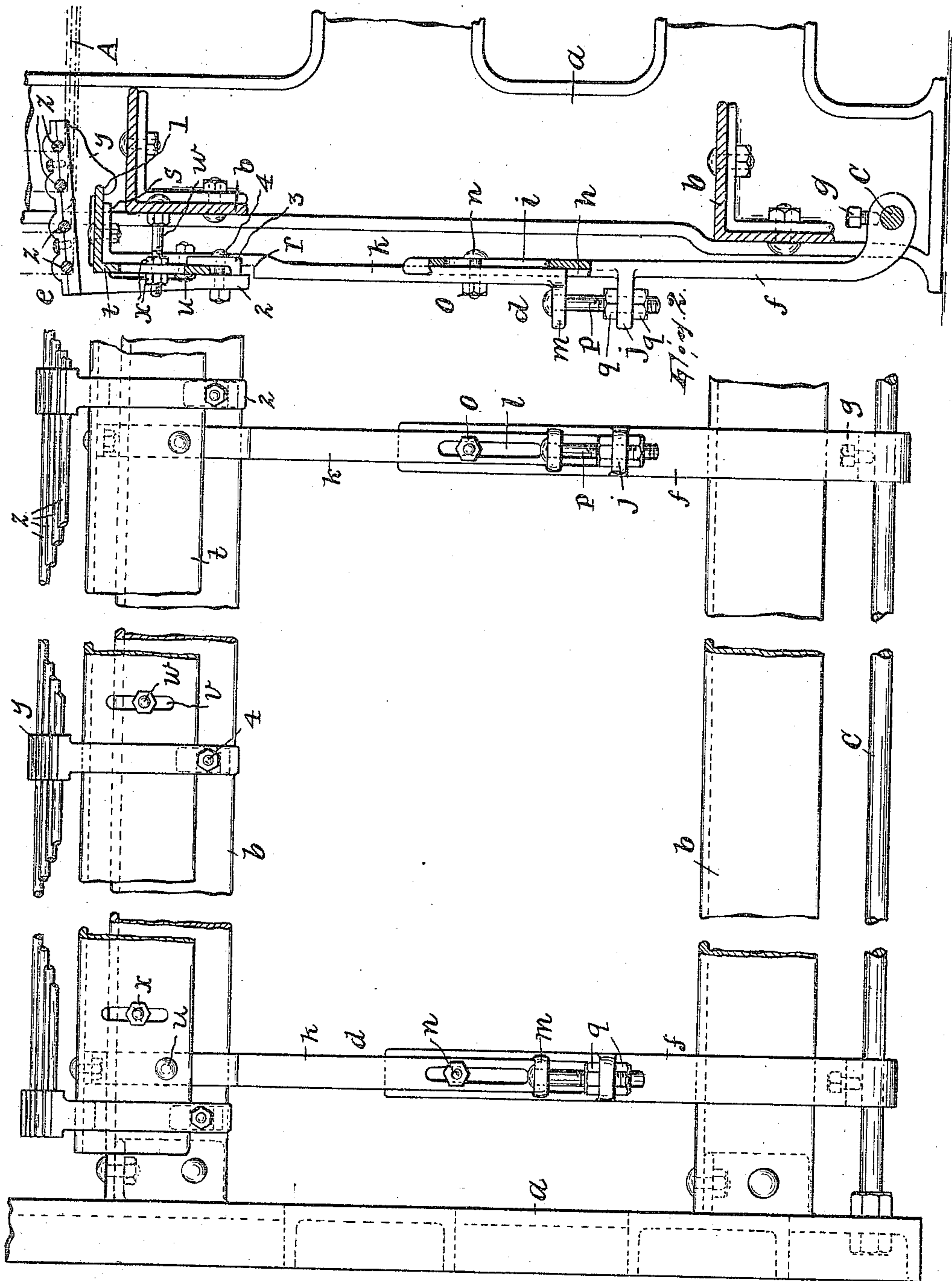


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GLASS BAR BRACKET MECHANISM FOR LOOMS.  
APPLICATION FILED MAY 3, 1910.

983,020.

Patented Jan. 31, 1911.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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GLASS-BAR-BRACKET MECHANISM FOR LOOMS.

983,020.

Specification of Letters Patent.

Patented Jan. 31, 1911.

Original application filed December 17, 1909, Serial No. 533,641. Divided and this application filed May 3, 1910. Serial No. 559,122.

*To all whom it may concern:*

Be it known that I, FREDERICK BENZ, JR., a citizen of the United States, residing at Haledon, Passaic county, New Jersey, have  
5 invented a certain new and useful Improvement in Glass-Bar-Bracket Mechanisms for Looms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others  
10 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.

