

(No Model.)

2 Sheets—Sheet 1.

J. G. CRAWFORD.

MANGLE.

No. 254,927.

Patented Mar. 14, 1882.

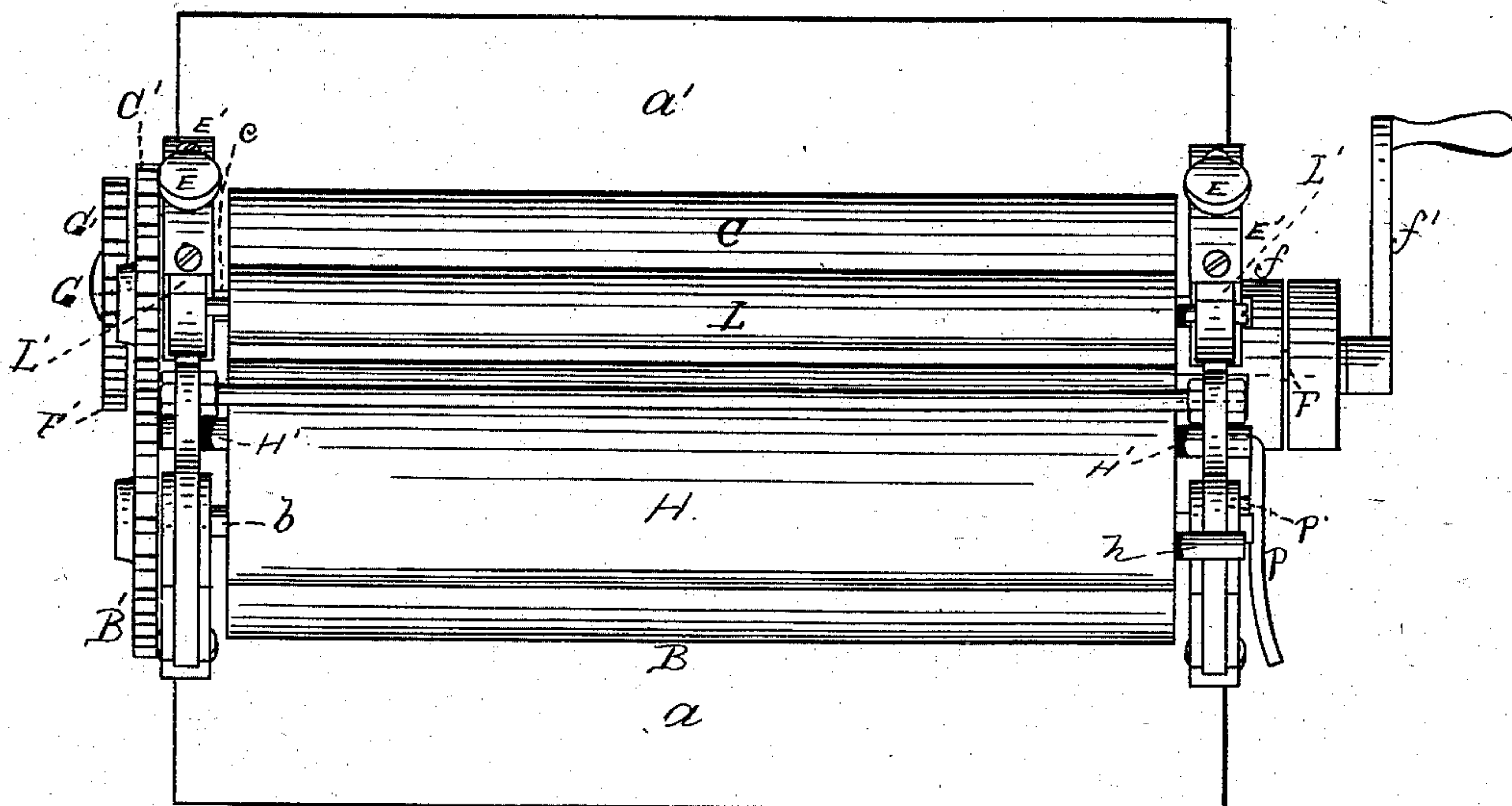


Fig. 1.

