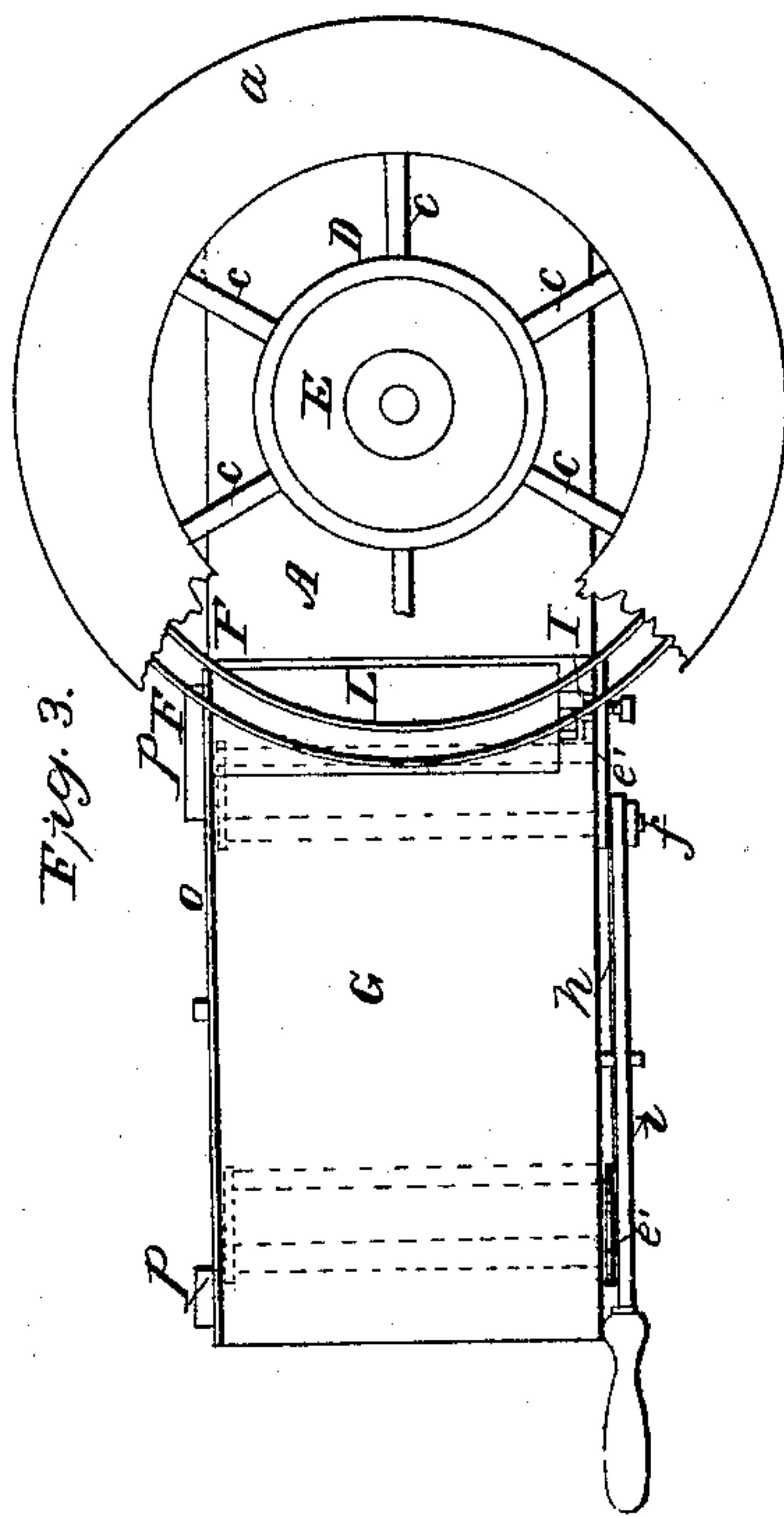
