No. 760,919. PATENTED MAY 24, 1904.

F. C. POOLE.

BEAD LOOM.

APPLICATION FILED OCT. 14, 1903.

NO MODEL.

Fig. 1.

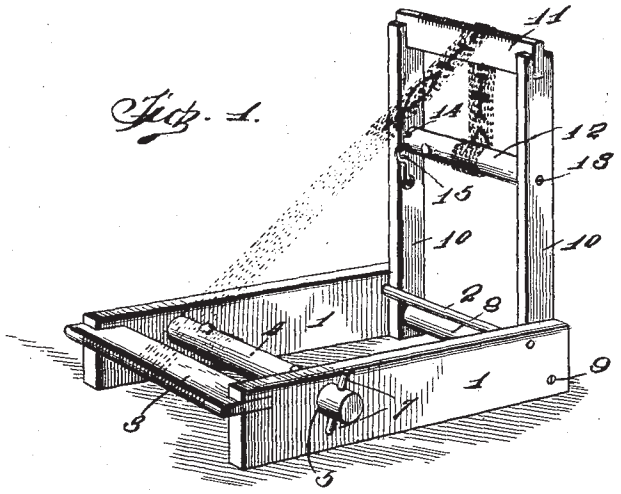
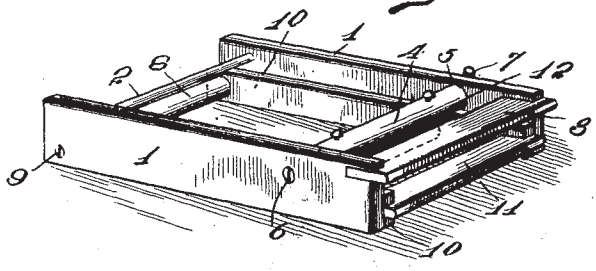


Fig. 2.



Witnesses

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No. 760,919. Patented May 24, 1904.

UNITED STATES PATENT OFFICE.

FREDERICK C. POOLE, OF GLOUCESTER, MASSACHUSETTS.

BEAD-LOOM.

SPECIFICATION forming part of Letters Patent No. 760,919, dated May 24, 1904.

Application filed October 14, 1903. Serial No. 177,028. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK C. POOLE, a citizen of the United States, residing at Gloucester, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Bead-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.

This invention relates to improvements in upright folding hand-looms for beadwork.

The object of the invention is the construction of an upright frame that can be folded into comparatively small space when not in use.

Another object of the invention is to construct a framework that will permit of the weaver pressing upon the beadwork from beneath the same and thereby greatly facilitating the manufacturing of the finished article.

Still another object of the invention is the construction of means assembled with said framework for controlling the tension of the warp-threads employed in the construction of the beadwork and, furthermore, the facilitating of the feeding of the completed beadwork to a receiving member carried by the frame when the device is in use.

With these and other objects in view the invention consists in the novel construction, combination, and arrangement of parts, as will be hereinafter fully described, illustrated in the accompanying drawings, and more particularly pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of the device in an unfolded or operating position. Fig. 2 is a perspective view of the invention in a folded position.

Referring to the drawings, 1 is a base member comprising substantially parallel bars or other equivalent means in which is secured a rod or bar 2 at or near one end of said base member. Within the base member 1 and below the top line thereof at any convenient point is a roller or drum 4, which is preferably journaled in said base, being secured therein at one end by an extension of said roller or by means of a screw 6, passing through the base and into the roller or drum 4, while the opposite end of said roller preferably extends outside of and below the upper line of the base member, as indicated at 5, Fig. 1, where said projection 5 is provided with handles or prongs 7, whereby said roller may be rotated, if desired. The tension of the roller 4 may be increased or diminished at will by manipulation of said screw 6 for well-understood reasons. If the loom members were all in the same plane or in substantially the same plane, difficulty would be encountered in working thereon, owing, first, to its limited dimensions, and, secondly, to the fact that the base member comprises substantially closed sides. To render the same collapsible for ease of transportation and also to provide ready accessibility to the under portion of the work being done thereon, I have found it desirable to connect with the base member 1 an auxiliary, vertically, or substantially vertically projected end extension, as follows:

Mounted at the end of base 1 opposite the comb 3 are uprights 10 10, which uprights are pivotally connected with said base by means of the member 8, which may be secured in position by screws 9, said roller 8 being provided with shoulders abutting against the contiguous faces of the uprights, thereby preventing that portion of the frame collapsing, or any suitable securing means may be provided for said uprights, though it is preferred that they be pivotally secured to the base 1 for convenience of folding when desired. At the free end of the uprights and extending in the line of projection thereof is a comb 11, extending transversely across between said members 10 and between the said comb 11, and at the point of connection of the uprights 10 to the base 1 is preferably mounted a second roller 12, which extends transversely between said uprights 10. The roller 12 is provided for convenience in winding thereon the finished product of the loom, and to prevent undue releasement thereof notches 14 are formed in one end thereof, and a suitable catch or pawl 15 is connected with the uprights or one of them and adapted to engage in said notches.

