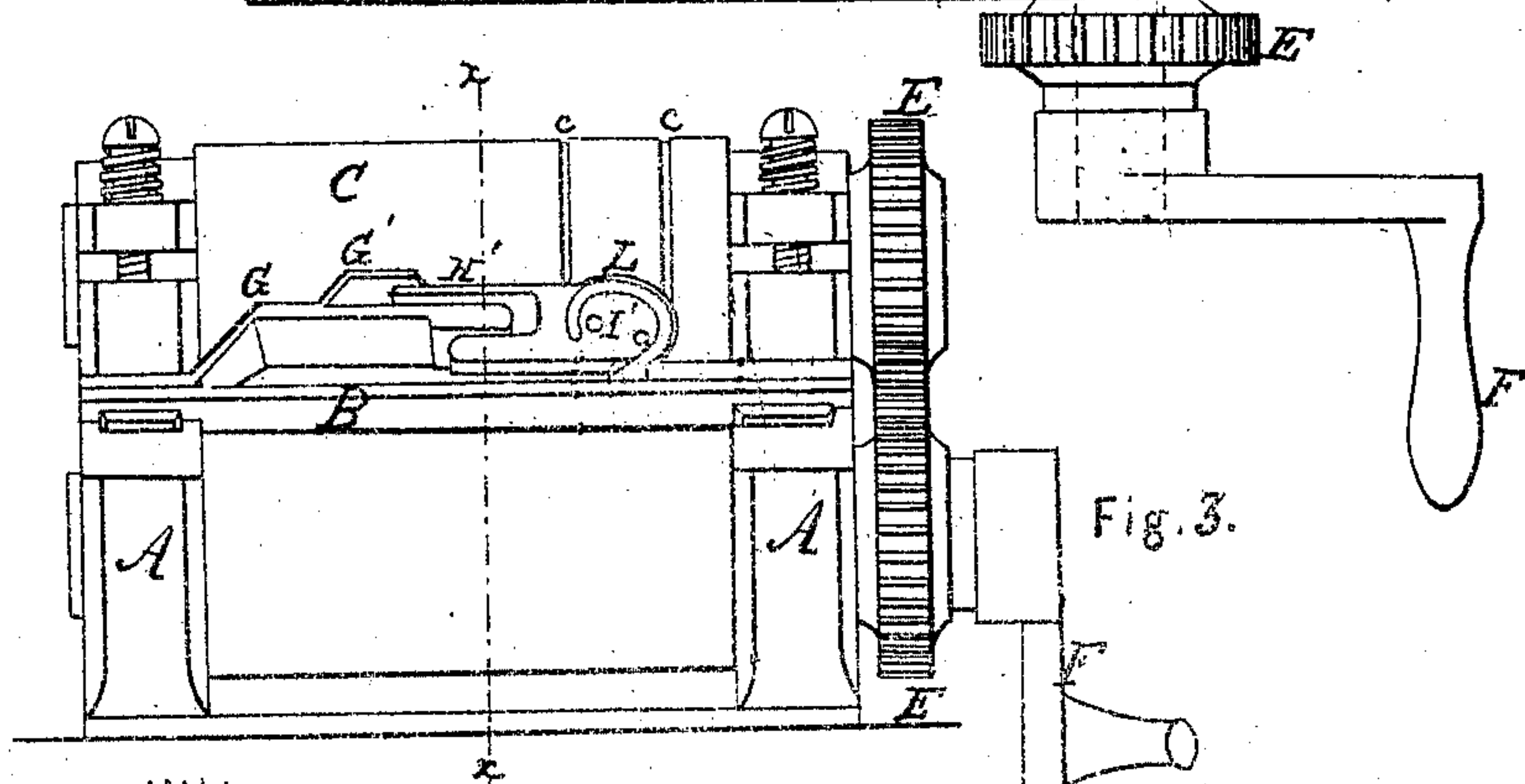
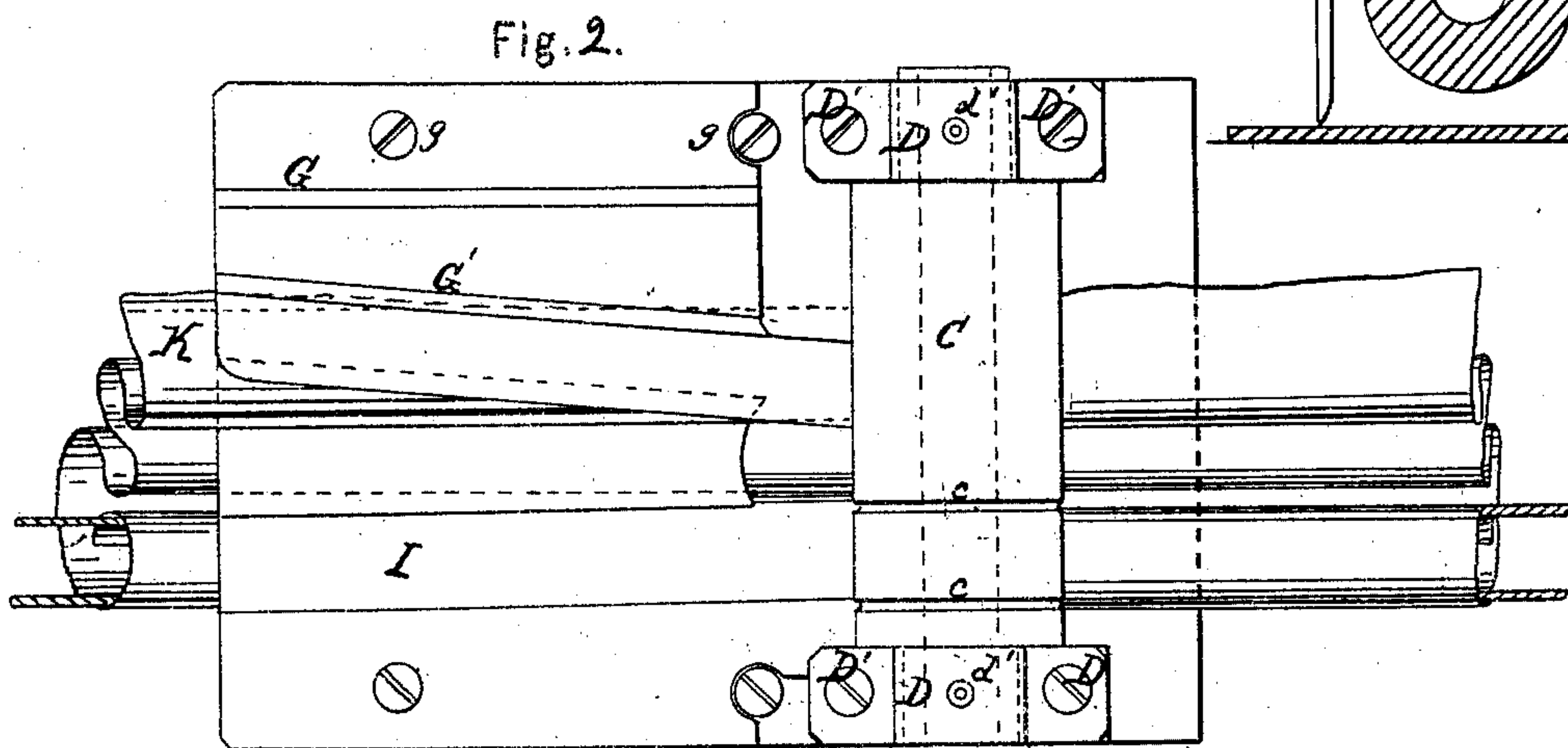