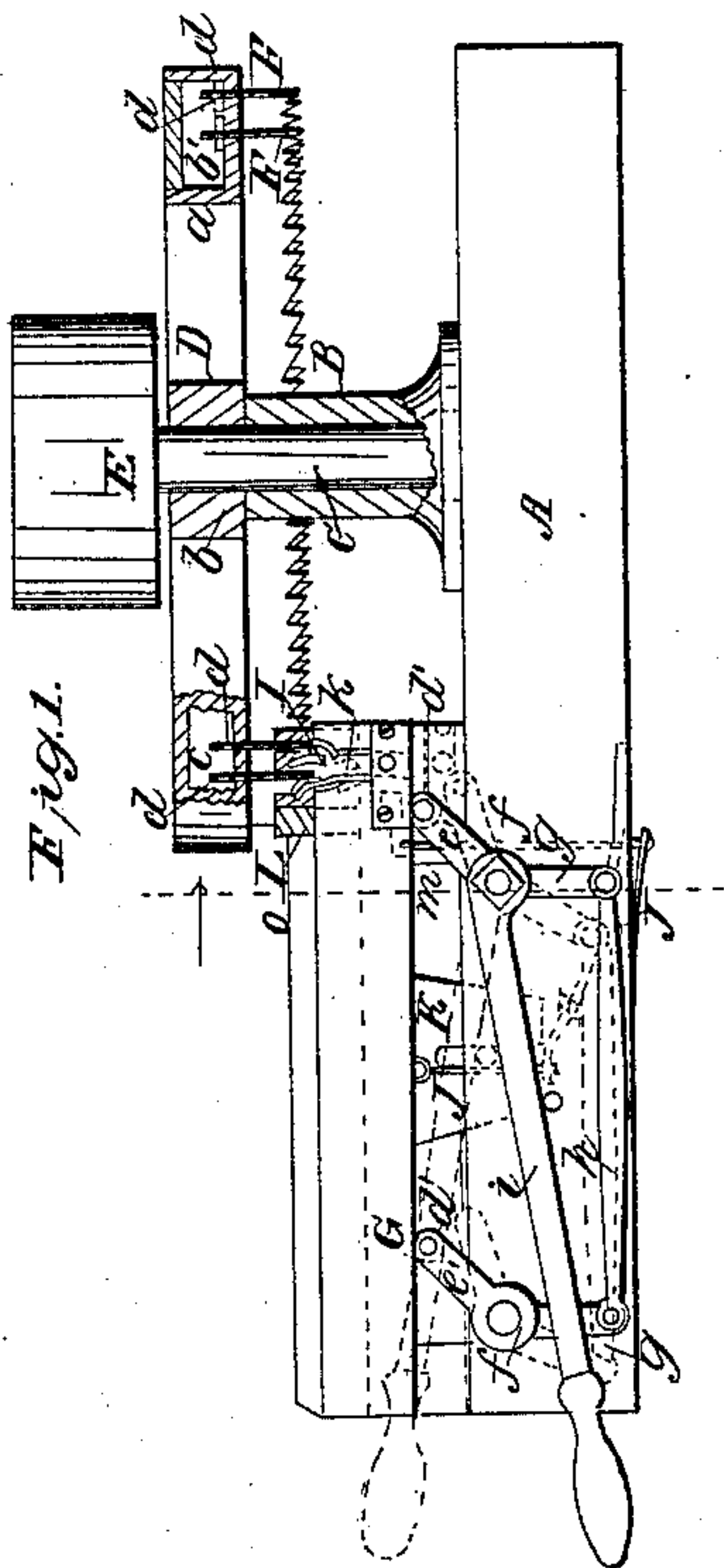
