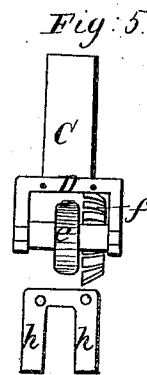
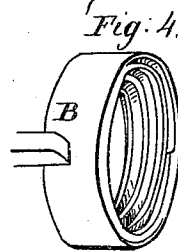
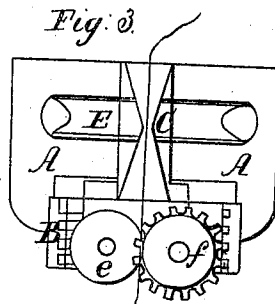
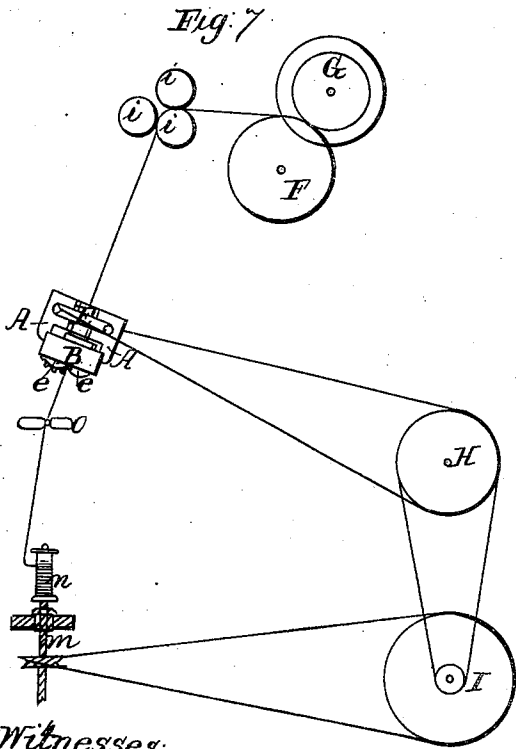
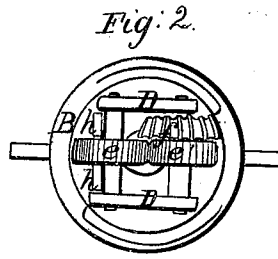
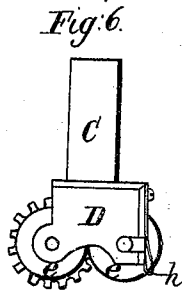
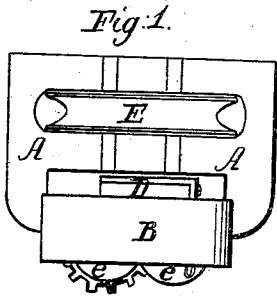


C. Chabot.
Spinning Mach.

N^o 89,290.

Patented Apr. 27, 1869.



Witnesses;
L. L. Chancy;
Geo. W. Vailant

Inventor;
Cyprien Chabot

United States Patent Office.

CYPRIEN CHABOT, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 89,290, dated April 27, 1869.

IMPROVEMENT IN TWISTING AND DRAWING-HEADS FOR SPINNING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To whom it may concern:

Be it known that I, CYPRIEN CHABOT, of the city and county of Philadelphia, and State of Pennsylvania, have invented certain new and useful improvements in spinning-machinery; and I do hereby declare the following to be a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 represents a vertical side view of what may be called a spinner.

Figure 2, an end view of the same.

Figure 3, a transverse section.

Figures 4, 5, and 6, additional details.

Figure 7, so much of a spinning-machine as will illustrate the combination of my invention with the same.

My invention consists of certain devices and improvements in spinning-machinery, fully described hereafter, by which wool or other fibrous material may be spun into a continuous thread.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A represents a frame, to which is attached an annular screw, or worm, B.

In that frame is placed a hollow spindle, C, which is allowed to revolve in it freely. The hole in the spindle C is made large at both ends, and tapering, like a funnel, to a small hole, in the middle or thereabout, only large enough to allow the free passage of the thread, and keep it central in the axis of the spindle, and at the same time allow it to be passed diagonally through the same.

To the end of the spindle C is a frame, D, in which are placed the rollers *e e'*.

On the roller *e'* is a gear, *f*, the teeth of which engage in the thread of the annular screw B.

The rollers *e e'* occupy the centre of the frame D, as shown in fig. 2, being reduced in width to less than the diameter of the hole in the end of the spindle, in order to allow the roving to be laid at one side of them, after having been passed diagonally through the hole in the spindle.

On the edge of each of these rollers, next to the reduced part, is a small bevel, forming between them, a small, wedge-shaped opening.

E is a pulley, which is fastened to the spindle C, and made to revolve with it in the usual way.

If we cause the spindle C to revolve, it is evident that the gear *f* will follow in the thread of the screw B, and therefore cause the rollers *e e'* to revolve on their axis, and at the same time revolve on an axis at right angles with their own.

To the frame D is attached a spring, *h*, which bears

on the roller *e*, and produces the necessary tension between the drawing-rollers *e e'*.

By placing this apparatus in combination with a spinning-machine, as shown in fig. 7, the object of the invention will be readily perceived.

F is a cylinder to support and drive the spool of slubbing or roving G.

H is the cylinder, to drive the spinner, as shown in fig. 7.

I is the cylinder, to drive the spindle.

i i i are the paying-out rollers, which are revolved in unison with the spool-cylinder and the other parts of the machine by any of the usual ways.

The slubbing or roving is made to pass from the spool G through the paying-out rollers *i i i*, and to the hollow spindle C and drawing-rollers *e e'*, thence through the eyelet *o* to the spool *n*, as shown in fig. 7.

While the revolving of the spinner gives the slubbing the amount of twist required for drawing, the same motion causes the drawing-rollers *e e'* to take and deliver the thread faster than the slubbing is furnished by the paying-out rollers, and therefore produce the drawing required.

The amount of drawing is regulated by changing the speed of the paying-out rollers.

The thread is then passed from the spinner to the spindle *n*, to receive the additional twist required, and wound on the spool *n*, in any of the well-known ways.

The mending, or piecing is rendered perfectly simple and easy by the peculiar construction of the spindle C and rollers *e e'*. The thread is passed from the bobbin through the eyelet *o*, and thence, by suction or with a small hook, between the reduced portion of the rollers *e e'*, diagonally through the hollow spindle C, and attached to the slubbing or roving in the usual way.

Now, it is evident, that while the eyelet *o*, the face of the rollers *e e'*, and the small hole in the spindle C are in a straight line, the tension on the thread will force it to come in the small, wedge-shaped opening formed by the bevel on the rollers *e e'*, and the revolving of the same will guide it to the centre.

Having thus fully described my invention,

What I claim therein as new, and desire to secure by Letters Patent, is—

The combination of the spindle C, having the hole through it bored tapering from each end to or about the middle, with the bevelled rollers *e e'* made narrower than the diameter of the hole in the end of the spindle, all substantially as herein shown and described.

The above specification of my said invention, signed and witnessed, at Philadelphia, the 26th day of October, A. D. 1868.

Witnesses:

L. L. CHENEY,
THO'S WELHAM.

CYPRIEN CHABOT.