

W. H. DREW.

Selectors for Hair-Cloth Looms.

No. 152,982.

Patented July 14, 1874.

Fig. 1.

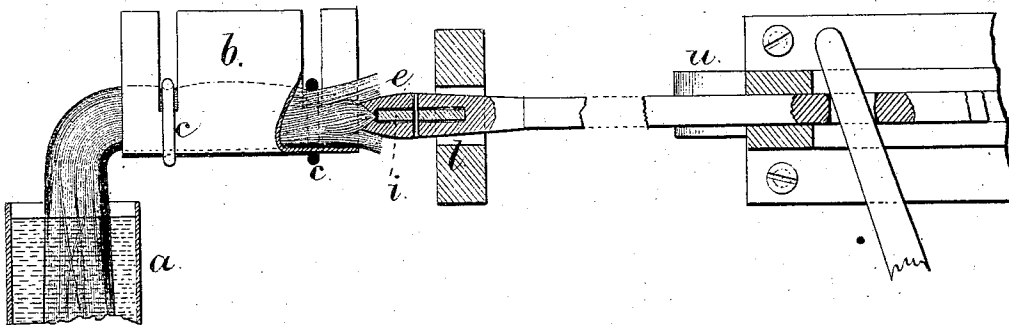
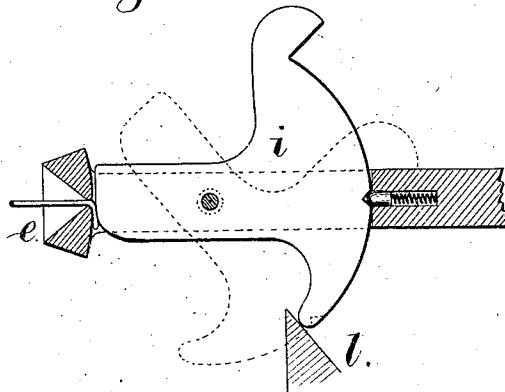


Fig. 2.



Witnesses,

Chas H Smith
Harold Perrell

Inventor

William H. Drew,
per L. W. Perrell atty

UNITED STATES PATENT OFFICE.

WILLIAM H. DREW, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN SELECTORS FOR HAIR-CLOTH LOOMS.

Specification forming part of Letters Patent No. **152,982**, dated July 14, 1874; application filed December 13, 1873.

To all whom it may concern:

Be it known that I, WILLIAM H. DREW, of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Selectors for Hair-Cloth Looms, of which the following is a specification:

A conical tube, having a small hole at the apex, is employed in selecting one hair at a time from a bunch of hairs, said hole being of a size that only admits one hair to pass. This selector is pressed upon the ends of the hairs as they are confined in a bunch, or the bunch pressed into the selector, and the hair that passes into the hole projects sufficiently to be grasped by pinchers, and drawn through the hole of the selector, or preferably grasped by a clamp that holds it in the eye of the selector while the parts move across the fabric, and the pinchers or clamps are moved at the proper time to release or drop the hair between the sheds of warp.

This improvement, although primarily adapted to hair-cloth, may be used in weaving any goods where the weft is in lengths and sufficiently stiff, and I remark that it may be used at both ends of a shuttle, so as to operate in two directions, or it may be at the end of a picking-stick.

In the drawing, I have represented the single selector at the end of a picking-stick.

Figure 1 is an elevation of the apparatus with the selector in section, and Fig. 2 is a sectional plan in larger size of the selector.

The hairs are, by preference, contained in a can, *a*, of water or other liquid to soften them; but a bag kept wet will answer the same purpose. The ends of the bunch of hair lie in the crotch-plate *b*, that is V-formed at

the lower part, and bands *c* of india-rubber or similar material serve to draw the hairs down in the crotch, and hold them in place, but allow a yielding movement as the selector *e* is pressed against the ends of the hairs.

In order to seize the hair forceps or pinchers may be used; but I prefer the swinging clamp *i*, that is operated by an incline or cam, *l*, and swings across at the back of the eye, bending the hair and gripping it firmly, so that the hair is drawn out from the bunch and across the fabric between the warp-threads, and dropped at the proper place by the action of an incline or cam, *u*, that moves the clamp *i* to liberate the hair.

It will be evident that, in place of the hollow cone being smooth, there may be grooves occupying radial positions to the eye to direct the hairs toward such eye.

I claim as my invention—

1. A reciprocating selector having a conical or converging end to direct the ends of the hairs, or their equivalents, and an eye to allow the passage of a single hair, in combination with nippers, pinchers, or clamps to seize such hair that passes through the eye, substantially as set forth.

2. A conical selector with an eye at the apex, in combination with a clamp that bends and holds the end of the hair at the back of the eye, substantially as set forth.

Signed by me this 8th day of December, A. D. 1873.

WM. H. DREW.

Witnesses:

GEO. T. PINCKNEY,
CHAS. H. SMITH.