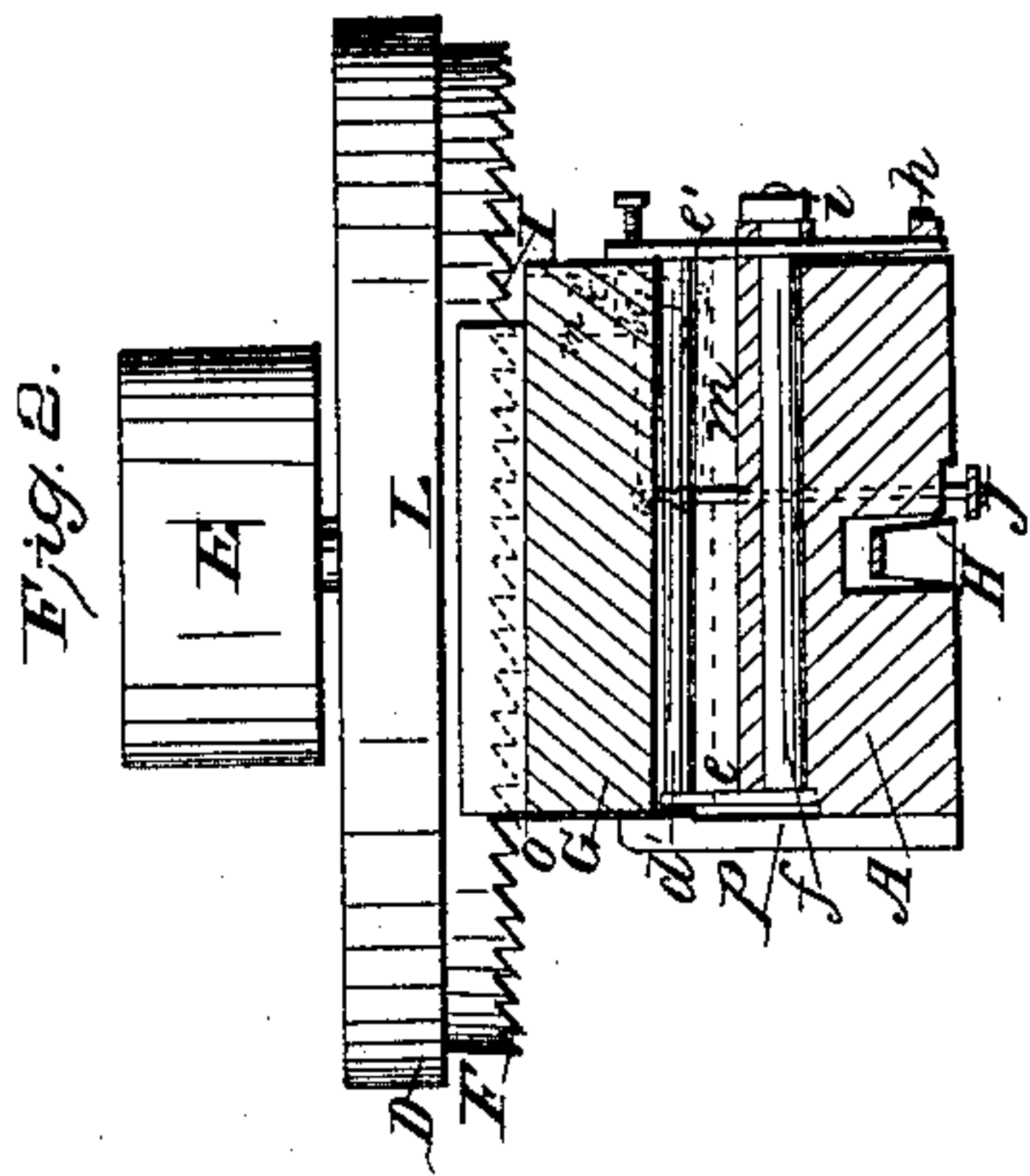


