

Garretson & Hoffman. Hand Loom.

No 50,925.

Patented Aug. 7, 1866.

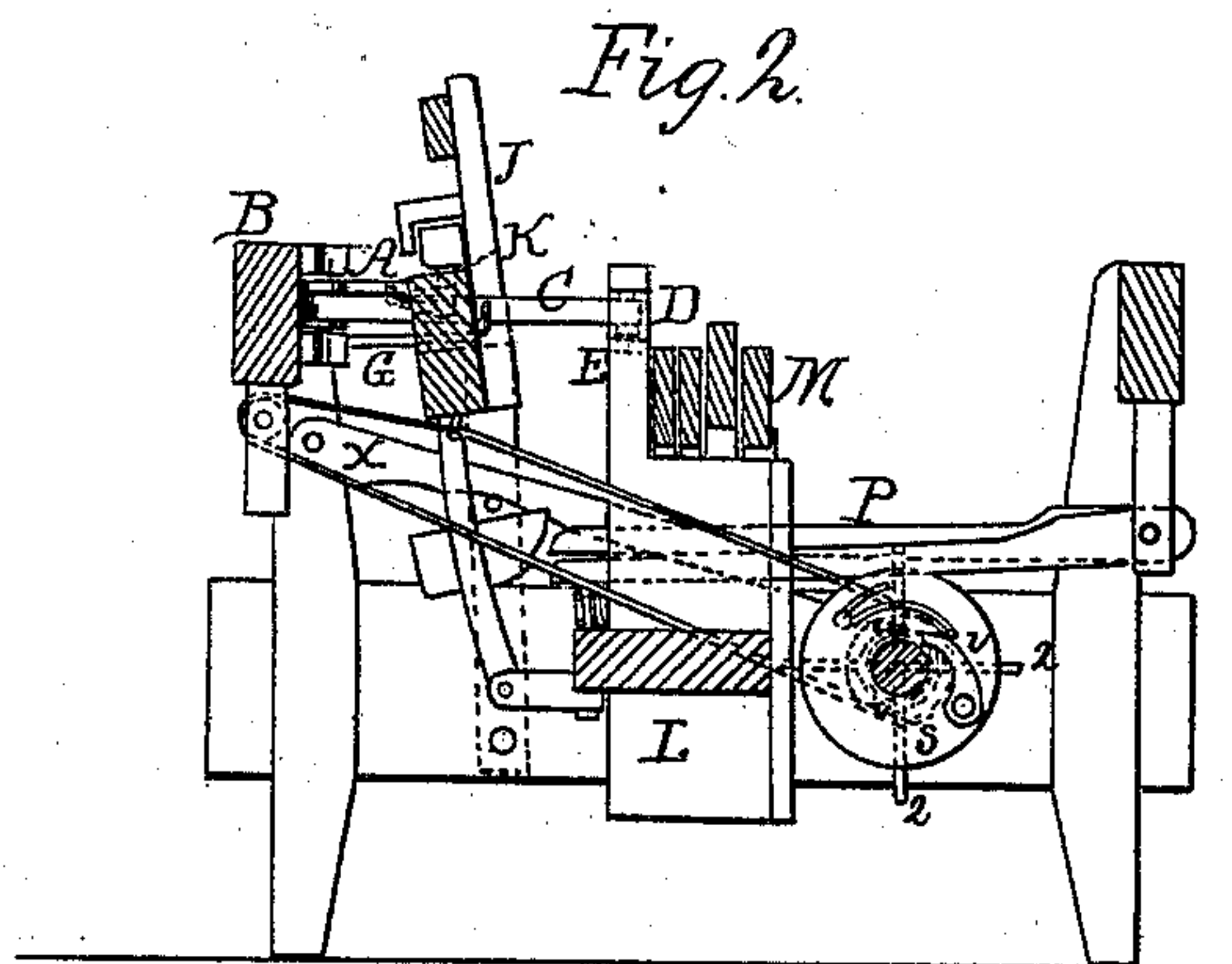
