

F. Spineux.
Spinning Twisting Head.

N^o 69,944.

Patented Oct. 15, 1867.

Fig. 8.

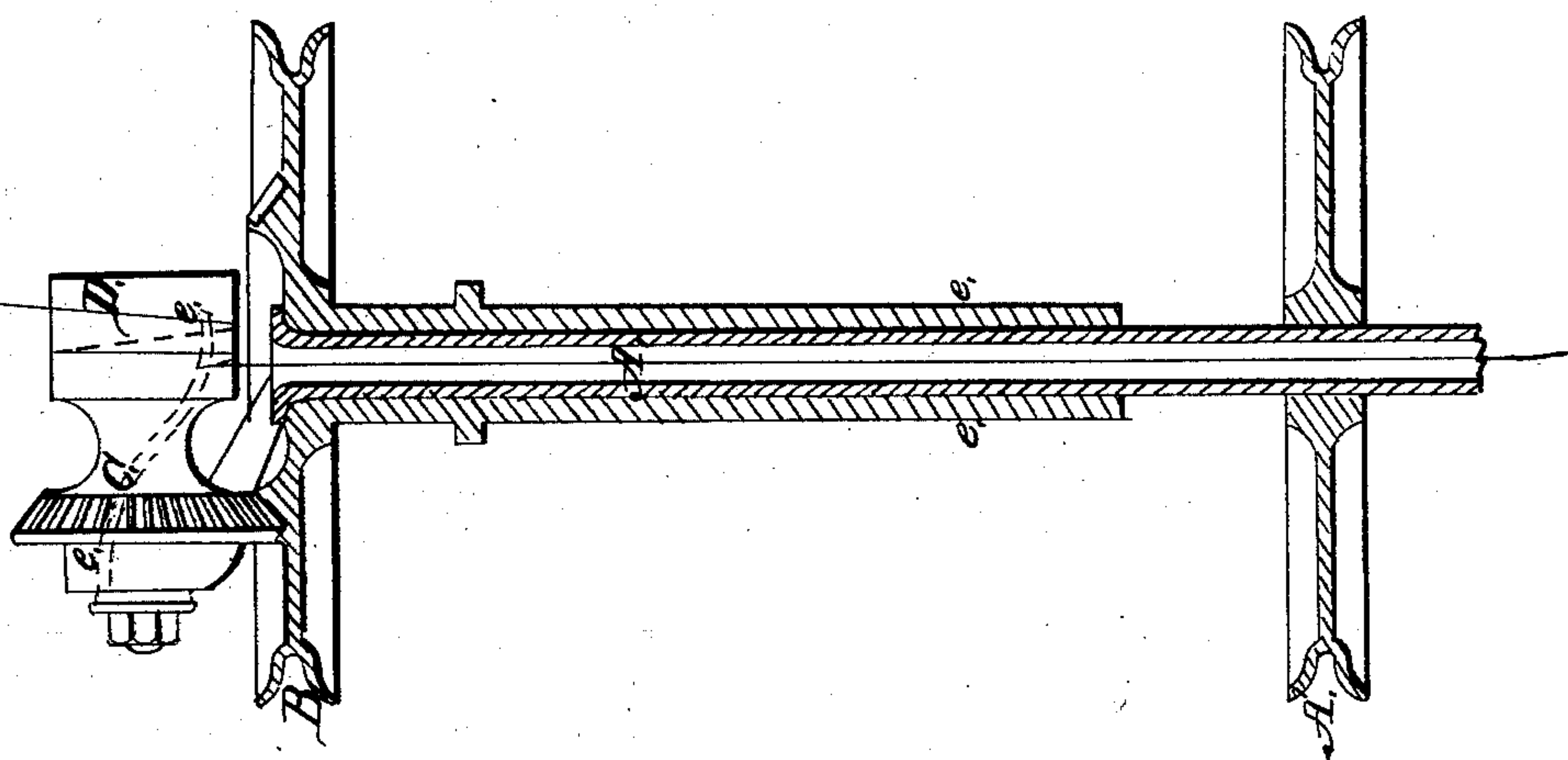
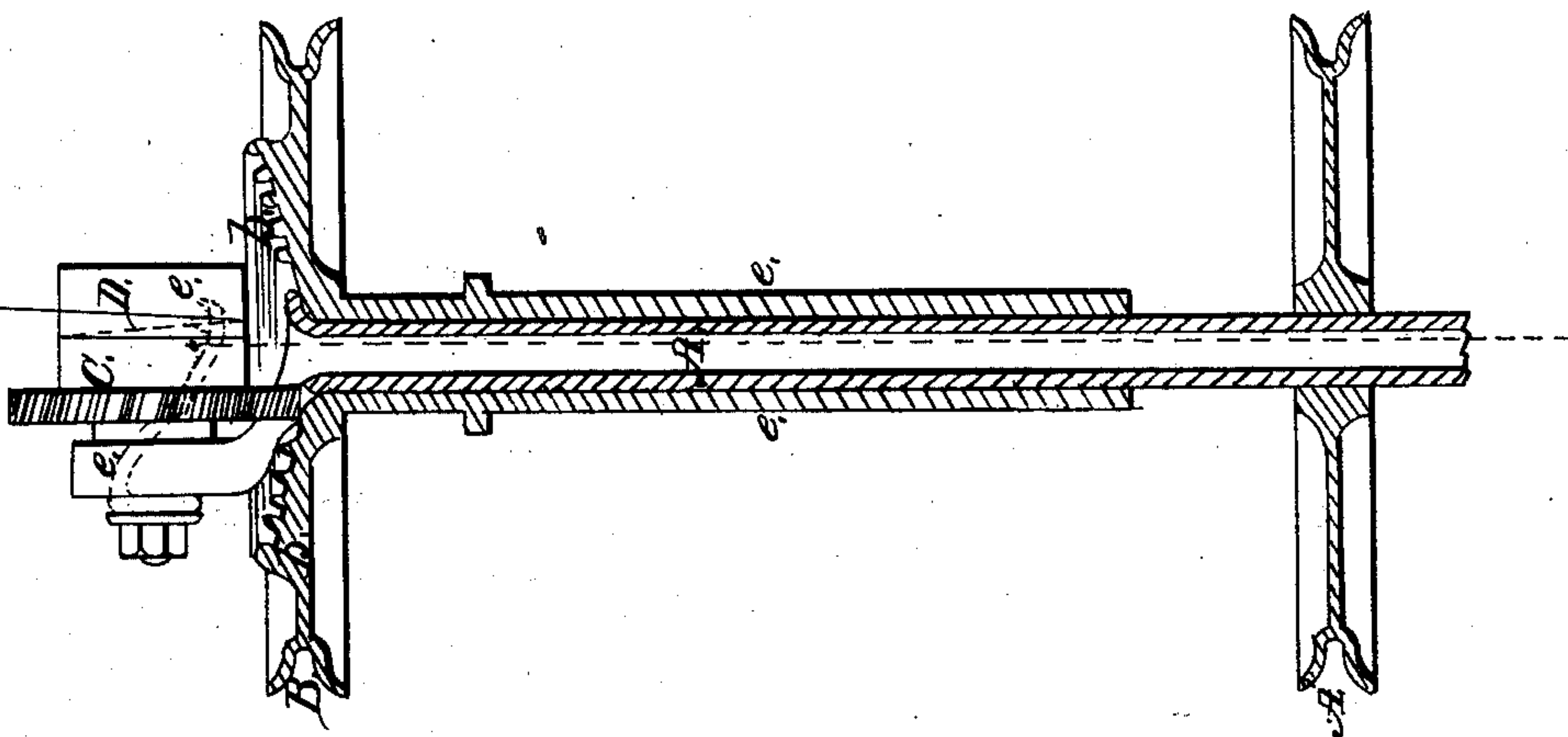


Fig. 7.



