

No. 626,898.

Patented June 13, 1899.

A. GARTNER.  
LOOM.

(Application filed Jan. 31, 1899.)

(No Model.)

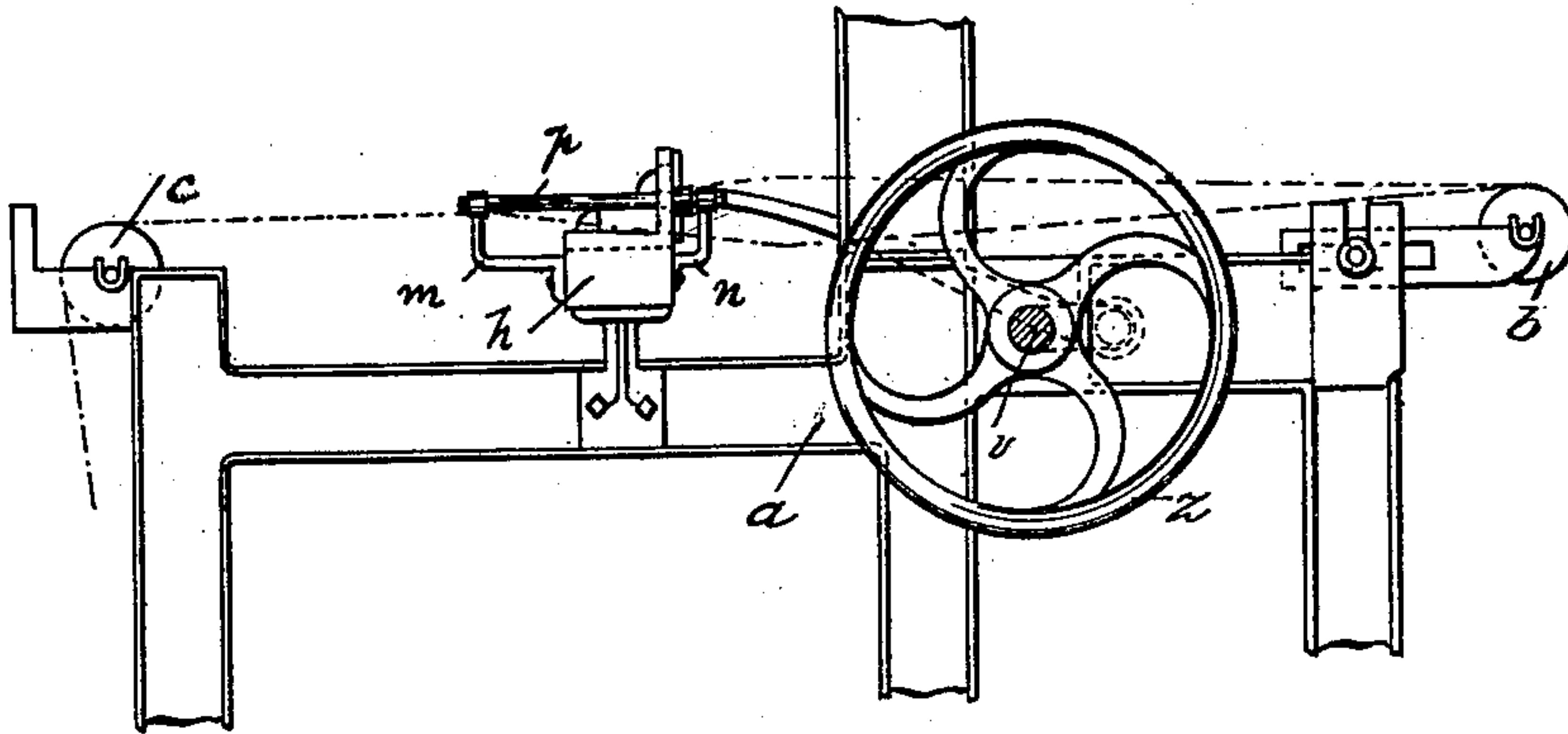


Fig. 1.

