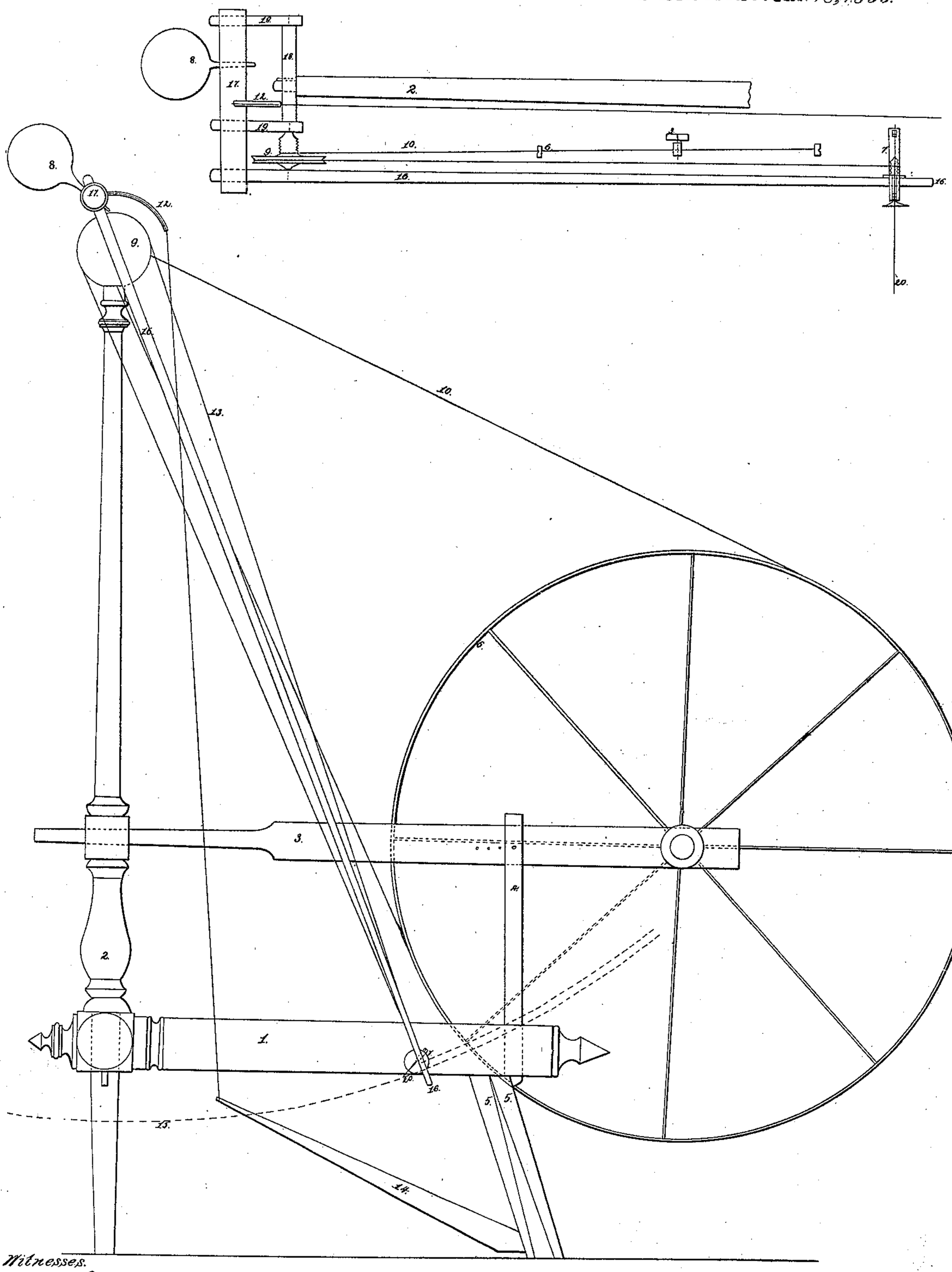
L. Wight.

Domestic Spinning Mach.

No. 14,482. Patented Mar. 18, 1856.



Witnesses.
David N. Kennedy
John Kennedy

Inventor.
Lyman Wight

UNITED STATES PATENT OFFICE.

