

(No Model.)

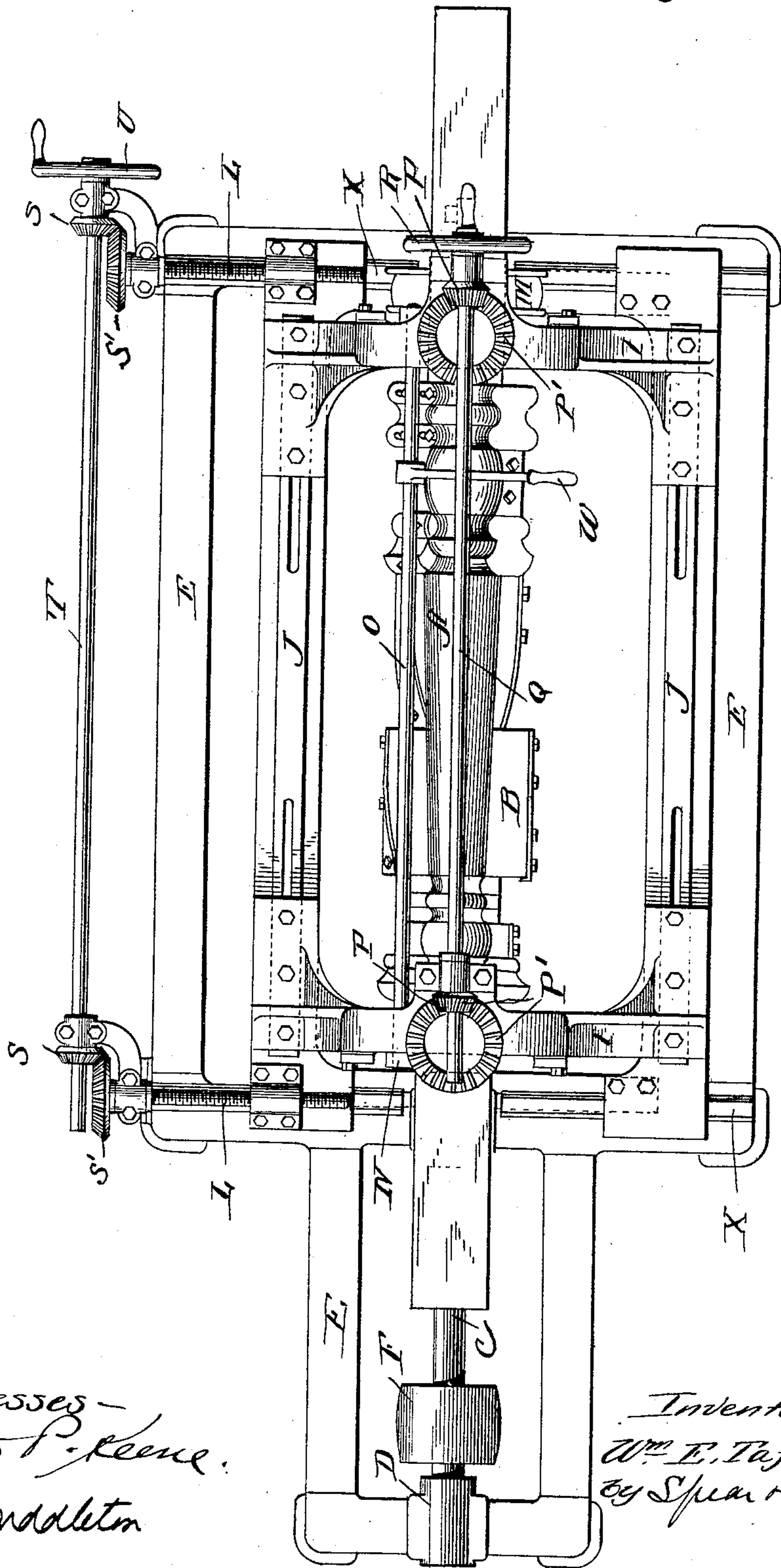
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W. E. TAFT.
WOOD WORKING MACHINE.

No. 434,846.

Patented Aug. 19, 1890.

Fig. 1.



Witnesses—
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Inventor:
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(No Model.)

