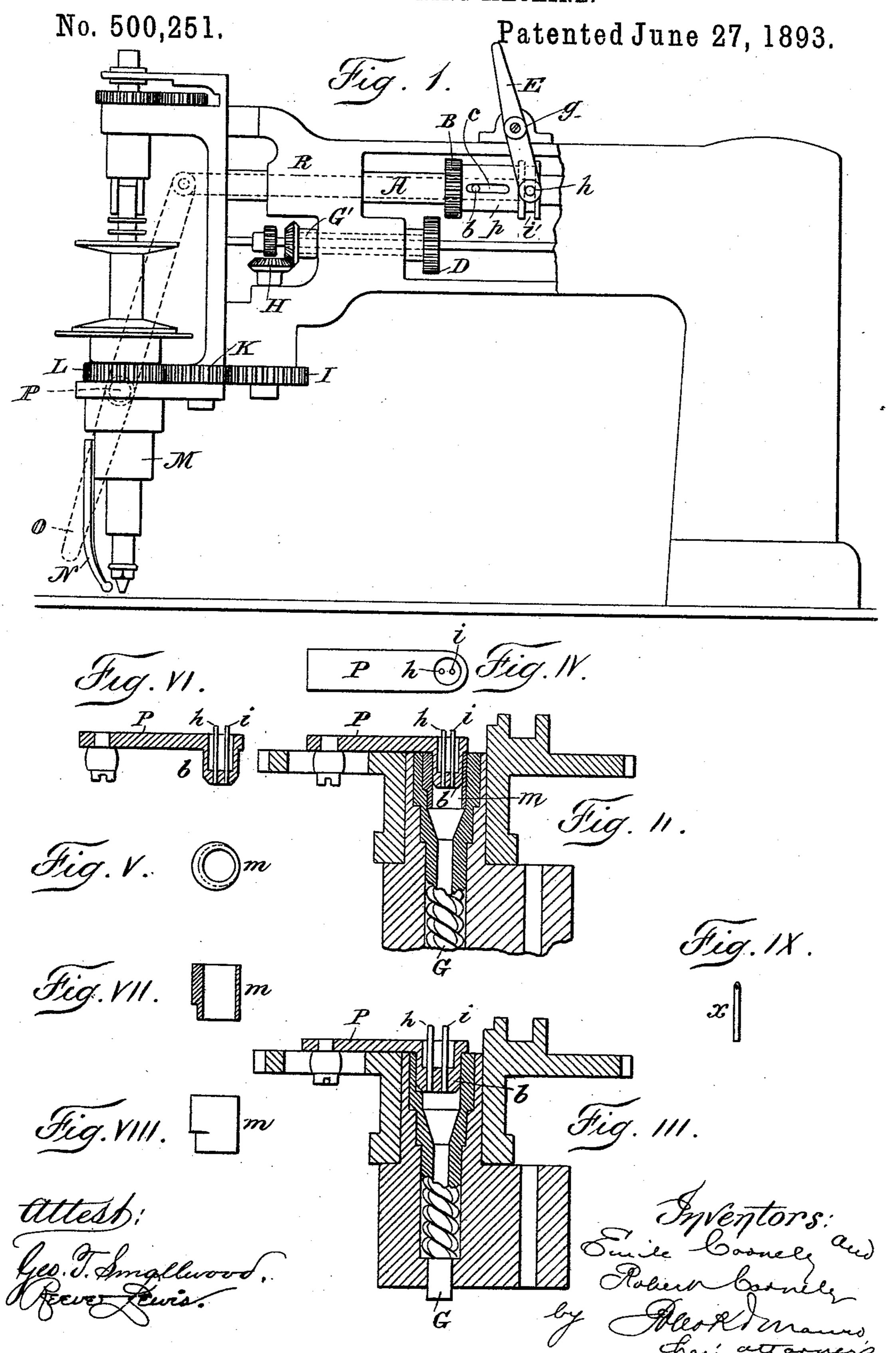
E. & R. CORNELY. EMBROIDERING MACHINE.



## United States Patent Office.

EMILE CORNELY AND ROBERT CORNELY, OF PARIS, FRANCE.

## EMBROIDERING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 500,251, dated June 27, 1893.

Application filed October 29, 1892. Serial No. 450,385. (No model.)

