

(No Model.)

W COLE.

DRAG SAW.

No. 307,708.

Patented Nov. 4, 1884.

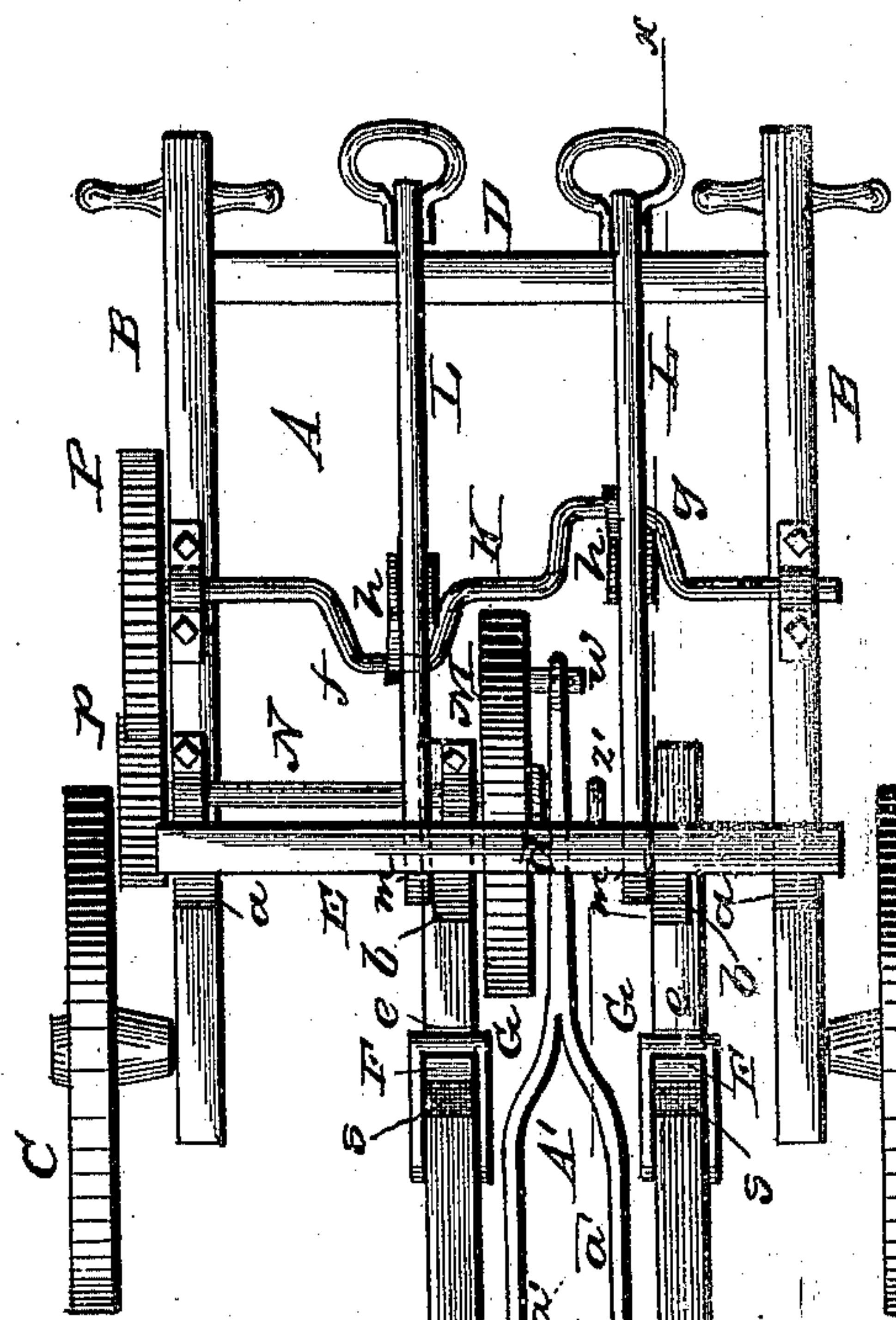
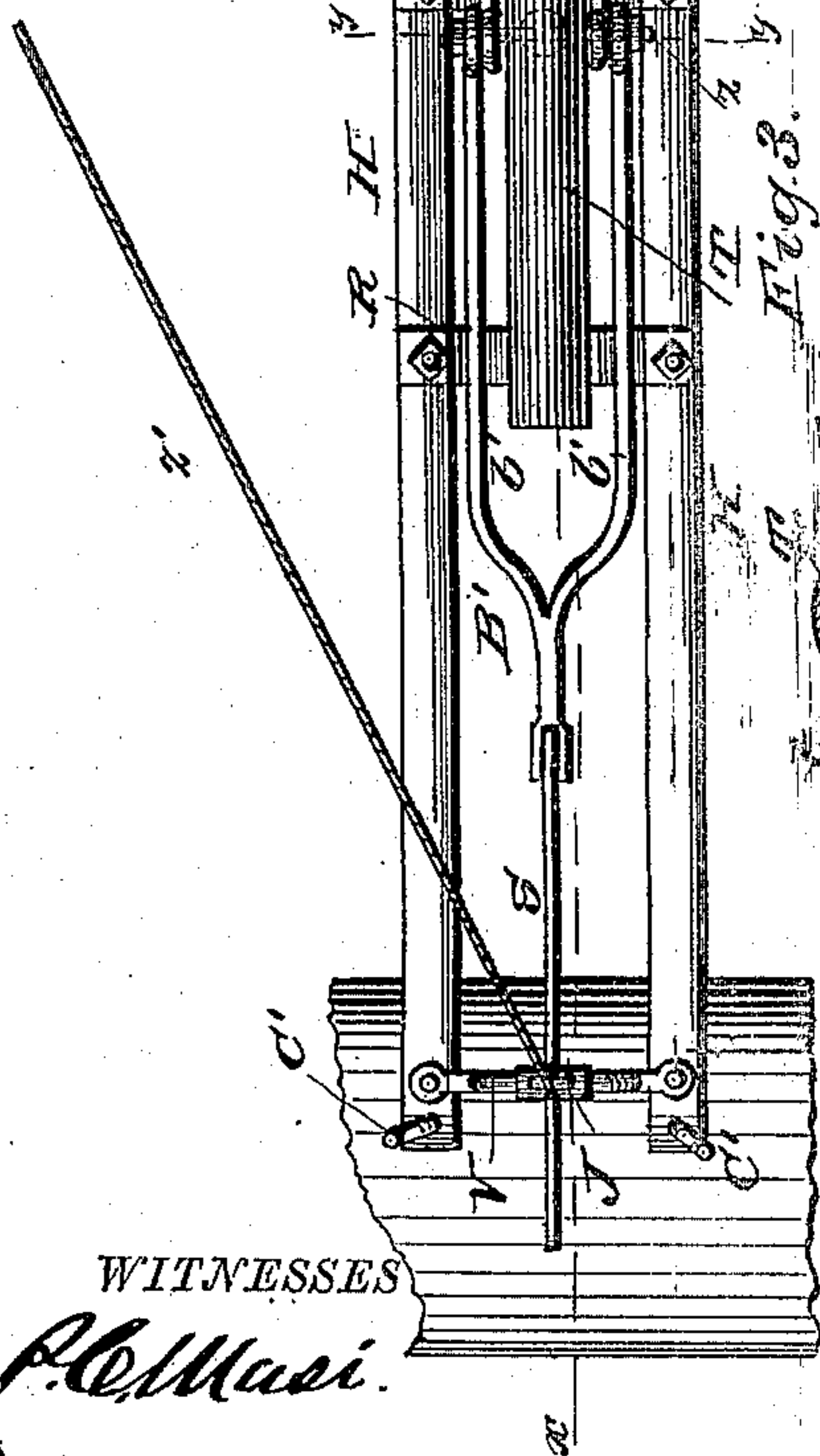


