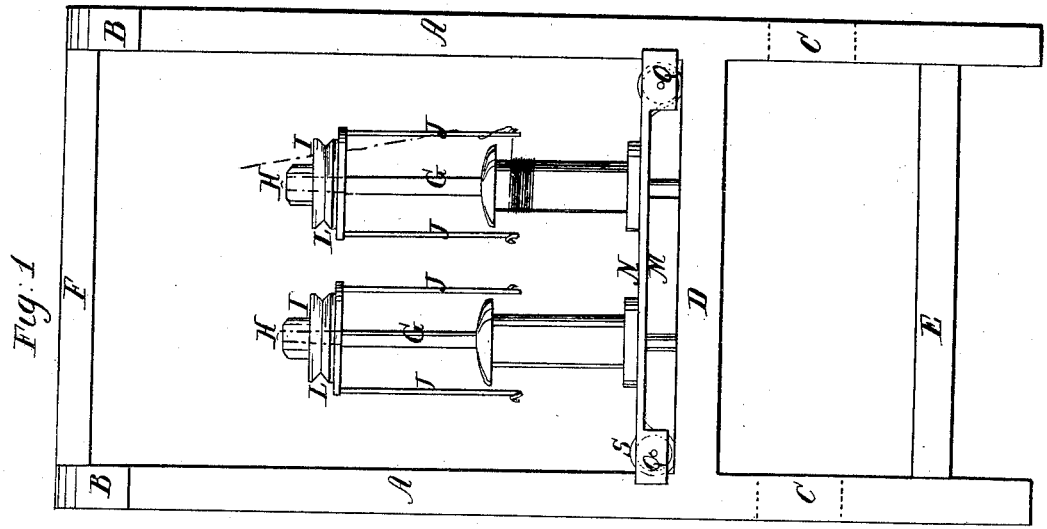
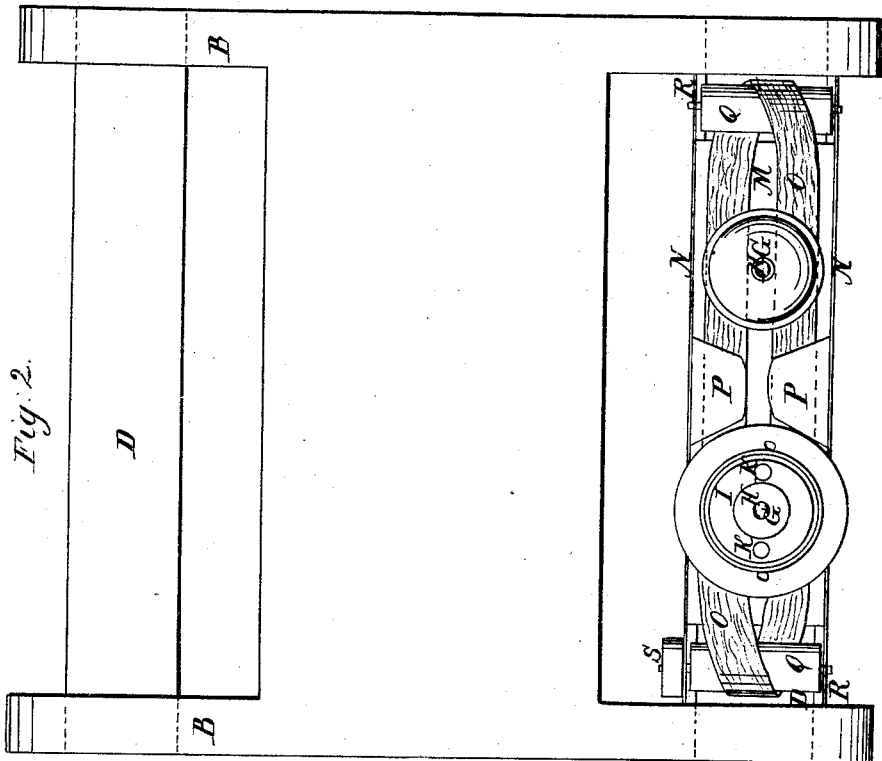


W. Perry. Spinning Mach.

N^o 11,972.

Patented Nov. 21, 1854.



UNITED STATES PATENT OFFICE,

WILLIAM PERRY, OF GRANITEVILLE, SOUTH CAROLINA.

SPINNING-FRAME.

Specification of Letters Patent No. 11,972, dated November 21, 1854.

To all whom it may concern:

Be it known that I, WILLIAM PERRY, of Graniteville, in the county of Edgefield and State of South Carolina, have invented certain new and useful Improvements in Machines for Spinning Fibrous Substances; and I do hereby declare that the same are described and represented in the following specifications and drawings.

