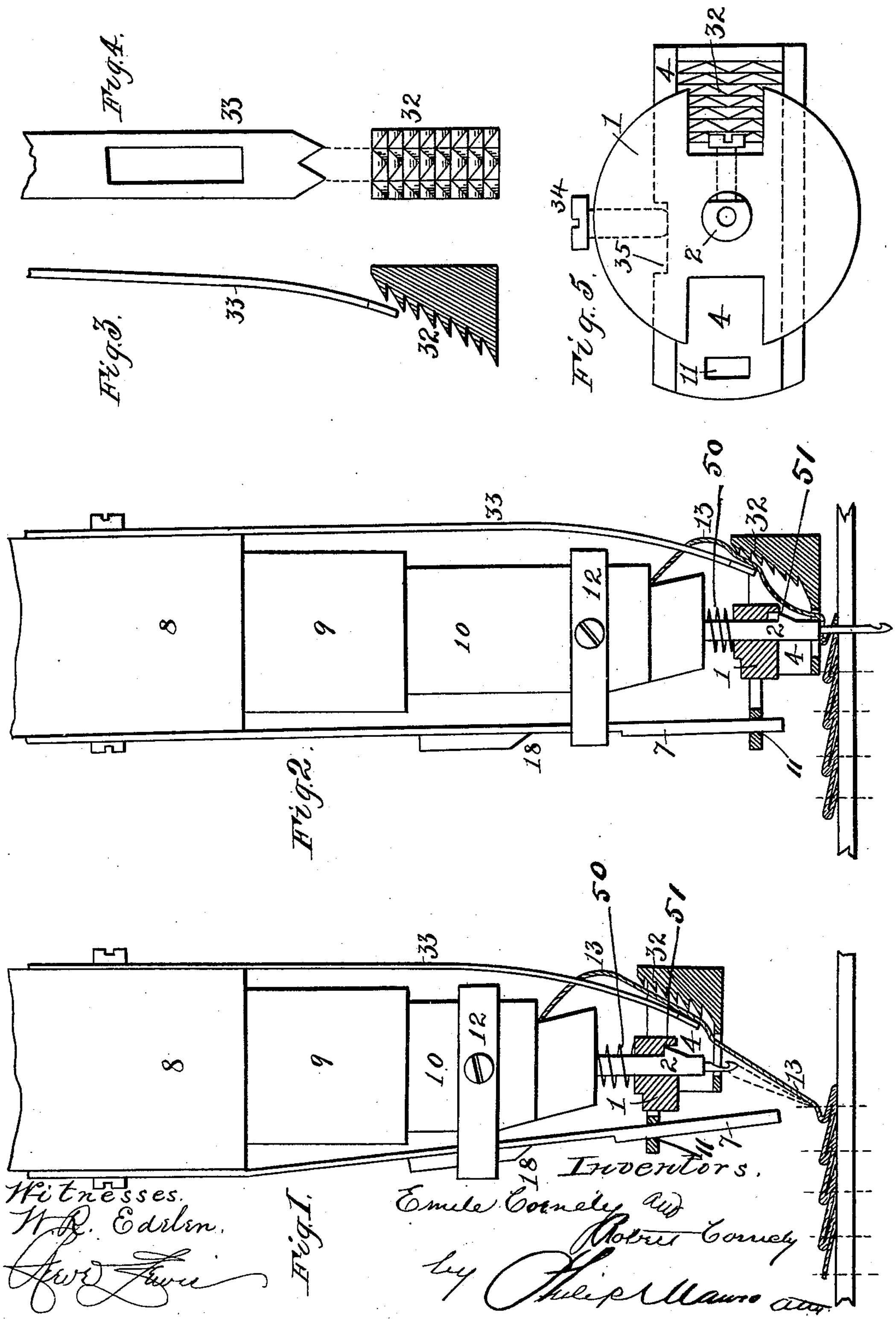
No. 676,422. Patented June 18, 1901.

E. & R. CORNELY.

ATTACHMENT FOR EMBROIDERING MACHINES.

(Application filed Dec. 5, 1900.)

(No Model.)



UNITED STATES PATENT OFFICE.

EMILE CORNELY AND ROBERT CORNELY, OF PARIS, FRANCE.

