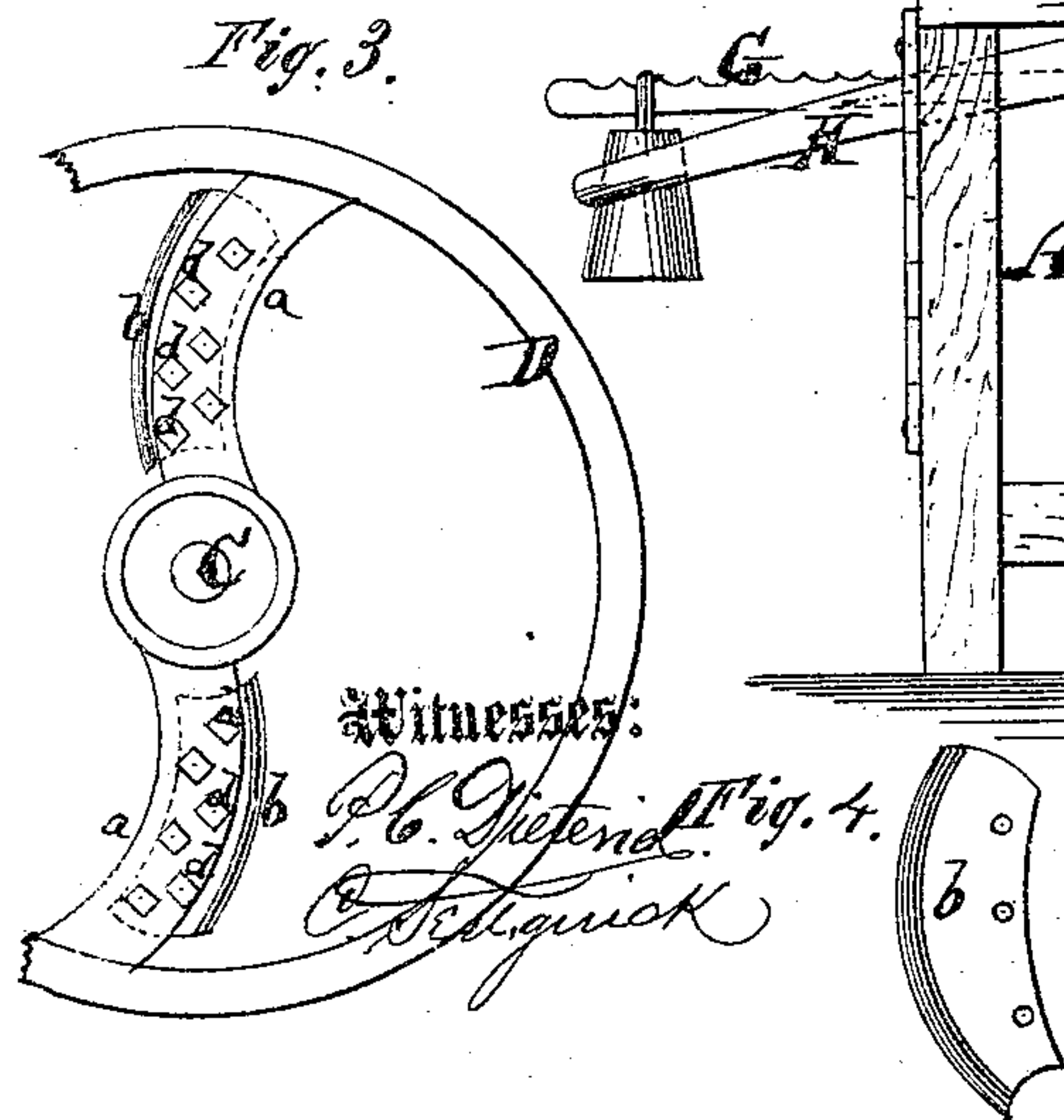
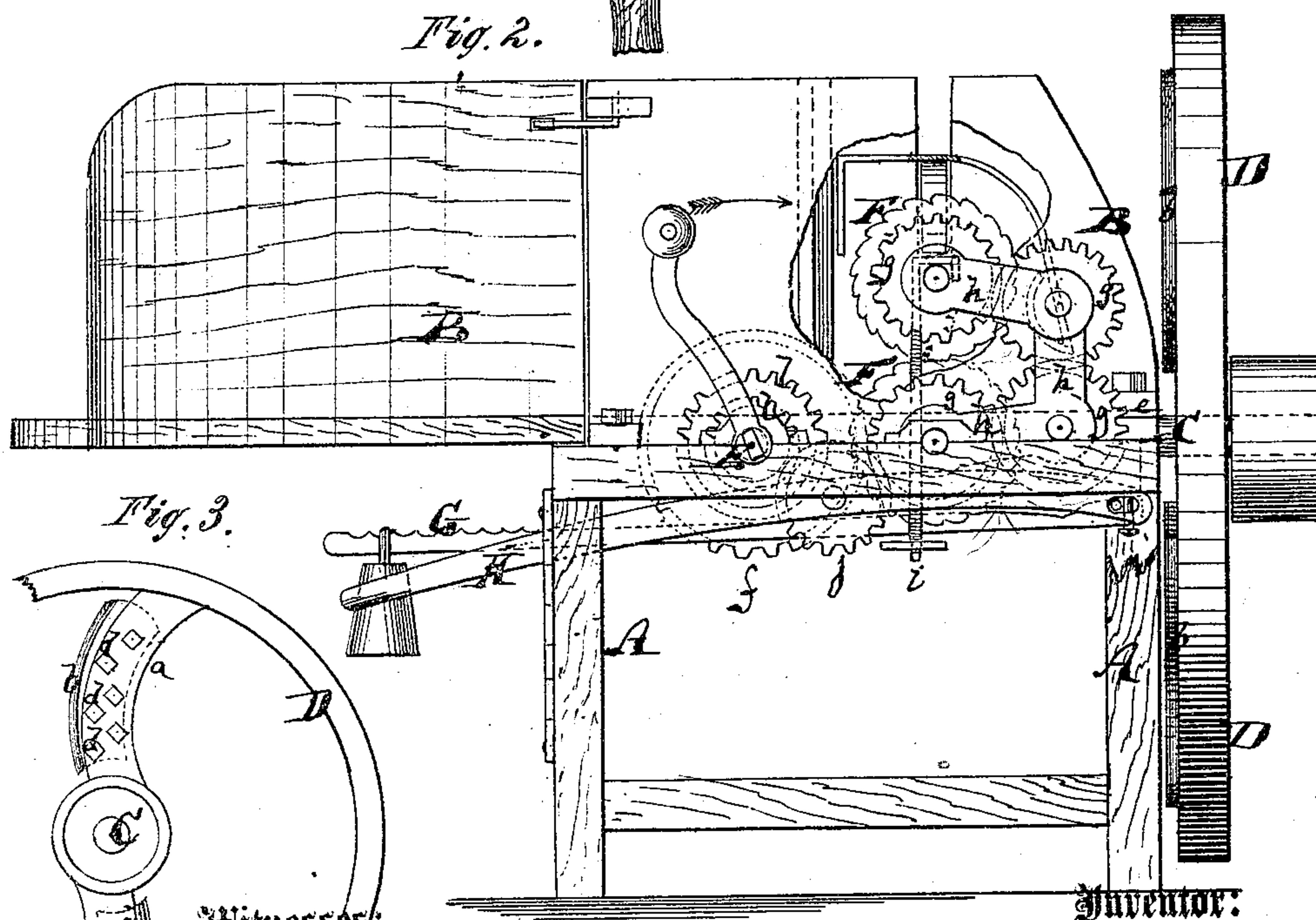
