

# M. Hulings, Spinning Mach.

N<sup>o</sup> 8,130.

Patented Jun. 3, 1851.

Fig. 2.

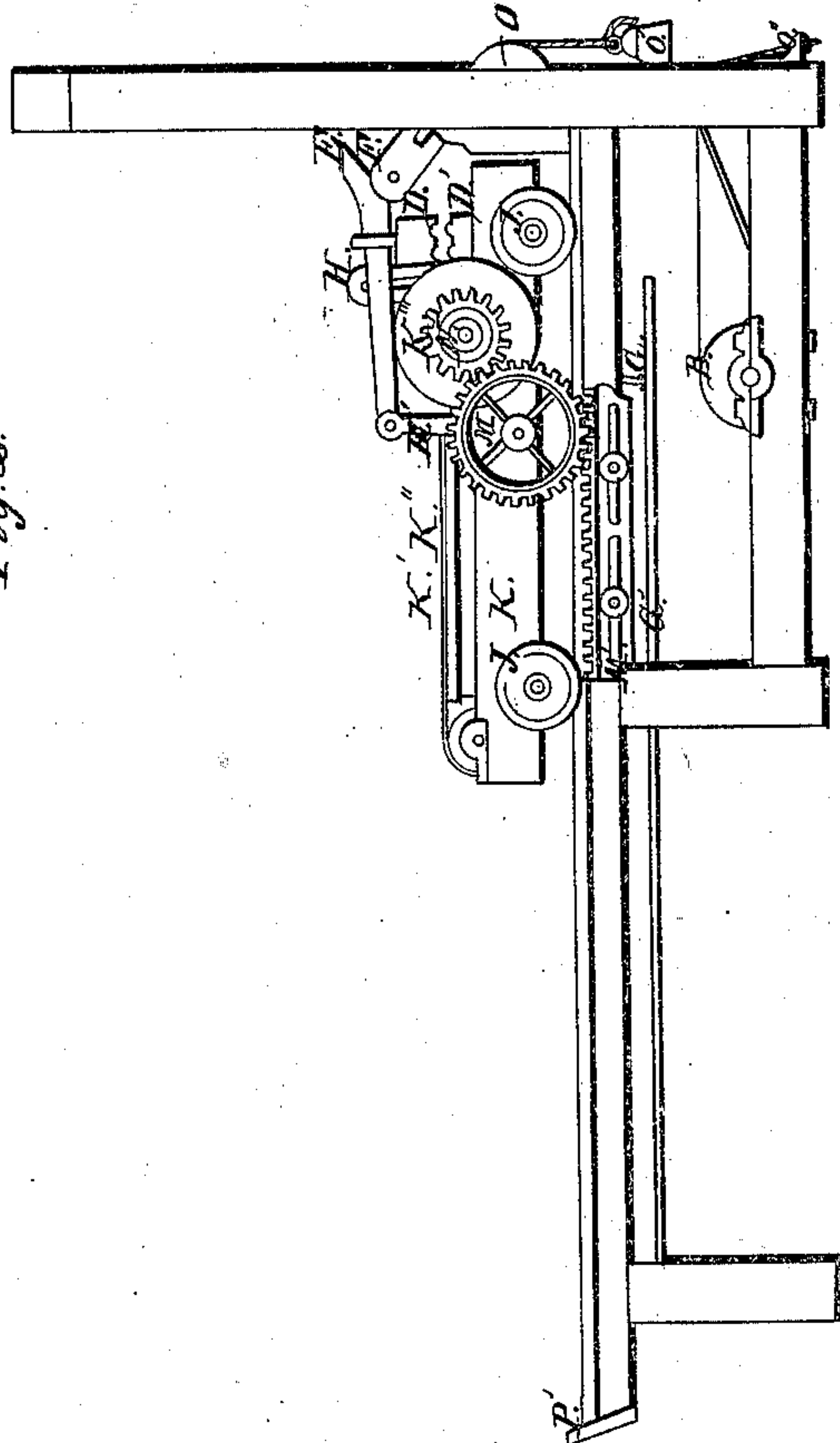
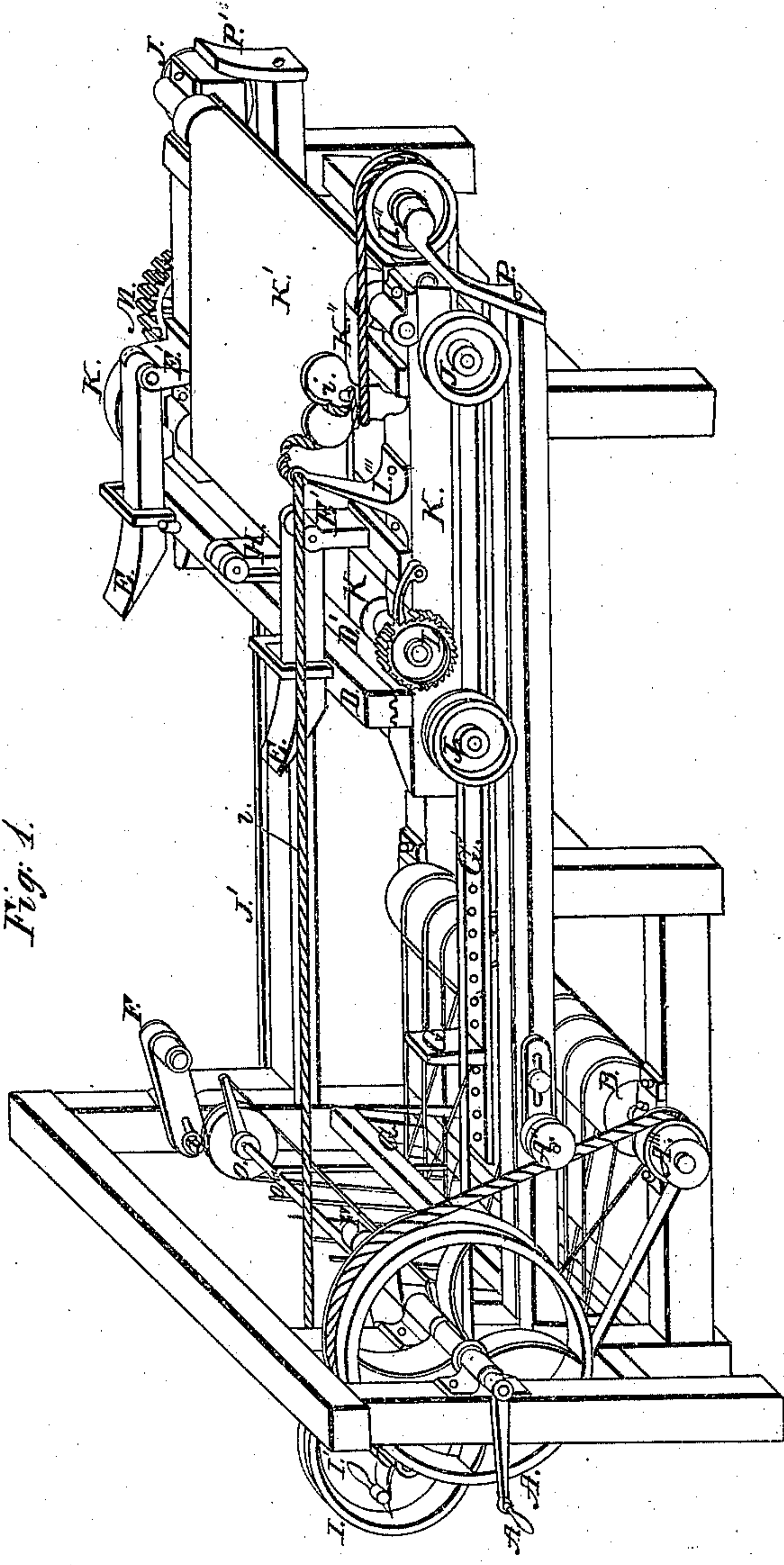


