No. 687,981. Patented Dec. 3, 1901.

J. EASTWOOD.

SNARL CATCHER FOR RING SPINNING AND TWISTING MACHINES.

(Application filed June 3, 1901.)

(No Model.)

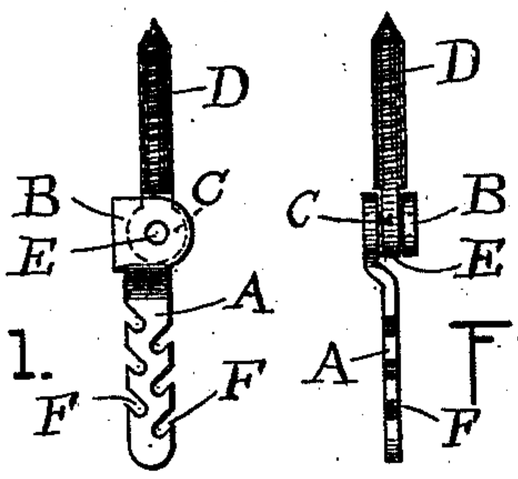


Fig. 1.

Fig. 2.

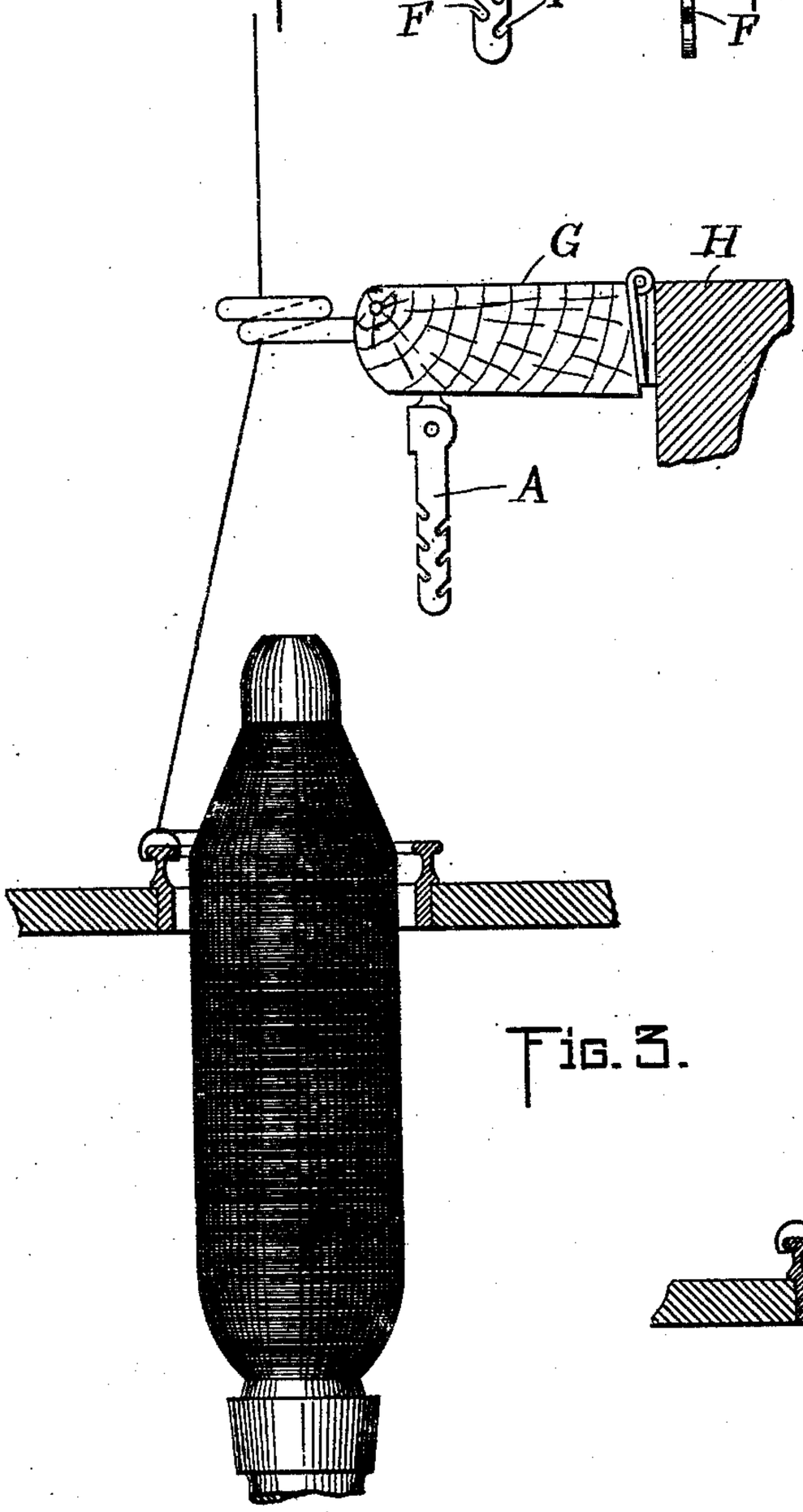


Fig. 3.