Fig. 1.



WITNESSES

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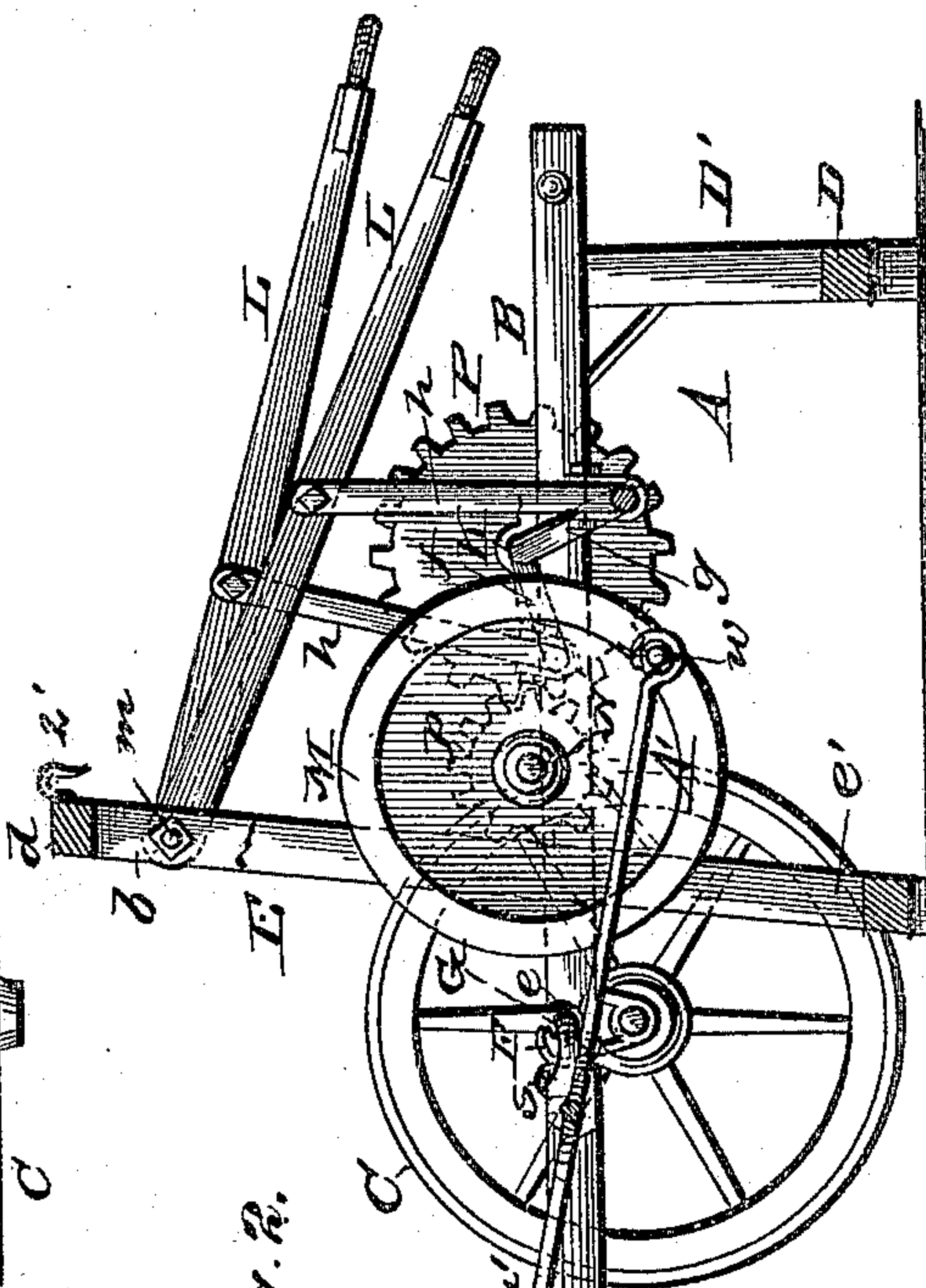
