



L. C. LOBATO.  
LOOM.  
APPLICATION FILED DEC. 5, 1914.

1,154,644.

Patented Sept. 28, 1915.  
3 SHEETS—SHEET 2.

Fig. 2.

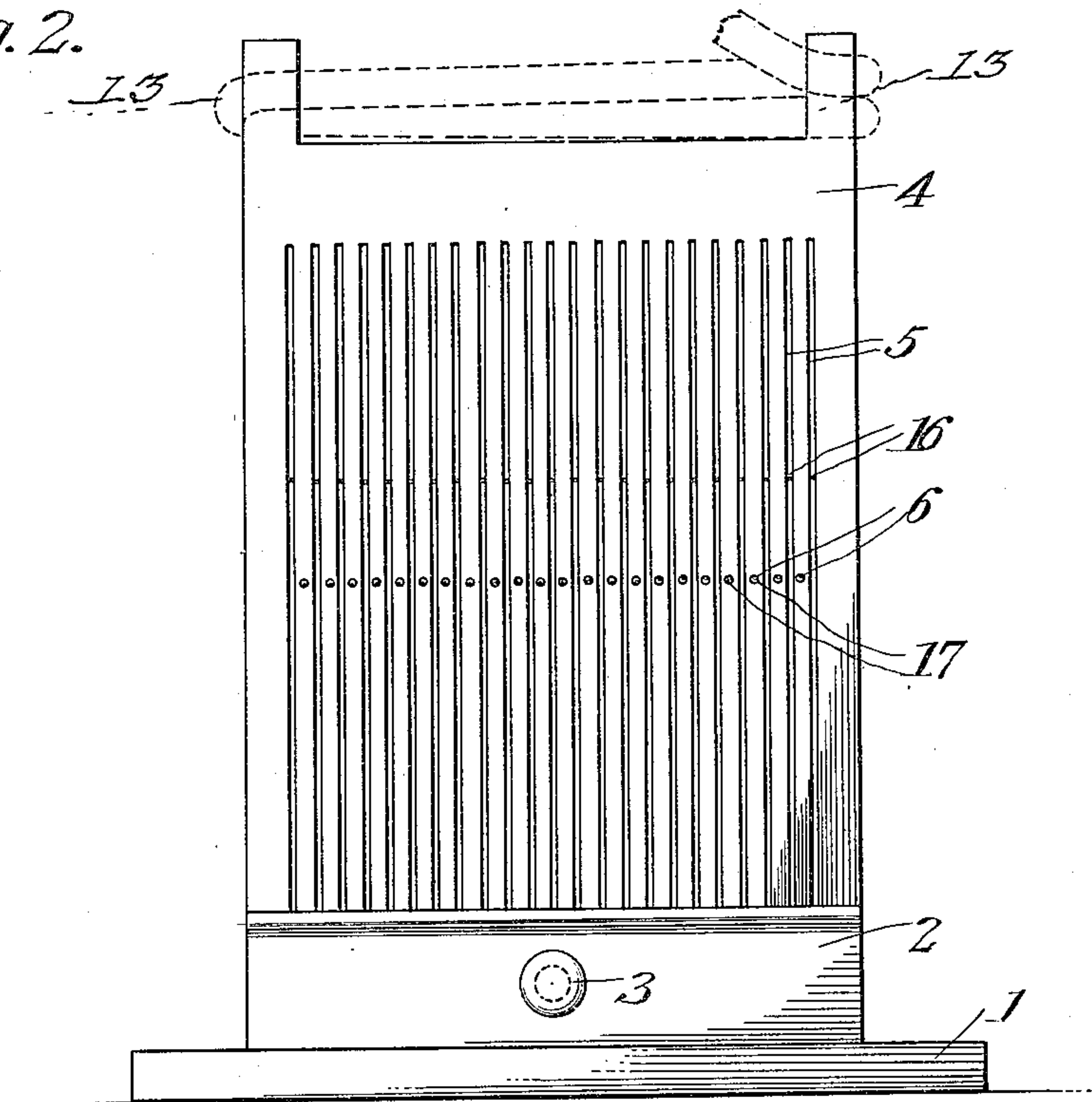


Fig. 8.