It will be obvious that if it is preferred to

provide the rotating member 12 with a ratchet-and-pawl mechanism this structure would be practically the same as that disclosed in the drawings for limiting the movement of said member 12. Upon the rollers or braces 12 and 4 are provided a plurality of tacks or the like for retaining the thread which is carried by said rollers in a fixed position thereon.

In operation the threading of the loom is accomplished by assembling a plurality of threads upon the roller 4 by means of one of the tacks carried thereon and passing the threads around the comb 3 and over and around comb 11 to roller 12, upon which the ends of the threads are secured, and as the beadwork is completed the same is wound around said roller. The surplus threads are secured upon the roller 4, and as it is necessary to supply the same to the combs as the work progresses by rotating the roller 12 this function of the invention is easily obtained. To retain the work in a fixed position, the pawl or catch 15 is placed into engagement with a notch or ratchet formed upon the end of the roller 12, and thereby locking the work in a fixed position upon the rolls and combs. The tension on the journals of the roller 4 is of such nature as to prevent the free rotation thereof, but permits of the winding of the warp-threads upon the roller 12, receiving the finished product. When it is desired to ship the device or when the same is not in operation, it can be easily folded so as to occupy a comparatively small space in such position as compared with a device having a stationary upright member upon which part of the structure is mounted.

When the device is in use, it occupies the position shown in Fig. 1, in which position the bar 2 serves as a brace or stop, so that as the tension upon the several parts increases incident to the hereinbefore winding of the work upon the rollers 4 and 12 the device will be thereby supported against collapse.

Another feature of advantage in the present invention is that in addition to the tension upon the work provided for by winding upon the rollers a temporary increase of such tension may be secured by manually forcing the upper part of the upright portion in a direction to increase the distance between the combs 3 and 11. The device may be readily folded into the position shown in Fig. 2 by throwing the upright portions 10 and their connections to a horizontal position away from the stop 2 and then folding the same on its pivots to a position within the base 1 and below the stop 2, comb 3, and roller 4.

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

1. A bead-loom comprising sections pivoted together and warp engaging and spacing means carried by the outer free ends of the said frame.

2. A bead-loom comprising a principal or supporting section, a pivoted section secured therein, warp-engaging combs carried at the outer ends of said sections and take-up means carried by the said sections, the warp extending across the angle of the frame from one comb to the other.

3. A bead-loom comprising a main frame, a pivoted section secured to one end thereof, a warp-comb carried in the other end of said section, and a second warp-comb carried by the outer end of the pivoted section, the warp being stretched across the angle of the frame.

4. A bead-loom comprising a wide frame and a narrow frame, the narrow frame being pivoted at one end in the wide frame so as to fit therein when folded, means for holding the narrow frame in an upright position forming an angle with the wide frame and warp-securing means at the outer ends of said frames.

5. A bead-loom comprising a main frame, a pivoted frame secured in one end thereof, near its lower edge, a stop carried by the said frame near its upper edge for limiting the inward movement of the pivoted frame in one direction, a warp-comb carried at the other end of the main frame, a take-up mounted in the frame adjacent to the said comb, a comb carried in the free end of the pivoted frame and a take-up mounted adjacent thereto.

6. A loom comprising a main section or frame, a pivoted section secured in one end thereof, a stop mounted also in said end for limiting the movement of the pivoted section in one direction, combs secured in the outer ends of both frame-sections for holding warp-threads in proper position across the angle of the frame when the frame is open, rollers mounted in said frames adjacent to the combs, forming take-up means for the warp-threads, means for holding one of said rollers positively in adjusted positions and means for turning the other roller from a point outside the frame.

7. A loom comprising a comparatively wide frame-section forming a base or support, an upright comparatively shallow section pivoted to the wide section near one edge thereof, the narrow section folding within the wide section when the loom is not in use, means for limiting the movement of the narrow section in one direction for holding it at an angle to the wide section, combs at the outer extremities of the sections for stretching warp-threads across the angle of the frame when open and take-up means carried by the said frames.

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

FREDERICK C. POOLE.

Witnesses:

HUGH PARKHURST,

E. M. GAYTON.