To enable others skilled in the art to make and use my improvements I will proceed to describe their construction and operation referred to the drawings in which the same letters indicate like parts in each of the figures.

Figure 1, is a front elevation of my improvements. Fig. 2, is a top view.

The nature of my invention consists in an endless band or bands of cloth or some other material, so constructed that it or they may be traversed upon the bobbin rail, each side of the spindles, to graduate the friction under the bobbins as may be desired, so as to adjust the drag of the bobbin to suit the kind of yarn being spun.

In the above mentioned drawings A A are parts of the frame connected by the top bars B B, and grits C C, and also by the spindle rails D D, and bottom bars E E; the bars B B being connected together by the roller beam F; the whole constituting a frame to which the other parts of the machine are attached or connected.

The spindles G G are made of round steel rods turned down at the upper ends so as to form a shoulder and pivot H for the whirl I to revolve on; the lower ends of the spindles being fastened in the rails D D. The whirls I I may be made in the form represented or such other form as may be desirable, and provided with two arms J J having a twist or quirl at the lower ends for the yarn to pass through, as it passes onto the bobbin; this whirl I is also provided with two holes K K, for the yarn to pass through as it descends from the usual guide above the spindle onto the flier. These whirls are operated by bands (from a cylinder placed and operated in the center of the frame,) which pass round the whirls in the scores L L, so as to turn the whirls and fliers upon the upper ends of the stationary spindles G G.

The bobbin rail M may be made of sheet or plate metal with the edges turned up so as to form ribs N N for the band O O to

traverse between; which ribs in conjunction with the points or pieces P, fastened to them in the spaces between the bobbins, hold the band O O nearly flat upon the rail with one edge near the spindles under the bobbins and allows it to be traversed by turning one or both of the rollers Q Q which rollers are provided with pivots fitted to turn in the projections R R upon the ends of the bobbin rail M. The pivot of one of the rollers Q has the pulley S fastened to it; to which a belt may be applied from such part of the machine as may be most convenient, so as to turn the roller and traverse the belt or band O O as required to graduate the friction under the bobbins to suit the kind of yarn being spun upon the frame.

I have only represented such parts of a throstle spinning frame as were necessary to show the construction and arrangement of my improvements and their connection with the other parts of a spinning frame of the ordinary construction; and I contemplate that the bobbin rail may be traversed by such devices as are in common use for that purpose. Also that two bands may be used instead of the band O O and made to pass straight around the rollers Q Q and pass under the rail from end to end; in such case the rollers Q would operate best in the position in which they are represented. But if only one band is used it may be necessary or desirable, to incline the rollers Q and to make them larger in proportion than those represented; and that in either case it may be necessary to have some sharp points projecting from the rollers to insure them to propel the bands or band. For some purposes it may be best to have a roller placed lengthwise under the bobbin rail, and to make the rail flat upon top with the corners rounded off so as to use a series of short bands instead of the band Q, and make them run across the top of the rail and around the roller placed under it upon one side of the spindles; or two rollers may be used under the rail, that is one upon each side of the spindles, if preferred. The motion given the bands may be with, or against the motion of the bobbins, as it may be desirable, to diminish or increase the drag of the bobbin upon the yarn being spun; and the amount of friction may be further varied by moving the bands faster or slower as may be necessary.

To set the spinning at work some yarn

should be wound upon the bobbins and the
end taken through the twist in the end of
the flier arm and it may be wrapped one or
more times around the flier arm and then
5 put through one of the holes K in the whirl
and through the ordinary guide above the
flier and pieced onto the sliver delivered by
the rollers in the usual manner. When the
bobbins are full they may be removed and
10 their places supplied by empty ones by tak-
ing up the fliers and putting them on again
after making the change.

With my improvements a spinning frame
may be run much faster than most of the
15 frames have been run heretofore because such
an amount of friction may be applied to the
bobbins as may be desirable besides the
frames may be made far cheaper than those
used heretofore.

What I claim as my invention and desire 20
to secure by Letters Patent is—

A movable band or bands, whether made
endless or otherwise, of cloth or some other
material, so constructed that it or they may
be traversed upon the bobbin rail under the 25
bobbins each side or between the spindles,
to graduate the friction under the bobbins
and adjust the drag of the bobbin to suit
the yarn being spun upon the frame sub-
stantially as described. 30

In testimony whereof, I have hereunto
signed my name before two subscribing wit-
nesses.

WILLIAM PERRY.

Witnesses:

JAMES JONES,
WM. CRUMPSTON.