

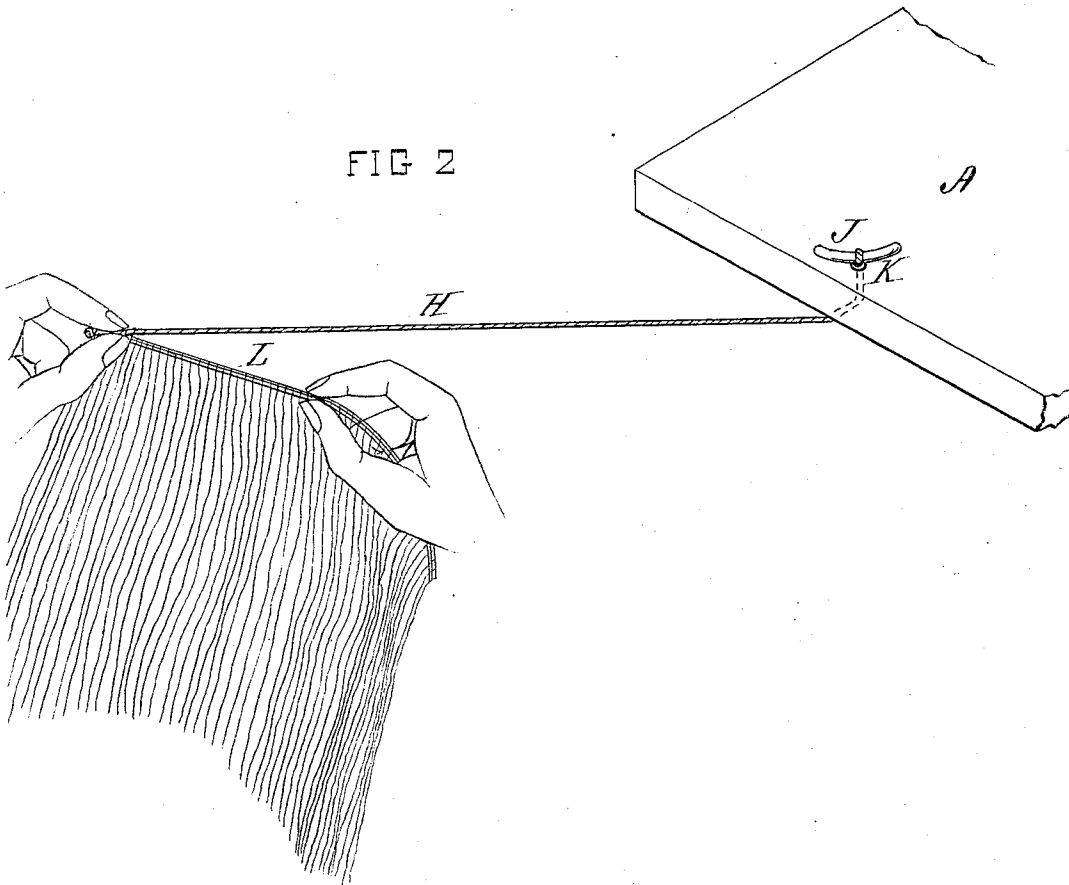
S. H. FLAGG.

Stock-Twisters for Hair Switches.

No. 150,144.

Patented April 28, 1874.

FIG 2



WITNESSES

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SAMUEL H. FLAGG, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN STOCK-TWISTERS FOR HAIR-SWITCHES.

Specification forming part of Letters Patent No. **150,144**, dated April 28, 1874; application filed December 4, 1873.

To all whom it may concern :

Be it known that I, SAMUEL H. FLAGG, of Providence, in the State of Rhode Island, have invented an Improved Twister for forming up Hair-Switches, of which the following is a specification:

The nature of my invention consists in a revolving spool and hook rigidly attached to a shaft, which is operated by a hand-crank and multiplying-gears, and which is held in a suitable frame, arranged for attachment to a table or bench. The object of this invention is to furnish a convenient machine for twisting the cord as it is used for winding up the stems of hair-switches.

In the drawing, A is the edge of the table or bench, to which the machine is attached. B is the frame of the machine; C, the adjusting-screw; D, the crank-handle; E and F, the multiplying-gears; G, the fixed spool, upon which the supply of cord H is to be first wound. I is the eye or hook through which the cord H is passed, with one or two turns taken around the wire, as shown, in order to create a suitable amount of friction.

In operating with the machine a certain amount of the cord H is to be unwound from the spool and drawn through the hook I, and is then to be held at one end by the fingers, as shown. The spool is then to be turned by means of the crank-handle D and multiplying-gears E and F until sufficient twist has been imparted. The stems of the switches are then to be wound, as usual, by the natural untwisting of the cord.

Figure 2 represents the method of forming up hair-switches heretofore in general use, and will, by comparison, illustrate the value of my improvement.

The proper length of cord H is first secured to the pin J by means of knots or half-hitches,

and then passed through a hole, K, in the table A, and its outer end held by the thumb and forefinger of the left hand while the pin J is being turned by the thumb and forefinger of the right hand until sufficient twist has been imparted to the cord. The stem of the switch L is then secured at one end to the twisted cord H, as shown, and, by gradually loosening the hold upon the cord by the thumb and forefinger of the left hand, the stem of the switch will be wound in a spiral around the cord, and after the other end of the stem has been secured the cord is to be removed from the pin J; and the same operation is then repeated with another piece of cord.

The pin J, when the attached cord H is passed through the hole K, provides a means of twisting the cord, and also operates as a brake to prevent the cord from untwisting at that end while the stem of the switch is being wound.

It will be readily seen that my improved twister, by first receiving a large amount of cord in one piece upon the spool G, and by its very rapid movement when turned by means of the crank D and multiplying-gears E and F, and by so holding the cord H, by means of the hook or eye I, that it cannot be pulled from the spool while the stem is being wound, fulfills all the conditions required to do the work with greater ease and rapidity than heretofore.

I claim as my invention—

The combination of the frame B, hand-crank D, multiplying-gears E and F, spool G, and eye or hook I, when constructed and arranged as described, for the purpose specified.

SAMUEL H. FLAGG.

Witnesses:

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