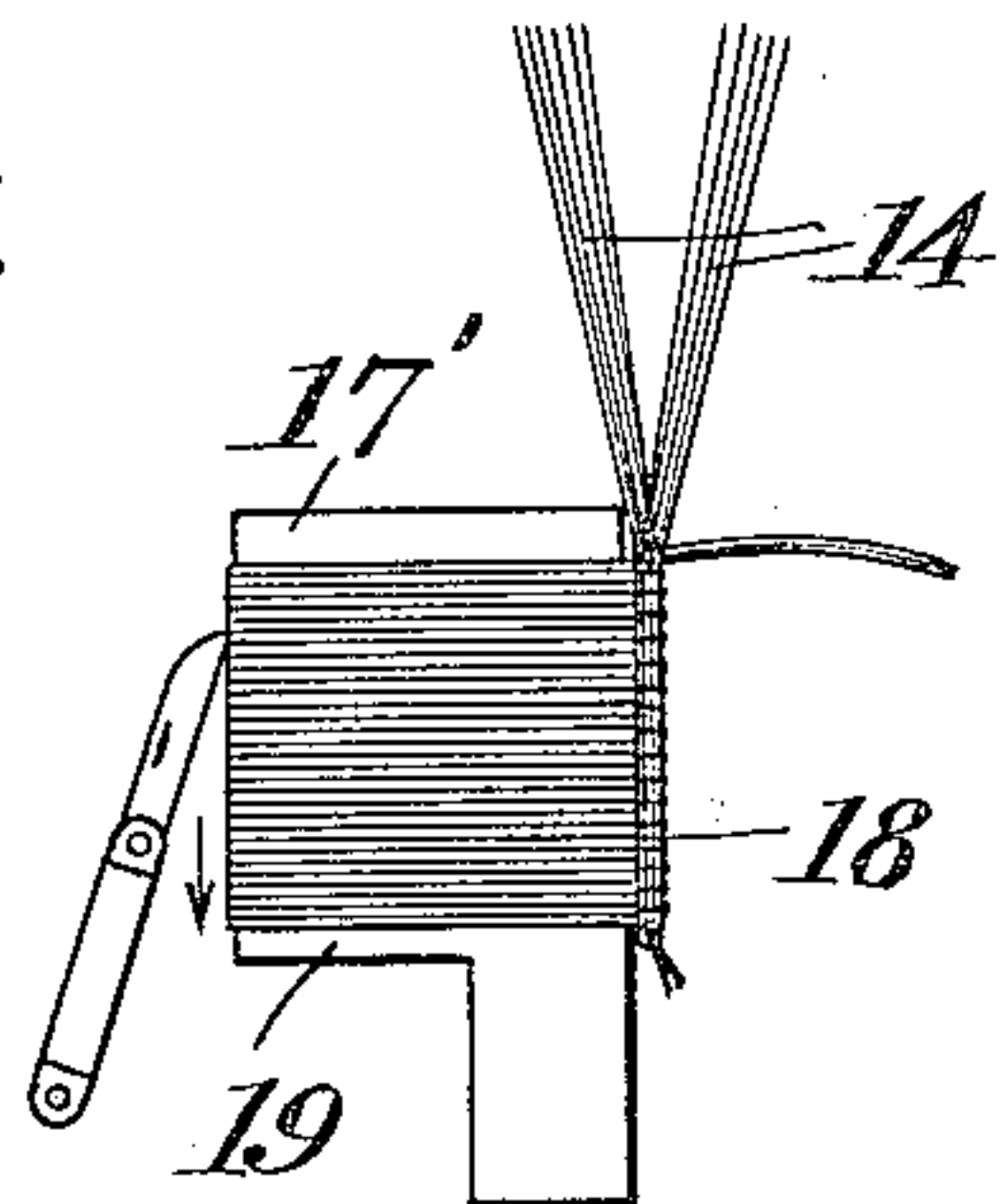


Fig. 9.

