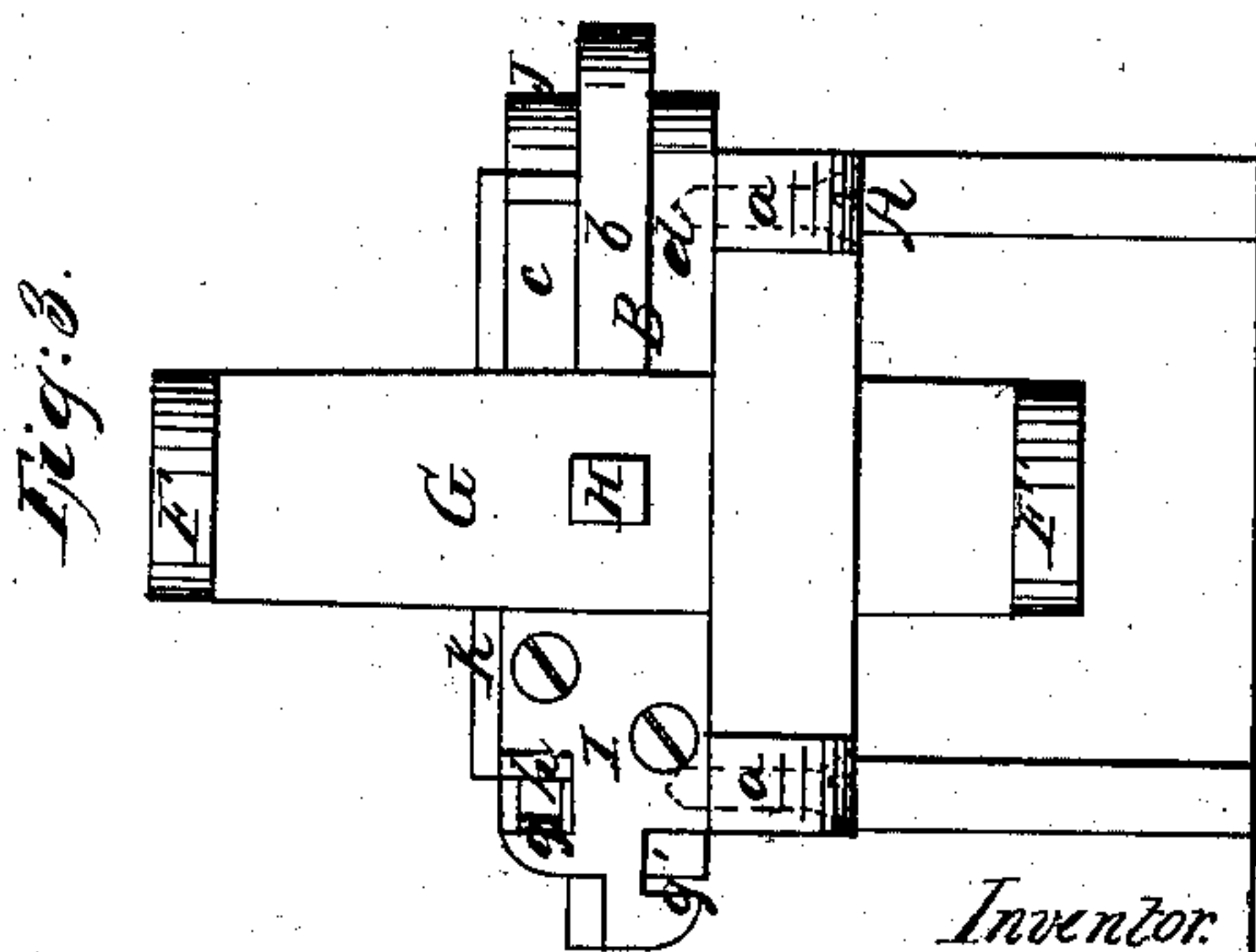
