

(No Model.)

W. H. KYNETT.

HAND LOOM.

No. 396,281.

Patented Jan. 15, 1889.

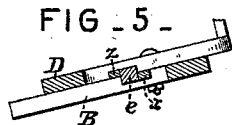
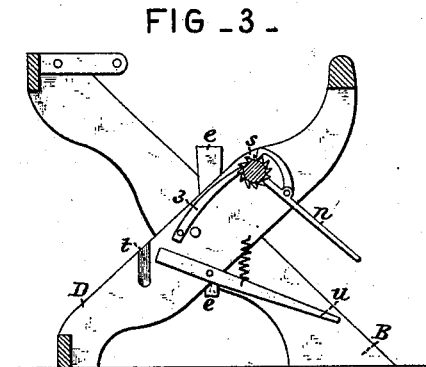
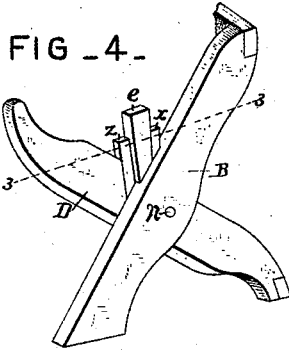
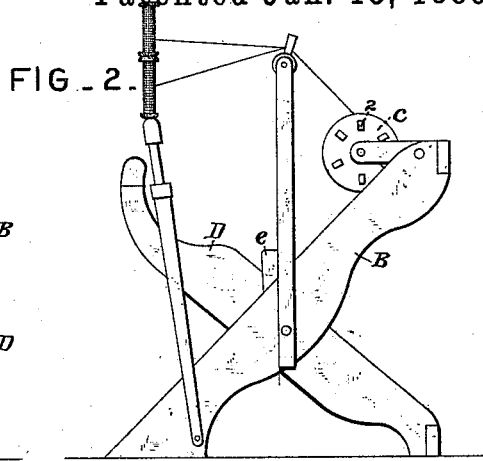
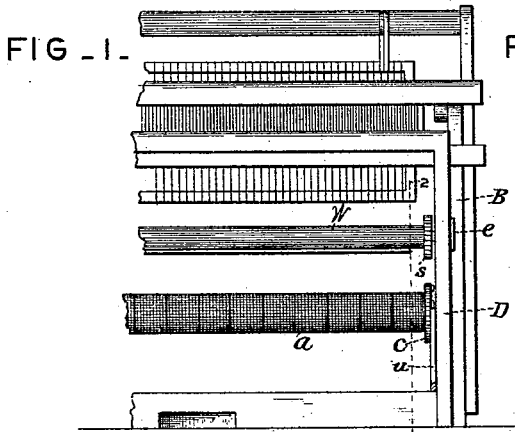


FIG. 8.

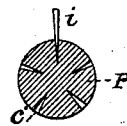


FIG. 7.

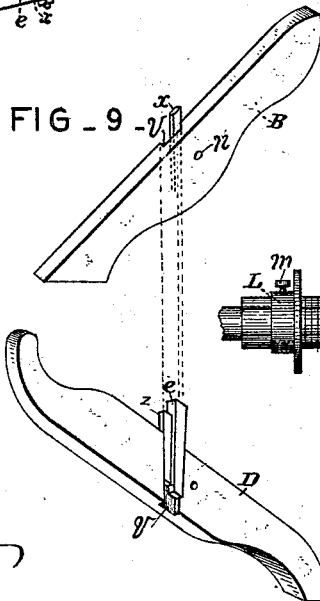
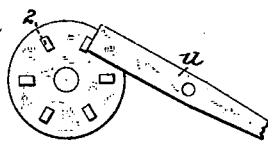
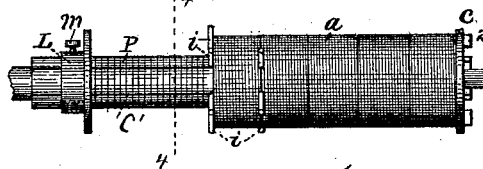


FIG. 6.



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WILLIAM H. KYNETT, OF BATTLE CREEK, MICHIGAN.

HAND-LOOM.

SPECIFICATION forming part of Letters Patent No. 396,281, dated January 15, 1889.

Application filed May 24, 1887. Serial No. 239,270. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. KYNETT, a citizen of the United States, residing at Battle Creek, county of Calhoun, State of Michigan, have invented a new and useful Hand-Loom, of which the following is a specification.

This invention has for its object certain improvements below described and claimed.

In the drawings forming a part of this specification, Figure 1 is a front elevation of the loom, about one-half being broken away; Fig. 2, an end elevation; Fig. 3, a section looking from a point at the left of line 2 2 in Fig. 1; Fig. 4, a perspective of certain details below described; Fig. 5, a section on dotted line 3 3 in Fig. 4; Fig. 6, an enlarged detail from Figs. 1 and 2, showing additional features not shown in said figures. Fig. 7 is an end view of the warp-roller head and lever enlarged from Fig. 1; Fig. 8, a cross-section on line 4 4 in Fig. 6 and showing a pin in plan; and Fig. 9 is a perspective of separated parts in Fig. 4.