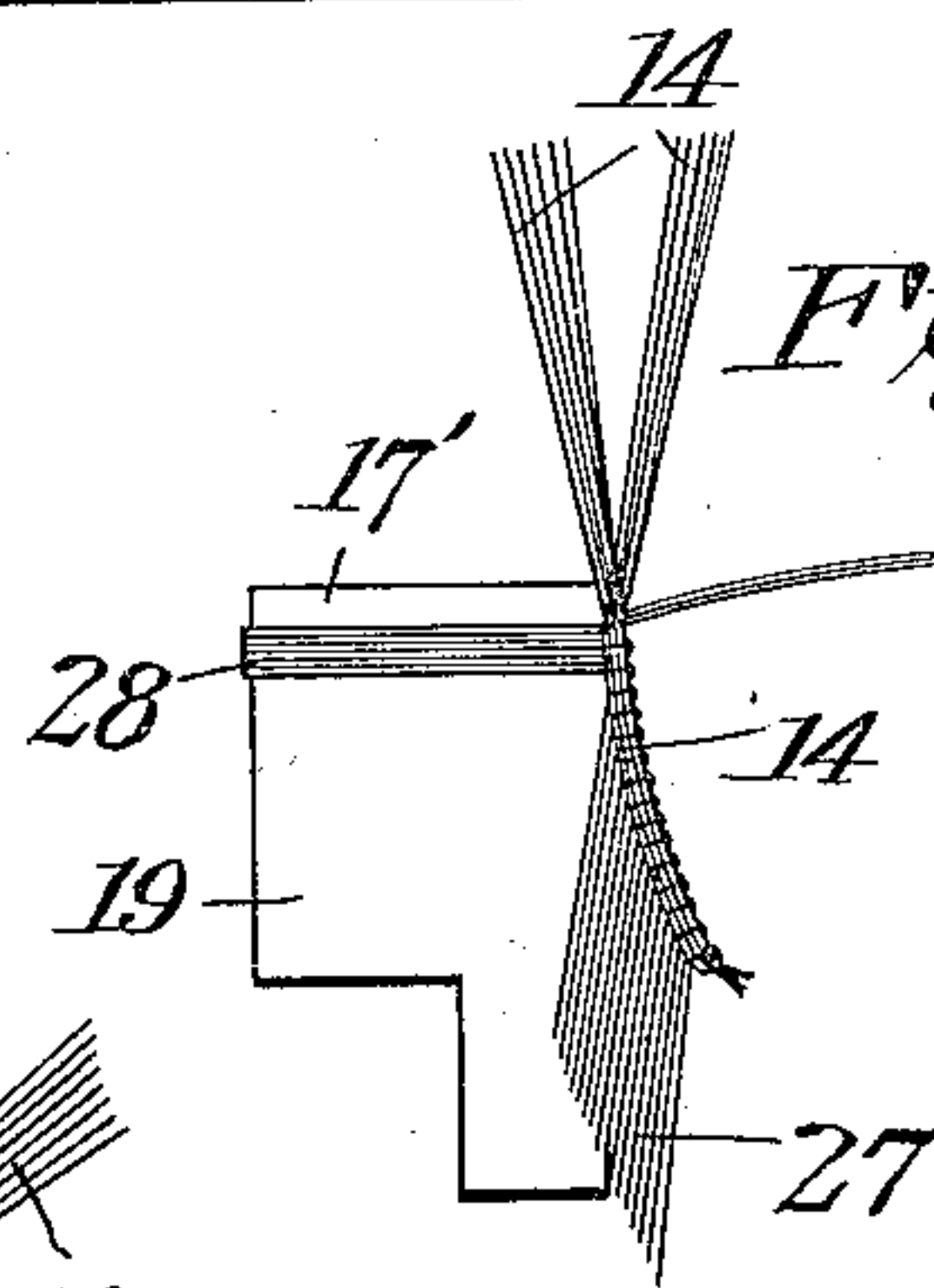
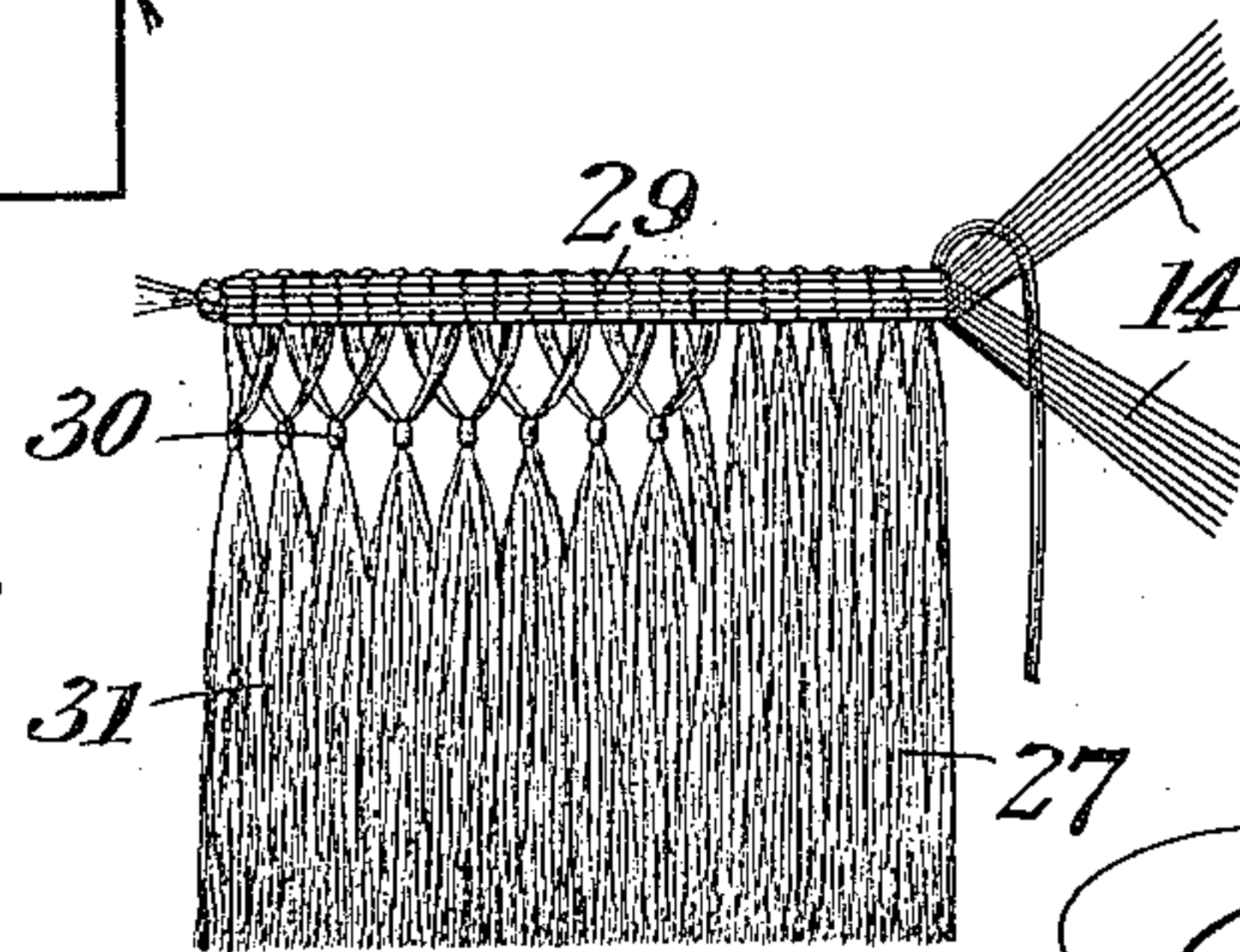


Fig. 10.