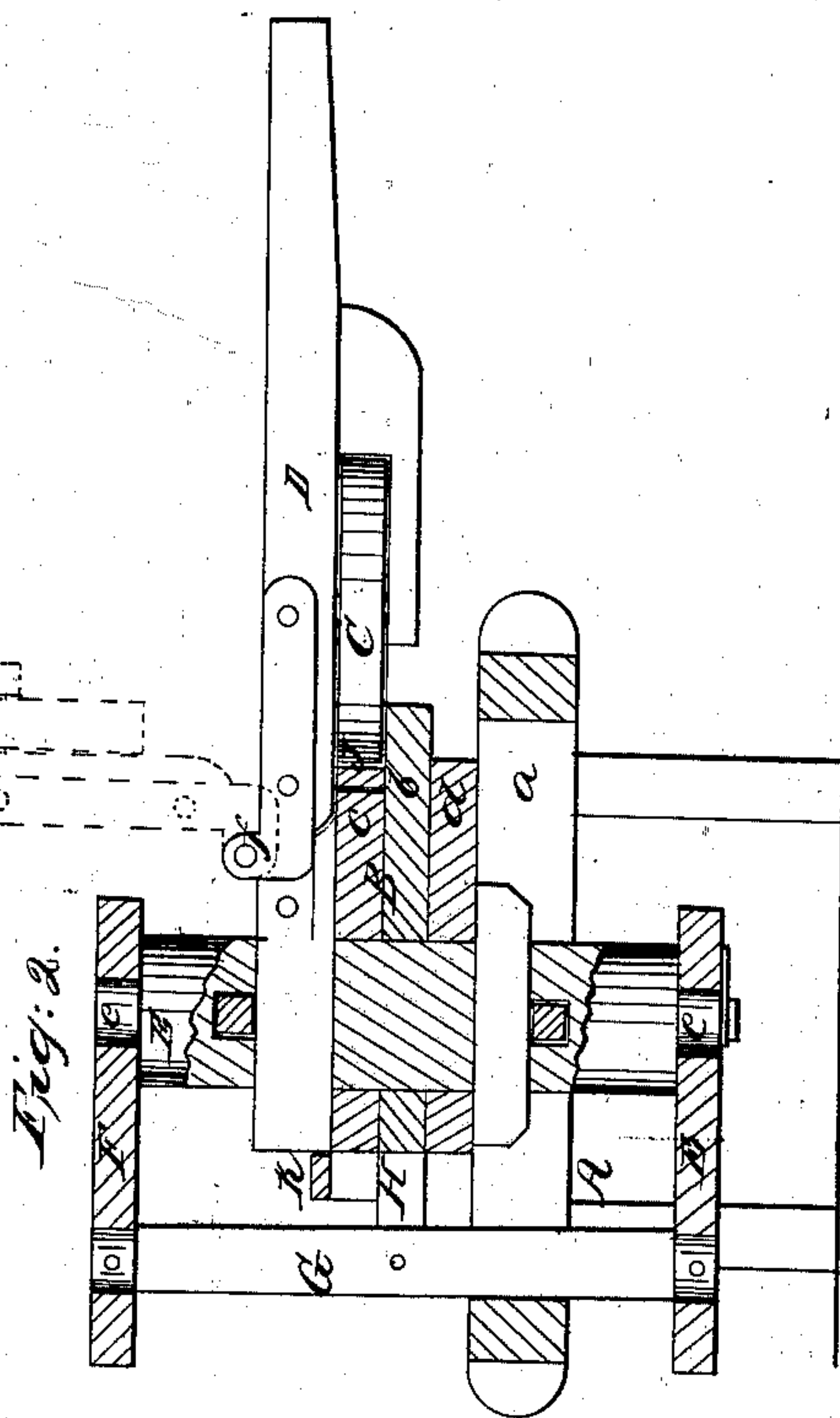
