

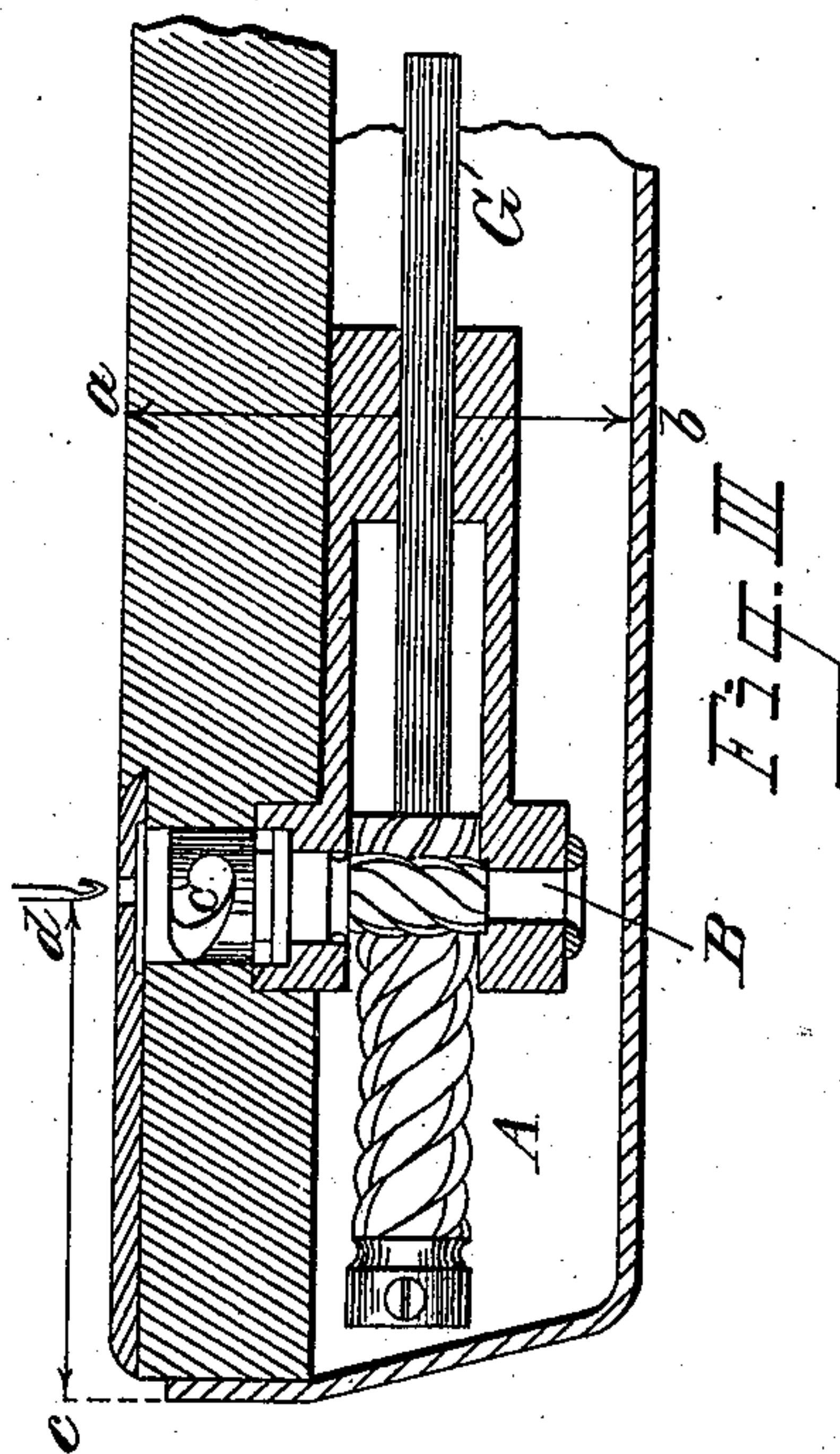
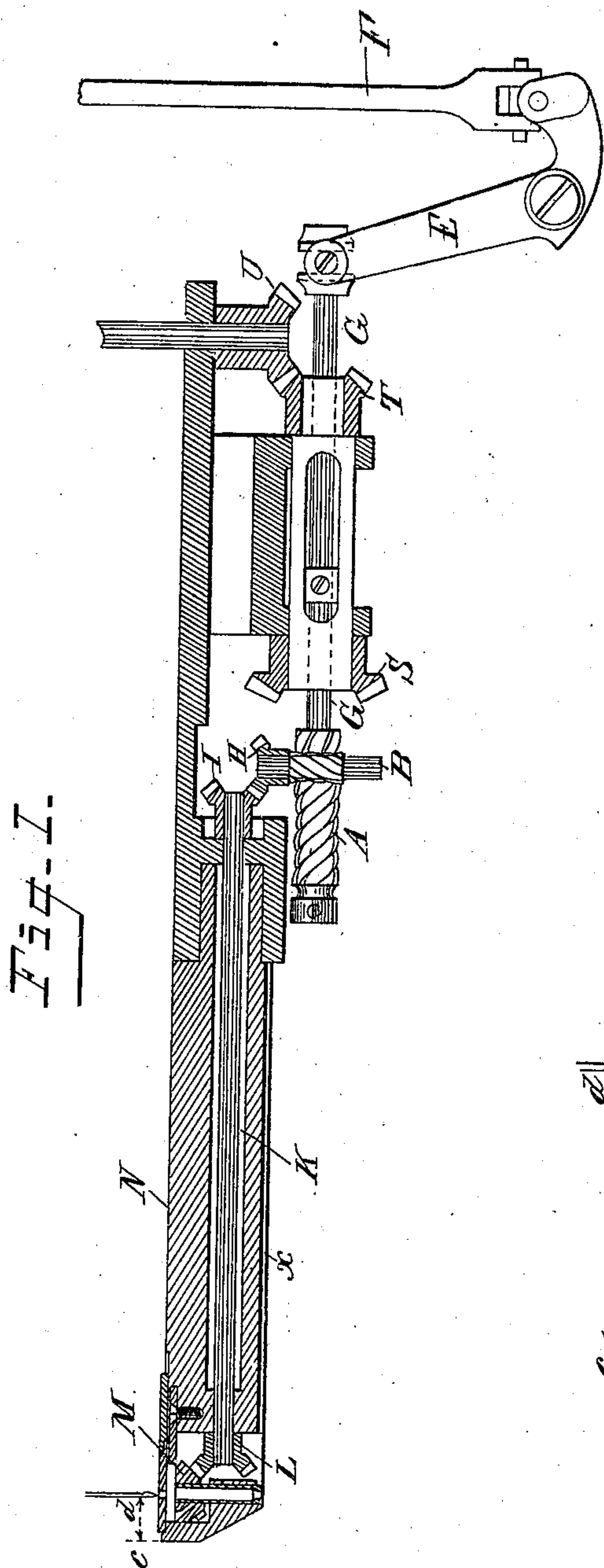
(No Model.)