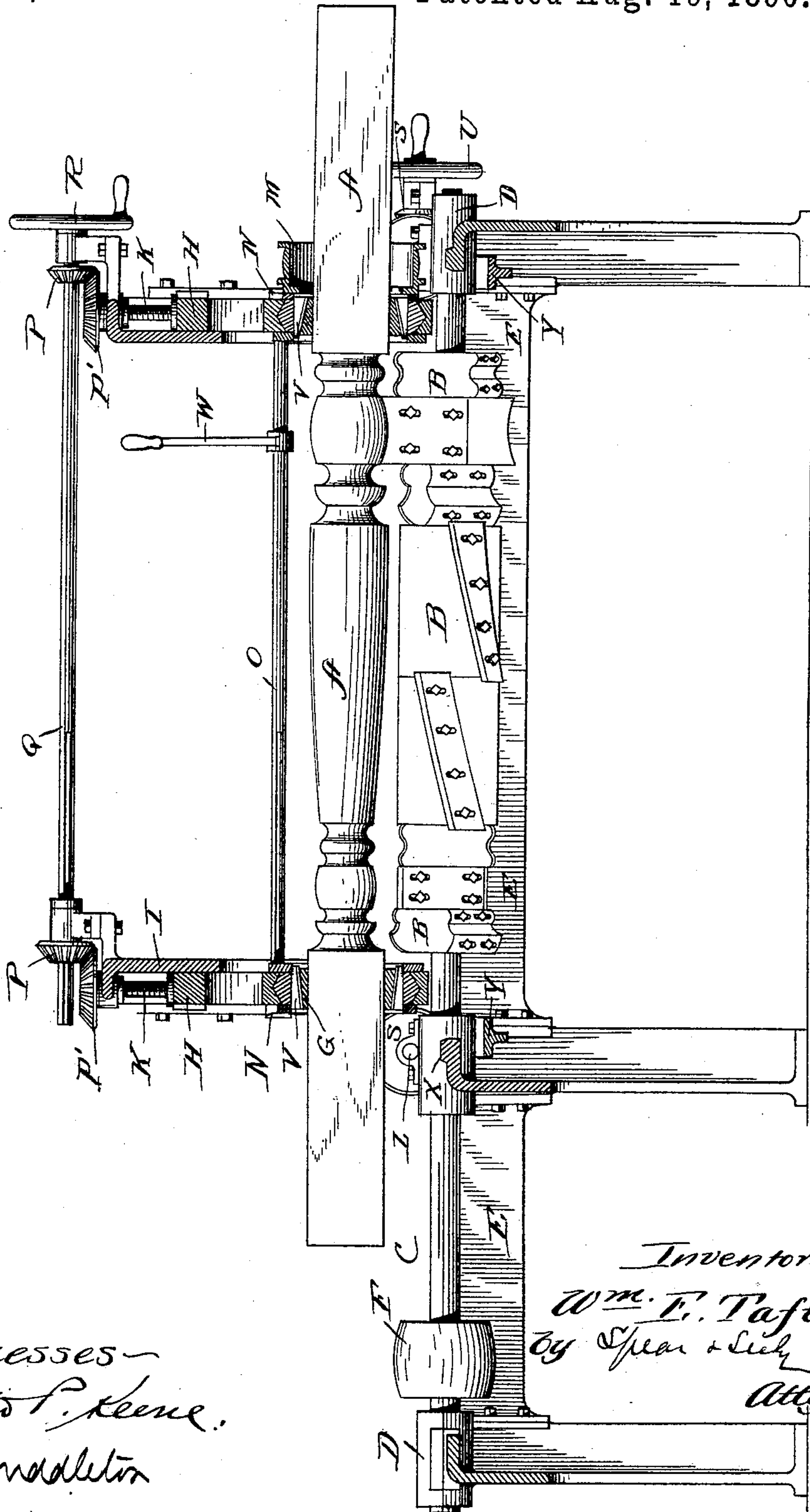
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Fig. 2.



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(No Model.)

