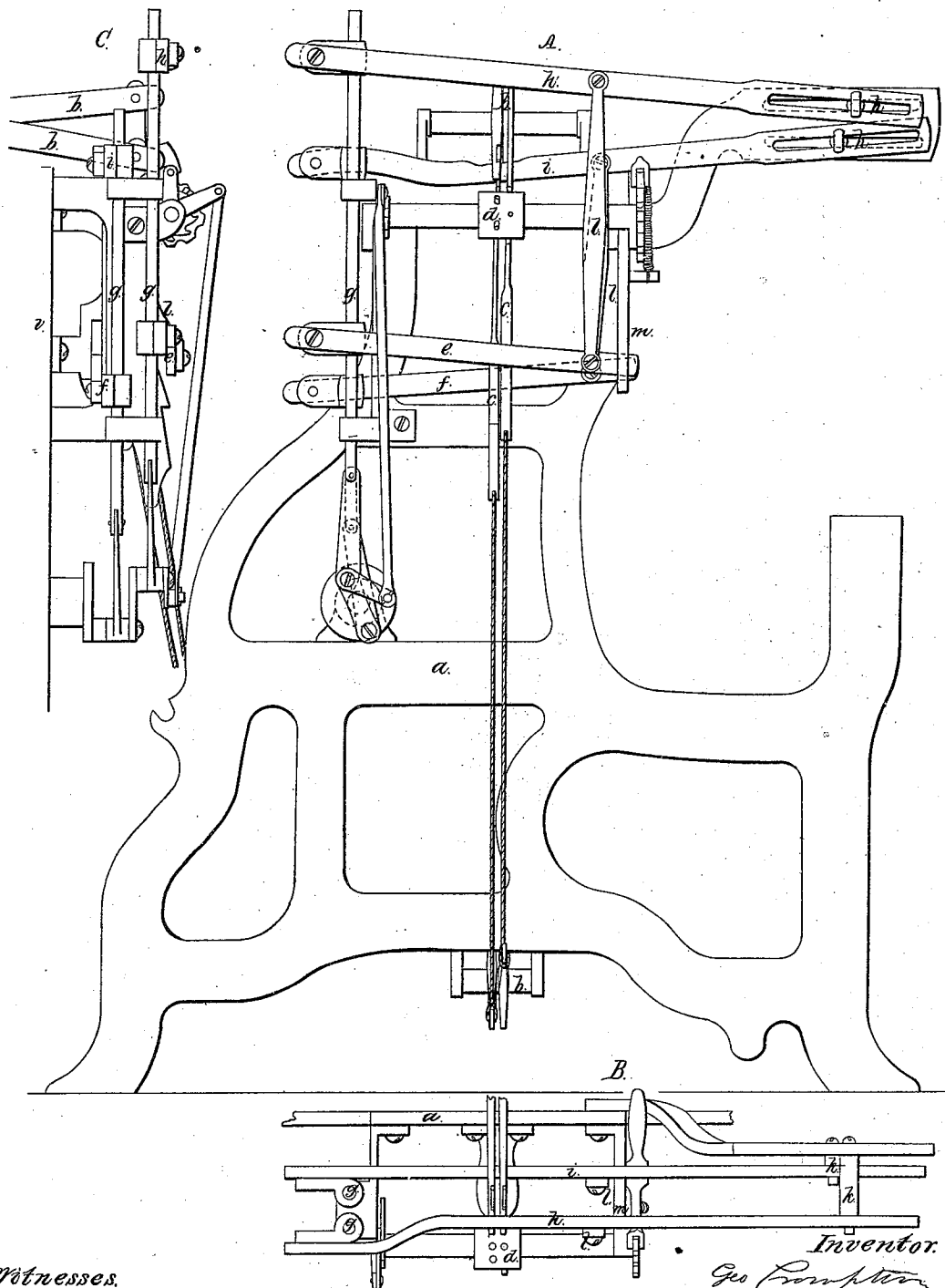


G. Crompton. Loom.

N^o 85,432.

Patented Dec. 29, 1868.



Witnesses.

C. Warren Brown
S. M. Poul

Inventor.