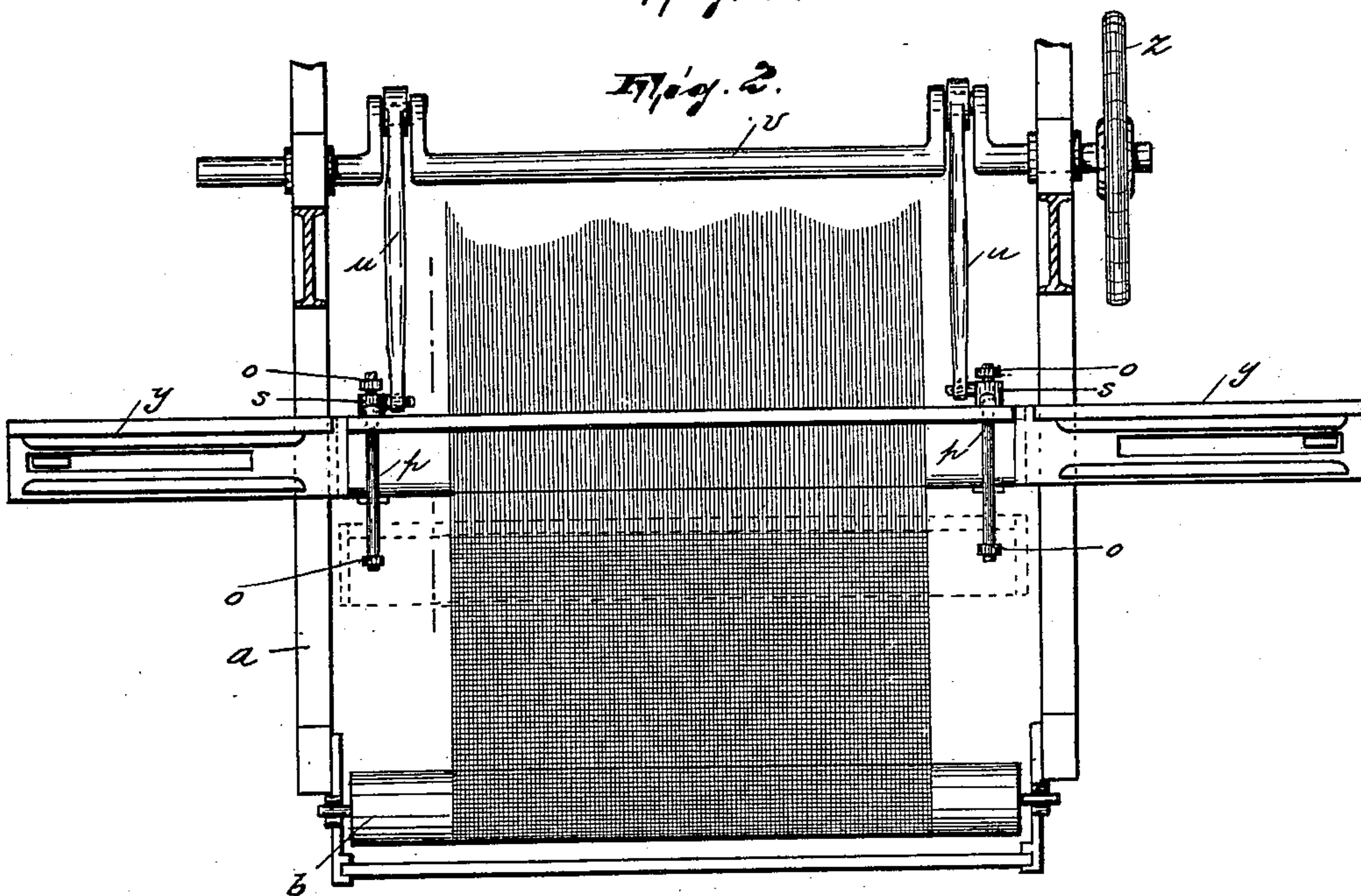


Fig. 2.