Witnesses

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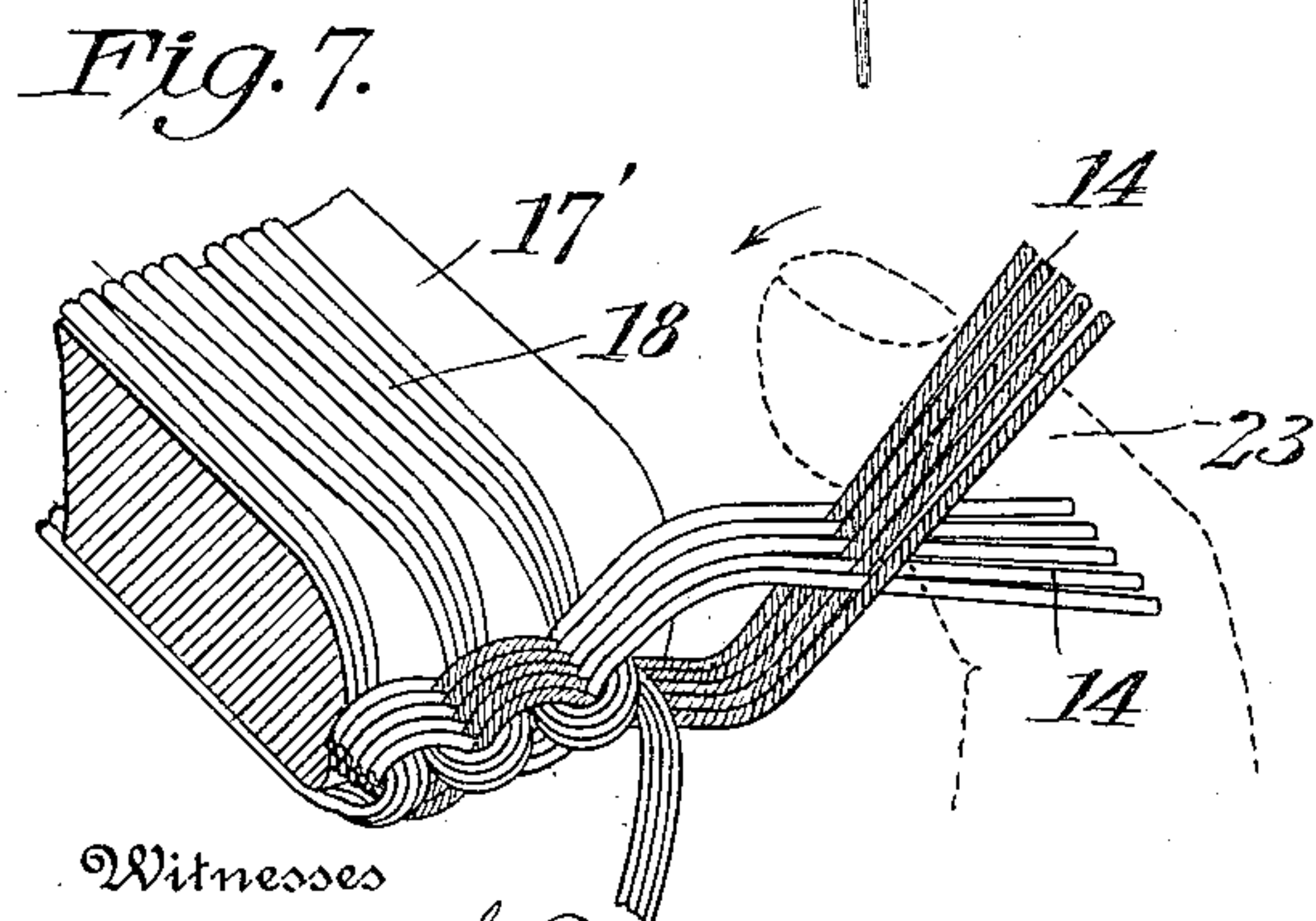
