

LOUISE WILBUR. Hair-Turning Hetchels.

No. 126,661.

Patented May 14, 1872.

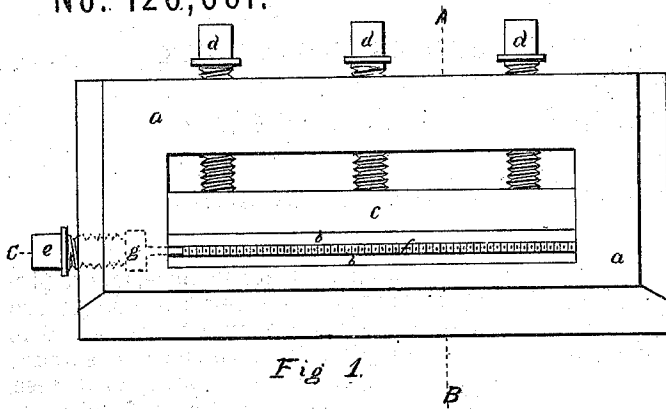


Fig. 1.

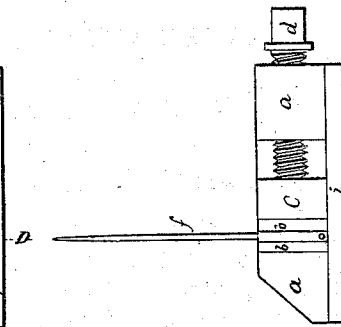


Fig. 3. Section on A.B. of fig. 1.

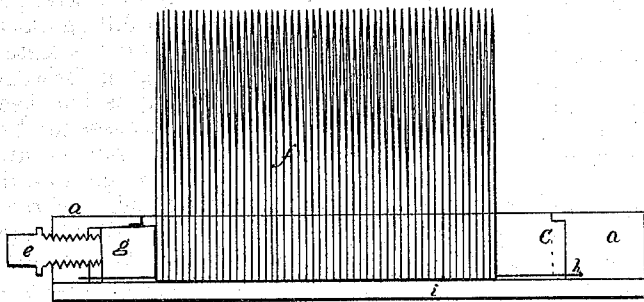


Fig. 2. Section on C.D. of fig. 1.

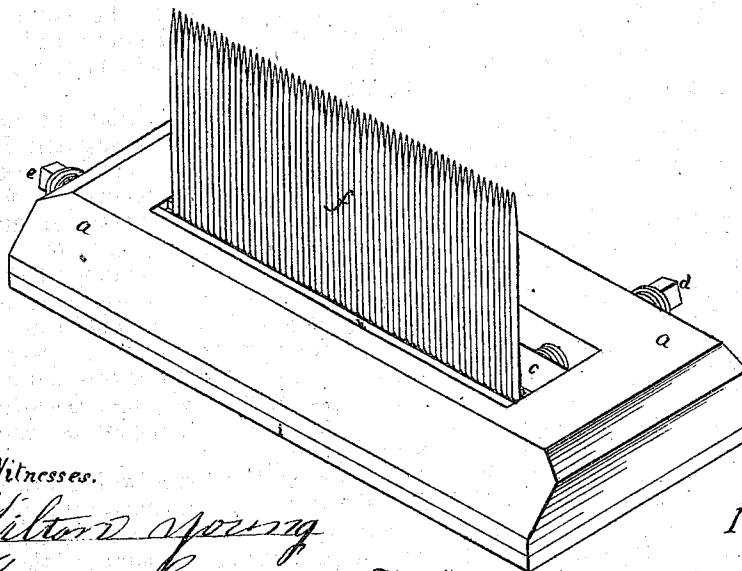


Fig. 4.



Fig. 5.

Witnesses.

Milton Young
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LOUISE WILBUR, OF WATERTOWN, NEW YORK.

IMPROVEMENT IN HAIR-TURNING HATCHELS.

Specification forming part of Letters Patent No. 126,661, dated May 14, 1872.

SPECIFICATION.

I, LOUISE WILBUR, of Watertown, in the county of Jefferson, State of New York, have invented a Hair-Turning Hatchel, of which the following is a specification:

Nature and Object of the Invention.

