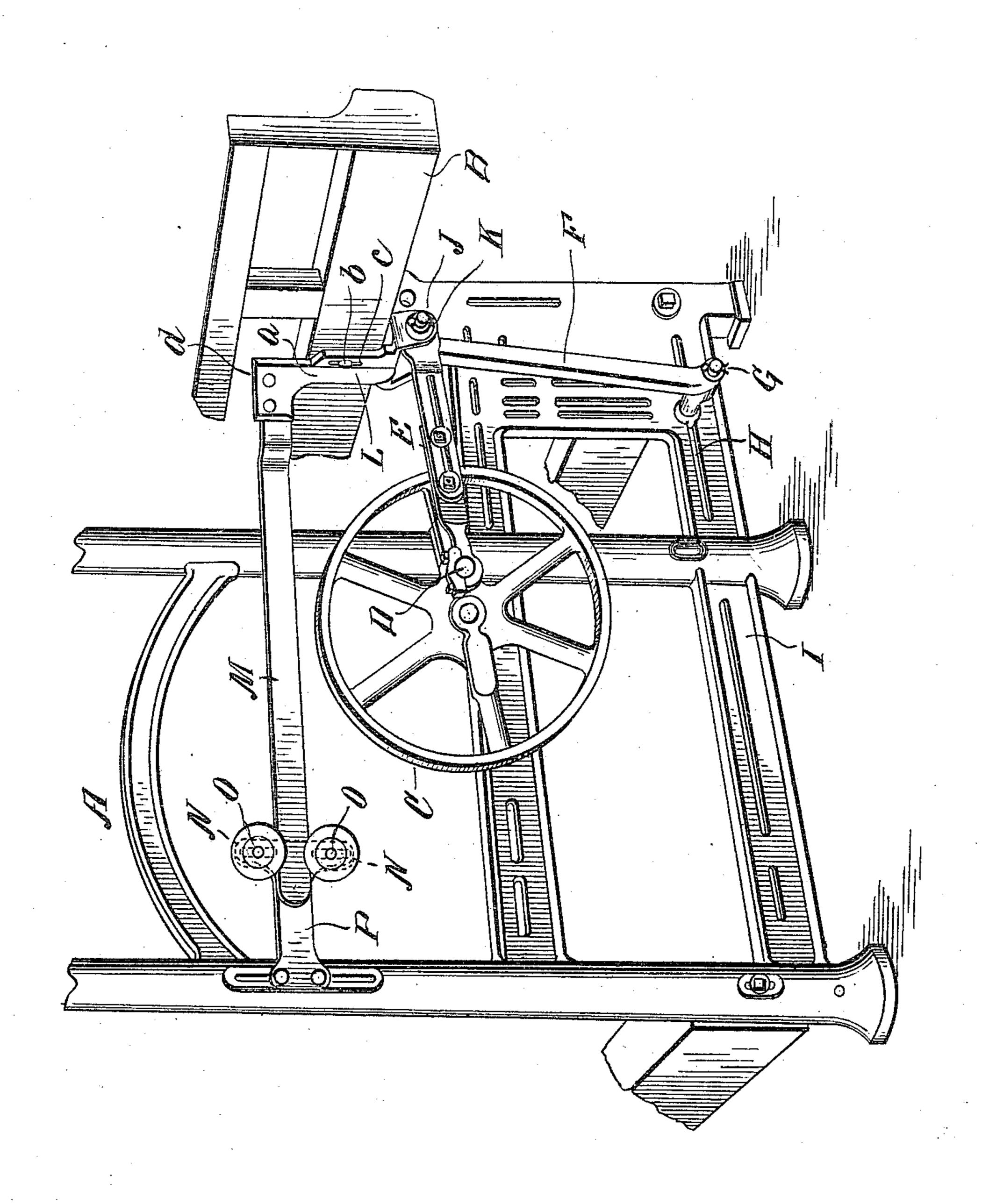
## A. INSINGER. LATHE MOTION FOR LOOMS. APPLICATION FILED AUG. 21, 1907.

985,594.

Patented Feb. 28, 1911.



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## UNITED STATES PATENT OFFICE.

## ALFRED INSINGER, OF PHILADELPHIA, PENNSYLVANIA.

## LATHE-MOTION FOR LOOMS.

985,594.

Specification of Letters Patent. Patented Feb. 28, 1911.

Application filed August 21, 1907. Serial No. 389,481.

To all whom it may concern:

Be it known that I, Alfred Insinger, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia 5 and State of Pennsylvania, have invented a certain new and useful Improvement in Lathe-Motions for Looms, of which the fol-

lowing is a specification.

This invention relates, generally, to looms, 10 and particularly to the lathes or battens of narrow-ware looms, and has for its object to provide a device whereby the beam may be made to maintain substantially a vertical position during the whole of its movement or 15 oscillation, and it consists of the parts and combinations of parts hereinafter described and claimed.

In the accompanying drawings, forming a part of this specification, is represented a 20 perspective view of the end of a loom frame showing my invention in operative position thereon.

Referring to the drawing A represents the end frame of a loom, B the batten or lathe 25 beam, and C the fly wheel. The lathe or batten is connected to the crank pin D, carried by the wheel C, by an adjustable rod or pitman E. The parts described above may be of the usual or any preferred type as they 30 form no part of my present invention.

The lathe beam is pivotally supported at or near the ends and, where the length of the beam is such that it is desirable so to do, at one or more points intermediate its ends, 35 by a sword arm F which is mounted on a stud G adjustably secured in a slot H in the lower transverse beam I of the end frame, and at its upper end on a pin J inserted in the perforated ears K depending from the 40 bracket L. The end of the pitman E is also mounted on the pin J between the ears K alongside the end of the rock or sword arm. The bracket L is formed with the vertically extending arm a and is vertically adjustably 45 secured to the rear side of the lathe beam by means of the screws or bolts b which extend through slots c formed therefor in the arm and enter the beam.

At its upper end the arm a of the bracket

is formed with the laterally projecting per- 50 forated ear or lug d to which is bolted one end of an arm M, the other or free end of which extends back to and between the guide sheaves N which act as a support and guide for said arm. The sheaves N are mounted 55 on studs O which are adjustably secured in slots, as indicated in dotted lines, in a bracket P adjustably secured to the rear post or upright of the end frame.

By vertically adjusting the sheaves on the 60 bracket P the pitch of the batten or lathe

beam may be varied as desired.

It will be observed that the above construction and arrangement of the parts enable me to secure a back and forth motion or vibra- 65 tion of the lathe beam with but two joints one at the lower end of the sword arm and one for the upper end of the same and the end of the pitman or drive arm, thus reducing the number of points of frictional wear 70 and insuring a steady even movement to the lathe beam and, of a consequence, even weaving of the loom, while by reason of the arm M and sheaves N the vertical position of the beam is maintained throughout its movement 75 or vibration.

Having thus described my invention what I claim is:

1. A parallel motion device for lathes or battens for looms, comprising a beam, sword 80 arms supporting the same, a pitman for vibrating the beam, an arm rigidly secured to the beam, and means engaging said arm to maintain the vertical position of the beam during its vibration.

2. A parallel motion device for the lathes or battens of looms, comprising a beam, pivoted sword arms for supporting the beam, a pitman for vibrating the beam, a guide arm fixed to the beam, and adjustable sheaves 90 controlling the direction of the plane in which the guide arm may move.

In testimony whereof, I affix my signature, in the presence of two witnesses.

ALFRED INSINGER.

Witnesses:

Louise E. Kephart, GEO. MECKE.