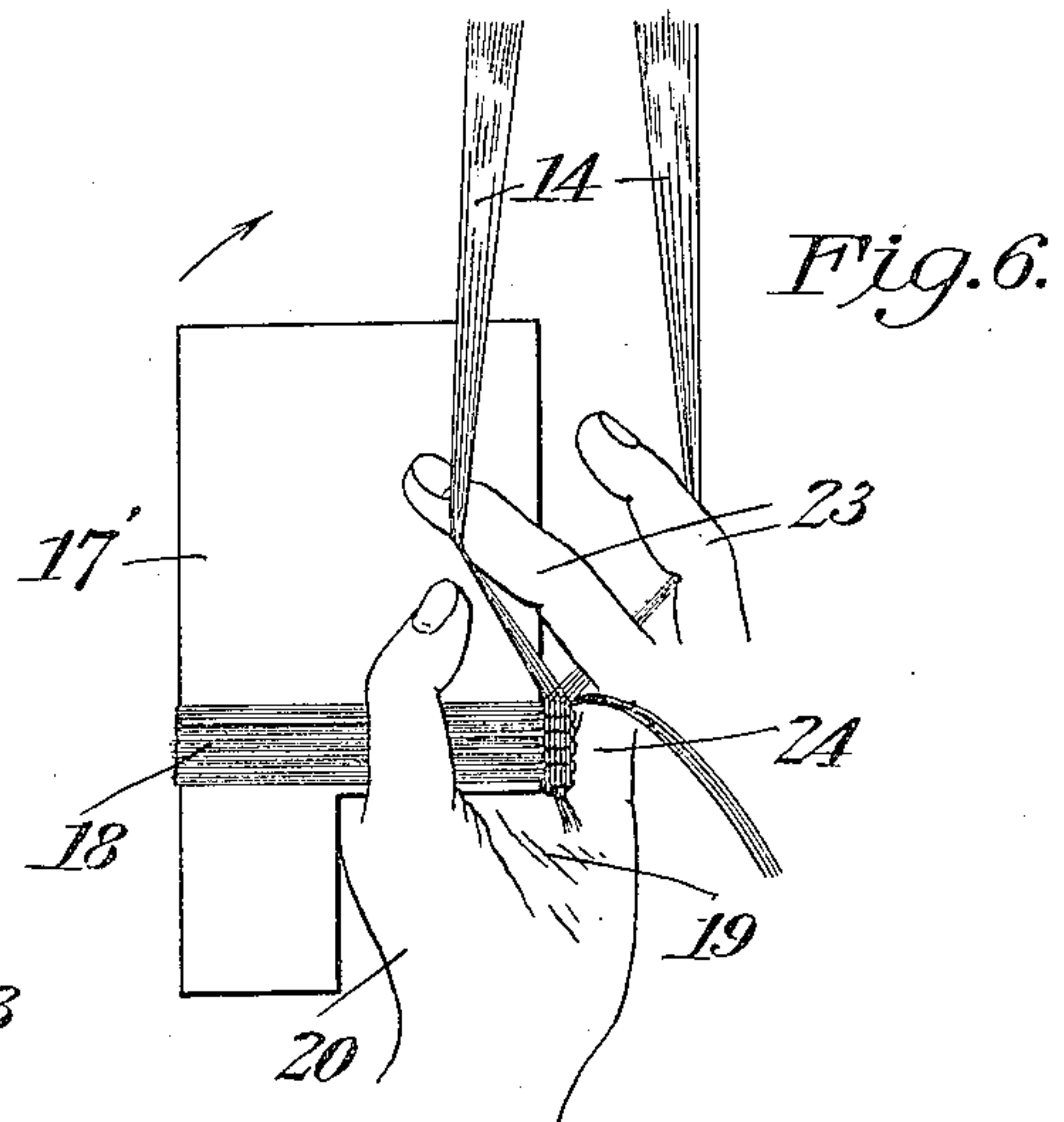
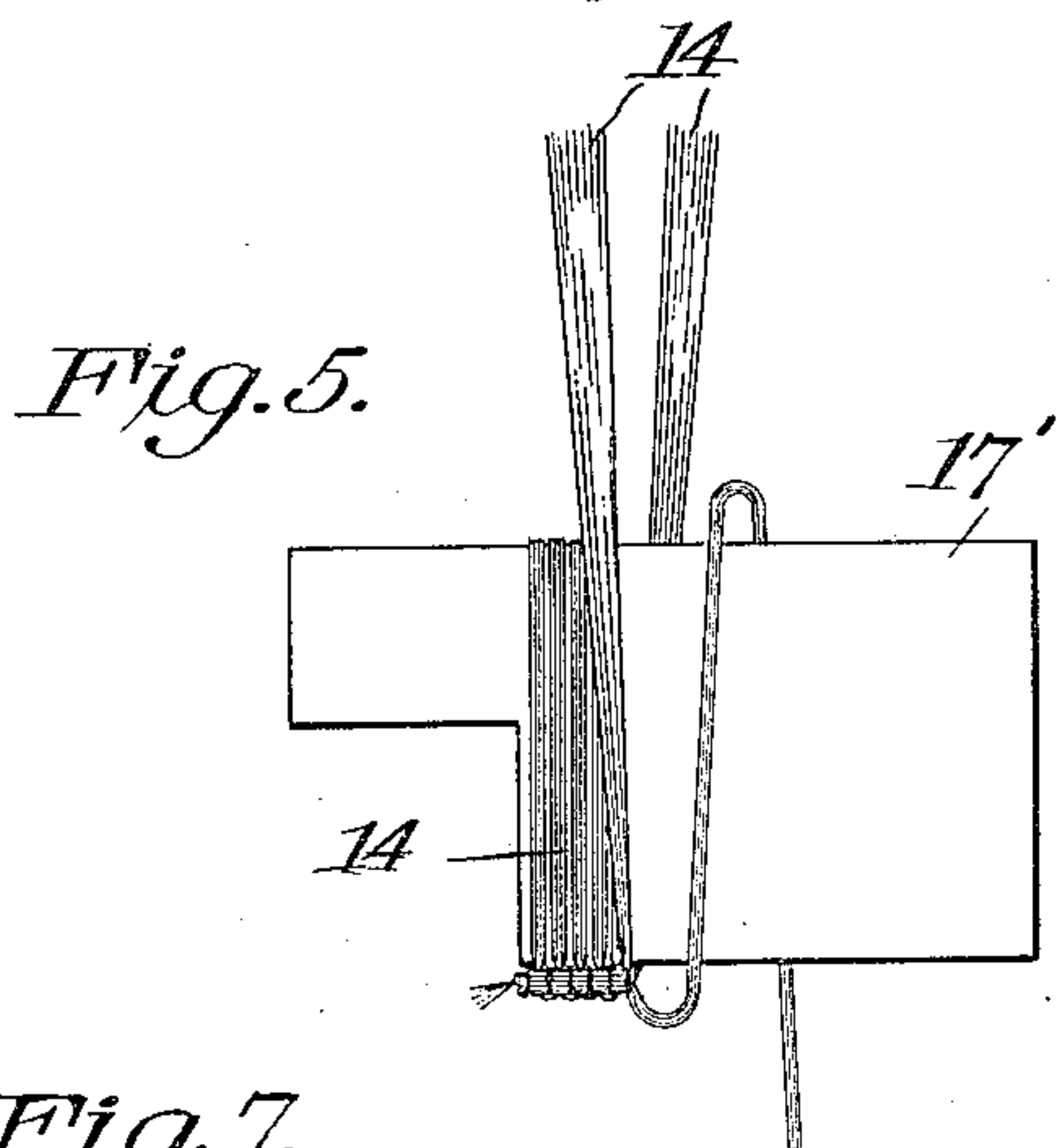