15 In certain classes of looms, depending upon the character of the goods to be wound, it is desirable that the guiding means for the warp threads which coacts with the breast beam in sustaining the shed-forming  
20 portion of the warp threads be adjustable relatively to the breast beam.

The object of my present invention is to provide a structure affording the said guiding means which may be readily adjusted  
25 as the circumstances may require, that is, either in directions toward and from the breast beam or in vertical directions.

The invention will be found fully illustrated in the accompanying drawing, wherein—  
30 in—

Figure 1 is a rear elevation of so much of a loom constructed in accordance with my invention as it is necessary to show for the purpose in hand; and, Fig. 2 is a vertical  
35 sectional view of what is shown in Fig. 1.

The frame of the loom carries the side frames *a* and girths *b*. It may also comprise a horizontal rod *a* connecting the said side frames at the back lower portions thereof.  
40 On this rod is fulcrumed a lever structure *d* which carries the glass bar bracket mechanism *e* and is adjustable around shaft *c* as an axis and extensible vertically. The lever structure *d* includes two or more lower  
45 sections *f* which are directly fulcrumed on the rod *c* and may be fixed thereon, when once adjusted, by the set screws *g*. Each of the sections *f* is provided at the back thereof at its upper end with a longitudinal  
50 groove *h* and with a longitudinal slot *i* coinciding with said groove; below the groove and slot it has a rearwardly projecting lug *j*. Said lever structure also comprises two or more upper sections *k*, which are comple-

ments of the sections *f* and each of which is 55 provided with a longitudinal slot *l* in its lower end portion and with a rearwardly projecting lug *m* at its lower end. A bolt *n*, provided with a nut *o*, penetrates the slots *i* and *l* and serves to clamp each two upper 60 and lower sections together. The lugs *j* and *m* are penetrated by a bolt *p* carrying nuts *q* embracing between them the lug *j*, the parts *p* and *q* serving to anchor the upper section to the lower section, in the groove *h* 65 of which it is received. Each upper section is recessed at the back at its upper end, as at *r*, and it has its upper extremity *s* turned forwardly, substantially at a right angle. An angle iron *t*, connecting the several sec- 70 tions *k* and fitted over their upper ends, is secured to them by the bolts *u*, its vertical web being received in the recesses *r* of the lower section. Said web has the vertical slots *v* receiving threaded studs *w* which 75 project from the upper girth *b* and have nuts *x* between which said web is clamped. By adjusting the nuts, the entire lever structure may be adjusted forward or backward on its fulcrum. By adjusting nuts *q* the 80 elevation of the glass-bar bracket mechanism may be altered at will.

The glass-bar bracket mechanism is constructed and arranged as follows: *y* design- 85 nates a series of brackets which carry the glass-bars *z* forming the means which directly coacts with the breast beam in supporting the shed-forming portion of the warps *A*. Each bracket *y* has a jaw 1 which receives the forward edge of the angle iron 90 *t*; it also has a downwardly depending leg 2 which, when the jaw is properly engaged with the angle iron as shown, bears squarely against the rear vertical face of the angle iron, being held thereagainst by the clamps 95 3 having bolts 4 securing them to the legs 2 of the brackets. This arrangement allows the brackets to be removed and replaced with facility and convenience and permits their spacing to be varied at will. 100

My present application is a division of my application for U. S. Letters Patent for narrow-ware looms, Serial No. 533641, filed Dec. 17, 1909.

Having thus fully described my invention, 105 what I claim as new and desire to secure by Letters Patent is:

1. In a loom, the combination of the



frame, warp guiding bars, a substantially upright supporting structure for said bars arranged in the frame and pivotally supported therein at the lower end of said structure, and means, engaging the upper end-  
5 portion of said structure, for securing the same to the frame when adjusted, substantially as described.

2. In a loom, the combination of the  
10 frame, warp-guiding bars, a substantially upright supporting structure for said bars arranged in the frame and comprising upper and lower members having substantially horizontal projections and means, adjustably  
15 connecting said projections, for anchoring the upper member to the lower member, substantially as described.

3. The combination of a support having web-portions arranged at an angle to each  
20 other, warp-guiding bars, brackets carrying said bars and each having a jaw receiving

the relatively outer edge of one of said web-portions and a leg disposed face to face with the other web-portion, and means for clamping each leg to the adjoining web-portion, 25 substantially as described.

4. In a glass-bar bracket mechanism for looms, the combination of a frame, a plurality of horizontal bars, a lever-structure  
30 fulcrumed in said frame on a horizontal axis, means, carried by said lever-structure, for supporting said bars thereon, and means, connecting said lever-structure with the frame, for adjusting the same on its axis,  
35 substantially as described.

In testimony, that I claim the foregoing, I have hereunto set my hand, this 2nd day of May, 1910.

FREDERICK BENZ, JR.

Witnesses:

JOHN W. STEWARD,  
WM. D. BELL.