

(No Model.)

W. DOWNING.  
PAPER FOLDING MACHINE.

No. 377,354.

Patented Jan. 31, 1888.

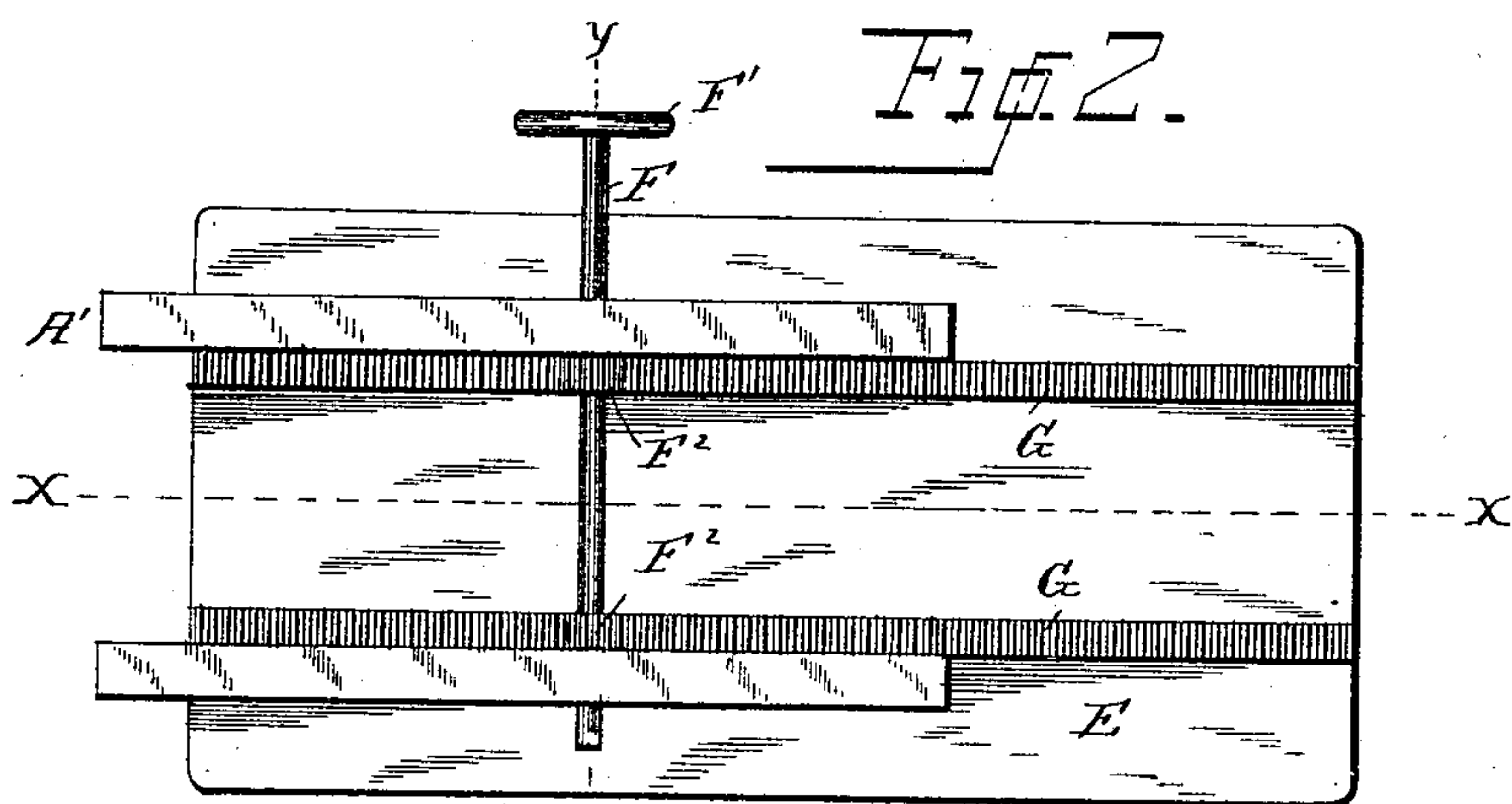