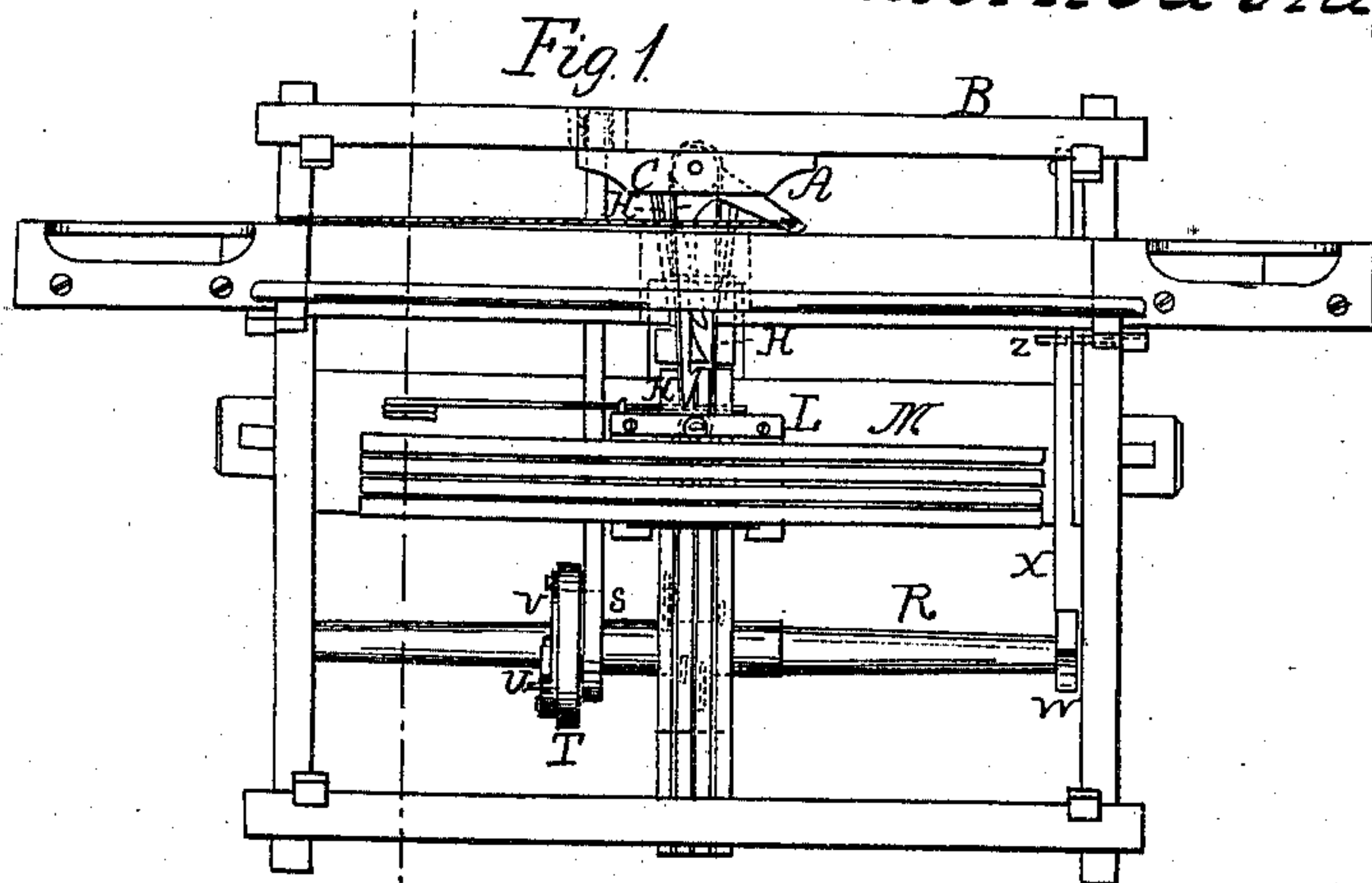
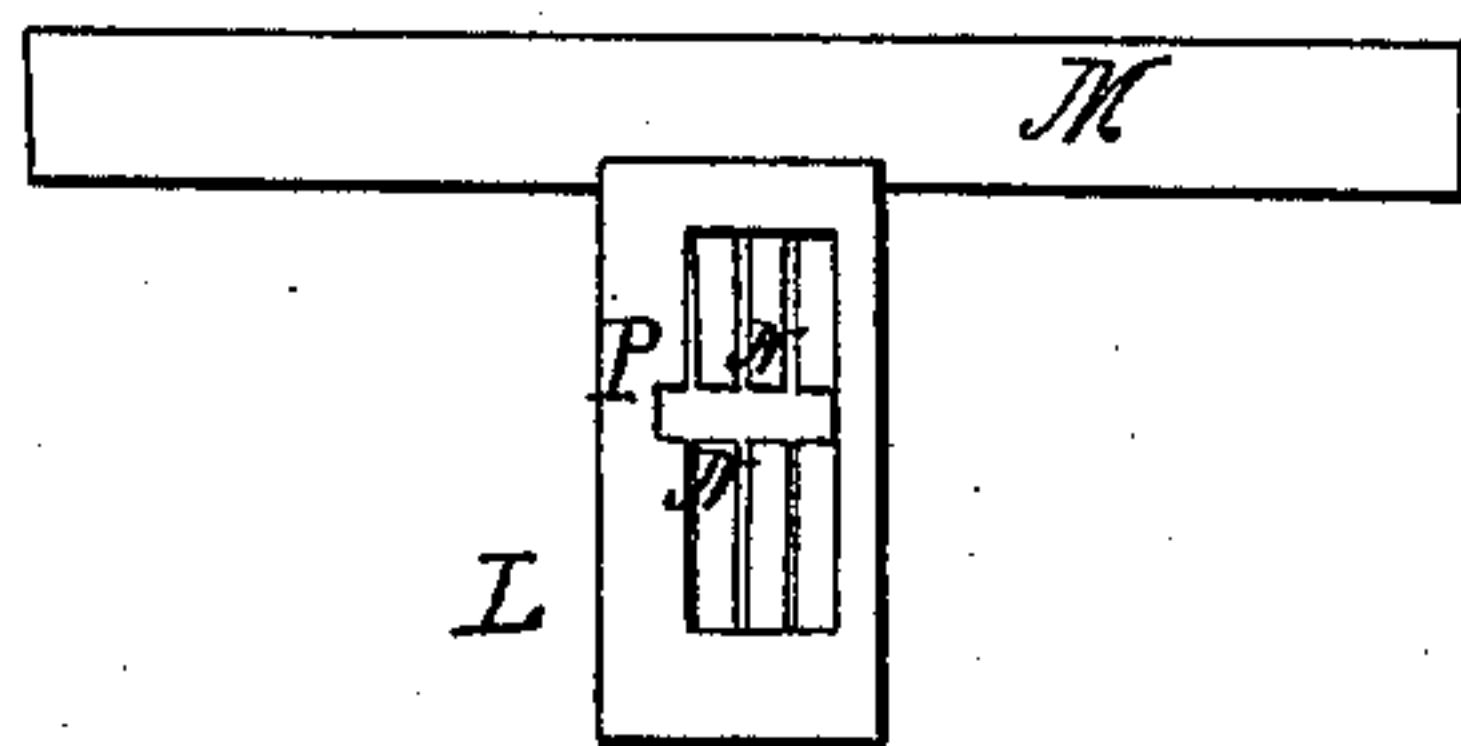