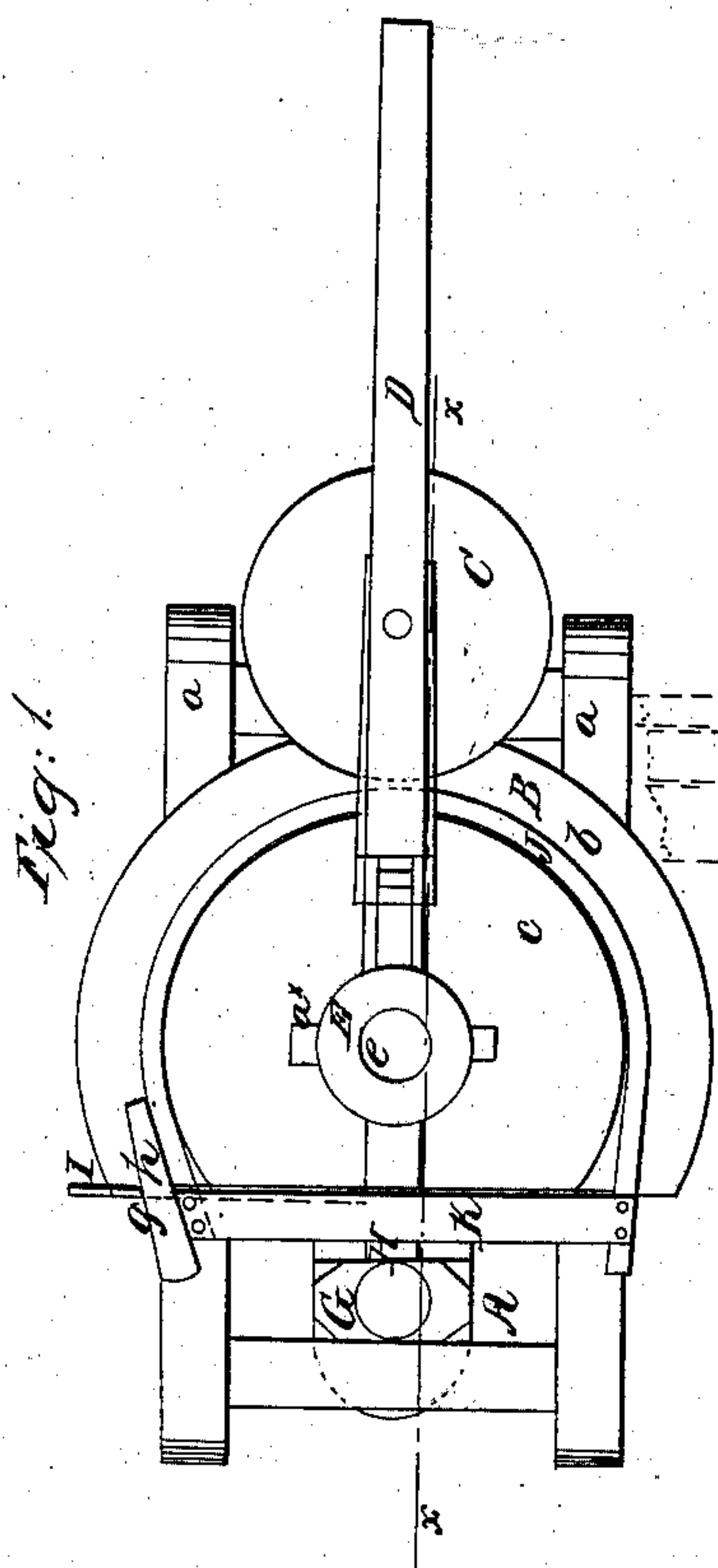


