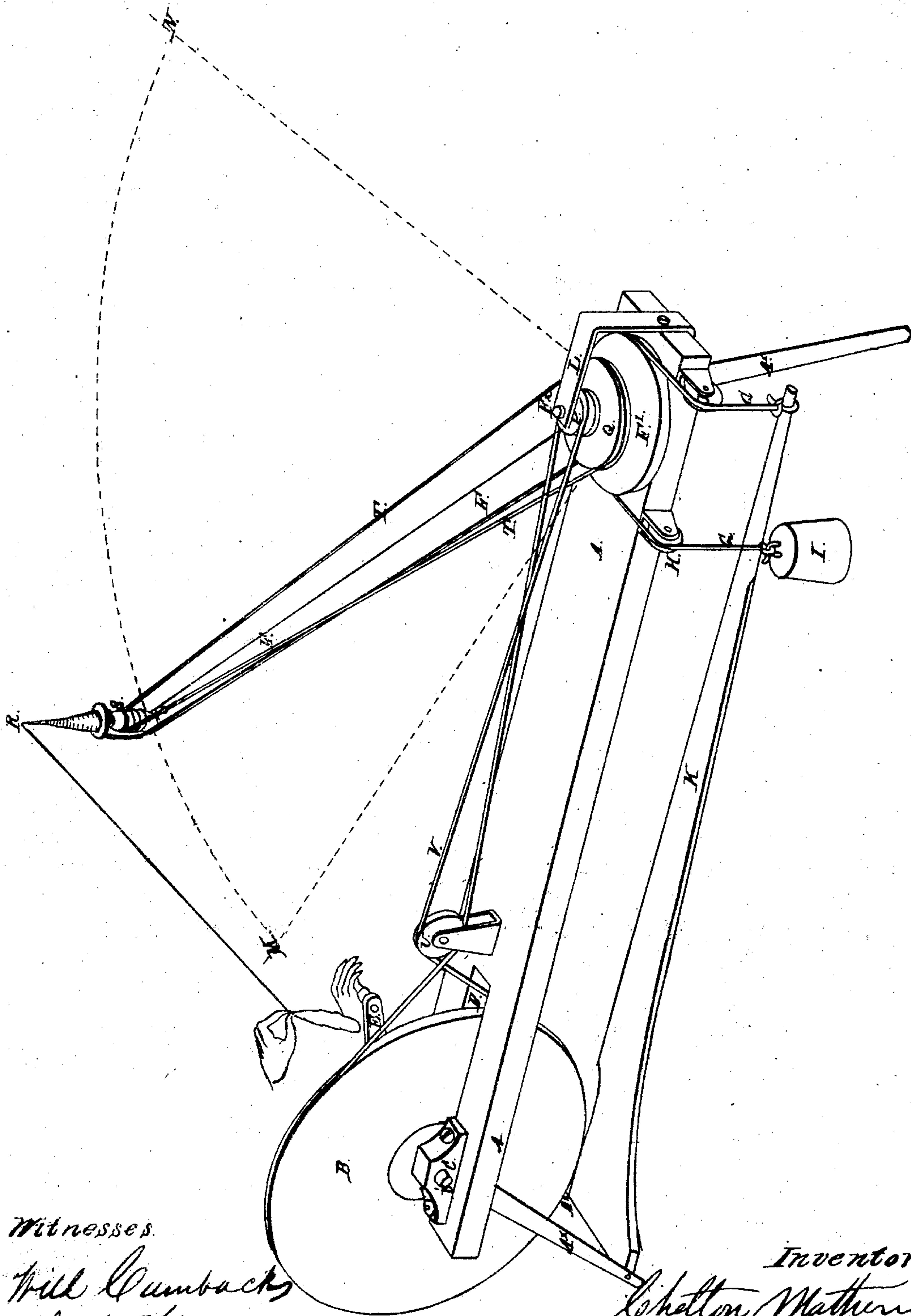


C. Mathenev.

Domestic Spinning Mach.

Nº 27,059.

Patented Feb. 7, 1860.



Witnesses.

*Will Lambach
J. J. Thomas*

Inventor.

