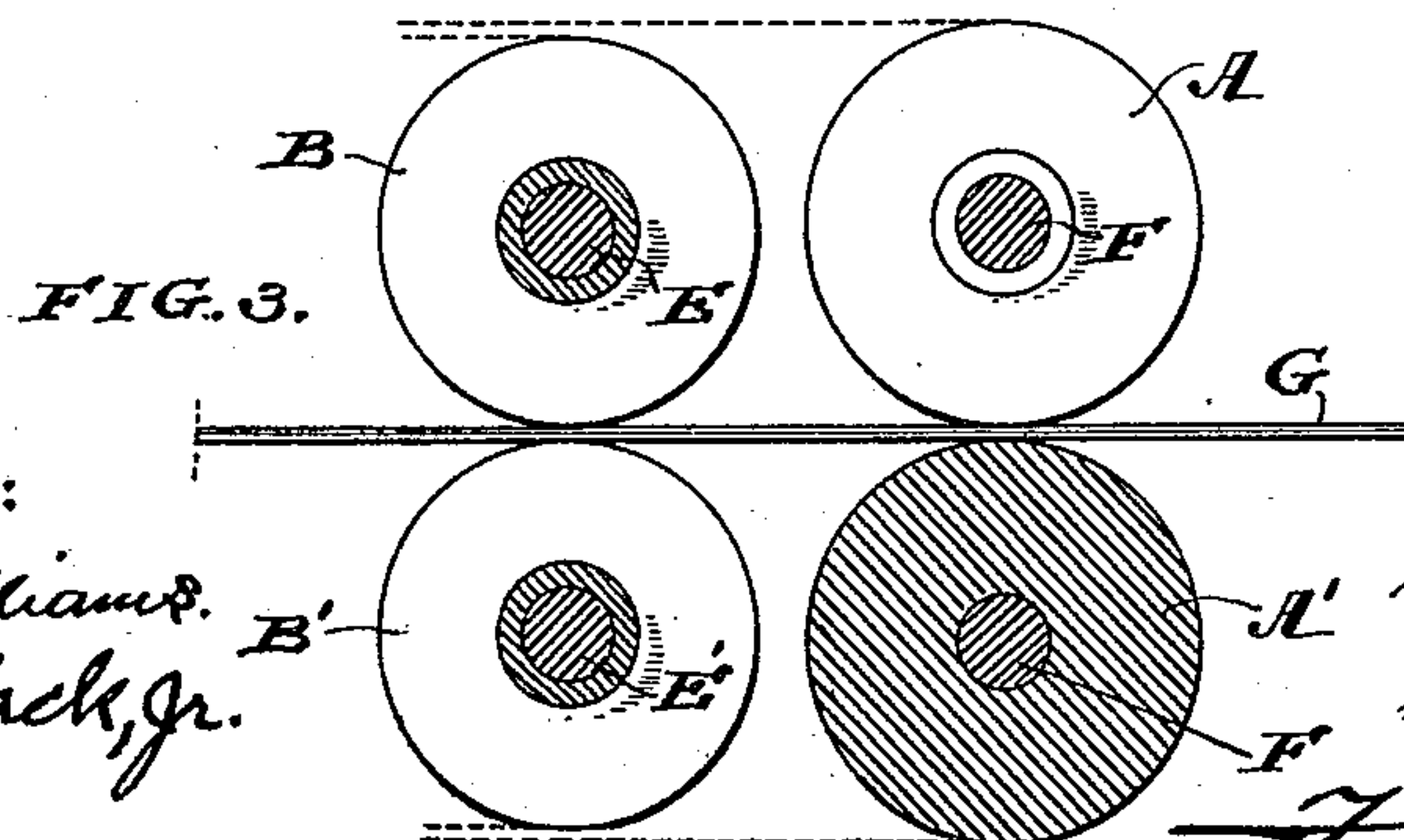
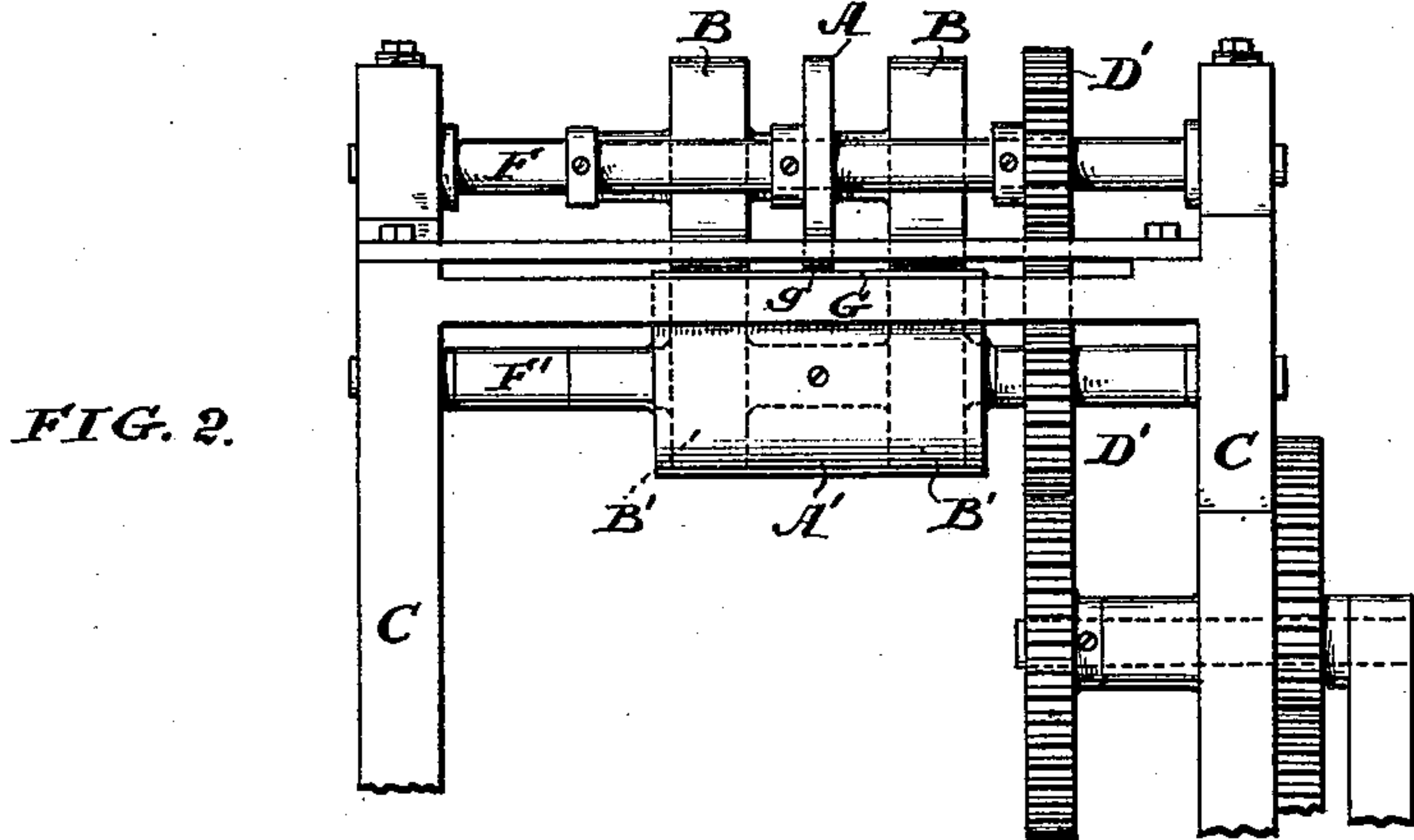