Witnesses:

J. M. Combs
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United States Patent Office

FERDINAND SPINEUX, OF LIÉGE, BELGIUM.

Letters Patent No. 69,944, dated October 15, 1867.

IMPROVEMENT IN DRAWING AND TWISTING HEAD FOR SPINNING.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, FERDINAND SPINEUX, of Liège, Belgium, have invented new and useful Improvements in Machinery for Spinning Wool and other fibrous materials; and do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making part of this specification.

This invention relates to a mode of constructing and arranging certain apparatus or parts of machinery employed in the formation of a roving or sliver, used in spinning wool and other fibrous materials, and in the formation of a thread whereby, in performing simultaneously the two operations of drawing and twisting the rove or sliver or partially-formed thread, I am enabled to impart the amount of twist which is necessary for the even drawing by the roller, and to vary the proportion between the twist and the draught; and it consists mainly in the application to the drawing roller of a notched guide for directing the thread thereon, in such manner that the friction between the rove or sliver or partially-formed thread, and the cylinder or roller upon which the same is wound, may prevent the said rove or sliver from slipping.

To enable others to make and use my invention, I will describe its construction and operation by referring to the drawings.

To one extremity of a tube, A, there is attached a driving-pulley, A', and to the other end a frame carrying a single drawing-roller, D, attached to a worm-wheel, C, or bevel-wheel, as shown, or to other suitable gearing capable of engaging with a spiral worm or screw-thread, b, or with a bevel-wheel or other gearing upon the end of the tube l. This spiral worm or screw-thread is formed upon the inside of a hollow tube, l, which encompasses the tube A, and is enlarged at one end, forming a flange, or otherwise shaped so as to cause the said worm or screw-thread to engage with the teeth of the above-mentioned worm-wheel. To the tube l is attached a pulley, B, which is fitted over or upon the tube A, so as to turn easily the one within the other, so that either can be caused to rotate independently of the other in whichever direction circumstances may require, the tube A being rotated by the pulley A' attached thereto. The pulleys A and B are now connected with suitable driving apparatus of such kind that different velocities of rotation can be imparted to each simultaneously. This apparatus is placed between the ordinary feed-rollers of a roving or spinning machine and the flier and bobbin or the cop upon which the rove or sliver is to be wound, and the said rove or sliver is caused to pass from the ordinary feed-rollers above mentioned along the axis of the tube A, and around the drawing-roller D, and to be wound one or more times evenly upon said roller by means of the notched guide e, as shown in Figures 7 and 8, so that the friction between the rove or sliver, and the cylinder or roller upon which the same is wound, may prevent the said rove or sliver from slipping, and I then cause the said tubes A and l to rotate at different velocities, in such manner that the roller D will twist the rove or sliver, and the said rove or sliver be wound upon the roller D more rapidly than the same is delivered to it, and so that the drawing is thereby effected in any degree, which may be required, and the amount of drawing and twist imparted to the rove or sliver be regulated at pleasure. I would also remark that I find it advantageous to increase the diameter of the roller D gradually towards the end where the rove or sliver finally leaves it, whereby any slipping of the same is rendered nearly impossible.

Having now fully described the nature of the said invention, and the manner in which the same is to be performed, I declare that I do not intend to claim any of the mechanical parts of the apparatus above described separately and apart from the application and combination thereof, as hereinbefore described, as being any part of the invention, and that I do claim as of the invention—

The roller D and its guide e, for directing the course of the thread thereon, in combination with the hollow spindles A l, substantially as shown and described.

As witness my hand and seal the eighth day of April, one thousand eight hundred and sixty-seven.

FR. SPINEUX. [L. s.]

Witnesses:

A. LAMARCHE JAMAR, *Industriel, Liège.*

AD. GHYS, *Employé à Seraing.*