

G. T. THORNE.

HAIR LOOM.

APPLICATION FILED MAR. 29, 1912.

1,069,497.

Patented Aug. 5, 1913.

2 SHEETS—SHEET 1.

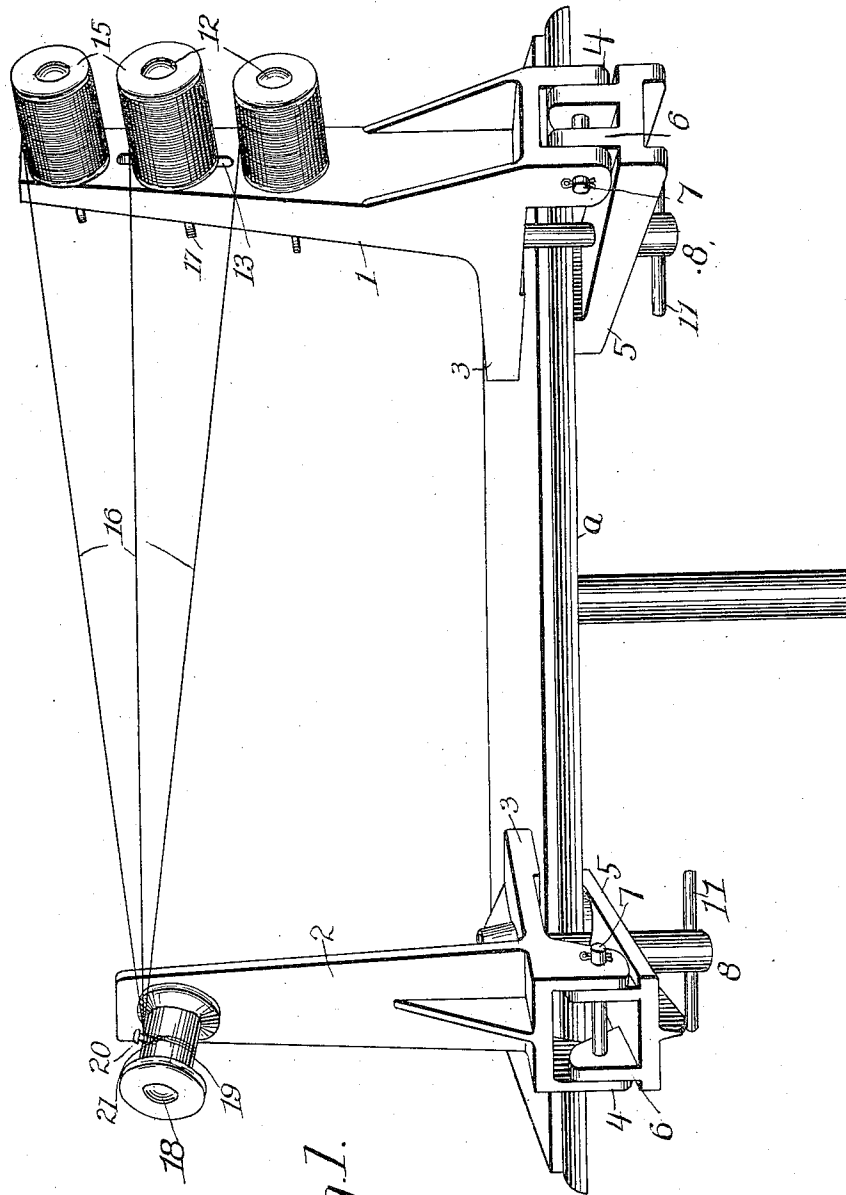


Fig. 1.

Witnesses

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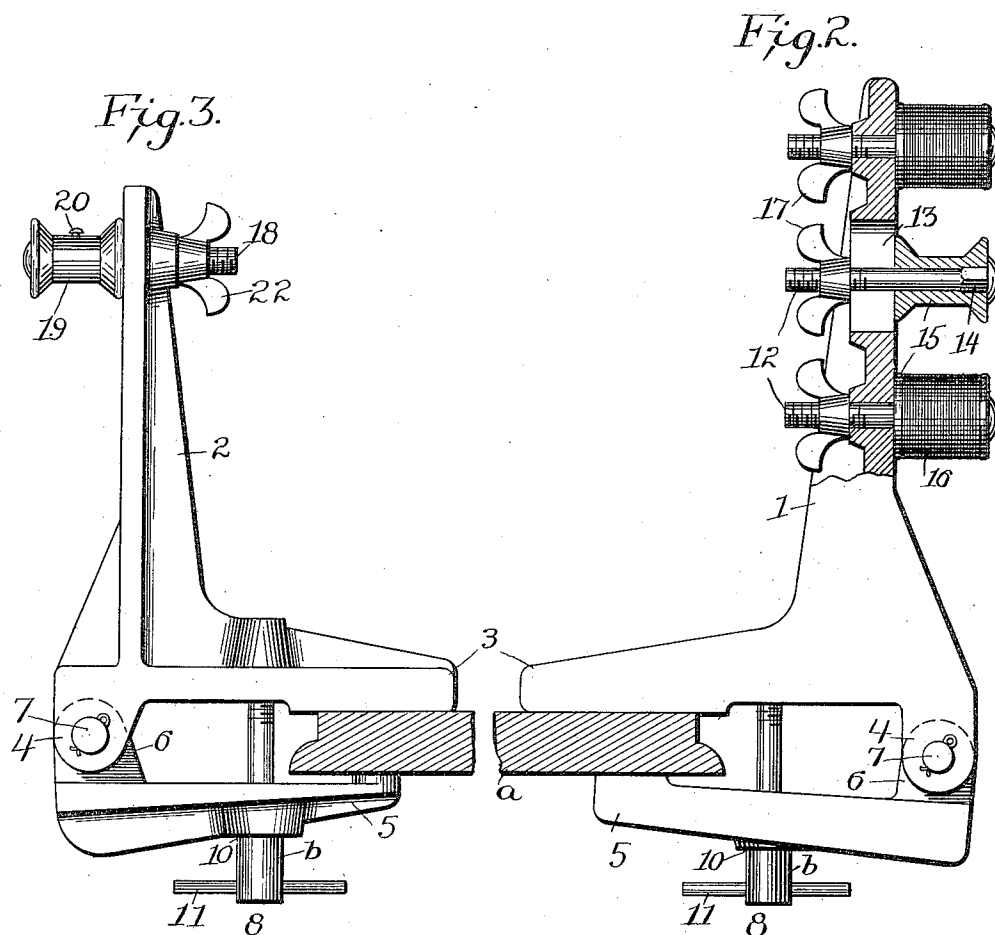
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UNITED STATES PATENT OFFICE.

