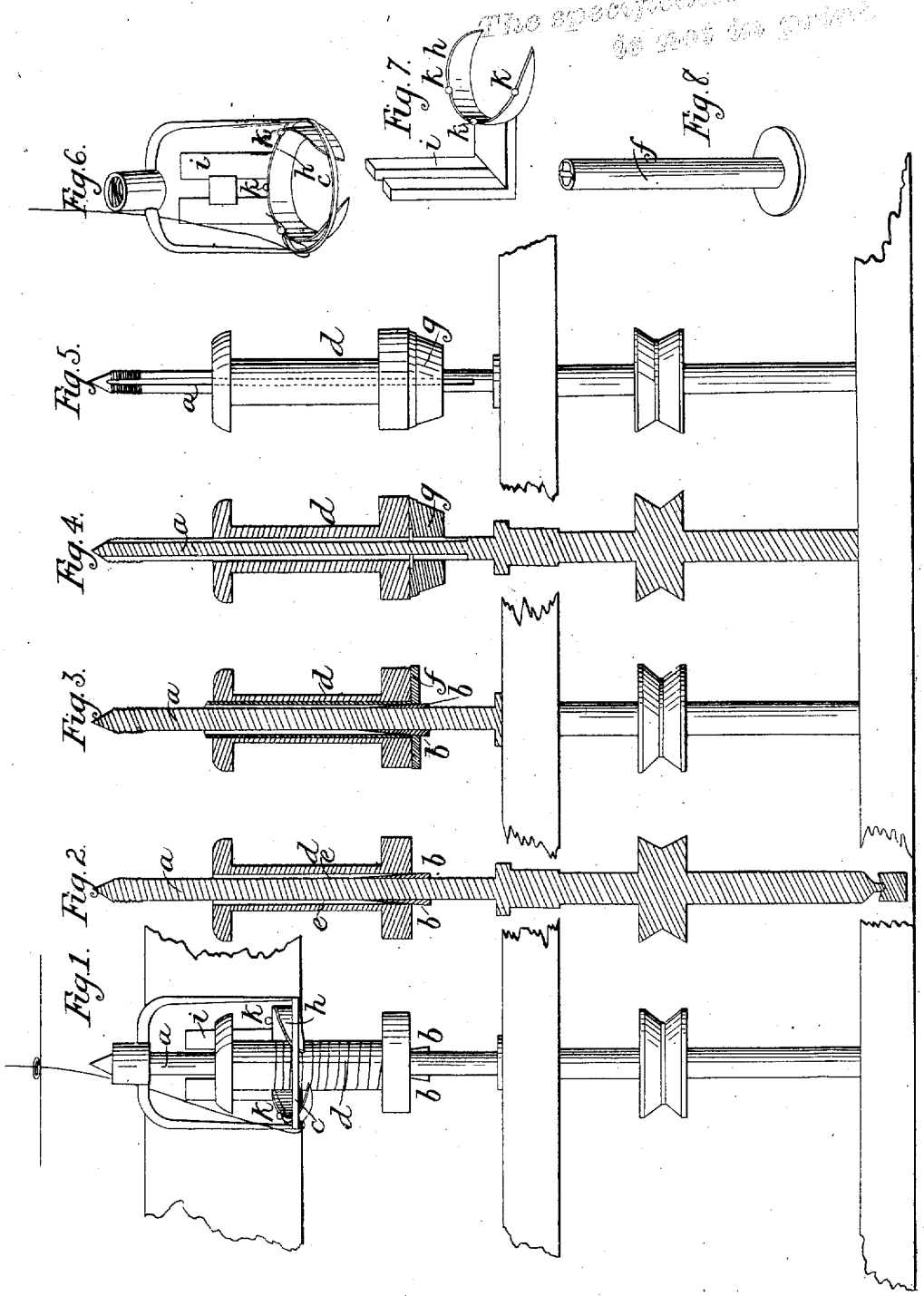
PATENTED NOV. 11, 1830.

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J. THORP.