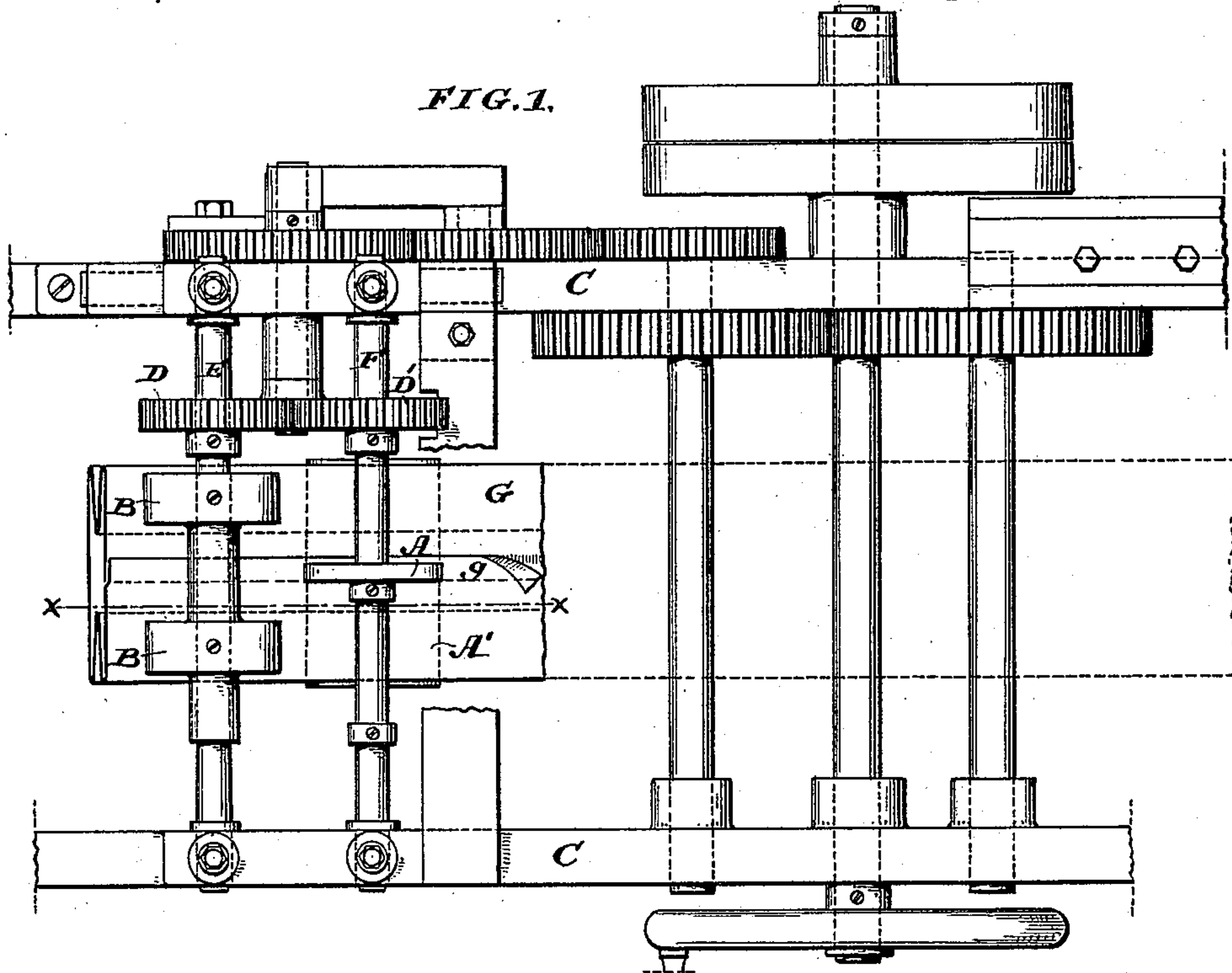