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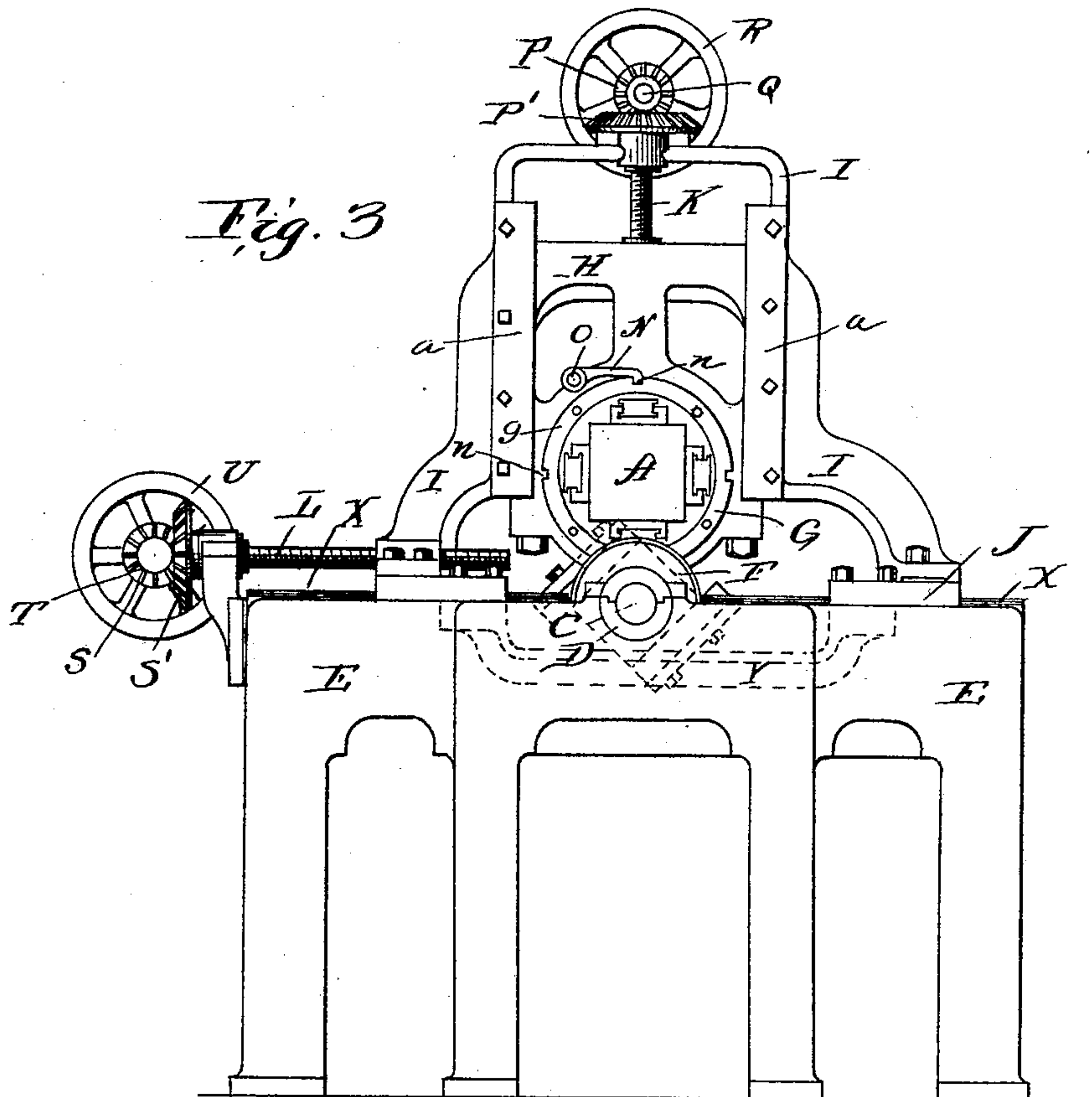


Fig. 4.