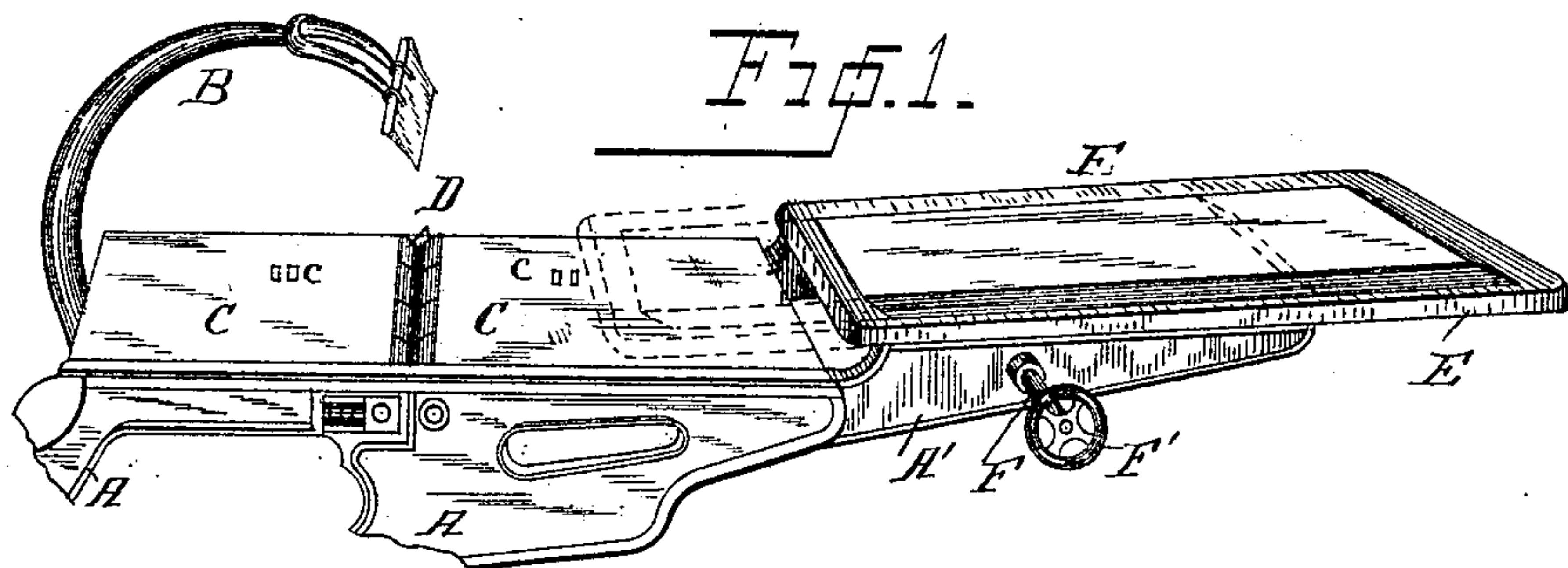
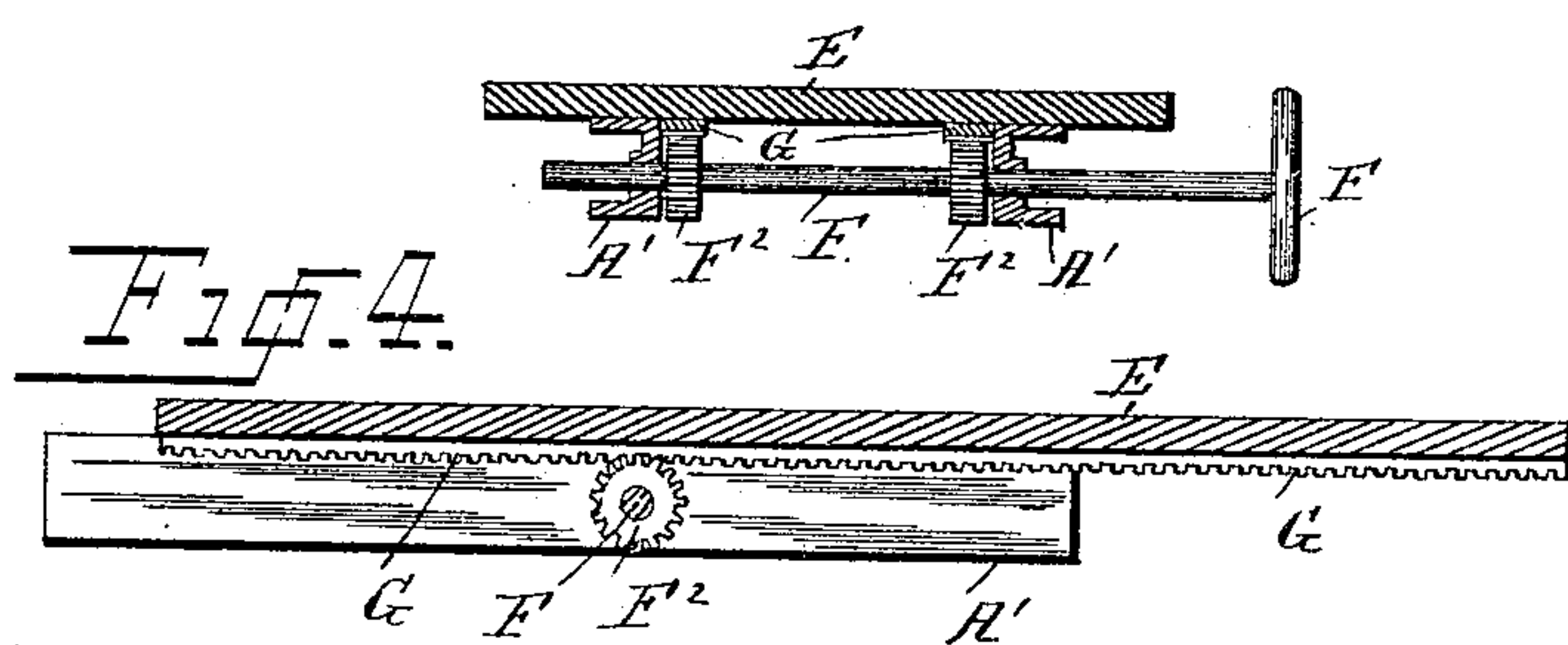


Fig. 3.