LYMAN WIGHT, OF BENTON, PENNSYLVANIA.

SPINNING-WHEEL.

Specification of Letters Patent No. 14,482, dated March 18, 1856.

To all whom it may concern:

Be it known that I, LYMAN WIGHT, of Benton, in the county of Luzerne and State of Pennsylvania, have invented a new and useful Improvement in Spinning-Wheels for Spinning and Twisting Wool Tow and Cotton, which I shall call the "Pendulum Spinner;" and I do hereby declare that the following is a full and exact description of the construction and operation of the same.

No. 1 in the accompanying drawings is a bed piece or bench.

No. 2, is a post the lower end passing down through the end of bench No. 1, forming one leg of the bench and supporting at its top a frame to which the pendulum is attached. The object of the pendulum is to carry to and from the operator a spindle on which a thread may be drawn out and twisted.

No. 3 is a sliding bar, one end passing through post No. 2, and is supported near the other end by passing through the top of a small post No. 4, rising from bench No. 1. At the end of said bar the large or principal band wheel No. 6, is hung. The sliding of this bar tightens or slacks band No. 10, and is held fast by a pin in post No. 4.

Nos. 5—5 are two legs in the end of bench No. 1. These two and the one formed by post No. 2 passing down through the bench form the three legs of the bench.

No. 16, is the pendulum rod. At the lower end is a cross piece No. 7, to which the spindle No. 20 is hung. Said crosspiece is made to slide up and down on the rod to tighten band No. 13.

No. 12, is a quarter circle of iron fastened to the cap piece of the frame No. 17, on which a cord rests running down to the foot piece No. 14, for the purpose of driving the spindle from the operator when the foot is pressed against the foot piece. At No. 9, on the section of the drawing which is placed at the top of the paper of the new drafts, may be seen the whir and pulley on which the two bands of wheel rest which give motion to the spindle No. 20. The frame at the top of post No. 2, is composed of a cross piece No. 18, fastened to the top of post No. 2, in the ends of which are gudgeons and two short posts Nos. 19—19 the lower ends of which have their bearings on said gudgeons, so that they can turn on them backward and forward to let the pendulum rod which is fastened to the cappiece vibrate.

No. 17, is a cappiece fastened to the top of posts Nos. 19—19, and projects over at one end far enough to receive the pendulum rod and give space for the whir and pulley No. 9, to play between the pendulum rod and short post No. 19.

No. 8, is a ball of wool attached to the cappiece No. 17, and is a little inclined forward for the purpose of balancing the spindle from post No. 2 where it would naturally rest up into the operator's lap.

My wheel operates as follows viz. By turning the principal band wheel No. 6, on which band No. 10, rests gives motion to the whir No. 9, around which it passes, and also to the pulley on the end of said whir, on which band No. 13, rests which runs around a small whir on spindle No. 20, giving speed to the spindle. The attendant with roll in hand sits down in front of wheel No. 6, with the face toward post No. 2, which brings the post near the foot piece No. 14, splices the roll to a thread on spindle No. 20, and by pressing the foot on the foot piece drives the spindle from the operator and draws out the thread, and by turning band wheel No. 6, gives speed to the spindle which twists the thread.

The advantages of my wheel are as follows: One advantage is that a thread can be drawn out easier by a vibrating pendulum than by a carriage and head on friction rollers as is done in the case of the horizontal spinner which was patented some ten or eleven years ago. Another advantage is that it occupies only about half the room when not in operation that the horizontal spinner does. Another advantage is the distance between the pulley on the end of whir No. 9, and the whir on the spindle being some three or four feet thus causing band No. 13 to lap farther around the whir on the spindle consequently it does not require to be so tight as in other wheels. And thus it operates easier than any other wheel within my knowledge. Another advantage that

it costs only about half to make it that it does to make the horizontal and but little more than the common hand wheel.

Having thus described the construction and operation of my improved wheel, what I claim as my invention and desire to secure by Letters Patent is,

Attaching the spindle of a hand spinning wheel to a vibrating pendulum, and operating the same substantially in the manner and for the purpose set forth.

LYMAN WIGHT

Witnesses:
J. M. SEAMAN,
DAVID N. KENNEDY.