying clip-like travelers to the rings of twisting machines and the like after the manner described, said bar having a hollow therein accommodating a multiplicity of the travelers, an opening at its bottom for release of one traveler at a time, and keeper means at said opening capable of yielding to permit springing of the traveler clips over the rings for retention by the latter.

6. A tool in the form of a bar useful as a lever in applying clip-like travelers to the rings of twisting machines and the like after the manner described, said bar having a hollow therein accommodating a multiplicity of the travelers, an opening at its bottom end for release of one traveler at a time, and a keeper crosswise of the bottom of said opening capable of yielding to permit springing of the travelers over the rings for retention by the latter.

7. A tool in the form of a bar useful as a lever in applying clip-like travelers to the rings of twisting machines and the like after the manner described, said bar having a longitudinal gravity magazine channel therein for holding a multiplicity of the travelers upright in serial order, an opening at its bottom end for release of one traveler at a time, and a keeper crosswise of the bottom of said opening capable of yielding to permit springing of the travelers over the rings for retention by the latter.

HAROLD E. JOHNS.