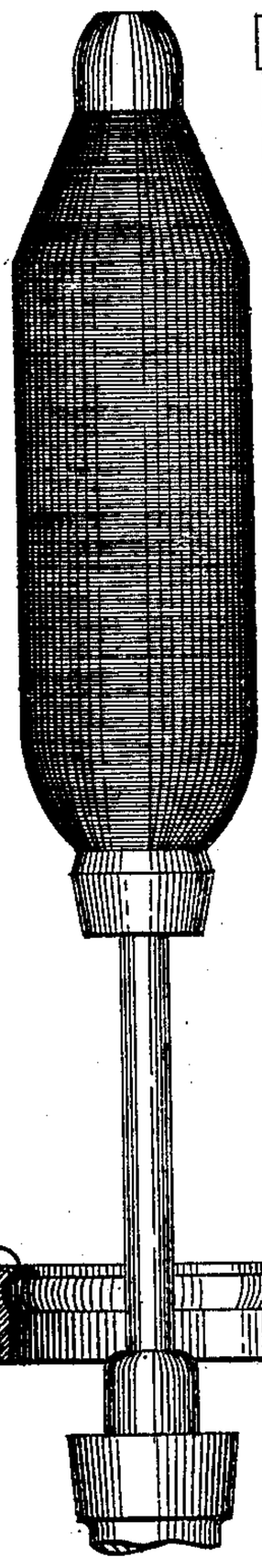
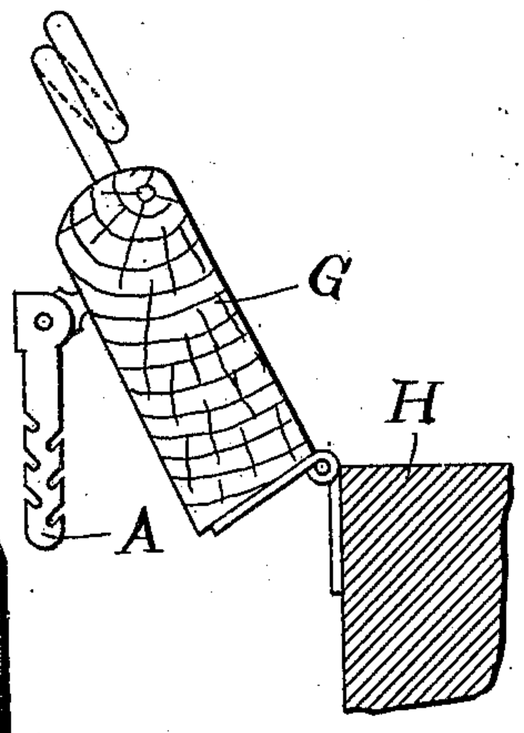


Fig. 4.



WITNESSES:
A. D. S. Brown.
H. Joseph Doyle.

INVENTOR:
John Eastwood
by Wright, Brown & Quinby
Attorneys

UNITED STATES PATENT OFFICE.

JOHN EASTWOOD, OF BURNLEY, ENGLAND, ASSIGNOR TO JOHN WILLIAM COOK, OF MANCHESTER, ENGLAND.

SNARL-CATCHER FOR RING SPINNING AND TWISTING MACHINES.

SPECIFICATION forming part of Letters Patent No. 687,981, dated December 3, 1901.

Application filed June 3, 1901. Serial No. 62,912. (No model.)

To all whom it may concern:

Be it known that I, JOHN EASTWOOD, of Burnley, in the county of Lancaster, England, have invented certain new and useful Improvements in Snarl-Catchers for Ring Spinning and Twisting Machines, of which the following is a specification.

My invention relates to ring spinning and twisting machines, and is designed to catch or arrest snarls or broken ends when they occur during the working of the machine.

I so design my invention that it does not interfere with the operation of the machine, either during twisting or when the bobbins are being doffed.

Reference is made to the accompanying drawings, in which—

Figure 1 is a side view of the catcher and the screwed shank. Fig. 2 is an edge view of the same. Fig. 3 is a side view of a portion of a spindle ring and rail and of the thread board or flap when in position during the period of twisting, and Fig. 4 is a similar view during the period of doffing.

The reference-letters in all the drawings refer, respectively, to the same parts.

In carrying my invention into effect I form, by stamping or in other convenient method, out of iron, steel, brass, or other suitable material, a small blade A, hereinafter called the "catcher." I form the upper part of A into a fork B, into which the flat head C of a small screw D loosely fits. The back of the fork acts as a stop which prevents the catcher A from swinging too near the spindle and also prevents it from oscillating while the frame is working. The catcher A is hinged to the head C and is suspended on a small pin E, fixed in the fork-head B and passing loosely through the head C. The shank D is screwed with a thread similar to that of screws intended to be screwed into wood. The catcher A has formed in both its edges several downwardly-projecting notches or serrations F.

In applying my invention I screw the shank D into the under side of the wooden thread-boards G, which are hinged to the roller-beam H of the machine. I fix the catcher A in such a position that it will be clear of the thread when the latter is in its normal position, but sufficiently near to arrest any snarl or broken end which may occur. When doffing takes place and the thread-boards are turned up in the usual way, as shown in Fig. 4, the catcher A hangs vertically and is quite clear of the bobbin as the latter is being removed.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the thread-board of a ring-spinning machine, a support D secured to said board, and a snarl-catcher consisting of a blade A with notches F formed in each edge and loosely hinged to the support D and free to oscillate in but one plane or direction.

2. The combination with the thread-board G, of the screw D secured thereto and having a flat head C, the notched or serrated blade A formed with a fork at its upper end embracing the flat head C, and a pivot uniting the said head and fork, all constructed arranged and adapted to operate substantially as set forth.

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

JOHN EASTWOOD.

Witnesses:
THOS. E. LEIGH,
WILLIE IDESON.