D. E. Butler,
Making Fellies.
N^o 22,107. Patented Nov. 23, 1858.



UNITED STATES PATENT OFFICE.

DERWIN E. BUTLER, OF CHESTERFIELD, OHIO.

DEVICE FOR CLAMPING AND FEEDING BOLTS IN FELLY-SAWING MACHINES.

Specification of Letters Patent No. 22,107, dated November 23, 1858.

To all whom it may concern:

Be it known that I, DERWIN E. BUTLER, of Chesterfield, in the county of Fulton and State of Ohio, have invented a new and Improved Machine for Sawing 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 annexed drawings, making a part of this specification, in which—

Figure 1, is a side sectional view of a portion of my invention. Fig. 2, is a transverse vertical section of ditto, taken in the line *x*, *x*, of Fig. 3. Fig. 3, is a plan or top view of ditto.

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

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

A, represents a horizontal bed piece on which a vertical support or bearing B, is placed to receive a shaft C, of a horizontal wheel D. The upper part of the shaft C, above the wheel D, has a driving pulley E, attached to it. The wheel D, may be constructed of metal, the outer part of the wheel being an annular box *a*, connected to the hub *b*, by arms *c*, which extend through the box *a*, which may also be provided with radial partitions or ledges *b'*, see dotted lines in Fig. 3. In the under side of the box *a*, of the wheel D, a series of concentric annular slots are made to receive band or annular saws F, said saws passing up within the slots and into the arms *c*, and partitions *b'*, which are also slotted to receive their upper edges and steady or keep them in proper position. Through the upper parts of the saws F, pins *d*, pass to retain the saws in the wheel D, see Fig. 1. In the Figs. 1 and 2, two saws are shown secured to the wheel D, the space between the saws being equal to the desired width of the fellies.

G, is a bed on which the bolt from which the fellies are sawed is placed. This bed rests on two rods or bars *d'*, *d'*, the ends of which are fitted in arms *e*, *e*, *e'*, *e'*, at each side of the bed piece A, said arms being secured to the ends of shafts *f*, which pass through the bed piece A, see Fig. 2. The arms *e'*, *e'*, at one side of the bed-piece A, have projections *g*, attached, and the ends of these projections are connected by a bar *h*, as shown clearly in Fig. 1. To the innermost shaft *f*, or the one nearest to the wheel

D, a lever *i*, is attached, and a spring H, which is fitted within the bed-piece A, is connected with the bed G, by a link *j*.

I, is a jaw or clamp which is fitted in the bed G, near the wheel D. This jaw or clamp is formed on the upper end of a bent bar *k*, which is secured in the bed G, by a pivot *l*, and the inner end of said bar *k*, is attached by a link *m*, to a spring J, which is fitted in the under side of the bed piece A. The bed G, has a slotted plate K, attached to it at one side and a screw passes through the slot of said plate into the bed-piece, serving as a guide. The jaw I, bears against a spiral spring *n*, see dotted lines, Fig. 2, which spring has a tendency to keep the jaw thrown outward the length of its movement. To one side of the bed G, a ledge or flanch *o*, is attached, and bearings *p*, *p*, for the bed G, are attached to the bed piece A, at one side.

The operation is as follows: The wheel D, is rotated by a belt passing around the pulley E, or gearing may be used instead. The "bolt" L, from which the fellies are to be cut, is placed on the inner part of the bed G, and the operator depresses the outer end of the lever *i*. This movement of the lever *i*, raises, through the medium of the arms *e*, *e'*, and rods *d'*, the bed G, so that the "bolt" L, is fed to the saws F, F, which by the rotation of wheel D, cut a felly from the bolt L. As the bed G, is raised the jaw I, is made to press the end of the bolt against the ledge *o*, in consequence of the bent bar *k*, being connected by a link *m*, to the spring J. The bolt L, will be firmly held in position while being acted upon by the saws F. The bolt L, may be adjusted or fed to the saws by hand as each felly is sawed from it. The spring H, brings down the bed G, when the lever *i*, is relieved from the pressure of the hand. Fellies of varying sizes may be sawed by adjusting the saws F, nearer to or farther from the center of the wheel. The bed G, being adjusted nearer to or farther from the center of the wheel D, by withdrawing the screw of the plate K, and placing it nearer the wheel D. A series of saws, that is to say, more than two, may be attached to the wheel D, so that fellies for wheels of different diameters may be sawed at the same time, the nearer the saws are placed to the center of the wheel, the quicker or smaller, of course, the arc of the fellies.

Having thus described my invention,

what I claim as new and desire to secure by Letters Patent is,

1. The bed G, arranged with the rods *d*, *d*, arms *e*, *e*, *e'*, *e'*, connected by the bar *h*, and
5 the spring H, for the purpose of readily operating the "bolt" L, or feeding and removing the same from the saws, as described.

2. The jaw I, formed on the bent bar *k*,

attached to the bed G, and spring J, so that 10 the jaw may be operated to grasp the "bolt" and the "bolt" relieved therefrom by the movement of the bed G, substantially as herein set forth.

DERWIN E. BUTLER.

Witnesses:

L. M. THORP,

F. N. BUTLER.