WITNESSES

Joseph Ashbaugh.
B. W. Williams

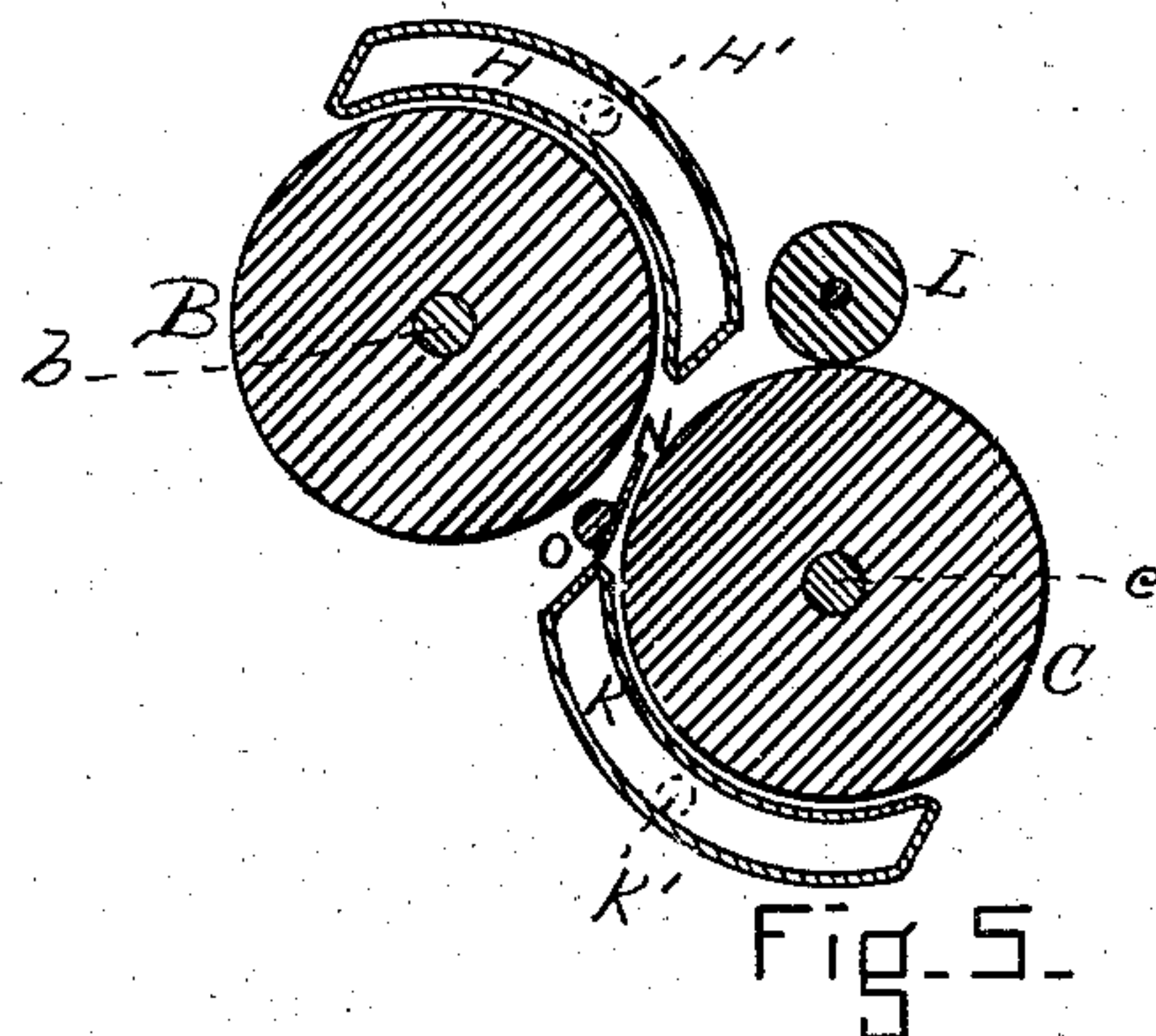
