(12) **United States Patent**
Thorp

(10) **Patent No.: X3361**
(45) **Date of Patent: Aug. 10, 1821**

(54) **BRAIDING**

(76) Inventor: **John Thorp**

John Thorp,

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 himself of his improvement being a Braiding Machine

This machine consists of wheels, the number of which is in proportion to the kind of braid or the number of strands that forms it. These wheels are placed in a circular form, so that the carriers will have a direction pointing to the centre where the braid is formed. The inner surfaces of said wheels are concave, forming a curve corresponding with the circle on which they stand, and are of an equal thickness connected one with another, by cogs causing them to turn all together, and accurately on their centres, each forming its revolution in a proper time.

There are two plates, whose surfaces form the same curve of the said wheels, one of which has a shaft confined to, and projecting from its centre, passing loosely through the centre of the other plate carrying it. These plates, when together, constitute what I call a carrier, and is that part of the machine, which contains and carries a spool, bobbin or a strand, and are as many in number as the strands or strands requires to form the braid, each of which is placed astride upon the rims of said wheels, and is pressed together by a spring, which causes them to pinch the wheels producing a friction sufficient to hold them in their places, and is carried round in their proper route by the wheels as they turn shifting in their intercommunication from one wheel to another, which is effected by arms or studs. These arms or studs are confined, one to the carrier, and another steadfastly fixed to some permanent part of the frame, with its point extending so near to where the rims of the wheels come in contact as to interfere with the point of the one belonging to the carrier; and their position are such as to cause the said

carriers from the rim of one wheel on to the rim of another; and so on round, from wheel to wheel alternately forming the braid. In the rims of said wheels are notches in which the shafts of the carriers lie, and by which they are steadied in their circumvolution. These notches are so arranged as to cause exactly opposite each other, admitting the shafts of the carriers to pass between the wheels as they turn. There are other small notches in said wheels which receive a projection from the carriers, serving also to keep them in their places. Said Machine is capable of making nearly all kinds of braid, such as whip thongs, both single and twilled, also the flat braids, single and twilled, cords &c. and with more from three strands to almost any number; and being constructed to operate without shuttles, secures it subject to no sudden vibration, nor abruptness in its operation; as the strands or threads that form the braid all circulate regularly, without obstruction or impediment of motion, &c.

To connect one of these machines, which is calculated for braiding cords into one that will form a flat braid, no other alteration is necessary than to dispense with one of the post with notches, letting the carriers return back and forth, instead of continuing round the whole circle. This however necessary in making flat braid, to have the notches or rims which either smaller or larger, so as not to lodge the carriers in the same place from which they were taken. The braid is taken forward by a weight or leading rollers

Witnesses

William A. Allen

William Neal Shipley

John Sharp

Feb (Augst 10. 1821 Patented)

DRAFTSMAN'S DIVISION.

All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

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DEPARTMENT OF THE INTERIOR,

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Washington, D. C., ..., 189_

SIR:

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By direction of the Commissioner:

Very respectfully,

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Chief Clerk.

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United States Patent

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