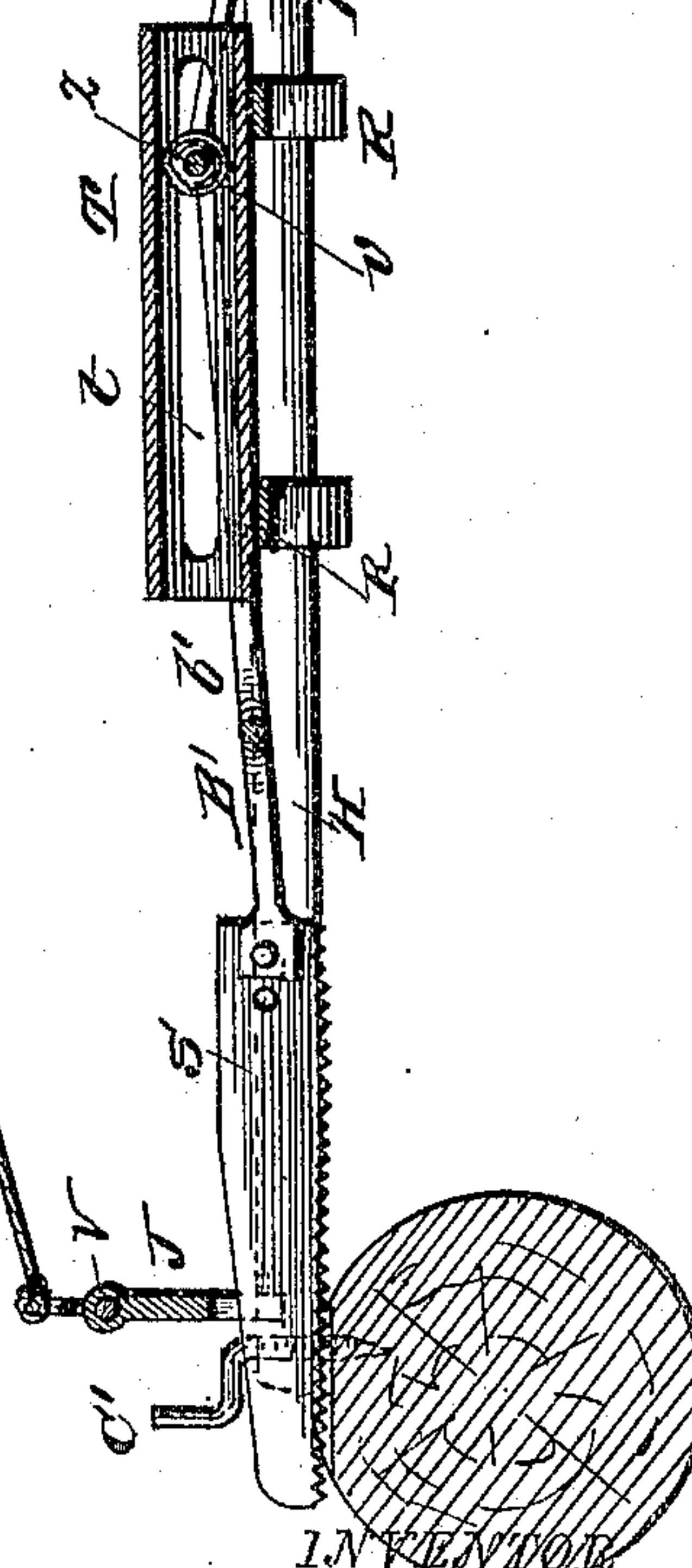
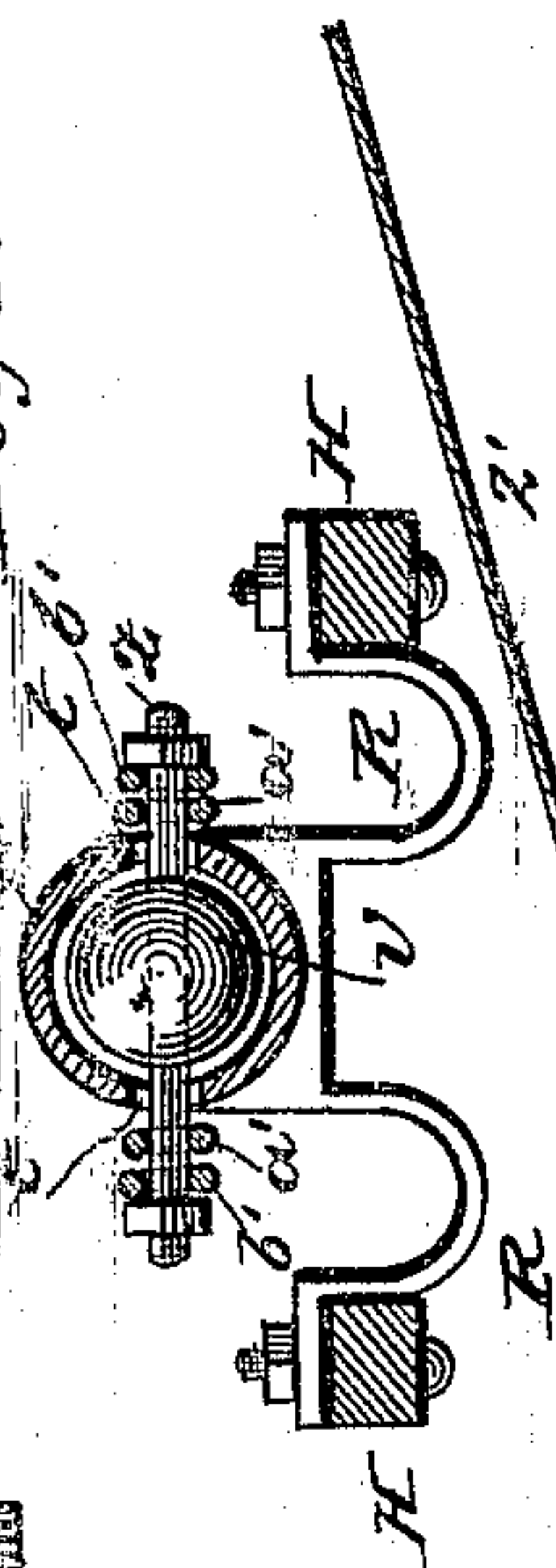