Witnesses  
W. A. Courtland  
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Inventor  
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Atty's.



# UNITED STATES PATENT OFFICE.

WELLINGTON DOWNING, OF ERIE, PENNSYLVANIA, ASSIGNOR TO THE  
BROWN FOLDING MACHINE CO., OF SAME PLACE.

## PAPER-FOLDING MACHINE.

SPECIFICATION forming part of Letters Patent No. 377,354, dated January 31, 1888.

Application filed June 2, 1887. Serial No. 240,046. (No model.)

*To all whom it may concern:*

Be it known that I, WELLINGTON DOWNING, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Paper-Folding Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to paper-folding machines; and it consists in certain improvements in the construction of the feeding-table, as will be hereinafter fully described, and pointed out in the claims.

My invention is illustrated in the accompanying drawings, as follows:

Figure 1 is a perspective view showing the top and a fragment of the frame-work of a folding-machine with my invention embodied therein. Fig. 2 is a plan view of the under side of the feeding-table and its supports. Fig. 3 is a transverse section of the parts shown in Fig. 2 on the line *y y* in said figure. Fig. 4 is a longitudinal section of the same parts on the line *x x* in said figure.

A marks the frame-work of the machine; A', the bracket or support of the feeding-table; B, the starter or folding-blade; C C, the top of the folding-machine; *c c*, the points to which the paper is adjusted before it is folded; D, the first pair of folding-rollers; E, the feeding-table; G G, racks on the under side of the feeding-table; F<sup>2</sup> F<sup>2</sup>, pinions which gear with the said racks; F, a shaft carrying said pinions, and F' a hand-wheel for operating said shaft.

The feeding-table E is supported on the brackets A' A' a little above the top C of the folder, and it is adjusted on said brackets so as to slide longitudinally thereon, and thereby be approached more or less toward the folding-roller D. In Fig. 1 dotted lines show the feeding-table approached closely to the said rolls, and in full lines it is shown removed at a considerable distance from said rolls. The feeding-table can be made so as to be moved longitudinally by hand or by mechanism. I illustrate one plan for operating it by mech-

anism. This consists in providing racks G G on the under side of the table and journaling in the brackets A' a shaft, F, with pinions F<sup>2</sup> thereon, which gear with the said racks, and providing said shaft with a hand-wheel by which it can be revolved. When the feeding-table is thus provided with mechanism for moving it longitudinally, very little trouble will be experienced in adjusting the table to any point desired.

The object in constructing the feeding-table so it can be adjusted more or less near the feeding-rollers D is to enable the operator to bring the pile of unfolded sheets on the table into the most convenient position for feeding them to the machine. The operator sits or stands at one side of the machine, about opposite the ends of the folding-rollers, and the nearer the papers on the feeding-table are to the operator the better. The table must of necessity be removed a little more than one-half the length of the sheets from the feeding-rollers, and it has been the practice to fix a table far enough away from these rollers to accommodate large sheets; but when the operator is feeding small sheets it is very inconvenient to be compelled to reach for the same distance he has to when feeding large sheets. To avoid this inconvenience I make the table adjustable from and toward the folding-rollers, as above explained.

What I claim as new is—

1. In a paper-folding machine, the combination, with the first set of folding-rollers, of a feeding-table that is adjustable from and toward said rollers over the top of the folding-machine, substantially as and for the purposes set forth.

2. In a paper-folding machine, the combination, with the first set of folding-rollers, of a feeding-table which is mounted on ways, in a manner substantially as shown, whereby it can be adjusted more or less near said rollers.

3. In a paper-folding machine, the combination, with the first set of folding-rollers, of a feeding-table which is mounted on ways and is provided with gearing, substantially as set forth, whereby the said table can be moved on said ways and adjusted more or less near the said folding-rollers.

4. In a paper-folding machine, the combination, substantially as set forth, of the frame A, brackets A', extending from said frame A, shaft F, journaled in said brackets, pinions  
5 F<sup>2</sup> F<sup>2</sup> on said shaft, the feeding-table E, mounted and movable on said brackets longitudinally, and the racks G G on said table gearing with said pinion.

In testimony whereof I affix my signature in presence of two witnesses.

WELLINGTON DOWNING.

Witnesses:

JNO. K. HALLOCK,  
WM. A. COURTLAND.