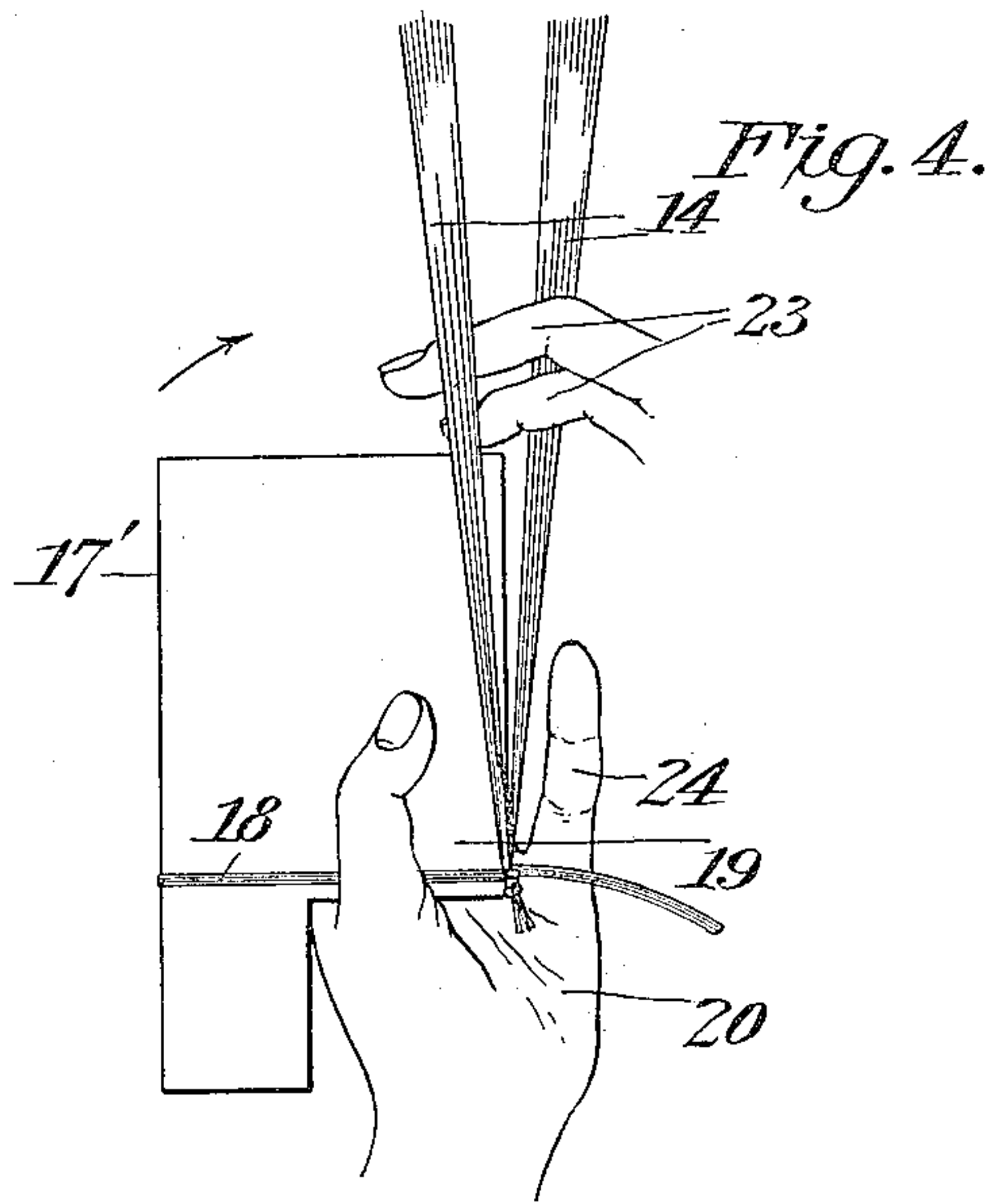
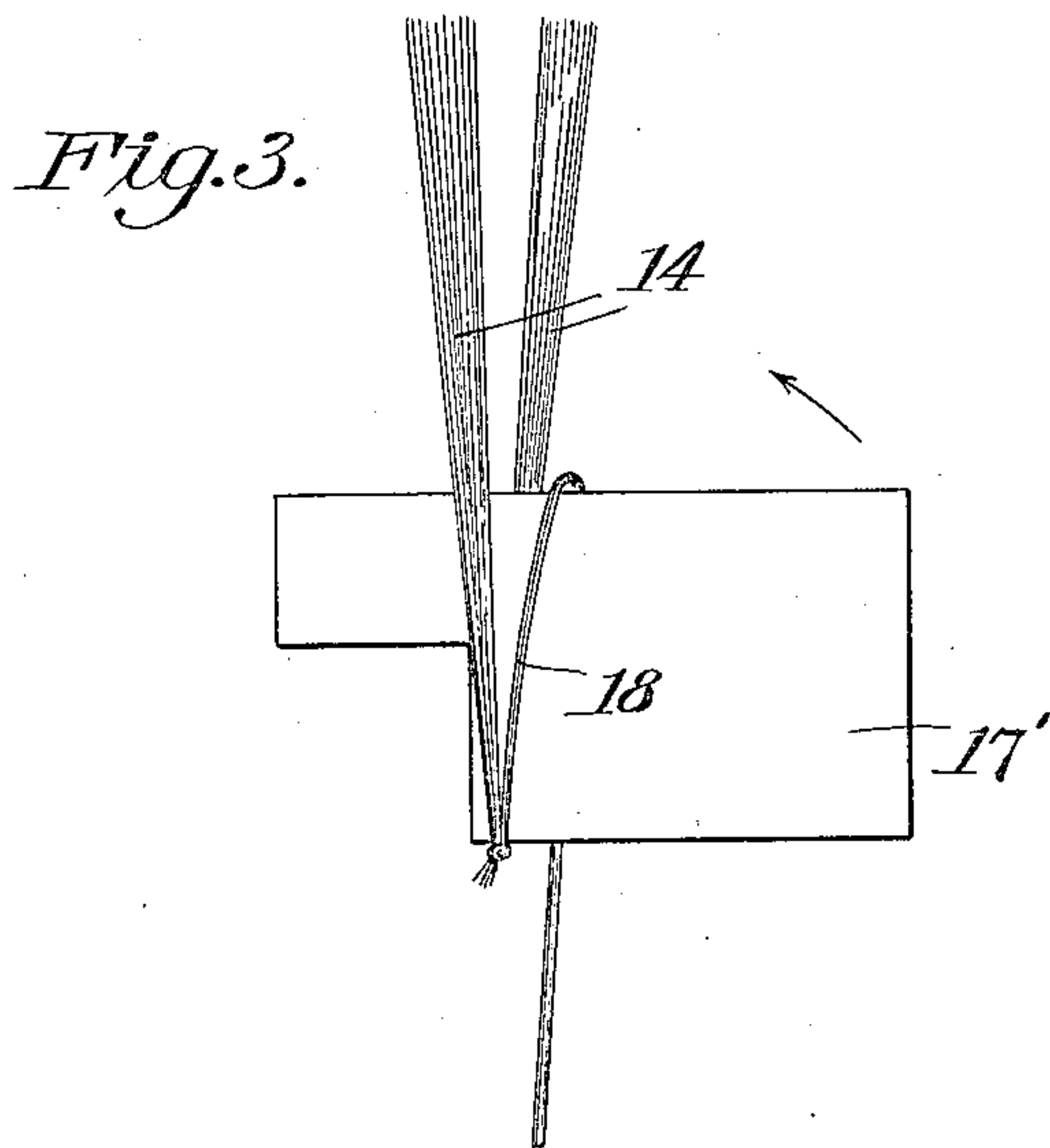
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# UNITED STATES PATENT OFFICE.

