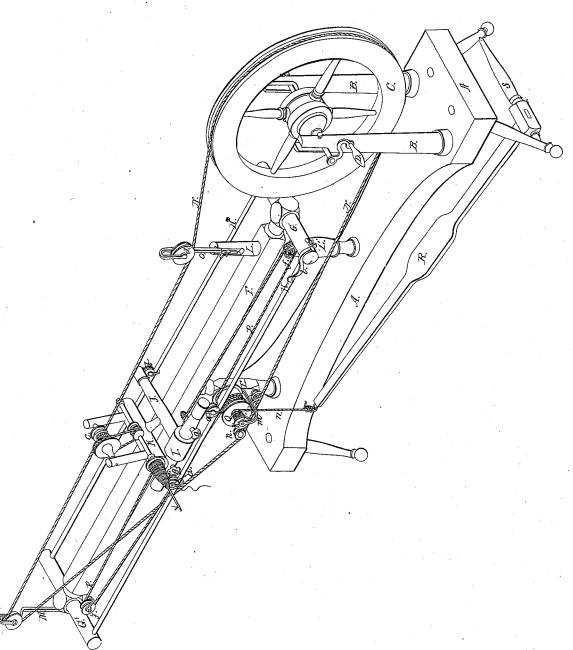
H. F. Wieeles: Sninning Mach.

Nº4,892.

Patented Dec. 15, 1846.



UNITED STATES PATENT OFFICE.

HIRAM F. WHEELER, OF SPRINGVILLE, PENNSYLVANIA.

SPINNING-WHEEL.

Specification of Letters Patent No. 4,892, dated December 15, 1846.

To all whom it may concern:

Be it known that I, HIRAM F. WHEELER, of Springville, in the county of Susquehanna and State of Pennsylvania, have invented 5 a new and Improved Spinning-Machine; and I do hereby declare the following to be a full, clear, and exact description of its construction and operation, reference being had to the accompanying drawing, making 10 a part of this specification.

The nature of my invention consists in securing the usual form of spinning wheel head to a vibrating carriage running on

ways, and combined with a treadle and driv-15 ing band wheel, in such a manner that a person can spin wool or cotton rolls without moving from his or her position, and walking to and fro, as is required to be done with the ordinary spinning wheel.

A, is the supporting stand of the spin-

ning machine.

C, is a band wheel.

B, B, are supporting standards of the band wheel.

D, is a crank on the axle of the same.

E, E', are standards rising from A supporting a longitudinal beam F.

H, H, are metallic wire tension ways passing through the ends and secured to the 30 cross-heads G, G', attached to each end of the beam F. The vibrating wheel head carriage, resting upon and running on the ways H, H, is composed of the longitudinal bar I, and the transverse bar J, permanently 35 connected to each other. The wheel head carriage rests and vibrates upon the friction rollers a, a, working in bearings attached to the under side of I, and upon a friction roller b, attached to the under side of the 40 outer end of J, the friction roller bearings passing under the wire ways, to prevent the carriage from being thrown off the same.

K, is the spinning wheel head of the usual form, having its shank inserted into the

45 center of J.

L, is a standard inserted into the upper side of the beam F, at its rear end, to which is secured by a set screw, the adjustable supporter o, of the regulating pulley d.

M, is a standard secured to the rear side of the cross head G', supporting a pulley e.

h, is a pulley working on an axle on the end of arm s, secured to the standard E, by the regulating screw i.

N, is a band passing from the under side of the band wheel C, to the pulley h, thence it ascends to the pulley e, on standard M, thence in a horizontal direction to the driving pulley c, of the wheel head, making two turns around which, it passes to and under 60 the tightening pulley d, and thence on to the band wheel C, again.

f, f', are pulleys having their bearings made fast to the inner sides of the cross

heads G, G'.

m, is a curved metallic arm, secured to the standard E, supporting the axle of the drum

Q, and the pulley k.

P, is a band having one of its ends made fast to the shank of the regulating screw g, 70 passing through bar I, of the wheel head carriage, from which it passes to and over the pulley f, thence to and three times around the drum Q, thence to the pulley f', and thence to the regulating screw g', to 75 which it is made fast, and thereby secured to the wheel head carriage.

R, is a driving treadle having one end let into and secured to the vibrating axle S, and its other end suspended by a cord n, 80 passing around pulley k, on the same axle

of the drum Q.

The operation of my spinning machine is as follows: The wheel head carriage is brought to the rear end of the ways H, H, 85 the backward movement of the carriage on the ways causing the band P, to impart motion to the drum Q, and pulley k, winding the cord n, upon the pulley, and thereby elevating the vibrating end of the treadle R, 90 the roll is then spliced to a thread on the spindle v, the attendant with the right hand takes hold of the crank D, to prevent the turning of the band wheel C, while the treadle R, is pressed down by the foot, thus 95 imparting motion to the drum Q, and carrying the wheel head and carriage to the other end of the ways, during which movement, rapid motion is imparted to the spindle v, by the action of the stationary band N, upon 100 the moving driving pulley c, of the wheel head, thereby forming a thread the length of the ways H, H. The attendant now imparts motion to the wheel C, with the right hand, and thereby draws the wheel head 105 carriage back to the rear end of the ways, by means of the band N, at the same time winding up the cord n, and elevating the treadle R. As the wheel head carriage approaches the rear end of the ways, the 110 spring l, made fast to the cross-head G, strikes against the side of the metallic supporter of the rear friction roller a, and prevents the bar J, of the carriage, from coming in violent contact with the standard L; also preventing its recoil, and retaining it while the roll is spliced. A partial revolution of the wheel C, after the wheel head carriage has been brought to the rear end of the ways, will wind the thread upon the spindle v, spun by the forward movement of the wheel head; the roll is then spliced, and the same operation is repeated as above set forth.

Having thus fully described the construc-

tion and operation of my improved spinning machine, what I claim therein as new 15 and desire to secure by Letters Patent, is—

and desire to secure by Letters Patent, is—
The combination of the ways H, H, with
the spring l, for the purpose of preventing
the wheel head carriage from coming back
with too much force, and also for preventing its recoil and retaining it, while the roll
is spliced, substantially as herein set forth.
HIRAM F. WHEELER.

Witnesses:
Albert Beardsley,
Miles Prichard.