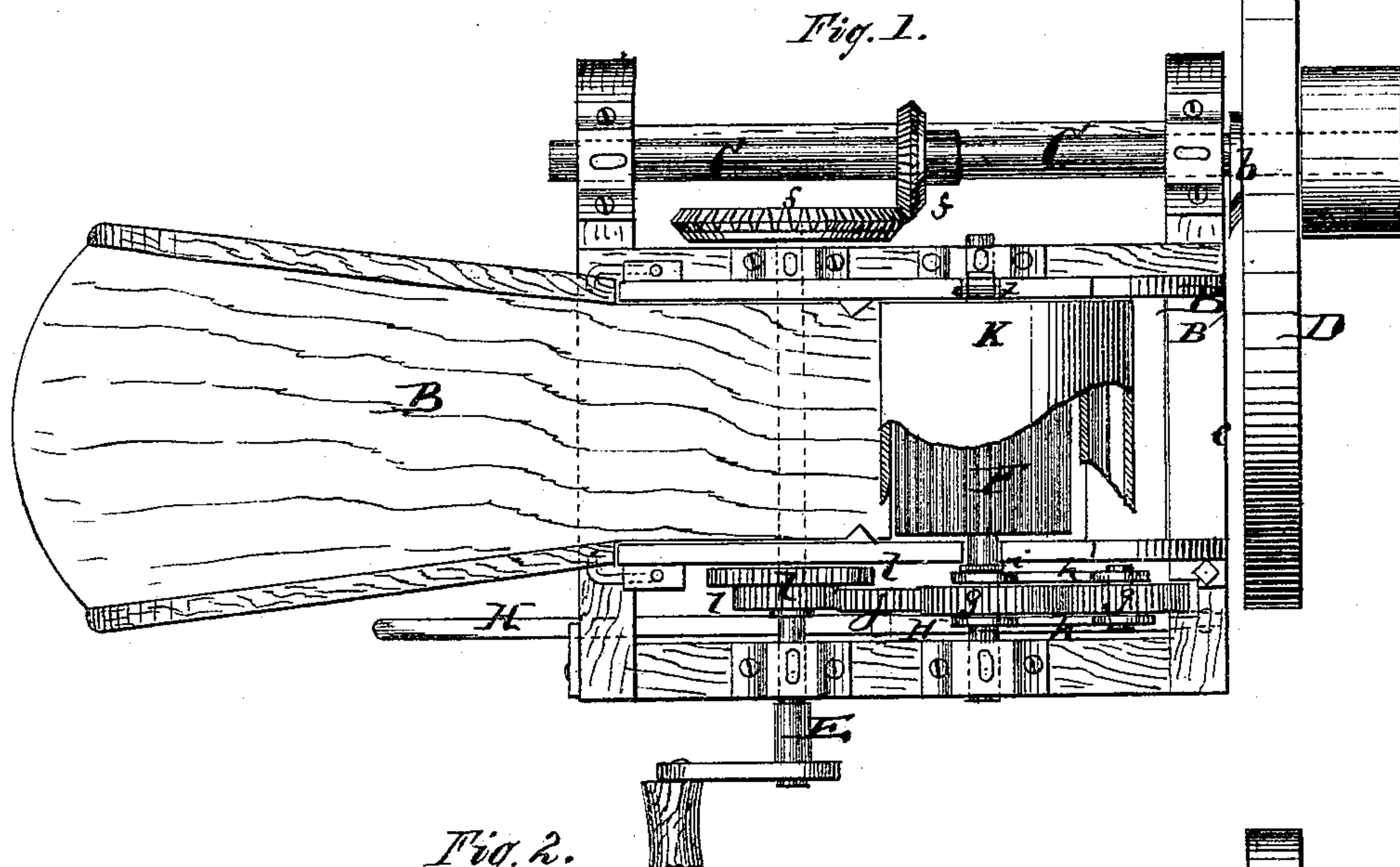