To all whom it may concern:

ROBERT CORNELY, residents of Paris, France, have invented new and useful Improvements 5 in Embroidering and Sewing Machines, which are fully set forth in the following specification.

This invention relates to embroidering machines of the type described in many prior patro ents, such as Nos. 228,445, 461,737, 466,889, 479,057, and particularly to machines of that type which are adapted to work cording-embroidery.

The principal object of the present inven-15 tion is to provide means whereby the mechism which actuates the revolving thread-carrier can be instantaneously thrown into and out of action, so as to change from simple chain stitch to the cording embroidery, and 20 vice versa, without arresting the operation of the machine. When machines of this character employ two needles, as in Patent No. 466,889 above referred to, making parallel lines of stitches, it is desirable to vary at times 25 the distance between the two lines. Means for accomplishing this result are hereinafter described, so that by means of the present improvements we are able to produce, with the same machine, a great variety of effects.

In the accompanying drawings, Figure I, is a side elevation of the parts of the machine above the bed plate (part of the casing being broken away). Figs. II and III are vertical sections of the looper-mechanism. Figs. IV 35 and VI are details of the looper. Figs. V, VII and VIII are details of the removable eccentric sleeve, and Fig. IX shows a needle that may be used in place of the looper tubes.

In the cording embroidery machines, above 40 referred to a pinion B on the main shaft A of the machine (Fig. I) drives a series of pinions D, G', H, I, K, L and finally the sleeve M, on which the revolving thread carrier N is secured.

In Fig. I means are shown whereby the actuating mechanism of the revolving thread without arresting the work. To this end pinion B on the main shaft A of the machine is 5c carried by a sleeve p, and a pin b of shaft A passes through the slot c of sleeve p and thus the pinions B turn with the shaft A. The tion of the machine.

lever E which turns on its fulcrum g is pro-Be it known that we, Emile Cornely and | vided with a pin h which extends into the collar i' of sleeve p, and by turning said lever E 55 the pinion is shifted on shaft A, and can be set in and out of gear to and from the pinion D while the shaft is turning; and consequently the entire series of transmission gear wheels D, G', H, I, K, L together with the revolving 60 thread carrier N can be thrown in and out of gear during the operation of the machine, thus producing new and various effects in ornamental embroidery in which some of the lines can be made in single chain stitch em- 65 broidery, and others in cording work without stopping the machine.

> The operation of the pinion B can be still more facilitated by the application of a lever O which turns on its fulcrum P and which is 70 connected to the pin h by means of the connecting rod R; the handle of said lever is close to the hand of the operator which holds and guides the material.

> When the machine works with two needles, 75 as shown and described in Letters-Patent No. 466,889, an oscillating looper is employed which is operated by the oscillating motion of the screw shaft G (Figs. II and III) the latter acting upon the cylindrical part b of the 80 looper P which is fitted into an eccentric hole of the screw shaft G.

By employing on the same machine needles of different distances one from the other, the throw of the eccentric in the screw shaft 85 G must be shorter or longer according to the distance of said needles one from the other. To effect this the hole in the gear shaft G is bored out in conformity with the widest distance which is employed between the two 90 needles, i. e., it has the throw of the greatest length as represented in Fig. III, and when the needles are set at a smaller distance one from the other a sleeve m (Figs. V, VII and VIII) which has a smaller eccentric is set into 95 the eccentrical hole of the screw shaft G, as represented at Fig. II, and then a looper piece P provided with two small tubes i, h at a small carrier can be thrown into and out of action | distance one from the other (Figs. II and VI) is adjusted into the eccentric sleeve m as rep- 100 resented at Fig. II. Thus a looper for any desired distance between the needles can be employed without any change in the construcInstead of the very small tubes h, i in Fig. VI, small needles x (Fig. IX) can be employed on the looper piece.

Having thus described our invention, what we claim is—

In a sewing or embroidering machine, the combination with the stitch-forming mechanism, the revolving thread-carrier and its actuating mechanism, of a handle or lever for throwing said actuating mechanism into and out of gear at the will of the operator while

the machine is in operation, substantially as described.

In testimony whereof we have signed this specification in the presence of two subscrib- 15 ing witnesses.

EMILE CORNELY.
ROBERT CORNELY.

Witnesses:

ROBT. M. HOOPER, S. T. S. FULLER.

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