This invention relates to a new and improved loom and has, for its principal object, the provision of a loom in which the length of the warp can be readily varied. An important object of the invention is to provide a hand-operated loom for weaving articles which require the warp of the weave to extend beyond the woof.

Another important object of the invention is the provision of a loom of this character wherein each pick of the warp is accomplished by means of a needle.

A further important object of the invention is the provision of a loom including means for supporting the woof, and means for supporting the warp at a predetermined distance from the woof.

Another and still further important object of the invention is to provide a loom which is light in weight and easily moved by children.

Other and further important objects of the invention will be apparent from the disclosures in the accompanying drawing and following specification.

The invention, in a preferred form, is shown in the drawing and hereinafter more fully described.

In the drawing:

Figure 1 is a perspective of the device of this invention.

Figure 2 is a top plan view of Figure 1 embodying the warp and woof in its proper relationship to the loom.

Figure 3 is a perspective view of the needle used in threading the woof through the warp.

As shown in the drawing:

The reference numerals 4 and 6 indicate generally the longitudinal bases of the loom. These bases 4 and 6 are comprised of three parallel juxtaposed strips 8, 10, 12 and 14, 16 and 18 respectively. U-shaped elements 20 and 22 are disposed around the top and sides of the bases 4 and 6 in order to retain the strips 8, 10, 12 and 14, 16 and 18 in contact relationship when it is desired to change the length of the warp 24. Transverse strips 26 and 28 are suitably fastened to the strips 10 and 16, and 12 and 14 respectively. The vertical members 20 and 22 are fastened to the transverse members 26 and 28. The stationary strips 8 and 18, which remain fixed with respect to the other strips which form the longitudinal bases 4 and 6, have joined to them the uprights or woof supporting members 34. Slots 36 are cut into the upper portions of the uprights 34 to permit the looping of the woof 43 through these slots as shown in Figure 2. Fastening pins 42 are positioned in the top portions of the uprights 34 and just below the bottom of the slots 36 so that these pins will not interfere with the woof when it is inserted into the slots. The extended portions of these pins 42 and 43 are utilized in providing a fastening means for the loose ends of the woof as best shown in Figure 2.

The vertical members 30 and 32 are designed for the reception of the pins 44 and 45. The pins 44 and 46 lie in the same horizontal plane with the pins 42 and 43. The longitudinal strips have holes 48 bored in them at spaced intervals to accommodate the bolts 49 when the loom is extended to a predetermined position and the holes caused to coincide. These bolts hold the loom rigidly when the warp is wrapped around the pins 44 and 45.

A needle 52 is used in connection with the loom when weaving. This needle, which may be of any desired material, has its front part tapered and its rear portion provided with an eye 50 through which is threaded the warp 24.

The warp may be of any desired material either in card form or strips. One end of the warp is tied to the protruding end of the pin 42 and then wound in and out of the slots 36, at the uppermost part of the woof supporting members, until all such slots have been filled. The free end of the woof is then securely fastened to the projecting portion of the pin 43.

The warp 26 which is threaded into the eye 50 of the needle 52 when it is made ready for operation, can be of any desired material. The warp, one end of which is secured to the extended portion of the pin 46, is carried longitudinally of the loom under the pin 43 then above and below the woof in the usual manner and under the pin 42. The warp is then extended to the pin 44 above and beneath said pin and then back again over the pin 42 and woven through the woo and over the pin 42. This procedure is continued until the warp occupies the entire width of the loom. If one strand of warp is not long enough to complete the width desired, it may be terminated at either pin 44 or 46 by tying it securely thereto. Another strand may be started at this point of termination and carried out as heretofore prescribed.

After the completion of the weaving operation, the pins 42 and 43 are removed from the woof supporting members, allowing the ends of the woof to hang free. The woof may then be lifted from the slots of the woof supporting members. The loop ends of the warp are then released by removing the pins 44 and 45 from the vertical
members 30 and 32. The warp material is then laid flat on the support and the projecting ends of the warp cut off even with the remaining portions of the warp. The projecting ends of the woof are then extended into the weaving by means of a sack needle until said ends disappear, thus eliminating the necessity of knotting the ends.

This loom is designed particularly for use in educational institutions and is especially adapted for weaving mops. Heretofore, a loom capable of making a weave with a warp of only one length was used but herein is a device which is light in weight, has a minimum of moving parts, and can be adjusted to a warp of any pre-determined length.

I am aware that many changes may be made and numerous details of construction varied throughout a wide range without departing from the principles of this invention, and I, therefore, do not purport limiting the patent granted herein otherwise than as necessitated by the prior art.

I claim as my invention:

1. In a weaving device, longitudinal parallel bases composed of slidably paralleled juxtaposed strips having holes therein for the reception of bolts, said strips being adapted to vary the length of the loom, bolts adapted to be inserted into the holes in said strips, U-shaped members adapted to retain the juxtaposed strips in contact relationship, transverse parallel strips secured to pairs of longitudinal strips, vertical members diametrically disposed at the ends of the transverse parallel strips, upright members, securely fixed to a pair of parallel strips adapted to remain stationary with respect to the juxtaposed strips supporting the vertical end members, and having slots in the upper portions thereof to receive the woof, said upright members being intermedial with the vertical members and centered between them when the loom is closed and lying in parallel planes which pass through the end vertical members said vertical end members being adjustable with respect to the upright members in order that the position of the woof may be predetermined with respect to the warp, pins removably positioned in the intermediate upright members, pins removably positioned in the vertical end members.

2. In a loom, an adjustable base comprised of juxtaposed strips having holes therein adapted to coincide when in position desired, bolts to be inserted into the coincident holes in the juxtaposed strips, U-shaped member adapted to hold the strips in contact relationship when the base is adjusted, transverse members affixed to the juxtaposed slidable strips, warp supporting members affixed to strips, warp supporting pins disposed in the vertical end members attached to the transverse fixed to the strips and having slots in the top into which the woof is threaded, woof fastening pins disposed in the woof supporting member, the distance between the woof supporting members and any warp supporting member may be varied.

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