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN LOOMS.

Specification forming part of Letters Patent No. 56,925, dated August 7, 1866.

To all whom it may concern:

Be it known that we, A. P. GARRETSON, of Ripley, Brown county, State of Ohio, and J. M. HOFFMAN, of Miami, Miami county, State of Indiana, have invented new and useful Improvements in Looms; and we do hereby declare the following to be an exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of our invention consists in the arrangement and combination of the following devices, viz: the picker, hooks, and side binders, pin in the lathe for the purpose of vibrating the shuttle, the shedders, with their projections, and the square block and latch, as more specifically hereinafter described.

Figure 1 is a top view of the loom; Fig. 2, a side elevation, and Fig. 3 a front view of the harness-frames.

The construction and operation are as follows:

For throwing the shuttle we have a picker, A, pivoted in the breast-beam B, with an endless belt, C, fastened to the back of the picker A, and extending to the pulley D in the stationary box E and between the binders G, which latter project from the breast-beam, and are for the purpose of holding the hooks H up to the center of the lathe J, so that the pin K, that is in the lathe J between the hooks G, will catch and operate or vibrate the picker A.

L is a box, in which slide vertically the bars N, which are secured to the harness-frames M. A portion of each bar, in this case, is cut away, leaving the pieces projecting one from the bottom upward, and the other from the top downward. These projections are in the same line, one directly above the other; but the projections on each frame are a little to the left of those on the frame next in front of it.

The treadles P are pivoted side by side on a pin at the center of the end framing of the loom, and they pass, severally, through the openings made in the bars N, and when either of them is raised by the pins on the treadle-shaft it raises its respective harness-frame.

The number of treadles corresponds with the number of harness-frames in all cases.

The cam-shaft R, which operates the treadles, receives its motion from a loose pulley, T, which surrounds this shaft. This pulley is provided with a spring-pawl, U, which engages with pins or teeth V on this shaft and moves it forward. This pulley is turned backward and forward on this shaft by means of an endless strap or band which is attached to the under side of the lay and passes around a hub on this pulley T. The motions of the lay give the strap a forward and backward motion, and rotate the pulley in different directions; but on the backward motion the pawl slips over the teeth or pins V, and does not rotate the shaft. The lathe must be moved fully backward and forward to give full operation to the machine.

The square block W on the shaft R, and the falling latch X, which is pivoted to one of the uprights of the breast-beam, are to preserve the pattern cams or arms Q on the cam-shaft R in their erect position and prevent the shaft from rolling too far forward. The square block W on the shaft R is held by the falling-latch X, that is operated by a projecting pin, Z, on the sword of the lathe J, for controlling the rising or falling of the latch.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The endless belt C and picker A, with the hooks H and side binders, G, fastened in the breast-beam B, and the pin K in the lathe J, all arranged as described, for the purpose of vibrating the shuttle.

2. The shedders M, with their projections N, and elevators P passing through them, with the arms Q and reacting pulley T on the cam-shaft R, when arranged and combined as herein described, and for the purposes set forth.

3. The square block W on the shaft R, with the falling latch X, when arranged and operated by the lathe as herein described.

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J. M. HOFFMAN.

Attest:

M. N. TAYLOR,

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