J. Compton, Bending Wood.

N^o 39,887.

Patented Sep. 15, 1863.



Witnesses:

J. W. Coombs
G. W. Reed

Inventor.

Jacob Compton
per (Munnell & Co.)
attys

UNITED STATES PATENT OFFICE.

JACOB COMPTON, OF ELMIRA, NEW YORK.

IMPROVEMENT IN FELLY-BENDING MACHINES.

Specification forming part of Letters Patent No. 39,887, dated September 15, 1863.

To all whom it may concern:

Be it known that I, JACOB COMPTON, of Elmira, in the county of Chemung and State of New York, have invented a new and Improved Machine for Bending Fellies for Wheels; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a plan or top view of my invention; Fig. 2, a side sectional view of the same, taken in the line *x x*, Fig. 1; Fig. 3, an end view of the same.

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

The object of this invention is to obtain a felly-bending machine of simple construction, which will admit, by a very simple manipulation or adjustment, of two different-sized fellies being bent upon it.

To this end the invention consists in the employment or use of a reversible former provided with two molds of different diameters, corresponding to the two different sizes of fellies to be bent, the former being provided with a shaft having mortises made in it to receive a lever, which is provided with a roller, and the shaft provided with suitable bearings, all arranged as hereinafter set forth.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a framing, which may be constructed in any proper manner to support the working parts of the machine, and B represents a former, which is placed horizontally on the framing A, and is secured thereto by bolts or screws, which pass up through the top bars, *a*, of the framing into the under side of the former, as indicated by the dotted lines in Fig. 3. The former B is rather more than a semi-circle, as will be seen by referring to Fig. 1, and it has three different diameters—the central one, *b*, being the greatest, and *c*, which is at one side of *b*, being somewhat smaller than the one, *d*, at the opposite side of *b*, as shown clearly in Figs. 2 and 3. The parts *c d* constitute the former proper, the central part, *b*, merely serving as a guide for a pressure-roller, C, which is attached to a lever, D, one end of which is fitted in a vertical shaft,

E, which passes centrally through the former and is allowed to turn freely therein. This shaft E has the journals *e* at its ends fitted in bars F F', the outer ends of which are fitted in the ends of a vertical bar, G, which is attached to the former B by a horizontal arm, H. The bar G bears against one end of the framing A, as shown in Figs. 1 and 2. The lever D is provided with a joint, *f*, which admits of the lever being raised up, as indicated by the red outline in Fig. 2.

To one end of the central part, *b*, of the former there is secured a metal plate, I, which has two notches, *g g'*, made in it—one in its upper and the other in its lower side—as shown clearly in Fig. 3.

The operation is as follows: When the smallest fellies are to be bent, the former B is in the position as shown in Figs. 2 and 3, the smaller part or mold *c* being uppermost. The felly J, being properly steamed, is secured at one end in the notch *g* of the plate I by means of a key or wedge, *h*, and the lever D is turned so that its roller C will bear against the felly J and bend it around the mold *c*, and the two ends of the felly are connected by a bar, K, which is nailed to them and retains the felly in shape when removed from the mold *c* and placed on a rack to dry. In order to remove the bent felly from the mold the lever D is raised upward, as shown in red in Fig. 3, and the upper bar, F, removed. When the larger-sized fellies are to be bent, the former B is detached from the framing A and inserted so that the larger mold, *d*, will be uppermost. The lever D is then inserted in another mortise in the shaft E, so that said lever will have the same relative position with the mold *d* that it had with the mold *c*. The lever D may be varied in length by adjusting it more or less forward in the shaft E, a key, *a'*, being used to secure the lever in its mortise in the shaft. In using the mold *d* the felly is secured at one end in the notch *g'* in plate I, said notch being then uppermost, as well as the bar F. Thus, by this simple arrangement, it will be seen that fellies of two different sizes may be bent on one and the same machine.

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

1. The reversible former B, having two

molds, *c d*, of different diameters, and a central roller-guide, *b*, in connection with a removable lever, *D*, provided with a pressure-roller, *C*, and a shaft, *E*, passing centrally through the former *B* to receive the lever *D*, substantially as and for the purpose set forth.

2. Constructing the lever *D* with a joint, *f*, when said lever is used in connection with the former *B* and its concomitant parts, for the purpose specified.

3. The arrangement of the bars *F*, *F'*, and *G* with the shaft *E*, to admit of the latter being properly supported or retained in position and at the same time admit of the bent fellics being readily removed from the mold and machine by the attachment of the bar *F* or *F'*.

JACOB COMPTON.

Witnesses:

G. L. DAVIS;

W. H. DAVIS.