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M. Hulings. Spinning Mach.

Nº51,054.

Patentect Nov. 21,1865.

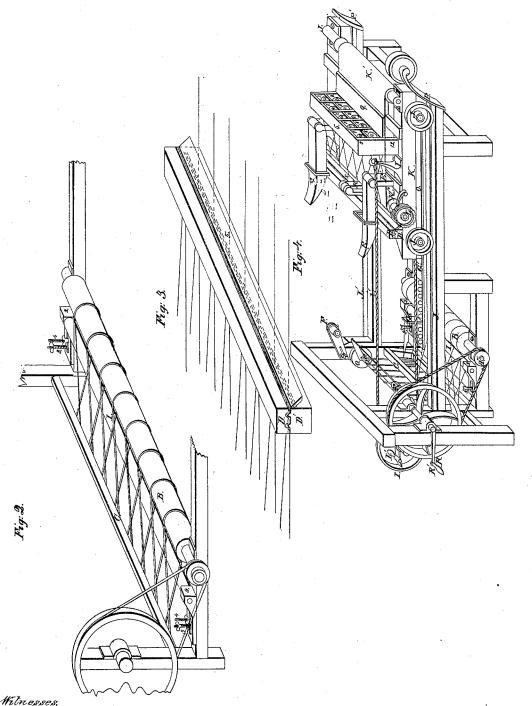
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N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

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Nº51,054.

Paterited Nov. 21, 1865.



Adonyah & Hulings Lonathan Willis

Inventor Margarel Flulings

UNITED STATES PATENT OFFICE.

MARGARET HULINGS, OF INDIANAPOLIS, INDIANA.

IMPROVEMENT IN SPINNING-MACHINES.

Specification forming part of Letters Patent No. 51,054, dated November 21, 1865.

To all whom it may concern:

Be it known that I, MARGARET HULINGS, of Indianapolis, in the county of Marion and State of Indiana, have invented new and useful Improvements in the Wool-Spinning Machine of Margaret Hulings, patented on the 3d day of June, 1851; and I do hereby declare that the following is a full, clee, and exact description of the construction and operation of the same, reference being had to the annexed drawings, in which—

Figure 1 is a perspective view of the box 6, attached to the carriage K, which box has as many apartments as there are spindles, for the purpose of holding the balls of doubled yarn for twisting the threads passing from the box 6 through holes, as shown in annexed draw-

ings.

Fig. 2 represents a tightener, 1, for the endless band. This tightener is a small roller of the same length as the drum B, with gudgeons in the ends, which work in boxes 2, with slots and set-screws 3, fastened to the frame-work or sill on which the drum B rests, between the spindles and the drum B. This tightener 1 can be moved back or forth by means of the said slots and set-screws 3, by which the band is tightened or loosened, as the case may be.

Fig. 3 represents a guard, 5, fastened to the stationary hand or clamp D', which hand is surmounted by the movable hand D. The joint of the two hands is cut in two half-round and three straight surfaces. The upper hand, D, being movable, is lifted up by means of the lifters E E, which are attached to the hand D by means of staples. These hands D D' rest over the axle of the roller on which the wheel J turns. This guard prevents the thread from winding around the axle, should they break.

Operation: The box 6 is placed upon the carriage K, as shown in annexed drawings, and is supported by studs 12, which are inserted into mortises made in the frame-work of the carriage K, the box 6 not touching apron K', so that it can move and carry the wool-rolls to the ends of the spindles, as in spinning. Af-

ter the yarn is doubled and wound on little balls, and not in little balls, so as to facilitate their unwinding to the last particle, the balls 10 and 11 are placed in the apartments 7 and 8, as shown in drawings in Fig. 1. The threads pass through holes in the box provided for that purpose, then between D and D', and then to the spindles, as in ordinary spinning. The strip G', which is provided with holes, into any of which the stud or stop G may be inserted, is lengthened out so as to have one additional hole for the stud or stop G to be inserted, allowing the carriage K to recede to the stop P, giving the threads their full length, at which time H comes in contact with G and the hand D falls, holding the threads as in spinning

9 is the lid of the box 6, as shown in Fig. 1. The tightener 1 is a roller, which is placed between the drum B and spindle-frame C, under the band, and, as the band runs from the drum B in an angle to the wheels on the spindles, the tightener can be moved forward or backward, tightening or loosening the band, as the case way he

as the case may be.

The guard 5 is a strip which is fastened to D', as shown in Fig. 3 of annexed drawings, projecting over the front axle, to which the wheel J is attached, preventing the threads from catching and winding around the axle.

The parts indicated in outlines in Fig. 4 and not colored are no portion of my present invention or improvements, but are merely drawn to illustrate the application of my improvements to my old machine; but

What I do claim, and desire to secure by Let-

ters Patent of the United States, is-

The combination and arrangement of the box 6, with the apartments 7 and 8, placed upon the carriage K, the tightener 1 and box 2, with slots and set-screws 3, and the guard 5, all operating substantially as and for the purpose described.

MARGARET HULINGS.

Witnesses:

JNO. L. SMITHMYER, ADONIJAH P. HULINGS.