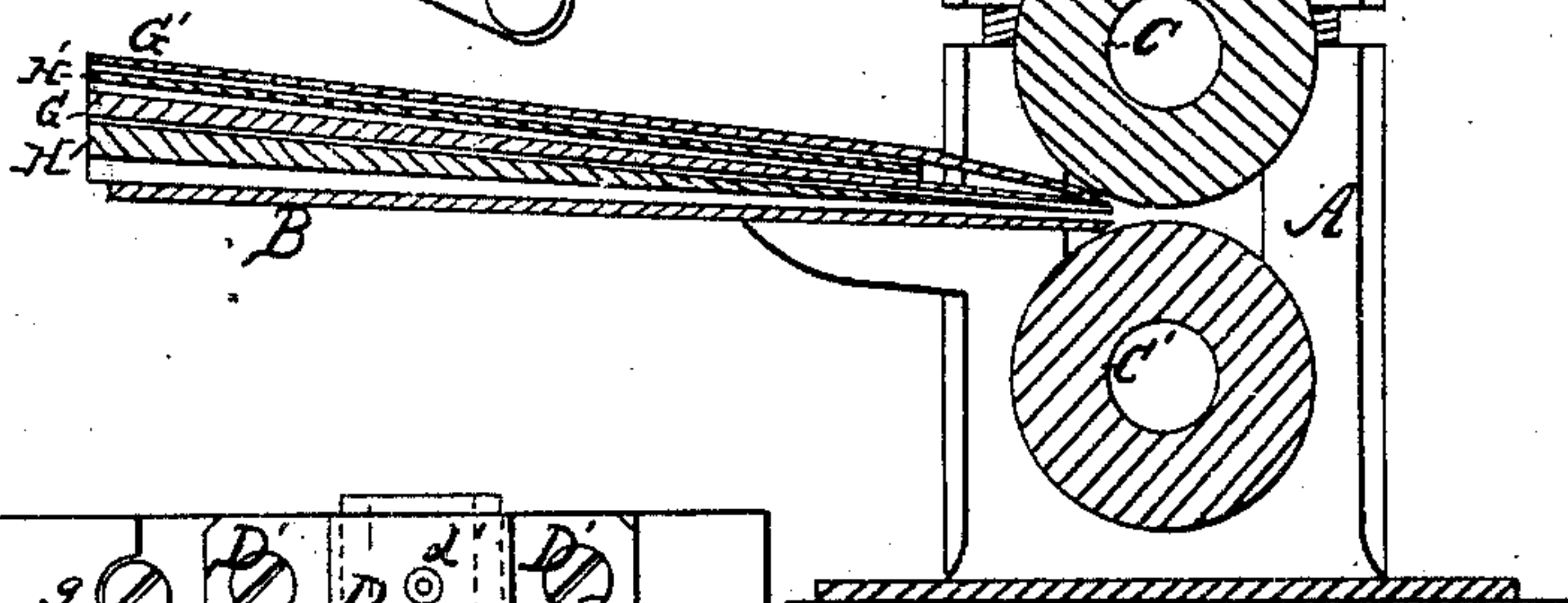