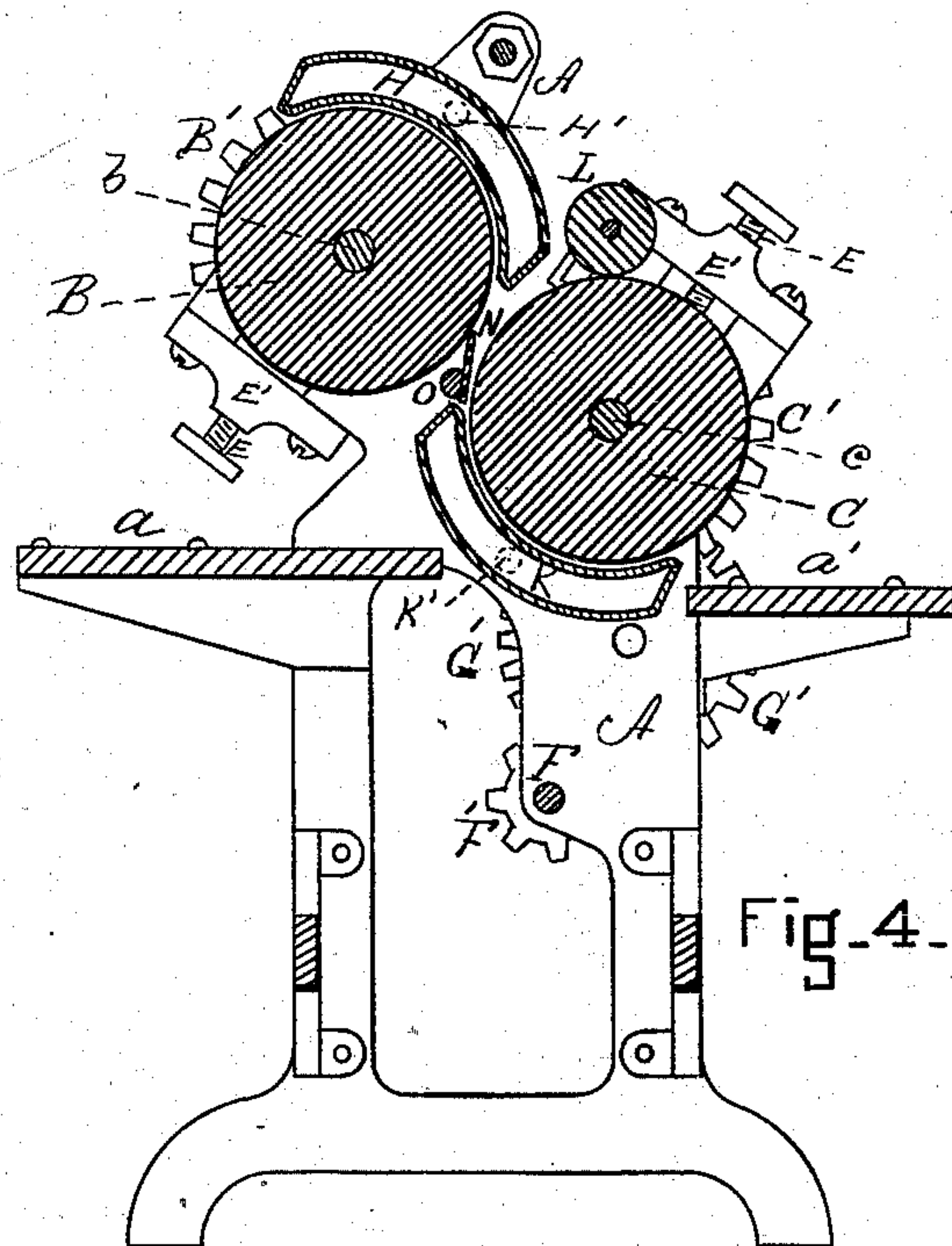