2 Sheets—Sheet 1.

E. & R. CORNELY.  
EMBROIDERING MACHINE.

No. 504,332.

Patented Sept. 5, 1893.



Attest:  
J. H. Erb:  
Per Lewis

Inventors:  
Emile Cornely and  
Robert Cornely  
by Frank J. Mearns  
their attorneys.

(No Model.)

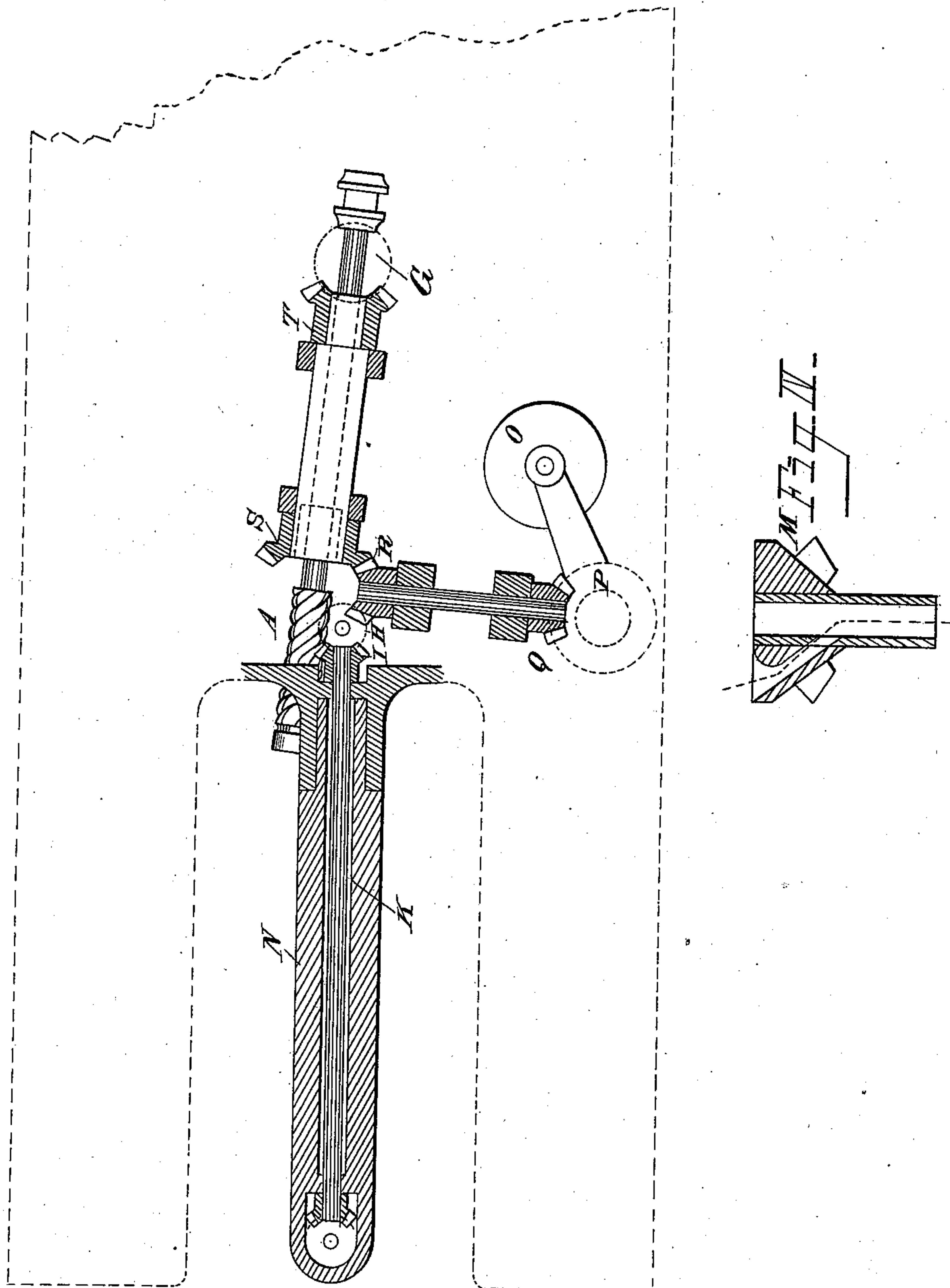
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Fig. II.