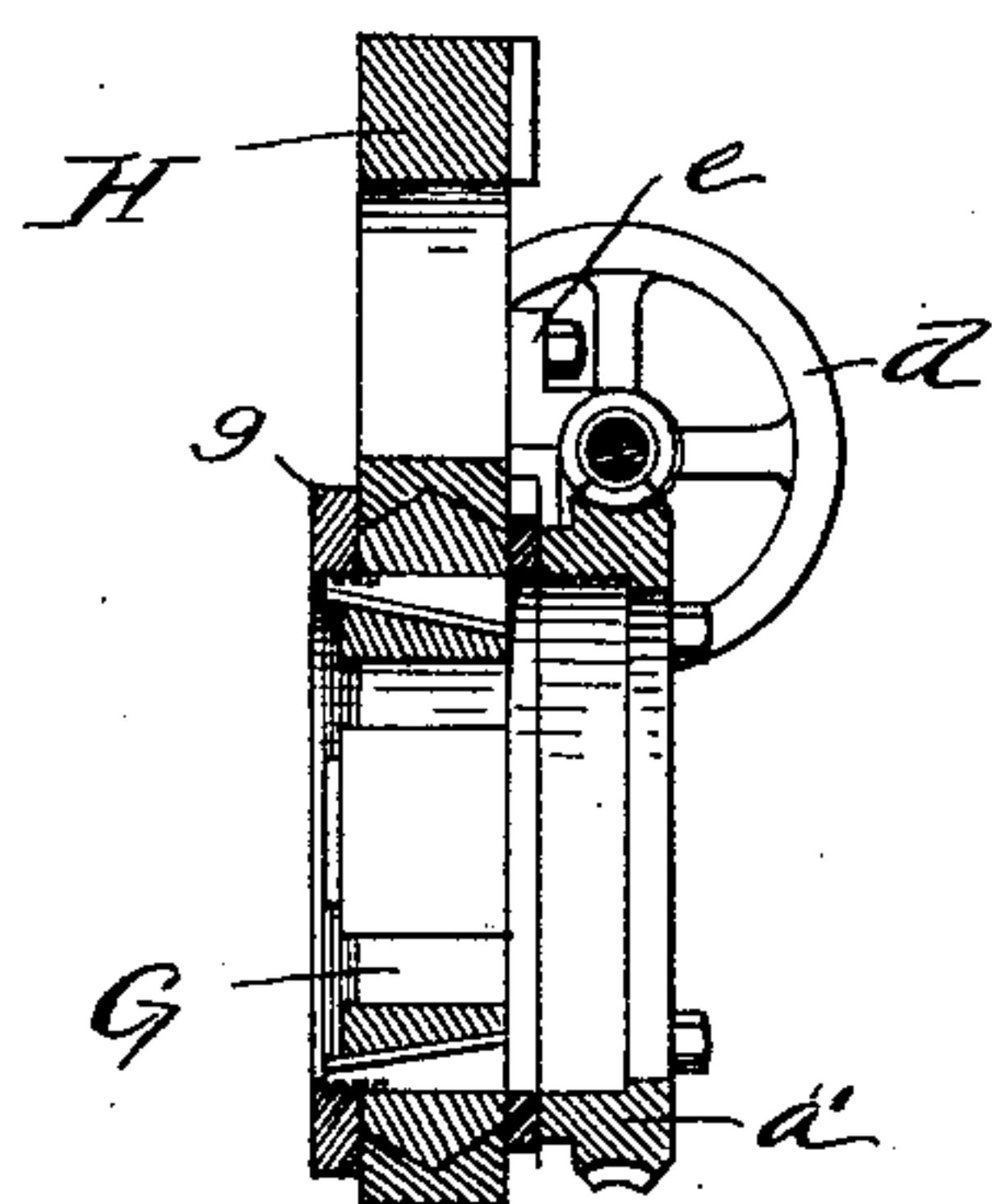