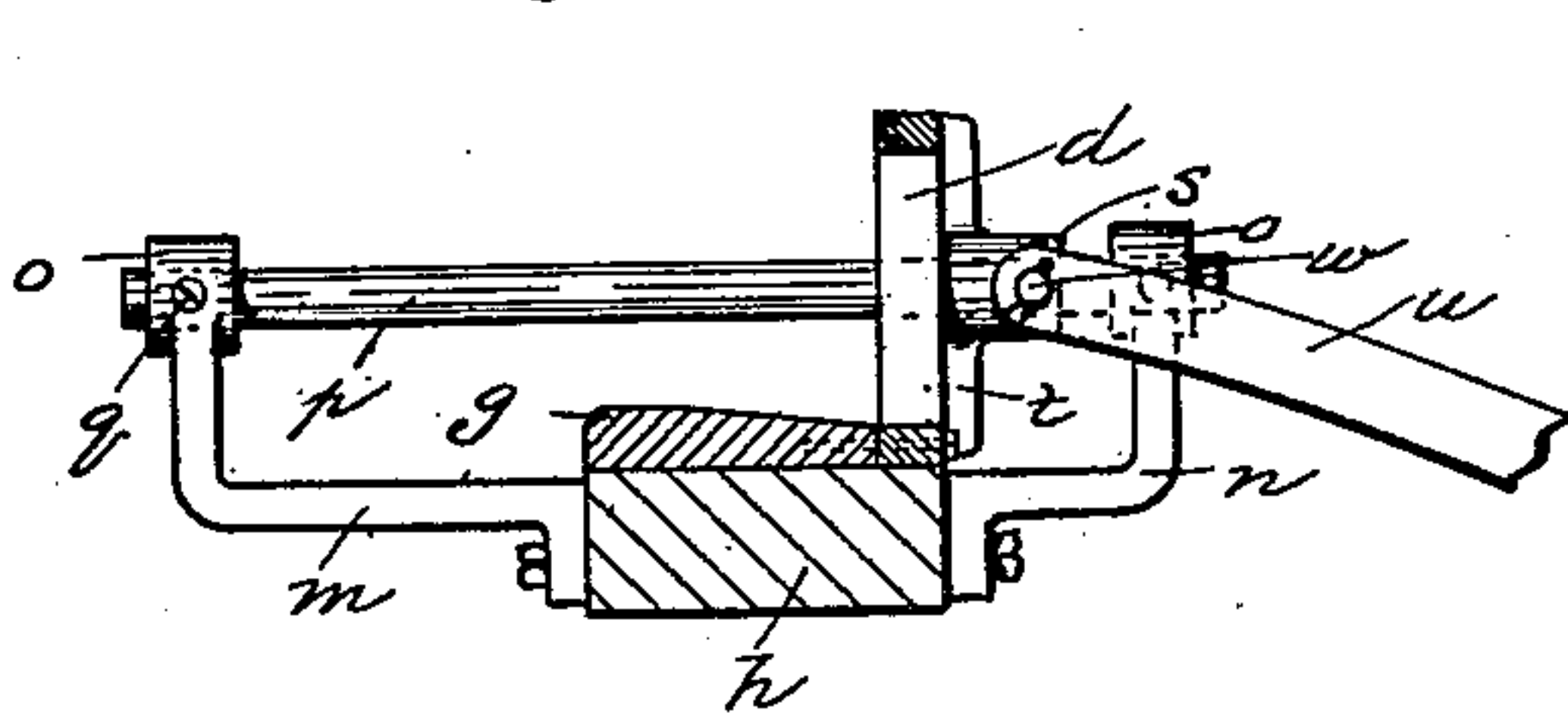


Fig. 3.