Fig. 2.



~~INTERVIEW~~

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UNITED STATES PATENT OFFICE.

WESLEY COLE, OF MENOMONEE, WISCONSIN.

DRAG-SAW.

SPECIFICATION forming part of Letters Patent No. 307,703, dated November 4, 1884.

Application filed April 18, 1884. (No model.)

To all whom it may concern:

Be it known that I, WESLEY COLE, a citizen of the United States, residing at Menomonee, in the county of Dunn and State of Wisconsin, have invented certain new and useful Improvements in Sawing-Machines; and I do 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a plan view of my machine. Fig. 2 is a vertical sectional view of the same; and Fig. 3 is a cross-sectional view taken through line *y y*, Fig. 1.

This invention has relation to hand sawing-machines; and it consists in the construction and novel arrangement of devices, as hereinafter set forth, and pointed out in the appended claims.

In the accompanying drawings, the letter A indicates the main frame, having the side bars, B, to the forward portions of which are secured the spindles of the carrying-wheels C. These side bars are connected in rear by transverse framing D, and between the carrying-wheels by the transverse upright frame E, consisting of parallel side bars, *a*, and intermediate bars, *b*, the connecting transverse cap-bar *c*, and the transverse base *d*.

To the intermediate uprights, *b*, are secured short bearings *e*, having on their front ends upwardly-turned coupling-hooks F, adapted to engage the loops G of the rear ends of the fender-bars H.

On bearings of the main frame are seated the journals of the crank-shaft K, which is formed with two cranks, *f* and *g*, at right angles to each other, to facilitate passing the dead-center. To these cranks are connected pivoted arms *h* of the hand-levers L, the forward ends of which are pivoted to bearings *m* of the upright transverse portion of the main frame. A treadle may also be connected to the crank-shaft to facilitate the operation thereof, and relieve the hands when desirable.

On the end of the shaft K is keyed a gear-wheel, P, which engages a pinion, *p*, on the end of a transverse shaft, N, which carries the

fly-wheel M. This fly-wheel is preferably arranged between the intermediate bars, *b*, of the upright transverse frame, and its shaft is seated on bearings of said transverse frame, to give the fly-wheel a solid support. The loops G at the ends of the fender-bars are provided with springs *s*, which are adapted to press against the outer surfaces of the hooks F, to prevent casual disengagement. The fender-bars are connected by bow-braces R, which sustain a tubular horizontal guide, T, having longitudinal slots *t* in its sides for the passage of a short transverse shaft pin or bolt, *z*, on which is pivoted the anti-friction roller or ball *v*, which works in the interior of the tubular guide.

To the ends of the pin or bolt *z* are connected the ends of the branches *a'* of the rear pitman-section, A', which extends to the fly-wheel, and is pivoted to a wrist-pin, *w*, thereof. To said pin or bolt *z* are also pivoted the ends of the branches *b'* of the front pitman-section, B', to the end of which is secured the saw S. By the device of this tubular guide, roller-bearing, and pitman-sections I am enabled to make that portion which is fastened to the saw quite short, and at the same time give it a free working movement. The saw, in starting, works in a back guide, J, which is attached to a bow-brace, V, connecting the fender-bars at their front ends. Screw-points C', passing through the front ends of the fender-bars, serve to attach the same to the log. These screw-points are provided with crank ends, to facilitate their operation. When the machine is in operation, the rear brace-frame, D, rests by its legs D' on the ground, and the transverse upright frame E also rests upon the ground by the feet *e'* of its base portion. When, however, the machine is being moved, by lifting the handle ends of the side bars, the supports D' and *e'* are lifted from the ground and the wheels are free to operate. When the machine is being moved, the fender is turned upward on the pivot-hooks of the main frame, and may be secured by means of an attachment-cord, *z'*.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. In a sawing-machine, the combination,

with the main frame, of the short hooked
bearings *e*, the fender-bars H, bow-braces R,
connecting the fender-bars, the tubular guide
T, supported on the said braces, the bolt *z*,
5 anti-friction ball *v*, pitman-sections, saw, and
mechanism for operating the same, substan-
tially as specified.

2. In a sawing-machine substantially as de-
scribed, the combination, with the main-frame
10 bearings *e* and fender-bars H, of the bow-
brace V, connecting the forward ends of the
fender-bars, and provided with the back guide,

J, the lifting-rope *z'*, and means for attaching
the same to the main frame, substantially as
specified. 15

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

WESLEY ^{his} X COLE.
mark.

Witnesses:

THOMAS RUNNING,
SEWELL H. PETERSON.