GEORGE T. THORNE, OF DETROIT, MICHIGAN.

HAIR-LOOM.

1,069,497.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GEORGE T. THORNE, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented new and useful Improvements in Hair-Looms, of which the following is a specification.

This invention is an improved hair loom, especially adapted to be used in the weaving of hair goods, such as switches, puffs and the like, in which strands of hair are taken from a toothed card and interwoven through a series of warp threads, the object of the invention being to provide an improved hair loom which comprises a pair of standards having means to detachably secure them to a table or other supporting object, spool carrying means on the said standards for the warp threads and means to tension the warp threads, the invention consisting in the construction, combination and arrangement of devices hereinafter described and claimed.

In the accompanying drawings:—Figure 1 is a perspective view of a hair loom constructed in accordance with my invention. Fig. 2 is a detail elevation, partly in section, of the standard which carries the let-out spools. Fig. 3 is a similar view of the standard which carries a tensioning spool.

In accordance with my invention, I provide a pair of standards 1—2, each of which has at its lower end an inwardly extending supporting foot 3 to bear on the upper side of a supporting body or object, such, for instance, as a table top *a*. Each standard is also provided at its lower end, on its outer side, with a pair of downwardly extending ears 4. A clamping jaw 5 is employed in connection with each standard, each clamping jaw being provided at its outer end with a pair of upwardly extending ears 6 which are arranged between the ears 4 of one of the standards and pivotally connected thereto by means of a pin or bolt 7. The clamping jaw is adapted to bear against the under side of the table top and to be firmly clamped thereto by means of a clamping screw 8. The clamping screw 8 has its upper end secured to the foot of the standard. Its lower portion passes through an opening in the clamping jaw. The lower end of the clamping screw is diametrically enlarged as at *b* to form a shoulder 10 which bears under the clamping jaw and the said enlarged portion of the

clamping screw has a cross bar 11 whereby the clamping screw may be readily turned to cause the clamping jaw to clamp or release the standard. It will be understood from the foregoing that the standards may be thus readily attached to or detached from a table top or other suitable support and that they may be readily arranged at any desired distance apart according to the length of the switch, puff or other article to be woven.

The standard 1, which is arranged at the right of the operator is provided with three, or any suitable number of spool carrying bolts 12. These bolts project from the outer side of the standard 1 and the intermediate bolt is also vertically adjustable in a slot 13 with which said standard is provided. The bolts have near their heads, squared shouldered portions 14, which engage the outer ends of the bores of the spools 15 which carry the warp threads 16 and constitute the let-out spools of the said warp threads. Each spool carrying bolt has at its inner end a winged nut 17 which may be turned so as to frictionally engage the inner side of the standard 1. Thereby the spools 15 may be tensioned as required or may be tightened so as to entirely prevent them from turning.

The standard 2 which is arranged to the left of the operator is provided with a single carrying and tensioning bolt 18 for taking up or tensioning the spool 19 which spool has a stud 20 projecting from one side to which the usual loop 21 formed at the united ends of the warp threads may be readily connected. This bolt 18 which is arranged to turn in an opening in the standard 2 also has a winged tightening and tensioning nut 22 to secure the spool 19 and enable the same to exert the required tension on the warp threads. The operator, having thus arranged the warp threads, as shown in Fig. 1 and with the standards 1—2 at the required distance apart, according to the length of the switch, puff or other article to be woven or made, proceeds as in the usual manner to weave the switch or puff by taking strands of hair from the usual wire toothed card, interweaving these strands of hair through the warp threads and forcing the interwoven strands to the left until they are compactly disposed, this process continuing until the desired quantity of hair has been thus woven and an article of the desired length has been ob-

tained. As the process continues, the work can be rolled up on the left hand, single empty spool 19 by loosening the winged nut from time to time, as will be understood.

5 My improved loom enables the warp threads to be used directly from the spools 15 and, hence, dispenses with the necessity heretofore existing of taking the threads from the spools and winding the threads on
10 tensioning keys.

While I have herein shown and described a preferred form of my invention, I would have it understood that changes may be made in the form, construction and proportion of the several parts without departing
15 from the spirit of my invention and within the scope of the appended claim.

I claim:—

20 A hair loom of the class described comprising a pair of standards having means

to detachably secure them to a supporting object, one of the standards having a single transverse opening and the other having a pair of transverse openings and a vertical slot at a point between said openings, bolts 25 extending through said openings and slot of the said standards, spools on the said bolts and tensioning nuts on the bolts, said spools and nuts bearing against opposite sides of the standards and the said slot of 30 one of the standards permitting of vertical adjustment of the spool which is carried by the bolt that passes through the said slot.

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

GEORGE T. THORNE.

Witnesses:

JOHN ANDERSON,
IRENE SNYDER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."