

D. B. Teter.
Spinning Mach.

N^o 47,685.

Patented May 9, 1865.

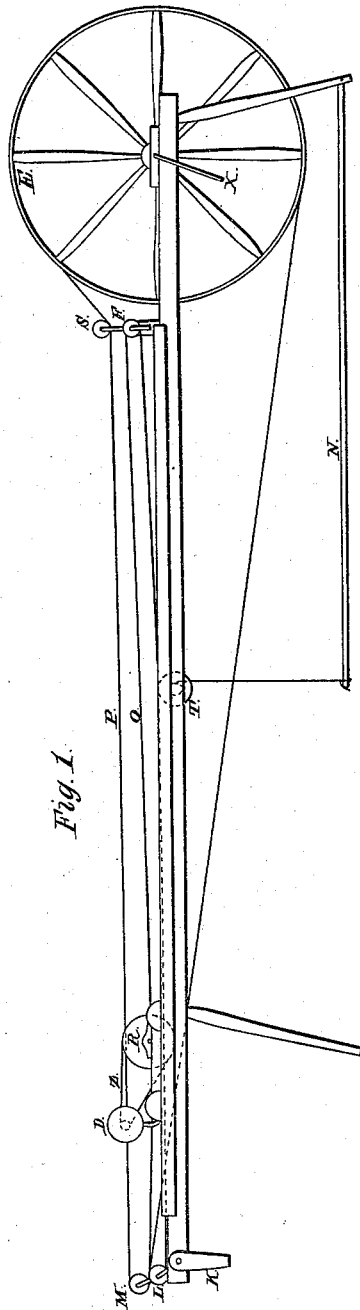


Fig. 1.

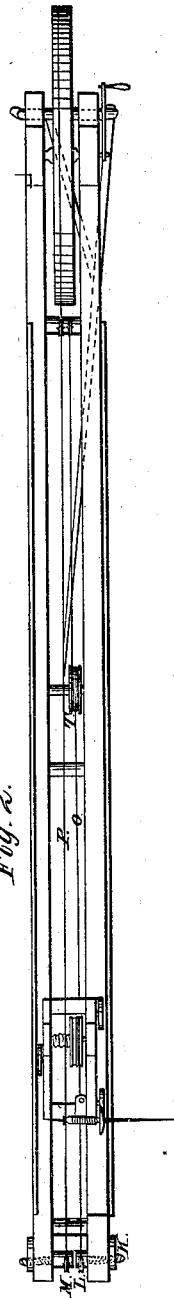


Fig. 2.

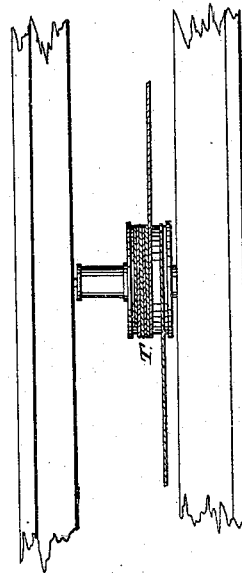


Fig. 3.

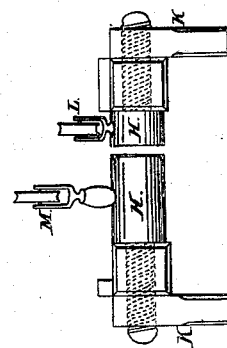


Fig. 4.

Witnesses.

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UNITED STATES PATENT OFFICE.

DAVID B. TEETER, OF BATAVIA STATION, ASSIGNOR TO HIMSELF AND SAMUEL C. DICKINSON, OF VAN BUREN COUNTY, IOWA.

IMPROVEMENT IN MODES OF ADJUSTING BANDS ON HAND SPINNING-MACHINES.

Specification forming part of Letters Patent No. 47,685, dated May 9, 1865.

To all whom it may concern:

Be it known that I, DAVID B. TETER, of Batavia Station, in the county of Jefferson and State of Iowa, have invented a new and useful Improvement in Adjusting the Bands on a Hand Spinning-Machine; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and the letters of reference marked thereon.

The nature of my invention consists in providing each of the uprights holding the two pulleys M and L at the end of the track with a screw, H, to pass through the rails of said track, and nuts K and K to fasten said screws, thereby allowing the pulleys to be adjusted to give the necessary tension to the operating-bands. I also widen the groove in pulley T, and sever the band O and fasten the two ends thus severed in the groove of said pulley with two small wooden pins. I then pass the other ends of band O around the pulley T, in opposite directions a sufficient number of times to give the required length of run to the car, then over the pulleys F and L, as shown in Figs. 1 and 2, and fasten them to the car in the usual manner.