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## LOOM.

1,154,644.

Specification of Letters Patent. Patented Sept. 28, 1915.

Application filed December 5, 1914. Serial No. 875,635.

*To all whom it may concern:*

Be it known that I, LUIZ C. LOBATO, a citizen of the United States, residing at Lowell, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Looms, of which the following is a specification.

My invention relates to improvements in looms, and refers particularly to what may be termed a hand loom, the main object being the provision of a loom which may be used or manipulated by an unskilled person to produce fringe in a rapid and most perfect manner.

Another object of my invention is the provision of a loom which will be of small and compact size making its use highly desirable in the home or in school where the operations may be performed by girls or adults and a desirable product made.

Another object of my invention is the provision of a loom which will be of extremely simple construction to make its cost small and which will be easy and efficient in operation and entirely practical in every respect.

With these objects in view the invention consists of a hand loom embodying novel features of construction and combination of parts substantially as disclosed herein.

In order that the detailed construction and the operation of my loom may be fully understood and its advantages and features of merit be appreciated, I invite attention to the accompanying drawings.

Figure 1 represents a side elevation of a loom constructed in accordance with and embodying my invention showing the loom; shuttle, warp and filling in operative relation, the dotted lines showing the manner of crossing the stationary and movable threads to produce the binding edge, Fig. 2 represents a front or face view of the loom proper, Fig. 3 is a view showing the first step in the operation, or the attaching of the warp to the shuttle, Fig. 4 is a view showing the second step, or forming or attaching the filling to the shuttle, Fig. 5 is a view showing the formation of a series of layers of filling and the necessary amount of warp or binder, Fig. 6 is a view showing the shuttle and position of the fingers of both hands in the operation of tightening the warp upon the filling which forms the fringe, Fig. 7 is an enlarged detail view showing the interlacing or knotting of the warp and filling, Figs. 8

and 9 are views showing the manner of cutting the filling to produce the fringe and leave a portion upon the shuttle, and Fig. 10 is a view showing the complete fringe as produced with my loom.

Referring by numerals to the drawings in which similar numbers are used to denote the same parts in all views.

The numeral 1 designates the base board or support of my loom, upon which is secured the guide or cleat 2, in which is mounted and secured by means of the pin 3, the warp thread guiding board 4, which is provided with a series of vertical thread guiding slots or channels 5, and with a series of alternately arranged thread receiving openings 6. Upon the base board is also secured a cleat 7, to which by means of a pin 8, is connected the lower end of the inclined tension bar 11, carrying the warp clamp and guide 12 at its upper end.

From this construction it will be seen that the loom proper consists of a base, a vertical board thereon having slots and openings which are alternately disposed and of an inclined bar, and that to the board at 13, is secured the free ends of the warp 14, and that the warp at 15, is retained by the clamp and guide 12, and from there the series of threads 16, pass through the slots or channels 5, while the series of threads 17 pass through the openings 6, of the board 4; as clearly seen in Figs. 1 and 2. This disposition of the warp threads causes one series to be retained and the other series to travel in a vertical line to cross the first named series, the purpose of which will presently appear.

In connection with the loom proper I employ a shuttle of novel and peculiar form and this consists of a board 17, upon which are wound the filling threads 18, said board having a hand receiving portion 19, to be grasped by the hand 20, as clearly shown in Figs. 4 and 6, and the filling threads are supplied direct from a spool or source of supply, not shown.

The manner of using the loom will be readily understood from the foregoing description taken in connection with the drawings and in Fig. 1 the loom and shuttle are shown with the warp threads in position in the loom and upon the shuttle a section or portion of the completed fringe. At the start the warp 14 and filling thread 18 are started or attached to the shuttle which is



moved in the direction shown by the arrow in Fig. 4, the fingers 23 of one hand are placed between the warp threads while the fingers 24 of the other hand hold the filling upon the shuttle, and Figs. 5, 6, and 7 show successive steps wherein the filling 18 is gradually produced and bound by the warp or binder 14.

In Figs. 8 and 9 is shown the manner of cutting the filling to form the fringe 27, a portion 28, of the filling being retained or left upon the shuttle to permit the continuance of the production of the fringe.

In Fig. 10 is shown a section of the complete article which consists of the binding edge 29, the knotted contiguous row 30 and the series of frills or tassels 31, forming the complete and highly ornamental article.

It will be understood that the length of the fringe is determined by the width of the shuttle; also that any number of threads may be used in producing the warp or binder as well as the filling and that any colors or character of material may be utilized according to the desire of the operator.

It will be noted that any person can operate the loom, it being simply necessary to move the shuttle up and down to cross the warp threads and to tilt the shuttle from one side to the other and manipulate the fingers to wind the filling upon the shuttle and knot and lock the warp upon the filling, thus producing a simple, inexpensive and

practical loom, capable of rapidly producing a highly desirable product.

I claim:

1. In a loom, the combination of a loom reed having openings and slots alternatively arranged to receive the warp and weft threads, a shuttle constituting a former upon which the weft thread is wound and interweaved with the warp thread, and means for holding and guiding said warp threads.

2. In a loom, the combination of a loom reed having openings and slots alternatively arranged to receive the warp and weft threads, a shuttle constituting a former upon which the weft thread is wound and interweaved with the warp thread, and means for holding and guiding said warp threads, said means consisting of a tension bar and a warp clamp or guide carried by said bar.

3. In a loom, the combination of a loom reed having openings and slots alternatively arranged to receive the warp and weft threads, a shuttle constituting a former upon which the weft thread is wound and interweaved with the warp thread, said shuttle having a hand receiving portion, and means for holding and guiding said warp threads.

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

LUIZ C. LOBATO.

Witnesses:

JOHN C. LOBATO,  
EVARISTO LEKOSA.

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