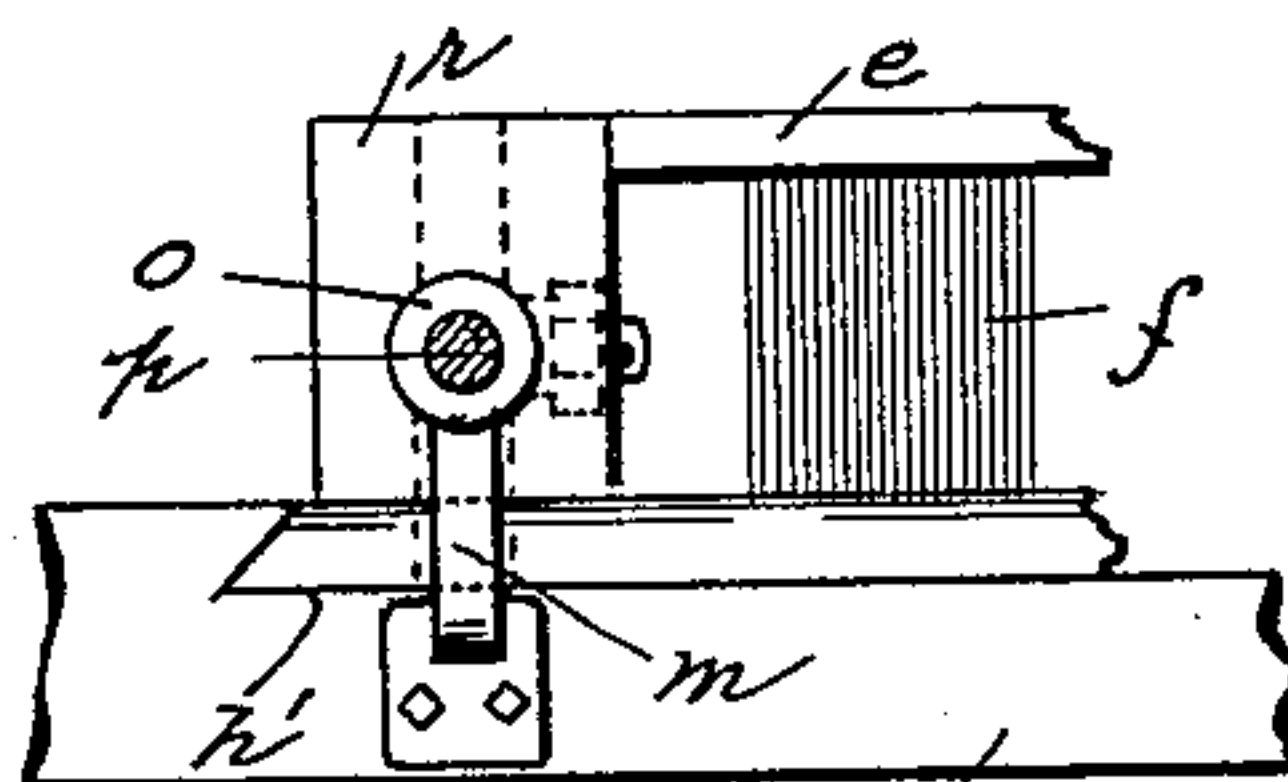


Fig. 4.

WITNESSES:

Wm. D. Bell.  
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INVENTOR:

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BY  
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ATTORNEYS



# UNITED STATES PATENT OFFICE.

ALFRED GARTNER, OF PATERSON, NEW JERSEY, ASSIGNOR TO BENJAMIN EASTWOOD, OF SAME PLACE.

## LOOM.

SPECIFICATION forming part of Letters Patent No. 626,898, dated June 13, 1899.

Application filed January 31, 1899. Serial No. 703,976. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED GARTNER, a citizen of the United States, residing in Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Looms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a loom, especially a broad silk-loom, with a stationary lay or batten and with a horizontally-reciprocating reed, by which arrangement the weft is beaten up by the reed without the necessity of moving the entire batten. Less power will thus be required for operating the loom, and consequently a higher speed can be obtained.

