(No Model.)

## E. M. YOUNG.

## HAND PLAITING ATTACHMENT.

No. 333,711.

Patented Jan. 5, 1886.

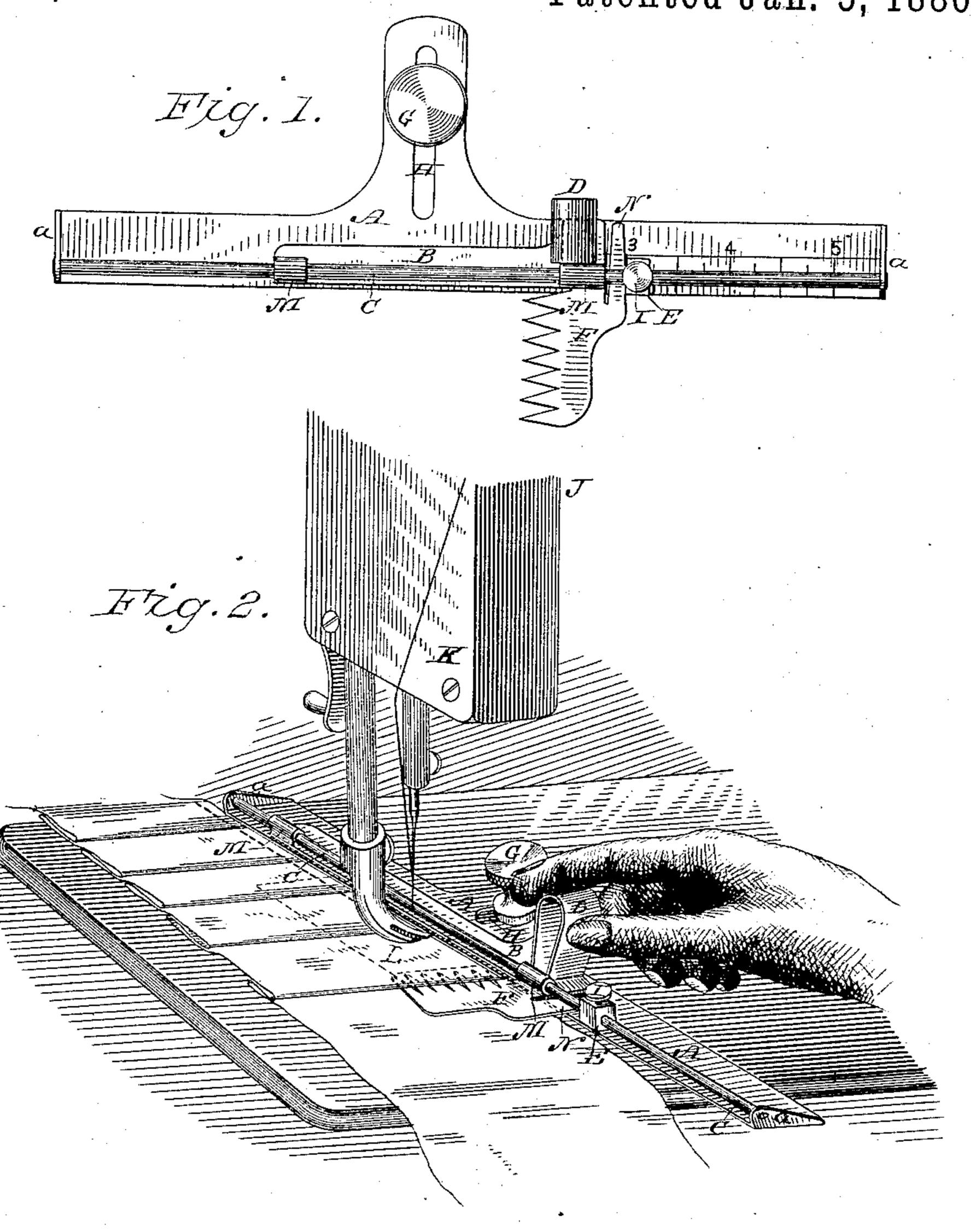
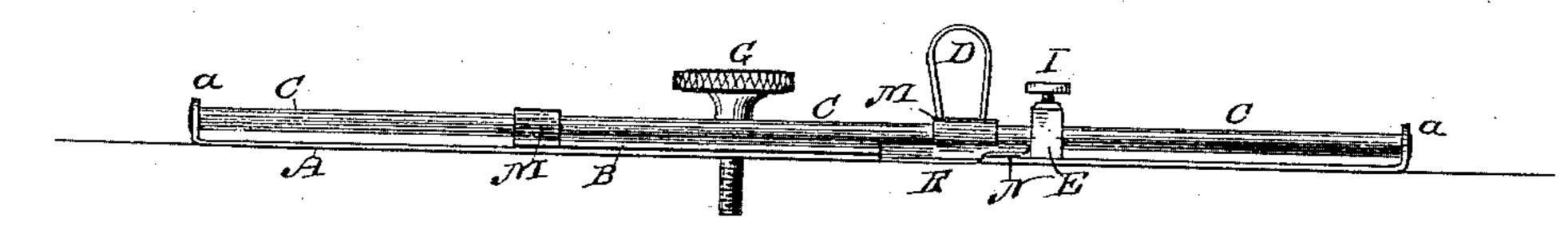