MACHINERY FOR SPINNING AND IN SPINNING COTTON YARNS.



THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

X6,445 — Nov. 11, 1830

John Thorp of Providence, Rhode Island.

Letters Patent.

The schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said John Thorp and of specifications himself of his improvement for spinning cotton yarns

Be it known that I John Thorp of Providence in the county of Providence & State of Rhode Island &c have invented constructed made and applied to use, new and useful improvements in machinery for spinning and in spinning cotton yarns, being improvements in my running up spinner patented on thirtieth day of June A.D. 1829. by which is produced a new mode of obstructing the traversing progress of the yarn, causing it to fall back of the cap, and wind upon the bobbin. The spindle used is the common throttle spindle, two projecting lips are affixed to that part of it where the bobbin usually traverses. These lips are on opposite sides of the spindle, are parallel with it, and project about the sixteenth of an inch. they extend up no further than the face of the bobbin, when at its highest position, and there should be length enough to the spindle above them to allow the bobbin to be raised above them, so as to turn on the spindle for the purpose of spooling the yarn for piecing &c.

The common throttle flyer is converted into what I call a cap, by affixing to the lower extremity of its arms, in a horizontal position a ring called the connecting ring sufficiently large to allow the bobbin to traverse up and down through it, this ring guides the yarn to, and distributes it on the bobbin. The yarn is not connected with the cap, but is left to coincide around its surface. The bobbin used is the common throttle bobbin, with a channel or groove formed on each side of its projection in which the above described lips of the spindle traverse, and by which the bobbin is made to turn

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with the spindle; or there may be a tube of the height of the bobbin, in which the two channels or grooves may be formed, having a large head or collar at the bottom on which the bobbin will loosely rest. This tube may be made of sheet iron and not entirely closed, and brazed to a head or collar of the same. In this case the opening in the side of the tube, will answer for one channel or groove, and the other channel or groove, and one of the lips on the spindle, may be dispensed with. The friction of the base of the bobbin on the head or collar will be sufficient to give motion to the bobbins, and the bobbin being allowed to turn on said tube, will at any time yield the yarn when it is necessary it should be drawn from it, as in piecing the ends &c. Or instead of said lips, on the spindle, grooves or channels may be made in it, and a collar used to give motion to the bobbin. This collar should be about the size of the base of the bobbin, and made to slide loosely on the spindle. From the side of its perforation two lips project inward, and into the channels or grooves in the spindle causing the collar to turn with the spindle.

But the principal improvement consists in a stationary spiral lip or rim, that I call the check. The upper edge of the check is within the connecting ring, one end, or part of this check is placed, and remains above this ring, while the other end remains below it. The space between the inside of this ring and the outside of the check, should be large enough to allow the yarn to recede freely in it. The friction or tension requisite to wind the yarn upon the bobbin, is produced by the upper edge of the check, over which the yarn is drawn or compelled to pass at every turn of the spindle.

The check is a thin piece of metal, bent flat-wise forming a curve corresponding with a circle less in diameter than that of the ring. It is fastened to above the [illegible] bottom or otherwise fastened to a fixed bar or rail that stretches along the spinning frame back of the spindles. By means of a slot or mortise in said bar the check can be raised or lowered at pleasure, bringing its upper edge more or less above the bottom of the connecting ring and pre-

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more or less angle in the yarn, consequently increasing or diminishing the friction or tension of the yarn, and winding it more or less light on the bobbin, said check should extend half way round the bobbin though a greater or less proportion may answer the purpose

Small polished notches or protuberances on the upper edge of the check, will produce an increased tendency on the yarn, the yarn passing down on the outside of the connecting ring, or lower edge of the cap, then up between said ring and the check and over the upper edge of the check to the bobbin.

Among the several improvements above described there is but one, in which I claim an exclusive property, and that is the check as afore described, by which the progress of reeling the yarn is obstructed, the yarn made to fall back of the cap and be wound on the bobbin

Providence R. I. Nov.r 1.st 1830

Witnesses
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