Patented Feb. 2. 1864



Witnesses.

Charles DuBois
Atamias Knight

J. F. McKinney

By Mr. Tinsley

Inventor,

UNITED STATES PATENT OFFICE.

J. F. MCKENNEY, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN PLAITING-MACHINES.

Specification forming part of Letters Patent No. 41,441, dated February 2, 1864.

To all whom it may concern:

Be it known that I, J. F. MCKENNEY, of the city and county of Baltimore, in the State of Maryland, have invented a certain new and Improved Machine for Laying Plaits or Folds and Tucks; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side elevation of my improved machine. Fig. 2 is a plan or top view thereof. Fig. 3 is a rear elevation of the same; and Fig. 4 is a vertical longitudinal section taken in the line *x x*, Fig. 3.

Similar letters of reference indicate corresponding parts in the several views.

The subject of this invention is a machine whereby continuous plaits or tucks of any desired number and width may be produced in linen or other material for shirt-bosoms, skirts, or any other purpose for which they are required; and the invention consists in the combination of a pair of feed-rollers with a series of folding and guiding plates of peculiar construction, said rollers being either hollow or solid, and designed to be used either hot or cold, with surfaces either plain, grooved, or embossed, all as will be hereinafter described.

In order that others skilled in the art to which my invention appertains may be enabled to fully understand and use the same, I will proceed to describe its construction and operation.

In the accompanying drawings, A is a frame supporting a bed or table, B, and two parallel rollers, C C', which rollers are adapted to revolve one above the other. The roller C' is journaled in suitable bearings in the lower part of the frame A, and the roller C is pressed down thereupon by box-straps D D' which are held in position by set-screws D' D', and allowed to yield in an upward direction to permit the passage of goods between them by spiral springs *d d*, which encircle said screws, and are secured at their respective ends to the box-straps D and heads of the screws D'.

d' d' represent lubricating-apertures.

The rollers are so arranged that their surfaces are brought in close contact with each other on a level with the top of the table B, and they, together with their journals, may be made hollow and connected through suit-

able stuffing-boxes with steam-pipes, for the purpose of admitting steam to the interior of the rollers in order to heat them.

The rollers may be provided with cog-wheels E E to adapt them to turn together when the wheels are rotated by means of a crank, F.

G represents a folding or guiding plate, and G' a bent plate, secured thereon in any suitable manner. The plate G may be secured to the table B by screws *g g*, and the inner edge thereof occupies a position between the plates H H', which are attached to a scroll-guide, L, the latter being secured upon a plate, J, which may be fastened to the table B by screws *g' g'*. The edge of the plate H is situated beneath the plate G', and all the plates are designed to occupy horizontal positions at different levels, as shown in Fig. 3. The scroll-guide is employed to turn the edge of the material, and is adapted for use, in connection with an internal guide, I', for the laying of cords within the plait. *c c* represent grooves formed in the roller C to accommodate the cord and retain the same in proper position as it passes between the rollers.

K represents the linen or other material to be plaited.

Operation: The material may be damped with either steam or water, if needful, and is introduced between the several plates and within the guide I in the manner shown in Fig. 2. The temporary removal of one of the plates G or J will greatly facilitate the introduction of the linen or other material between the plates, and the screws D' D' may be partially withdrawn to more readily permit the insertion of the end of the piece to be plaited between the rollers C C'. The rotation of the rollers by the crank F or other suitable means will then serve to draw the material through between the plates and press into permanent shape the folds, plaits, or tucks formed thereby. Continuous plates may be thus produced from end to end of pieces of material of any length, and the plaited goods may be separated into any required length for shirt-bosoms or other purposes.

By varying the number and positions of the plates the width and number of the plaits or folds may be varied as required.

Pivoted disks may, if preferred, be employed instead of the plates to produce the folds.

The machine may be made of sufficient width

to produce an entire shirt-bosom at one operation, and, if desired, the rollers can be embossed to represent stitching.

Having thus described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

A machine constructed with folding-plates

G G H H, scroll-guide I, and feeding and pressing rollers C C, adapted to operate substantially as herein described.

J. F. McKENNEY.

Witnesses:

W. MERRELL,

GEO. A. PETERS.