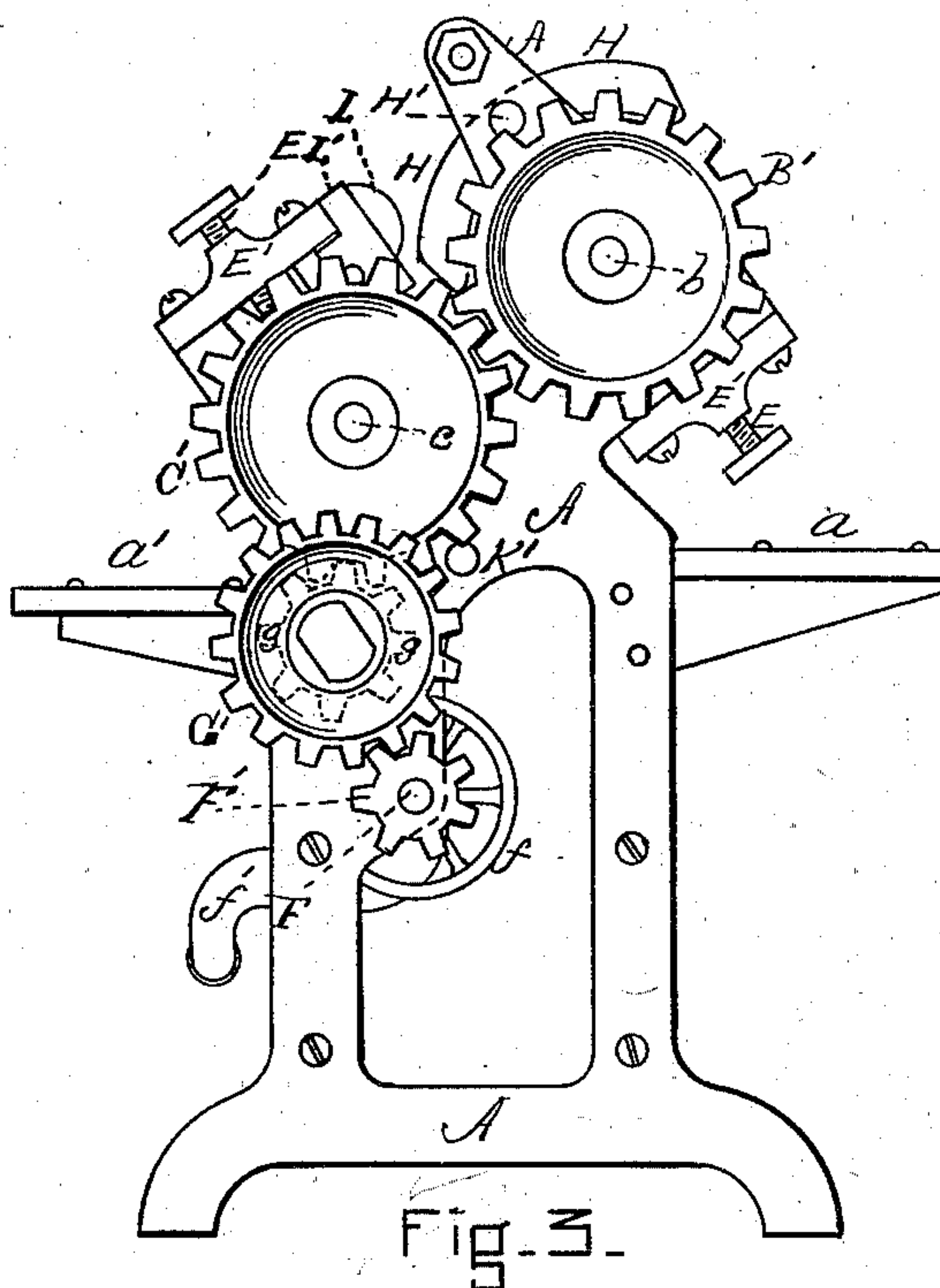
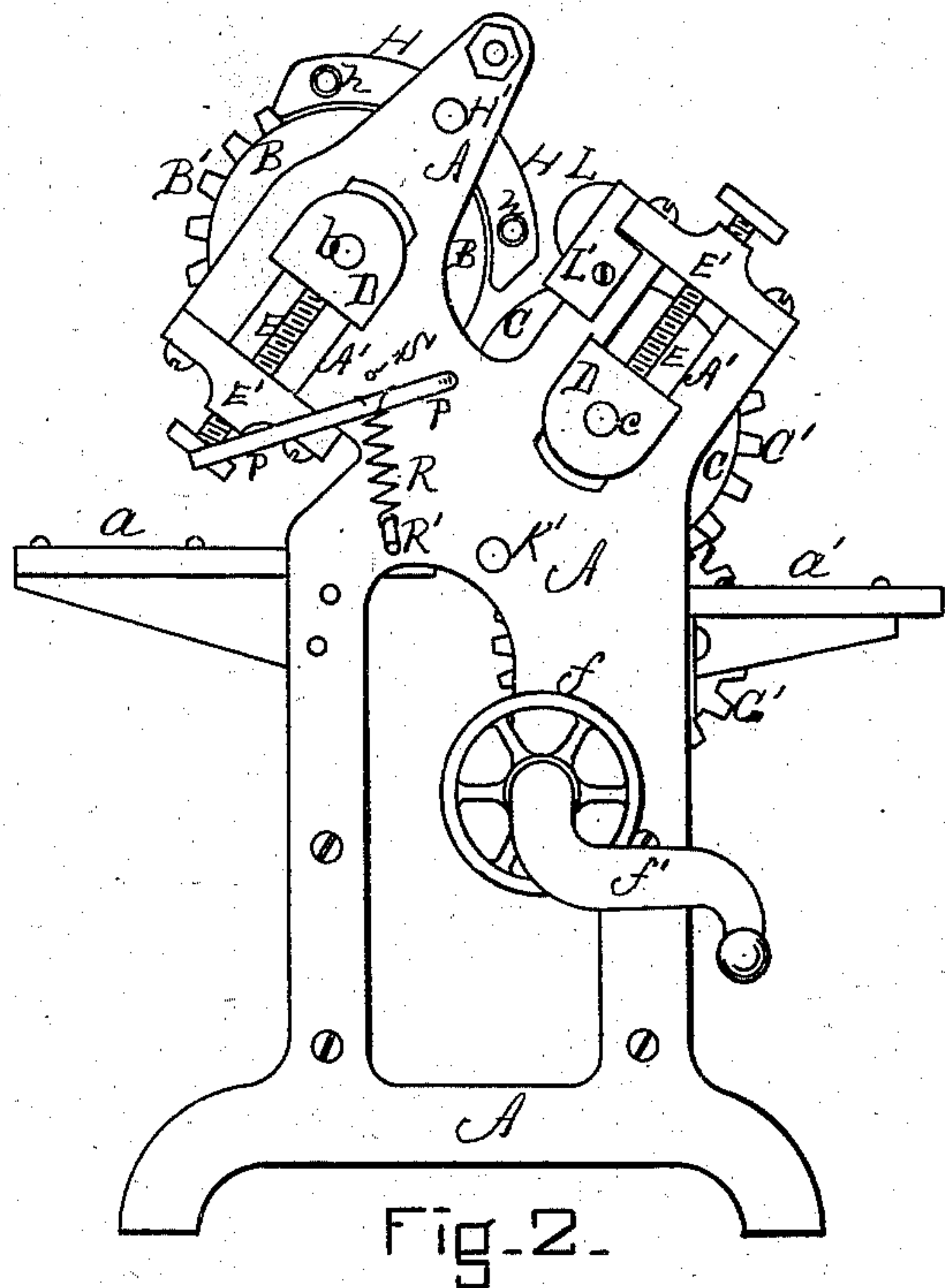
James G. Crawford, INVENTOR
By his Atty.
Henry W. Williams