To enable others skilled in the art to make use of my invention, I will proceed to describe its construction and operation.

I construct my hand-spinning machine substantially in the following manner—that is to say, I take two pine rails; these I put together with three turned cross-ties, so as to form a track for the car carrying the spindle, &c., as seen in Fig. 2. I then set this frame upon four legs, as seen in Fig. 1. I then make a wheel and place it on said frame at its rear end, as shown in Fig. 1, as wheel E. To the axle of said wheel E I attach crank X. I then fasten firmly to the cross-tie, immediately in front of wheel E on said track, the uprights holding the pulleys S and F, as seen in Fig. 1.

Pulley T is three and one-half inches in diameter and one and one-half inch thick. It is placed between the main rails, forming the track over the end of treadle N, as in Fig. 1. Its construction is more fully seen in Fig. 3.

I turn two wooden screws, H and H, one inch in diameter with heads two inches in diameter. These I fasten to the end of the track

by nuts K and K. To the heads of these screws I fasten the uprights carrying the pulleys L and M, as seen in Figs. 1 and 2.

Treadle N is made of three pieces, framed together so as to reach from leg to leg under wheel E, the long piece (four feet eight inches) reaching from the legs to pulley T, the short piece, (two feet long,) with a cross-piece to hold it together, and a wire, which constitutes its axis or center of motion, running through the treadle into the legs. (See Figs. 1 and 2.)

The car carrying the spindle and head is provided with wheels for traversing the track, and is framed twelve inches long, two inches high, four and one-half inches outside, and two and one-half inches inside. To the front of this car, by means of an iron prong three inches high, I fasten the spindle, and near the other end of the car I fasten a head, R, five inches in diameter, and place the car upon the track. (See Figs. 1 and 2.)

There are three cord-bands. The endless band P passes over wheel E, then under pulley S, then once around the whirl on the head R, then over the pulley M, and then back under wheel E. (See Fig. 1.) The course of band O is fully set forth hereinafter. The endless band z passes around the head R, and around the pulley on the spindle for giving motion to the latter. The pulley T is turned backward by a cord fastened to its axle and to the end of treadle N.

In the class of machines upon which mine is an improvement the uprights containing the pulleys L and M are fixed and immovable, being attached firmly to a solid cross-beam between the rails of said track, and band O is passed once around pulley T, so that when you attempted to operate the machine, if the band O was a little slack, it would slip on the pulley T, and of course the car would not move. If the band P is a little too taut, it would bind where it passes around the whirl of the head R until the whole machine would be at nearly a "dead lock." Now, in order to remedy these evils, I turn two screws, H and H, one inch in diameter and of sufficient length to pass through the rails of the track and receive nuts K and K. (See Fig. 4.) I make the heads of these screws sufficiently large to receive the uprights which carry the pulleys L and M and hold them firmly there-

in. (See Fig. 4.) These screws are passed through the rails so as to leave the heads and the pulleys L and M attached thereto between the rails, and the nuts K and K are then screwed on them, making all firm and solid, all of which is fully exhibited in Fig. 4, and marked "Plan showing screws and manner of adjusting bands."

The manner of arranging the band O on the pulley T is fully illustrated in Fig. 3, and marked "Enlarged plan of pulley."

Now, the mode of operation is this: When the machine is ready for use, as seen in Fig. 1, and marked "side view," if the bands O or P, or both of them are either slack or taut, by a slight turn of nut K you loosen screw H, so that you can adjust pulley L or M, or both of them, to produce the required tension of the band or bands. Now, by a turn of the large wheel E, the car is run back and the end of treadle N is elevated, then by placing your foot on said treadle, the car carrying the

spindle is thrown forward to the end of the track and held there until you give the large wheel a turn, which twists the yarn; then removing the foot from the treadle by another turn of the wheel the car is again run back, at the same time taking up the thread on the spindle. My method of adjusting said bands tends to produce and assists in keeping up a certain easy and uniform operation of said machine.

Now, what I claim as my invention, and desired to secure by Letters Patent, is—

The method of adjusting bands in spinning-machines by means of screws and nuts, in combination with the manner of attaching the band to the pulley T, as and for the purposes described.

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Witnesses:

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