Fig. 1.





# UNITED STATES PATENT OFFICE.

MARGARET HULINGS, OF RANDOLPH COUNTY, INDIANA.

## HAND-MACHINE FOR SPINNING WOOL.

Specification of Letters Patent No. 8,130, dated June 3, 1851.

*To all whom it may concern:*

Be it known that I, MARGARET HULINGS, of the county of Randolph and State of Indiana, have invented a new and useful  
5 Improvement in a Machine for Spinning Wool by Hand, or other Power; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference  
10 being had to the annexed drawings, making a part of this specification, the same letters referring to the same things in the different figures, Figure 1 being an isometrical view of the machine, and Fig. 2 an elevation of  
15 the opposite side from that shown in Fig. 1 and showing the more important parts and the carriage at the spindle end of the machine.

A the master or riving wheel having two  
20 band grooves in its face, A' being the winch by which it is set in motion, A'' a grooved idler upon a movable stud by means of which the band is kept tight, A''' a double grooved whirl or pulley on the shaft of B  
25 the main drum which gives motion to the spindle bands, C the spindle frame, D the movable and D' the stationary part of the hand or clamp; E E two lifters passing through two staples attached to D having  
30 one end hinged to the studs E' E' and the other beveled or sloped off and so situated that they climb upon the friction rollers attached to the studs F F as shown in Fig. 2. G a stud or stop attached to G' a  
35 strip having a number of holes in it, into any of which G may be inserted. H a small lever hinged at its top and so constructed that when D is raised up a small notch engages upon a corresponding projection and  
40 holds up D until it is disengaged by the lower end of H coming in contact with G as the carriage recedes from the spindle end of the frame when D falls by its own gravity and resumes the position shown in Fig. 1.  
45 I, a groove wheel with a winch or handle I' over which the endless band i' passes. I'' a grooved wheel or shin attached to the stud P. I''' a stud attached to the frame to which one end of the band i' is attached while the  
50 other end is secured to the thumb-pin i as shown. J J J three of the four railway wheels which support the carriage K and run upon the two ways J' J'. K' the apron, K'' the table or platform under the apron,  
55 K''' a boxed or hollow wheel inclosing a small ratchet wheel and hand similar to L.

This wheel turns freely in a backward direction on the shaft of K'' as the carriage approaches the spindles, but is engaged by the ratchet and hand above described, while  
60 the carriage K moves in the opposite direction, and by means of the motion communicated to M from the rack M' and thence to N which is attached to K''' causes the apron K' to move in a direction toward the spindles while the carriage moves from them,  
65 thus passing a portion of the rolls upon K' through between D and D' (the amount of motion given to the apron being regulated by moving the rack M' back or forth, and  
70 the clamp D is held up a corresponding time by placing G at the proper point in G').

O is one of two grooved wheels upon the shaft O''' which carries two arms and a small wire which serves as a trip or break  
75 to press the yarn or thread down to a proper position to be wound upon the bobbin or spool upon the spindles. O' a small weight which serves by means of the cord running over O as shown to raise the break or trip  
80 from the threads to allow of their being twisted.

O'' is a treadle hinged to the frame at one side and free to rise and fall at the opposite end a given height regulated by a pin  
85 in the frame, the movable end of this lever is connected with the other grooved wheel O by a cord passing over it in the opposite direction from that suspending O' so that by a pressure of the foot on the lever or treadle  
90 O'' is brought down at the pleasure of the operator and as soon as the pressure is removed the weight O' raises it up. P a stud to support I''. P' a stop to prevent the carriage from running too far back.  
95

The operation of my machine is as follows. Common corded wool in rolls, (the number of rolls corresponding to the number of spindles, of which I commonly make ten in the hand machine) being placed upon the  
100 apron K', the carriage being in the position shown in Fig. 2, and the ends being passed through between D and D' and attached to the spindle in the ordinary way. If the wheel I be turned in the proper direction,  
105 the carriage K will recede from the spindles at the same time the apron K' will roll in a direction toward the spindles allowing a portion of the rolls to pass through between D and D' until the wheel M leaves  
110 the rack M' when the motion of the apron will cease, and at the same instant the lever



H by contact with the stop G is disengaged and allows D to fall upon D' clamping all the rolls, the spindle being in motion a twist will be given to the thread while the carriage as it recedes gradually draws the thread or yarn to the required fineness, as soon as the threads have been sufficiently twisted the motion of A is reversed the trip is brought down, the motion of I is reversed, the carriage is brought to the position shown in Fig. 2, and the threads are wound upon the bobbins or spools upon the spindles. As the carriage approaches the spindles the wheel M runs upon the rack M' and gives a motion to the boxed or hollow wheel K''' in a direction from the spindles but as K''' is free to turn in this direction upon the shaft of the roller K'' and as K'' cannot turn in this direction on account of the ratchet L and its hand no motion is given to the apron, but upon the return of the carriage a motion in the direction toward the spindles is given to the wheel K''' by the means above described and as the hand and ratchet in K''' engages the shaft of K'' the apron is moved forward as before

stated and feeds up the rolls. As the carriage approaches the spindles the lifters E climb upon the rollers attached to F F' and raise the clamp D as already described. If these operations be repeated and the rolls supplied upon the apron K' and the proper attachment made (which may be done by a small girl) the spinning may proceed until the bobbins are full. To operate this machine well requires one person to manage the wheels A and I and a small girl to supply the rolls.

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

The clamp D, D', the inclined planes E, E, the lifters F, F', the adjustable stop G, the trip H the hand and ratchet L with the hand and ratchet K'', M M' and N, combined and arranged as set forth and described, or any analogous device for the purpose of spinning wool.

MARGARET HULINGS.

Witnesses:

ELIHU T. JOHNSON,  
REBECCA BLACKBURN.