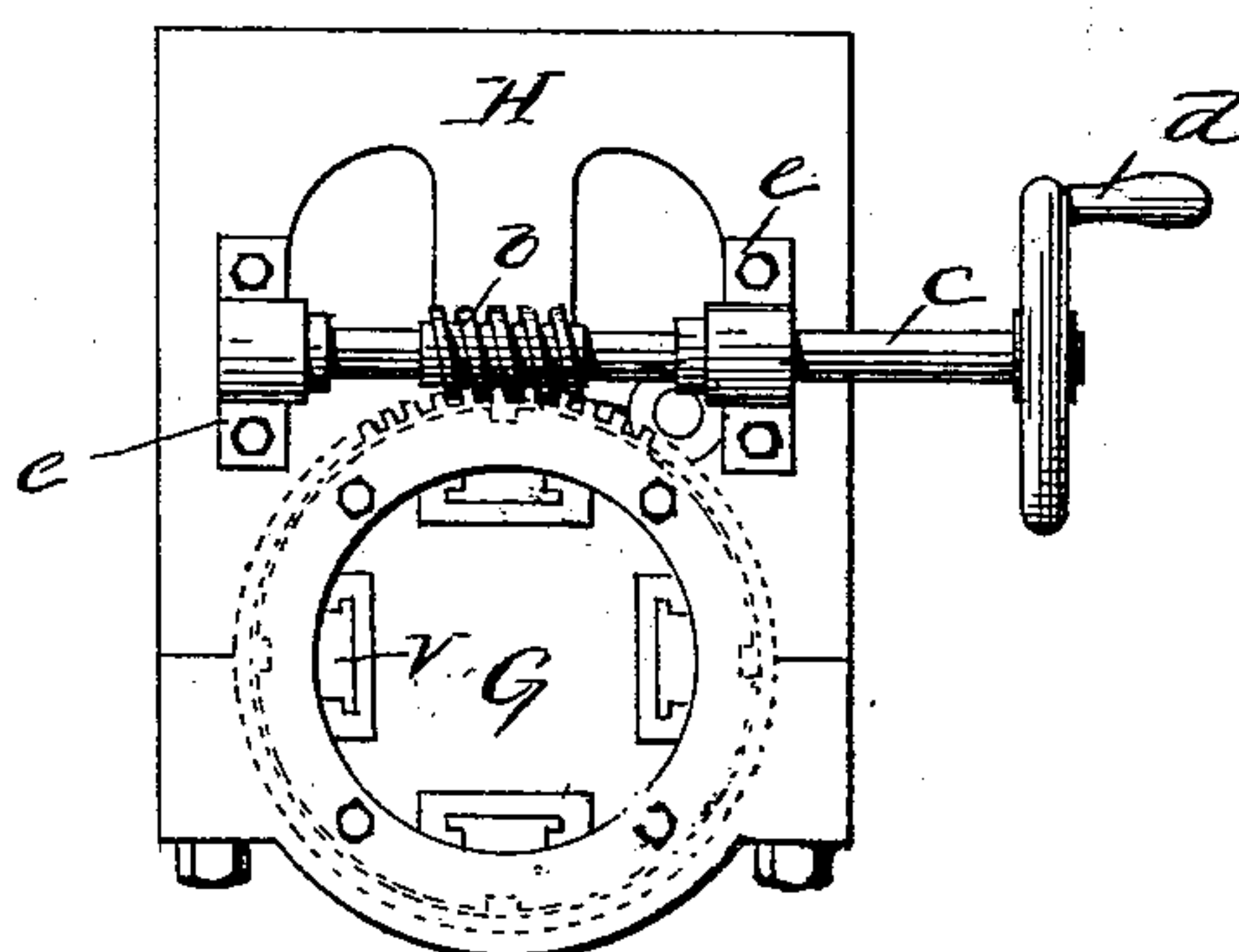