Referring to the lettered parts of the drawings, B D are crossed standards employed at each end of the loom, only one end being here shown. These standards B D are pivoted where they cross, said pivot passing through the standards a little to one side and a little below the center at *n*, Figs. 4 and 9, so that the pivot *n* will not interfere with the keys *e z x* in the registering-gains in the inner faces of the standards where they cross—that is, these gains register exactly in Figs. 2 and 3, in which gains the single key *e* is employed to hold the frame at a certain height. The key *e* is tapered or wedge-shaped, being narrowest at the lower end, and the gains *v* correspond to said shape. (See Fig. 9 for shape of the gains *v*.)

To hold the parts in a higher position than in Figs. 2 and 3, I temporarily make the gains *v* narrower by carrying the upper ends of the standards B D nearer to each other, which action causes the gains to partially shear by each other, as will be clearly seen in Fig. 5. I then insert in the upper side of the gain of the standard B a wedge-shaped key, *x*, sufficiently narrow and of a thickness to correspond to the depth of the gain *v*, and I insert a like key, *z*, in the gain of the standard or leg D, and insert the key *e* in the register-

ing parts of the gains, as in Figs. 4 and 5. In Fig. 9 the idea is further illustrated. By lowering the leg B (which shows the key *x* in its proper position) and fitting it against the leg D (which shows the key *e* and key *z* in proper position) in the position they occupy in Fig. 4 the parts B D *e z x v* would bear the relation to each other that they do in Figs. 4 and 5. As above stated, the effect of employing the keys *z x* is to make the registering parts of the gains form a narrower mortise, so that the same key, *e*, will hold the standards in a higher position.

To lower the parts, I insert the key *e* a less distance than is shown in said Fig. 3, and thus allow the upper ends of parts B D to spread farther apart.

Referring to Fig. 6, P is the warp-roller, having a fixed head, *c*, (said head being provided with lugs 2,) and a movable head, L, at the other end, said head L being adjustably held by a set-screw, *m*. When the last section of warp *a* is placed on the roller P, the adjustable head L is moved against it to form a heading to keep the warp in place at this end of the roller. Sometimes more sections of warp are used than at other times, according to the width and style of carpet.

The roller is provided with five radial gains, *c'*, (or more, if desired,) Figs. 6 and 8. When filling the roller P with warp-sections *a*, it occupies the position shown in Fig. 2, and when weaving carpet the roller is placed in bearings *t*, Fig. 3, in the position shown in Fig. 1, all as ordinarily, and will be readily understood. During the operation of filling the roller P, I commence at the end where the fixed head *c* is, observing to first insert radial pins *i* in the gains *c'* at such a distance from the head *c* as will correspond to the desired width of the warp-section *a*, said pins forming a temporary heading at one end of the warp-section, and also a division between the section last wound and the one being wound, Fig. 6.

The advantage of the radial grooves *c'* over a series of holes is that I am enabled to set the pins at a more exact point desired, and as they are wedge-shaped at the point they will be held sufficiently firm in the gains not to cant over laterally. Referring to Figs. 1, 3, and 7, the spring-actuated lever *u*, or, properly,

a foot-treadle, is pivoted to one of the legs, D, in position for its blunt end to engage the lugs 2 of the warp-roller P when in its lower position, as in Fig. 1, when weaving carpet.
5 The pawl 3 is at a proper location to form a stop to the blunt end of treadle *u* and prevent said end from rising too high when the operator steps on said treadle to disengage it from the lug 2 in the act of allowing the warp
10 to unwind when the carpet-roller *w* is revolved to wind up the carpet which has been woven. This carpet-roller *w* is operated by the lever *n'* and its pivoted dog 4 in the ordinary manner, said dog engaging the ratchet
15 S of the roller *w*, and the pawl 3 engaging said ratchet S and preventing the roller from turning back.

Having thus described the invention, what I claim is—

1. In a loom-frame, the combination of the 20 crossed pivoted legs, said legs provided with the gains in their contiguous sides, and the adjustable keys for insertion in said gains to hold the loom-frame at different heights, substantially as set forth. 25

2. In a loom, a warp-roller having the radial grooves for the reception of the pins, a fixed head at one end of said roller, a head at the other end-adapted to slide thereon, and a set-screw to fix the movable head at given points 30 of adjustment, substantially as set forth.

In testimony of the foregoing I have heretofore subscribed my name in presence of two witnesses.

WILLIAM H. KYNETT.

Witnesses:

JOHN C. PERKINS,
BYRON J. HEALY.