Geo Crompton
by his Attys.
Crosby & Hutton

United States Patent Office.

GEORGE CROMPTON, OF WORCESTER, MASSACHUSETTS.

Letters Patent No. 85,432, dated December 29, 1868.

IMPROVEMENT IN LOOM.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GEORGE CROMPTON, of Worcester, in the county of Worcester, and State of Massachusetts, have invented an Improvement in Looms; and I do hereby declare that the following, taken in connection with the drawings, which accompany and form part of this specification, is a description of my invention, sufficient to enable those skilled in the art to practise it.

My invention has reference to the arrangement of angular lifter, depresser, and evener-levers of fancy looms; and

The invention consists in pivoting the evener-levers upon stationary fulcra, and connecting the lifter and depresser-levers to such pivoted levers by links, so as to produce a parallel movement between each evener, and the lifter or depresser with which it is connected, the evener-levers and lifter and depresser-levers being connected at their outer ends to slide-rods, by which they are actuated.

The drawing represents a loom or loom-frame, with my improvement embodied thereupon.

A shows an end view of the loom;

B, a plan, and

C, an end view of the levers and lever-mechanism.

a denotes the frame.

b b, the upper and lower harness-levers, between the outer ends of which the hooked jacks *c* are hung, the jacks being shown as jointed directly to the upper levers *b*, and strung to the lower ones.

These jacks are distributed after each successive change of the shed by a pattern-chain or cylinder, *d*, and they are raised and lowered, to form the shed, by a lifter-lever, *e*, and a depresser-lever, *f*, which are hung to rise and fall angularly, and are connected to and derive their motion from slide-rods *g*, actuated by cranks at the end of the lathe-shaft.

After each formation of shed and throw of the shuttle, the jacks are returned to or towards their normal position, and as they complete this return-movement, they are clamped between angular evener-levers *h i*, which are hung on stationary fulcra *k*, or to a stationary fulcrum-plate, and are jointed at their opposite ends to and are reciprocated by the slide-rods *g*.

While the outer ends of the lifter and depresser-levers, and the outer ends of the evener-levers are jointed to the slide-rods, and the inner ends of the evener-levers are pivoted upon stationary fulcra, the

inner ends of the lifter and depresser-levers, in order to have movements coincident with the lifter and depresser-levers, are jointed to such evener-levers by links *l*, the levers *e f* being made short, and having their ends moving in guide-slots in a plate, *m*, thereby obtaining a coincident movement of each lever, *f* or *g*, with the corresponding evener-lever, without extending the lifter and depresser-levers out to the same length as the levers *h i*, to be hung at their ends on stationary fulcra, the same as are such levers *h i*.

Now, in some looms having angular lifter and depresser-levers, there have been employed angular or vibrating lifter and depresser-levers, pivoted on fulcra in the cloth-making plane, and short evener-levers linked to and so as to move coincident with such pivoted lifter and depresser-levers, both sets of levers being actuated from slide-rods, as shown here.

But such an arrangement involved the necessity of projecting the lifter and depresser-levers out over and near the drop-boxes, and their proximity thereto interfered with the removal of the shuttle-boxes for repairs, the standards for supporting the pivoted ends of the levers having to be removed, to effect the removal of the boxes, and to remedy this defect, I project the evener-levers out to the cloth-making plane, and pivot them there to a standard or fulcrum-plate, as shown, and then make the lifter and depresser-levers short, and connect them by links to the evener-levers, thus leaving all the space clear below the eveners, or between them and the boxes, thus allowing the boxes to be readily withdrawn, without removing any mechanism connected with the harness-motion, the evener-levers being pivoted overhead, and entirely out of the way of the attendant.

I claim the arrangement of the angular evener-levers, pivoted in or near the cloth-making plane, with short lifter and depresser-levers, connected to the evener-levers by links, substantially as and for the purpose described.

Also, the arrangement of short lifters and depressers, connected to eveners, pivoted as above described, with the slide-rods, pattern-chain or cylinder, and harness-jacks, substantially as set forth.

GEO. CROMPTON.

Witnesses:

HORACE WYMAN,
J. A. WARE.