(No Model.)

G. MORTSON.  
PAPER BAG MACHINERY.

No. 426,843.

Patented Apr. 29, 1890.



WITNESSES:  
David S. Williams.  
Joshua M. Kack, Jr.

INVENTOR:  
George Mortson  
by his attorney  
James T. Chambers

# UNITED STATES PATENT OFFICE.

GEORGE MORTSON, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE  
UNION PAPER BAG MACHINE COMPANY, OF PHILADELPHIA, PENN-  
SYLVANIA.

## PAPER-BAG MACHINERY.

SPECIFICATION forming part of Letters Patent No. 426,843, dated April 29, 1890.

Application filed January 11, 1890. Serial No. 336,625. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE MORTSON, a subject of the Queen of Great Britain, residing at Bridgeport, county of Fairfield, State of Connecticut, have invented a new and useful Improvement in Paper-Bag Machinery, of which the following is a true and accurate description, in connection with the drawings forming part of this specification.

My invention relates to that portion of a paper-bag machine which performs the function of folding and pasting a web of paper into a bellows-folded tube; and it consists in the hereinafter-described arrangement of drawing and presser rolls in connection with such machinery.

In the drawings, Figure 1 is a plan view of my device; Fig. 2, a front elevation thereof, and Fig. 3 a longitudinal section on the line  $x x$  of Fig. 1.

C is the frame of the machine; B B B' B', drawing-rolls secured on shafts E E' and arranged to engage the bellows-folded tube along its edges, as shown.

A is a narrow presser-roll, and A' a broad coacting presser and supporting roll. These rolls A A' are secured on shafts F F', and, as shown, are made slightly larger than the drawing-rolls and driven by means of the gears D D' with the same angular velocity, and consequently with slightly-greater peripheral velocity.

G is the bellows-folded tube, and  $g$  its pasted seam.

The mechanism for folding and applying

paste to the web of paper may be of any construction, and as it forms no part of my invention I have not shown it in the drawings. Having been folded and pasted, the tube G is drawn between the drawing-rolls B B B' B', and thence between the presser-rolls A A', and these latter rolls moving with slightly-greater speed than the drawing-rolls and acting on the centrally-lying seam, while the drawing-rolls engage the outer edges of the tube, their combined action is such as to draw the two overlapping edges of the paper together at the time the seam is pressed and made permanent, this drawing action being in practice just sufficient to counteract and overcome the tendency of the lapping edges to draw apart, which exists, as I believe, in all tube-forming machinery.

By using my device I secure a straight and even seam and a tube of more regular form than has heretofore been generally obtained.

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

In a paper-bag machine, the combination of the drawing-rolls B B B' B', arranged to act upon the sides of a bellows-folded tube, with pressing-rolls A A', having a slightly-greater speed than the drawing-rolls, and the roll A arranged to come over the pasted seam, all substantially as and for the purpose specified.

GEORGE MORTSON.

Witnesses:

A. M. WOOSTER,  
A. B. FAIRCHILD.