Fig. 3.



WITNESSES

Ed. a. newman. al. C. Numan INVENTOR

Elizabeth M. Young,

By her Attorneys

Odldwru, Nofthis Phylow.

## United States Patent Office.

ELIZABETH M. YOUNG, OF DANSVILLE, NEW YORK.

## HAND-PLAITING ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 333,711, dated January 5, 1886.

Application filed August 22, 1885. Serial No. 175,072. (No model.)

To all whom it may concern:

Be it known that I, ELIZABETH M. YOUNG, of Dansville, in the county of Livingston and State of New York, have invented a certain new and useful Improvement in Hand-Plaiting Attachments, of which the following is a

specification.

This invention relates to a hand-actuated device for attachment to any sewing-machine, used for the purpose of making (in conjunction with the sewing-machine) plaits in cloth, the process being continuous with the operation of the machine upon the cloth in sewing such plaits and without disengaging the cloth from the machine, and without stopping or interfering with the working of the machine. I attain the object sought by the means illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of my improved device disconnected from the sewing-machine; Fig. 2, a view in perspective showing it connected with the machine, and Fig. 3 a side

view of the device.

The entire device is made of metal. A strip or plate, A, having upturned ends or lugs a a, is the basis or frame-work of the device, and when in use this frame-plate rests horizontally upon the cloth plate or bed-plate of the sewing-machine, being fastened thereto by clamp-screw G, which passes through a side slot, H, in a lateral projection of a frame-plate into the

bed plate of the machine.

B is a slide playing freely back and forth 35 horizontally on a guide-rod, C, to which it is connected by metal loops or sleeves M.M. The guide-rod is supported by and rigidly connected to the frame-plate, the ends of this rod being fastened to the lugs or upturned ends of 40 the frame-plate. The slide B carries at one side a blade, F, which is provided with teeth, as shown. This blade moves with the slide of which it forms a part, and its teeth, being inclined a little downward, catch the cloth, and, 45 carrying it forward, form the plaits. An adjustable gage, E, arrests the slide in its motion to the right or toward the operator, and thus determines the width of the plaits. guide-rod C passes through the gage, which

50 can be set at any required point on the rod,

according to the width of plait desired, by means of a clamp-screw, I. The slide is moved back and forth upon the rod by means of an upwardly-projecting thumb-piece, D, which is manipulated by the thumb and first two fingers of the hand of the operator. This thumb-piece is firmly attached to the slide next its eage opposite that from which the blade F projects. A narrow strip, N, fastened to the slide, or being a portion thereof, and bent downward owith its free end resting on the frame-plate A, forms a combined spring and stay, and serves to keep the teeth of the blade firmly pressed down upon the cloth, and thus prevents slipping.

J shows a portion of the arm of a sewing-machine, of which K is the face-plate and L the ordinary throat-plate through which the

needle plays.

I am aware that prior to my invention hand-70 plaiters of various kinds have been made, but know of no hand-plaiter used, or adapted to be used, in connection with any sewing-machine, so as to be operated independently but at the same time with the machine to which it is at-75 tached, and by the same person.

I claim as of my own invention—

1. The combination of the frame-plate having the side slot, the guide-rod connected at its ends to the frame-plate, the slide of the guide-80 rod, the blade carried by the slide, and the thumb-piece for reciprocating the slide, substantially as and for the purpose set forth.

2. The combination of the frame-plate having the side slot, the guide-rod connected at its 85 ends to the frame-plate, the slide reciprocating on the guide-rod, the blade carried by the slide, and the adjustable gage, substantially as and

for the purpose set forth.

3. The combination of the frame-plate, the 90 guide-rod connected at its ends to the frame-plate, the slide on the guide-rod, having the strip N bearing upon the frame-plate at its free end, and the blade, substantially as and for the purpose set forth.

ELIZABETH M. YOUNG.

Witnesses:

CARRIE A. BRODT, JAMES A. YOUNG.