Fig. 5.



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UNITED STATES PATENT OFFICE.

WILLIAM E. TAFT, OF DUNMORE, PENNSYLVANIA.

WOOD-WORKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 434,846, dated August 19, 1890.

Application filed March 1, 1890. Serial No. 342,196. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. TAFT, of Dunmore, in the county of Lackawanna and State of Pennsylvania, have invented a new and useful Improvement in Wood-Working Machines; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention is an improvement in wood-working machines designed especially for cutting, turning, and finishing posts and the like.

The invention consists in the details of construction, hereinafter fully described, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of the improved machine. Fig. 2 is a side elevation partly in central vertical section. Fig. 3 is an end view. Figs. 4 and 5 illustrate modifications of the means for rotating the post or other article which is to be operated upon.

In the drawings, E represents the table or frame-work of the machine, which supports the operating parts. The main shaft C, which carries the cutters, is journaled in bearings D and is driven through a band-wheel F secured thereto. The bearings of the shaft C are fixed so that the said shaft and the cutters carried thereby have rotary motion only.

The post or other article which is to be turned is held in heads G, which are circular in form, and are held in frames H, being fitted thereto so as to be capable of revolution therein. One of these heads is provided at each end of the machine, and each head is provided with a series of wedges, as shown at V, which are operated to clamp the post or other article operated on securely in place. The frames H have vertical movement, so as to adjust the article to be turned in relation to the cutters. These frames move in guides a, formed on a yoke I, and the upper part of this yoke forms a bearing for a screw K, which is in connection with the frame H. A similar yoke I and screw K is arranged at the other end of the machine, and these screws are provided with bevel-gears P', which are in connection with bevel-gears P, secured to a shaft Q, which shaft connects the screws K through the bevel-gears, and it is operated by a hand-wheel R. By this connection the

frames H H may be adjusted vertically simultaneously. The yokes I I have outwardly-extending portions, which are adjustably secured to horizontal plates J, forming a frame, these plates being shown in Fig. 1, and having slots, so that the yokes may be adjustable toward or from each other to allow for posts of different lengths. The said plates J are fitted to slides X on the table-bed. At each end of the frame a screw L is in connection with a screw-threaded box connected to the plates J, and these screws L are provided with bevel-gears S', which mesh with bevel-gears S on the shaft T, which is operated by the hand-wheel U. By turning this wheel through the described connections the yokes carrying the frames H and the article to be turned are moved laterally to any desired position. In order to keep the frame or plates J from lifting in their lateral movement, I provide the clamps Y, which pass beneath the slides.

The heads which hold the article to be turned may be kept stationary when desired to operate on one part of the article at a time, in turning an irregular form, by means of latches N, secured to a shaft O, and operated by a lever W, these latches being adapted to engage with peripheral notches n in the projecting flanges g of the heads; and when the latches are in engagement with these notches, as shown in Fig. 3, the post or other article to be turned will be held stationary. When one side of the post has been acted upon by the cutters, the lever W may be lifted and the post turned to present another edge or side. As shown on the right of Figs. 1 and 2, the ring-shaped head is provided on its outer side and near its periphery with an annular flange, which projects beyond the frame and constitutes a belt gear-wheel or pulley M, to which power is applied for revolving the head and the work. When it is desired, however, to revolve the post A, it is only necessary to operate the lever W so as to disengage the latches N, and by applying power to the band-wheel M, connected to one of the heads G, in this way the post may be rotated. Instead of this manner of rotating the post, I may, as shown in Figs. 4 and 5, form one of the heads with a projecting flange, which in this instance is formed into

a worm-gear a' , and revolve this gear through a worm b on the shaft c , journaled in bearings $e e$ and operated by a hand-wheel d .

5 The shafts Q and O have a splined connection, as shown in Fig. 2, so as to allow for the adjustment longitudinally of one of the yokes I .

10 The shaft C , which carries the cutters, may be provided with cutters of various forms, and these knives or cutters are ground twisting or beveled so as to give a cut with the grain of the wood.

I claim as my invention—

15 1. In combination with the cutters and frame-work, frames H , having openings, the heads G , located within said openings and adapted to revolve, said heads having notched flanges g , and the latches N , carried by the frames and engaging said notches, substantially as described.

20 2. In combination with the frame-work and cutters, the frames H , having the heads G journaled therein, a latch N on each end of the machine for engaging the heads G , and means for operating both latches simultaneously, consisting of the shaft O and the lever W , substantially as described.

30 3. In combination, the frame, the cutters, the yokes I , supported on the frame and having vertical ways a , the movable frames H ,

guided in said ways, the heads carried thereby, and the adjusting-screws K above the frames and passing through the upper portions of the yokes, substantially as described.

4. In combination, the heads, the frames H 35 for supporting the same, the yokes I for the frames carrying means for vertically adjusting the frames, the plates J , with means for adjustably holding the yokes whereby they may be adjusted longitudinally of the machine, the main frame having lateral ways for the plates J , and means for adjusting said plates laterally of the machine on the said ways, substantially as described.

5. In a wood-working machine, the combination of the supporting-frame, the cutters, the frame H , having an opening, and the ring-head G , having clamping means and seated to revolve within the opening of the frame H , said head having an annular flange 50 projecting outside beyond the frame H , said flange being formed into a driving-wheel for the head, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of 55 two subscribing witnesses.

WILLIAM E. TAFT.

Witnesses:

HUGH BURKE,

JAS. H. TORREY.