Attest:

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Inventors:  
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their attorneys



# UNITED STATES PATENT OFFICE.

EMILE CORNELY AND ROBERT CORNELY, OF PARIS, FRANCE.

## EMBROIDERING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 504,332, dated September 5, 1893.

Application filed April 19, 1893. Serial No. 470,985. (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 Embroidering-Machines, which is fully set forth in the following specification.

The present invention relates to machines for embroidering stockings, gloves and similar articles for which purpose the machine is provided with a cylindrical or other shaped narrow arm or bed-plate on which the hollow articles to be embroidered can be placed.

Our invention can be fully understood in connection with the accompanying drawings constituting part of this specification, in which—

Figure 1, represents a vertical section (full size) through the improved arm and mechanism for producing the stitch. Fig. 2, represents a horizontal sectional view of the same; Fig. 3, a vertical section (full size) of a portion of the arm as it has been constructed heretofore, and Fig. 4 is an enlarged vertical section of the looper-pinion.

The size of the arm as employed heretofore and represented in Fig. 3 could not be reduced in its dimensions for the reason that the stitch producing parts of the machine composed of the screw rack A, the oscillating screw pinion B and its looper C which operate in conjunction with the needle hook D had to be lodged within said arm of the machine, and therefore neither its thickness  $a b$  nor its length  $c d$  could be in any wise reduced which made it impossible to embroider gloves and children's stockings. In order to obtain therefore, an arm of much reduced size the screw rack A and its screw pinion B have been disposed to the rear of the arm N of the machine. The pitman E (receiving its motion from the main shaft of the machine) drives, in the well known manner, the lever F, which imparts a reciprocating motion to the rod G of the screw rack A, and an oscillating motion to the screw pinion B; but the latter instead of being provided with the looper C as heretofore and as represented in Fig. 3, is provided with a pinion H which communi-

cates its motion to pinion I, shaft K (which passes through a hollow portion of the arm) and pinions L and M, which latter acts as looper, it being provided with proper openings for the passage of the thread, as represented on an enlarged scale in Fig. 4. As the pinion I, shaft K and pinions L and M can be brought within a very small compass, it follows that the size of the arm N can be much reduced, not only in height and width, but also in the length of its projection beyond the needle-hole, as shown in Fig. 1 in full size by the distance  $c d$ . The operating parts herein described as well as the needle and the feed are directed by means of the crank-handle O, and pinions P, Q, R, S, T and U in a similar manner as heretofore but with slight changes in their disposition, such as were required by the new disposition of the screw gearings A and B. The arm N is provided with a groove  $x$  (Fig. 3) in which the thread lies in passing from the bobbin to the looper.

Having thus described our invention, what we claim is—

In a machine for embroidering gloves, stockings and similar articles the combination with the crank-handle of the universal feed mechanism of a hollow arm constituting the bed-plate for the work, a looper-pinion supported in a bearing at the inner end of said arm, a shaft extending through the latter and having a pinion engaging with the looper pinion, a screw-pinion geared to the outer end of said shaft, a reciprocating screw rod engaging said screw-pinion, said rod and pinion being both located outside of said arm, means for reciprocating said pinion and connections for rotating the looper driving mechanism upon the movement of the crank-handle, substantially as described.

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

EMILE CORNELY.  
ROBERT CORNELY.

Witnesses:

CHARLES F. THIRION,  
HUGH P. KING.