The first part of my invention relates to an arrangement of a row of round teeth in a suitable frame, pointed, and separate at the top, but touching each other toward the bottom in such a manner that in passing the ends of combed hair through them the largest or root end of the hair will lodge between the teeth, allowing the small ends to pass through; by this means arranging all the root ends in one direction. The second part of my invention relates to the shape of the teeth, which admits of a hole being made through the shank for the passage of a steel rod, which holds the teeth from falling out when they are loosened for the purpose of cleaning.

Description of the Accompanying Drawing.

Figure 1 is a plan view of the turning-hatchel. Fig. 2 is a vertical section of the same on the line C D, Fig. 1. Fig. 3 is a vertical section of the same on the line A B, Fig. 1. Fig. 4 is a perspective view of the turning-hatchel. Fig. 5 is an enlarged view of one of the teeth.

General Description.

The cast-iron frame *a* is furnished with a clamp or follower, *c*, which is moved forward by the screws *d* through the side of the frame. *b b* are facings of brass, attached to the follower and side of the frame. *f* are the teeth, held in place between the brass facings, first, by the wire *h*, Fig. 2, passing through them near the bottom, and, second, by the clamp *c*, and also by the end clamp *g*, which is moved forward by the screw *e* and holds the teeth firmly together in the row. The teeth above the frame are made round and pointed at the top, tapering gradually from the middle upward, thereby leaving a space between them at the top, which grows gradually smaller to where they touch. The bottom of the tooth is made square, with a hole through it to receive the wire *h*, Fig. 2, which is for the pur-

pose of retaining the teeth in place, and to prevent their falling out when the clamps are loosened to admit of cleaning the teeth. The clamp *c* has a projection, which catches under a corresponding one in the frame, as is seen at *c* in Fig. 2, where a few of the teeth are omitted to show the manner of securing the clamp. The end clamp *g* is secured in a similar manner. An iron plate, *i*, is screwed to the bottom of the frame to give it strength, and to prevent the clamps from falling out at the bottom, and to give a base for the teeth.

This machine is useful in arranging, for weaving into switches, &c., such hair as has been gathered by saving the tangled masses combed from the head. The tangled hair is first straightened by drawing it through an ordinary hatchel, consisting of a number of rows of upright teeth placed at a small distance apart, being quite similar to the hatchel used for straightening flax. This lays the hair parallel, and removes such as is too knotted to become straightened, but leaves the root ends of the hair in both directions; such being known in the market as combed hair. If when in this shape it is woven into switches or other work, the hair which has its root outward soon works loose and comes out on account of its being larger toward the root and smaller toward the point of the hair, and also on account of the barbs on the hair, which always turn toward the point.

The object of this machine is to arrange the hair, after having been straightened by the ordinary hatchel, so as to have its root ends all one way, and is accomplished as follows: A bundle of the combed hair is held in the hand and drawn through the teeth of the turning-hatchel, which teeth, being pointed at the top and touching together toward the bottom, retain and draw out of the bundle all of the hair which presents its barbs to the teeth or has its enlarged root end toward this end of the bundle. By repetition of this process the hair is all arranged with its root ends in one direction.

In place of the teeth which are described and shown in the drawing, ordinary No. 1 needles may be used, such as are seen in the accompanying model, the shape of the point and body being precisely similar, and the eye of

the needle answering for the hole through the shank of the tooth; but they are attended with greater difficulty of setting up after cleaning, &c., on account of the shank being round.

Claims.

I claim as my invention—

1. The process of selecting the root ends from combed hair by drawing it through a row of pointed teeth, arranged substantially as hereinbefore described.
2. A hair-turning hatchel, provided with comb-teeth arranged in contact with each oth-

er at or near their bases, so that there may be wedge-shaped spaces between them, substantially as and for the purposes shown and set forth.

3. In combination with the teeth *f*, constructed and arranged substantially as described, the clamps *c* and *g* for confining said teeth under the arrangement shown and set forth.

Madame LOUISE WILBUR.

Witnesses:

MILTON YOUNG,
THOMAS CAREY.