J. G. CRAWFORD.

MANGLE..

No. 254,927.

Patented Mar. 14, 1882.



WITNESSES

Joseph Ashbaugh.
B. W. Williams

James G. Crawford INVENTOR
By his Atty.
Henry Williams.

UNITED STATES PATENT OFFICE

JAMES G. CRAWFORD, OF BOSTON, MASSACHUSETTS.

MANGLE.

SPECIFICATION forming part of Letters Patent No. 254,927, dated March 14, 1882.

Application filed December 27, 1881. (No model.)

To all whom it may concern:

Be it known that I, JAMES G. CRAWFORD, of Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Mangles, of which the following is a specification.

The nature of the invention is described below.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a plan view of a mangle embodying my improvements. Fig. 2 is an end elevation of the same. Fig. 3 is an elevation of the opposite end. Fig. 4 is a transverse vertical section. Fig. 5 is a similar section with the adjustable guide in a different position, as below explained.

A is the frame of the machine, and *a a'* are two opposite tables supported thereby.

B is the upper roll, (covered with felt or similar substance, as usual,) actuated by the shaft *b*, to one end of which is fixed the gear-wheel *B'*. C is the lower roll, actuated by the shaft *c*, to one end of which is fixed the gear-wheel *C'*, which meshes into the wheel *B'*. These rolls B C are made adjustable by having the ends of the shafts *b c* have their bearings in the blocks D, which are moved in the ways *A'* by means of the screws E, which pass through the cross-pieces *E'*. Any other suitable means of adjusting the rolls may be adopted, however, as the one shown is not novel.

F is a shaft rotated by the pulley *f* or crank *f'*, and having the gear-wheel *F'* fixed thereto. This gear-wheel *F'* meshes into the gear-wheel *G'*, placed loosely on the shaft G, (supported by the frame,) which shaft has fixed to it (see broken lines, Fig. 3) the pinion *g*, which engages gear-wheel *C'*. Hence rotary motion applied to the shaft F imparts motion in the same direction to the roll C, and in the opposite direction to the roll B.

H is the upper ironing-bed, heated in the ordinary manner by means of the steam-pipes *h h*. This bed, instead of being fixed immovably to the frame A, is centrally pivoted at *H'* therein, so that it will, by tipping slightly, allow clothes and articles of different thicknesses to readily enter between the roll B and bed H, and then thoroughly press them as they pass under the central or pivotal portion of the bed.

K is the lower bed, heated in the ordinary manner, and similarly pivoted at *K'* in the frame.

L is a friction or pressure roll, whose shaft lies loosely in the boxes *L'*, made large enough to allow considerable vertical play to the roll.

N is an adjustable guide, extending the entire length of the rolls and held by the shaft O, to which it is secured, and which is supported in the frame A.

P is a handle or arm passing through, or partly through, the frame, and fixed to the shaft O, and having a small pin or pointed projection, *P'*, Fig. 1, which fits into a small hole, S, Fig. 2, in the frame. The arm P being a spring-arm, when the pin *P'* lies in the hole S it remains there until removed by springing the arm horizontally from the frame, when said arm is drawn down by means of the spring R, secured to the frame at *R'*. When the arm P is down, as in Fig. 2, the guide N is in the position shown in Fig. 4. When the arm P is held in the hole S by means of the projection *P'* the guide N is in the position shown in Fig. 5.

The operation is as follows: Motion having been imparted to the machine, the rolls B C rotate inwardly—*i. e.*, from the tables *a a'*—in opposite directions therefore. Small articles—such as napkins, handkerchiefs, &c.—need usually to be ironed on one side only. The guide N is set in the position shown in Fig. 5, its upper edge about midway between the two rolls. Two girls stand at table *a* and feed in small articles upon the roll B. They are carried under the ironing-bed H, and guided by the guide N, drop between it and the roll B upon the table *a* ironed on one side only. At the same time two girls stand at the table *a'* and feed small articles between the roll C and roll L. They are guided by the guide N between the roll C and the ironing-bed K and drop on the table *a'*. In other words, when the guide is in the position shown in Fig. 5 articles fed into the machine on each side come out of the machine on the same side ironed on one side only. Now, by releasing the arm P from the hole S it is drawn down and the guide N takes the position shown in Fig. 4—*i. e.*, lying with its upper edge against the roll B. Larger articles—such as sheets, spreads, &c.—are now fed from the table *a* only. As they pass be-

tween roll B and bed H they are ironed on the upper side, then they are guided by the guide N between the roll C and the bed K and are ironed on the under side, dropping upon the table *a'* ironed on both sides.

The pivoted beds H K operate as before mentioned, thoroughly ironing the clothes, and so well doing their work that small pieces come out of the mangle perfectly dry.

10 Having thus fully described my improvement, what I claim, and desire to secure by Letters Patent, is—

15 1. In combination with the rolls B C and mechanism for actuating and supporting the same, substantially as shown, the adjustable guide N, arranged substantially as described,

whereby its upper edge will lie against the roll B, or about midway between the two said rolls, for the purpose specified.

2. In combination with the frame A and 20 rolls B C, the guide-plate N, shaft O, spring-arm P P', and spring R, all substantially as described, and for the purpose set forth.

3. In a mangle, the combination, with an ironing-roll, of an ironing-bed centrally piv- 25 oted, or nearly so, for the purpose of allowing play between the roll and bed, substantially as specified.

JAMES G. CRAWFORD.

Witnesses:

HENRY W. WILLIAMS,
JOSEPH ISHBAUGH.