The invention consists in the improved loom, its stationary lay or batten, and its horizontally-reciprocating reed, and in the combination and arrangement of the various parts, substantially as will be hereinafter more fully described, and finally embodied in the clauses of the claim.

In the accompanying drawings, Figure 1 is a side elevation of a portion of a loom provided with my improvements; Fig. 2, a top plan view of Fig. 1; and Figs. 3 and 4 are a transverse sectional and a front view, respectively, of the stationary batten and the reciprocating reed detached from the loom.

In said drawings, *a* represents a loom-frame, supporting in the usual manner the warp and cloth beams *b* and *c*, and the main driving-shaft *v*, carrying the hand-wheel *z*.

The lay or batten *h* is secured by suitable brackets *i* to the sides of the loom-frame *a*, and its central top portion is provided with a (preferably dovetailed) recess or groove *h'*. In said groove or recess is slidingly arranged a top plate or raceway *g*, of wood, porcelain, or any other suitable material, to the rear portion of which is secured the lower bar of the reed-frame *e*, provided with dents *f* and constituting the reed *d*, as clearly shown.

The batten *h* sustains two pairs of brackets

*m* and *n*, projecting, respectively, from the front and rear portions of said batten and provided at their upper or free ends with tubular enlargements or sleeves *o*. The sleeves *o* of each pair of brackets are connected and penetrated by a guide-bar *p*, which is removably held in position by set-screws *q*, arranged in said sleeves, and which guide-bars are above and at right angles to the batten *h*. To the end or vertical bars *r* of the reed-frame are secured (or integral therewith) tubular projections or sleeves *s*, strengthened by ribs *t*, projecting from the rear faces of the bars *r* and slidingly arranged upon their respective guide-bars *p*.

The means for effecting reciprocation of the reed consists of pitmen *u*, each of which is pivotally connected at one of its ends to its respective sleeve *s*, as at *w*, and at its other end to the driving-shaft *v* in the usual and well-known manner.

It must be remarked that the shuttle-boxes *y* are arranged on the end portion of the batten, and that arrangement does not differ from the construction common to broad silk looms.

In regard to the operation it need only be remarked that there is no difference between the ordinary loom and the loom above described, excepting that the batten remains stationary, and the reed is horizontally reciprocated, guided upon the bars *p p*, thereby effecting the beating up of the weft, as will be manifest.

I do not intend to limit myself to the precise construction shown and described, as various alterations can be made without changing the scope of my invention; but

What I claim as new, and desire to secure by Letters Patent, is—

1. In a loom, the combination with the frame, a batten stationarily arranged on, and a crank-shaft journaled in, said frame, of a reed carried by and adapted to reciprocate independently of said batten, brackets also mounted on said batten, guide-bars sustained by said brackets and supporting said reed and pitmen connecting said crank-shaft and the reed, substantially as described.

2. In a loom, the combination with the frame, a batten stationarily arranged on, and

a crank-shaft journaled in, said frame, of a reed carried by and adapted to reciprocate independently of said batten, a top plate or raceway connected with the reed, brackets  
5 also mounted on said batten, guide-bars sustained by said brackets and supporting said reed and pitmen connecting said crank-shaft and the reed, substantially as described.

3. In a loom, the combination with the  
10 frame, a batten stationarily arranged on, and a crank-shaft journaled in, said frame, of a reed carried above and adapted to reciprocate independently of said batten, brackets also

mounted on said batten, guide-bars sustained by said brackets above and transversely to  
15 said batten and supporting said reed, and pitmen connecting said crank-shaft and the reed, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 17th day of  
20 January, 1899.

ALFRED GARTNER.

Witnesses:

LOUISE SNYDER,  
JAMES B. NEWTON.