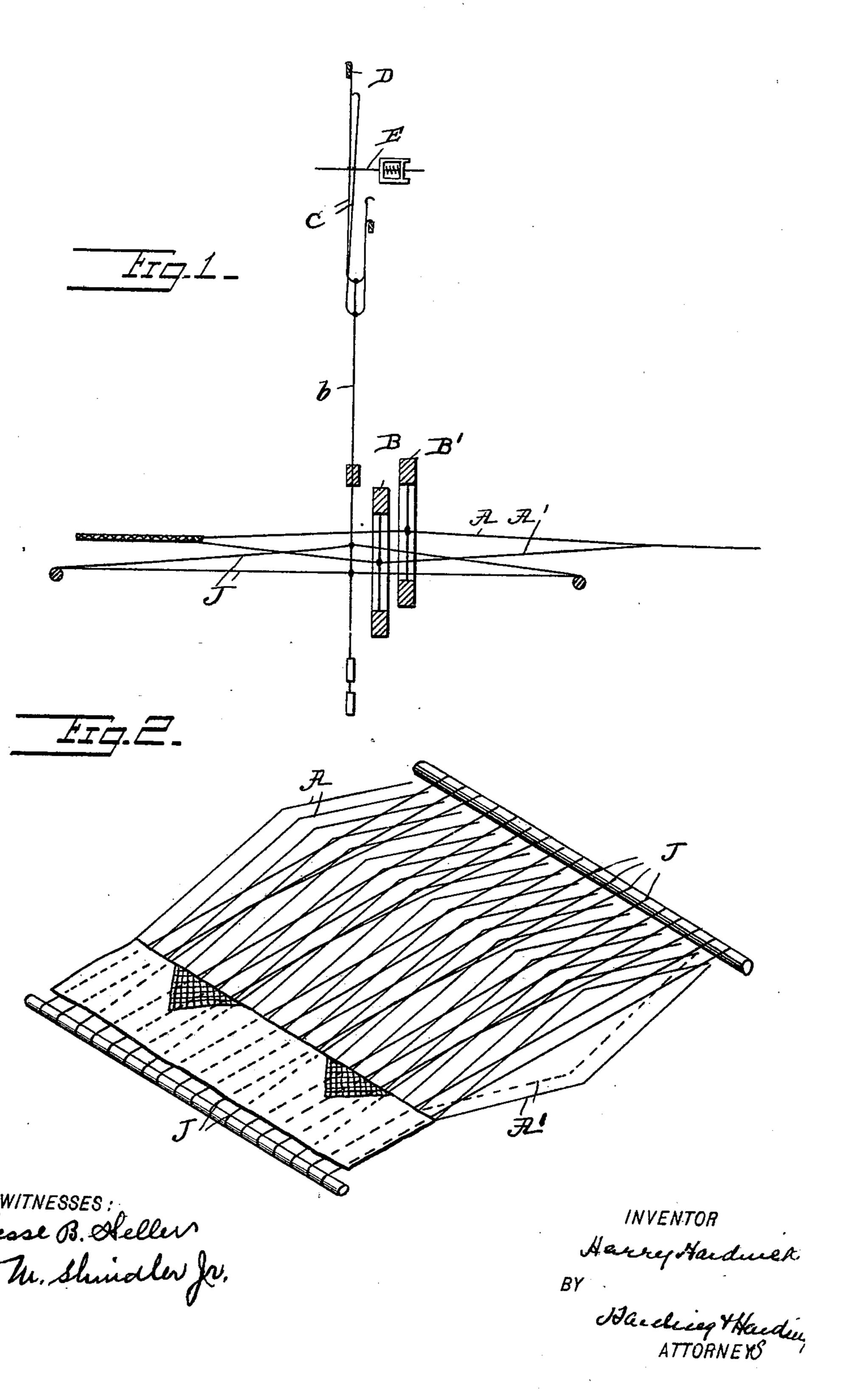
## H. HARDWICK.

# LOOM FOR WEAVING CHENILLE FABRICS.

(Application filed Apr. 8, 1899.)

(No Model.)



# United States Patent Office.

HARRY HARDWICK, OF PHILADELPHIA, PENNSYLVANIA.

### LOOM FOR WEAVING CHENILLE FABRICS.

SPECIFICATION forming part of Letters Patent No. 625,928, dated May 30, 1899.

Application filed April 8, 1899. Serial No. 712,201. (No model.)

To all whom it may concern:

Be it known that I, HARRY HARDWICK, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Looms for Weaving Chenille Fabrics, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in mechanism employed in looms for weaving chenille fabrics, and has for its object to reduce the skill necessary for the operator and to make the weaving more rapid, and thus

reduce the cost.

It has also for its object to make the setting more certain, thus reducing to a minimum the mistakes in the fabric and increasing the finish and correct design of the fabric.

This invention is a specific embodiment of the invention which forms the subject-matter of an application, Serial No. 677,123, filed April 11, 1898, and which invention is therein generically claimed.

I will now describe the embodiment of my invention as shown in the accompanying

drawings, in which-

Figure 1 is a sectional view through the 30 shafts and the fabric; and Fig. 2 is a perspective view of a portion of the fabric, the warp, and the supplemental warp.

A A', &c., are the ordinary warps used in weaving the fabric. These warps are connected in the ordinary manner, one half to one shaft B and the other half to the shaft B', which shafts are alternately lifted.

Jare a series of supplementary warps which are connected to the tails b, which are connected to the hooks C of an ordinary jacquard, lifted by the griff or knife D, and controlled by the needles E, operating the cards in the ordinary manner. The jacquard is so arranged as to operate for each pick of the che
15 nille tuft or fur, and the cards are so cut that the desired supplemental warp or warps are

lifted to form the indicating device for setting the chenille-weft in proper juxtaposition with the preceding weft. The operator instead of setting the contiguous wefts mechanically by 50 hand and eye sets each chenille-weft throughout its length so as to bear a relation to these indicating or supplemental warps which are lifted. The supplemental warps may be a mark of the position of a given color of the weft thrown, or they may indicate the given position of the figure and ground or any desired prearranged scheme; but in any event the operator has only to locate the prearranged indicia of the lift with relation to these supple-60 mental warps which are lifted.

Of course I do not intend to limit myself to any particular form of jacquard or equivalent mechanism. A lifter-board jacquard would operate equally well or a dobby or any 65 kind of mechanism in which, through, or by the indication of a card or a series of cards any one or a plurality of these warps J may be lifted. This is of course a general definition of a jacquard and also equally applies to 70 a kindred mechanism to accomplish the same result, and when I use the term "jacquard-machine" I intend to include, broadly, any such mechanism as would be covered by this definition.

Having now fully described my invention, what I claim, and desire to protect by Letters Patent, is—

In looms for weaving chenille fabric, in combination with the shaft and regular warp 80 connected therewith, of a plurality of supplemental warp, a jacquard, and connection between said supplemental warp and the jacquard, for the purpose specified.

In testimony of which invention I have 85 hereunto set my hand, at Philadelphia, Pennsylvania, on this 7th day of April, 1899.

#### HARRY HARDWICK.

Witnesses:

FRANK S. BUSSER, J. M. SHINDLER.