J. GREENWAY.

LOOM SHUTTLE MOTION.

No. 266,361. Patented Oct. 24, 1882.

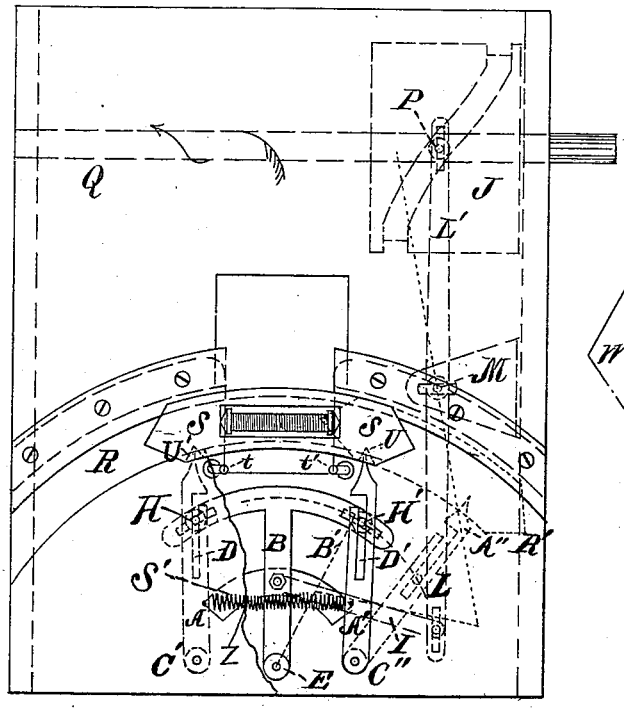

Fig. I.

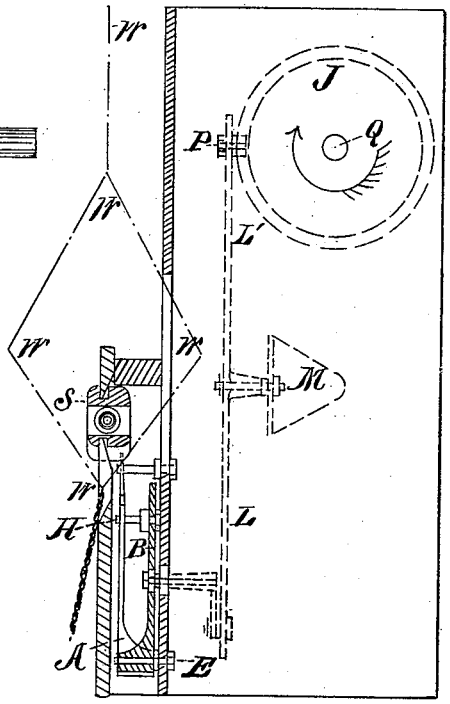

Fig. II.

Witnesses:
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per
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UNITED STATES PATENT OFFICE.

JOHN GREENWAY, OF PATERSON, NEW JERSEY.

LOOM SHUTTLE-MOTION.

SPECIFICATION forming part of Letters Patent No. 266,361, dated October 24, 1882.

Application filed December 19, 1879.

To all whom it may concern:

Be it known that I, JOHN GREENWAY, of the city of Paterson, in the county of Passaic and State of New Jersey, have invented a new and useful Improvement in Loom Shuttle-Motions, of which the following is a specification.

This invention relates to that class of loom shuttle-motions known as "positive motions," wherein the shuttle employed is longer than the width of the cloth to be woven, and is drawn through the shed in the warps by fingers on each side of the warp, which alternately take their hold on the shuttle when the latter is in its middle position—*i. e.*, between the sheds of the warp—and while one finger carries or draws the shuttle to its side of the warp, the other remains idle on the other side of the warp until the shuttle is again delivered to it by the first finger. The actuating mechanism and moving parts of the shuttle-motion are, with the exception of the shuttle itself, protected by a cover of metal or wood, preferably the latter, the curved side of which forms the inside guide of the raceway.

Figure I is a plan view of my invention with part of the cover removed, and Fig. II is a side elevation with the upper part of the mechanism shown in section in both figures, like parts being represented by the same letters of reference.

S is the shuttle, shown in Fig. 1 as in the center of its travel, provided with the recesses U and U′ for the ends of the actuating-fingers.

A and A′ are the shuttle-actuating fingers, provided with L-shaped slots D and D′.

C′ and C″ are the pivots or centers upon which said fingers vibrate.

R R′ is the raceway, struck from the center.

B is a T-headed lever, pivoted at E, and carrying at the extremities of its arms the studs H and H′, which work in the slots D and D′ of the fingers A and A′.

I is a connecting rod or link between the lever B and the lever L L′, whose fulcrum is at M. The end L′ of this lever carries the roller P, which engages in the slot of the cam J on the shaft Q. By the rotation of shaft Q in the direction indicated by the arrow the lever L L′, link I, and lever B will be caused to assume the positions indicated by the dotted lines, disengaging the stud H from the finger on the left-hand side, and carrying by the stud H′ the finger on the right-hand side to the dotted-line position, the said finger carrying with it the shuttle beyond the warps, where it remains until the reed has done its work of beating up the last weft-thread laid in front of it, and then the shuttle is again traversed through the warps by the reverse movement of lever B and fingers A A′. The fingers, when idle, are held against the stops *t* and *t′*, in position ready to receive the shuttle on its return, by the springs Z connecting the fingers.

What I claim is—

1. The combination of the supporting-frame and the stops *t* and *t′* with the shuttle-actuating fingers, spring Z, and mechanism for operating said fingers, substantially as shown, and for the purpose described and set forth.

2. The combination of the lever B, link I, lever L L′, roller P, and cam J, with the actuating-fingers A A′, arranged as and for the purpose described and set forth.

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Witnesses:
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