Chelton Mathenev

UNITED STATES PATENT OFFICE.

CHELTON MATHENY, OF GREENSBURG, INDIANA.

HAND SPINNING-WHEEL.

Specification of Letters Patent No. 27,059, dated February 7, 1860.

To all whom it may concern:

Be it known that I, CHELTON MATHENY, of Greensburg, in the county of Decatur and State of Indiana, have invented a new and useful Improvement in Hand Spinning-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making part of this specification.

The nature of my invention relates to the arrangement of a drawing arm and the position of the spindle, substantially as and for the purpose hereinafter represented and described.

The accompanying drawing represents the improved spinning machine in perspective.

A, is the frame, A¹ the legs, and B, the driving wheel the axle B¹ of which has its support in bearings C, upon each side of the open space D, in frame A.

Upon axle B¹ is arranged the crank E.

F, is the drawing arm, to the back end of which is fixed the wheel or circular base F¹. This wheel F¹ is furnished with a groove in its periphery to receive the cord G. This cord is made fast to the arm F, and one of its ends passing in the groove around a portion of wheel F¹ and over the pulley H, is connected to the weight I. The other end passing in the opposite direction around the wheel F¹ and over the pulley J, is made fast to the treadle K. Through the center of wheel F¹ is arranged and firmly secured thereto the vertical axle F², its upper end bearing in the bracket L, and its lower end in a bearing secured to the under side of frame A. This axle F² supports the arm F, and allows it to swing around in a horizontal plane as indicated by the dotted lines, from M, to N.

On the axle F² is arranged the two pulleys P, Q, fast to each other, and free to turn upon but independent of the axle F². In the outer end of arm F, is arranged the spindle R.

The spindle R, is furnished with pulleys S, around one of which passes the belt of band T, connecting it with and causing it to be driven by the pulley Q. Near the open space D, is arranged the guiding pulley U,

which serves to guide the band V, from wheel B, to pulley P.

Having described the arrangement and construction of the machine, the operation is substantially as follows: The operator turns the crank E, thereby through belt or band V, pulleys P, Q, belt T, and pulley S, giving motion to the sprindle R, causing it to revolve or rotate with the proper speed; with the other hand the operator holds the prepared wool or other material to be spun or twisted and after connecting it to the spindle in the usual manner, the foot of the operator is placed upon the treadle K, bearing it gradually down and so causing through cord G, and wheel F¹ the arm F to move gradually out through the space indicated from M, to N, or any required portion thereof so drawing out during the twisting operation the thread or yarn to the proper size. After the described operation the foot is raised from or with the treadle and the weight I, acting through cord G, and wheel F¹, brings the arm F, back to M, the starting point.

I am aware that the patent No. 14482 has been granted for an improved spinning wheel describing an arrangement of the arm which carries the spindle in bearings and is so suspended as to move from and toward the spinner in a vertical plane, while the spindle is arranged in a horizontal line to the spinner, and at right angles to the said plane, and to the arm suspending the said spindle.

Now my improvement consists in arranging the vibrating arm so that it shall move in a horizontal plane carrying its spindle always in a vertical position. Thus my improvement enables the spinner to draw the thread with the left hand in a straight line past the body and build the cop properly from the base to the point of the spindle by simply raising and lowering the hand; while in the patent before referred to if too much fiber be given to the thread, and it thereby becomes of more than ordinary length, the left hand which holds the fiber must be necessarily passed across the body of the spinner in order to build the cop. Therefore it results from my improvement that more yarn can be spun in the same time and

at greatly less labor, inconvenience, and change of position on the part of the spinner than when the vibrating arm is moved in the vertical plane. Therefore—

5 What I claim as my invention and desire to secure by Letters Patent, is—

The arrangement of the vibrating arm which carries the spindle and its bearings so that said arm shall move in a horizontal

plane, and the spindle be sustained in the 10 vertical position; substantially in the manner and for the purpose set forth.

In testimony of which invention I have hereunto set my hand.

CHELTON MATHENY.

Witnesses:

WILL CUMBACKS,
I. T. PHARES.