ATTACHMENT FOR EMBROIDERING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 676,422, dated June 18, 1901.

Application filed December 5, 1900. Serial No. 38,812. (No model.)

To all whom it may concern:

Be it known that we, EMILE CORNELY and ROBERT CORNELY, residents of Paris, France, have invented a new and useful Improvement in Attachments for Embroidering-Machines, which is fully set forth in the following specification.

The present invention has reference to improvements upon the folding attachment for embroidering-machines described in United States patent to Andre Debussy, No. 664,839, granted January 1, 1901, to us as assignees of said Debussy.

The improvements constituting this invention are fully illustrated in the accompanying drawings, wherein—

Figures 1 and 2 are part elevations and sectional views of the folding mechanism, showing different positions of the parts in the operation thereof. Figs. 3 and 4 are detail views of the spring and shoe, and Fig. 5 is an enlarged view of the folding-shoe and its supporting-block.

Referring to the drawings, 8 is a hub having blade 33 and spring 7, attached thereto and adapted to be turned upon the fixed tube 9 by means of the crank-handle of the machine. A nipple 2, attached to nipple-tube 10, carries a block 1, vertically movable thereon, but normally held in its lowermost position against a projection 51 on nipple 1 by coiled spring 50. A folding or guiding shoe 4 is supported by and adapted to reciprocate on the block 1. Said shoe also participates in the vertical and turning movement imparted to the block by nipple 2. The horizontal or lateral reciprocation is imparted to shoe 4 by spring 7, the lower extremity of which loosely engages through a slot 11 in the shoe. In the upward movement of nipple-tube 10 a ring 12 thereon, through which spring 7 passes, bears against an incline 18 on the spring and bends the latter, moving the shoe to the limit of its movement in one direction, as shown in Fig. 1. Upon the downward movement of the nipple-tube ring 12 is disengaged from incline 18, and the spring in resuming its normal position moves the shoe in the other direction. The lateral movement of shoe 4 is limited by a screw 34, Fig. 5, the inner end of which acts as a stop.

The mechanism thus far described is substantially the same as that of the Debussy patent above referred to.

The improvements constituting the present invention consist in providing the folding-shoe 4 with a toothed surface 32, against which bears a spring-blade 33. The ribbon or braid is passed into the shoe 4, between the blade 33 and toothed surface 32. When the shoe rises, the pressure of the blade feeds the ribbon down into the shoe 4, as shown in the position Fig. 1. When the shoe 4 descends, the teeth 32, acting against blade 33, equally feed the ribbon downward, as represented at Fig. 2, and thus the plaiting or folding work is supplied with ribbon or braid at the rising as well as at the descending movement of the shoe 4.

As will be apparent, the improvements constituting the invention may be employed in conjunction with other forms of mechanism than that herein specifically described without departing from the invention.

What we claim is—

1. In a sewing or embroidering machine, the combination with a sewing-needle and means for operating the same, of a movable folder for ribbon-braid or the like, means for imparting vertical and lateral movements to the folder to form the ribbon-braid or the like into folds beneath the sewing-needle, an upright toothed or serrated wall on the folder adapted to grip the ribbon-braid or the like and feed the same to the needle during the downward movement of the folder, and means independent of the folder acting to press the ribbon-braid or the like against the toothed or serrated wall and to hold the same stationary during the upward movement of the toothed or serrated wall whereby the latter is enabled to take a fresh grip on the ribbon-braid or the like.

2. In a sewing or embroidering machine, the combination with a sewing-needle and means for operating the same, of a movable folder for ribbon-braid or the like, means for imparting vertical and lateral movements to the folder to form the ribbon-braid or the like into folds beneath the sewing-needle, an upright toothed or serrated wall on the folder adapted to grip the ribbon-braid or the like and feed the same to the needle during the downward movement of the folder, and a

spring-blade independent of the folder acting to press the ribbon-braid or the like against the toothed or serrated wall and to hold the same stationary during the upward movement of the toothed or serrated wall whereby the latter is enabled to take a fresh grip on the ribbon-braid or the like.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

EMILE CORNELY.
ROBERT CORNELY.

Witnesses:
GEORGE E. LIGHT,
EDWARD P. MACLEAN.