T. WEBB.
Straw-Cutters.

No. 141,527.

Patented August 5, 1873.



Witnesses:

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UNITED STATES PATENT OFFICE.

THOMAS WEBB, OF ELYRIA, OHIO.

IMPROVEMENT IN STRAW-CUTTERS.

Specification forming part of Letters Patent No. **141,527**, dated August 5, 1873; application filed November 9, 1872.

To all whom it may concern:

Be it known that I, THOMAS WEBB, of Elyria, in the county of Lorain and State of Ohio, have invented a new and useful Improvement in Straw-Cutter, of which the following is a specification:

Figure 1 is a top view, partly in section, of my improved straw-cutter. Fig. 2 is a side elevation, partly in section, of the same. Fig. 3 is a detail front view of the cutter-wheel; and Fig. 4 a detail face view of one of the cutters.

Similar letters of reference indicate corresponding parts.

My invention is an improvement in the class of straw-cutters having feed-rolls, one of which is adjustable vertically, and yet so geared with the stationary roller as to continue its revolution, whether they are separated by a small or large quantity or thickness of the material to be cut.

The subjects of the claim indicate the improvement to which my invention more especially pertains.

The cutters are affixed to a fly-wheel, and can, by set-screws, be adjusted toward the front end of the straw-support.

In the accompanying drawing, the letter A represents the supporting-frame of my improved straw-cutter. B is the feed-box or trough supported thereon. This box is or may be made in sections, so that the back portion *a* may be detached or affixed at will. C is a longitudinal horizontal shaft hung in bearings at the side of the box B, and carrying at its front end a fly-wheel, D. To the spokes *a a* of this wheel are secured the cutters *b b*, by screws or other means, and by set-screws *d d* they can be set more or less oblique, so that their cutting-edges will be the requisite distance from the front edge *e* of the box B. Thus as the cutters wear they are set more and more toward the edge *e* to retain their efficiency. By gear-wheels *f f* the shaft C connects with a horizontal transverse shaft, E, which hangs under the box B. Rotary motion may be imparted to the shaft C or E by hand or other means. F F' are corrugated feed-rollers hung transversely in the box near to the front end thereof. They are geared together by cog-wheels *g g*, which hang

in a jointed frame, *h*. The upper roller F is vertically adjustable, and the jointed frame *h* keeps pace with its motions, but so as to keep the wheels *g* always in gear. By means of straps *i i* the upper roller F is connected with a weighted lever, G, hanging under the box B and drawing said upper roller down upon the straw to be fed with equal effect, whether there is more straw or less between the rollers. A cog-wheel, *j*, hung to a lever, H, is used to communicate motion from the shaft E to the train of wheels *g*. This wheel *j* meshes into the teeth of a wheel, *l*, mounted upon the shaft E, and into those of one wheel *g*.

When the feed-motion is to be promptly arrested, it will only be necessary to swing down the lever H, and thereby take the wheel *j* out of gear.

The wheel *l* may be made in steps or sections of various diameters, and movable on the shaft E, to allow the varying of the feed-motion during a given speed of the cutter. The upper roller is provided with a cover, K, which extends over on both sides of the same, and has arms attached to its ends which project into the vertical slots in the trough of the machine, and have hooked ends for adapting them to connect with the straps *i i*. The front end of the cover K has a convex spring plate attached on its under or inner side, so as to form a smooth and yielding surface for bearing on the material in passing from the rolls to the knife.

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

1. The cover K, having arms working in vertical guide-slots of the trough, and engaging with the straps *i i*, so that it may move with the roller F, and provided at its front end with a convex yielding or spring-bearing plate, as described, for the purpose specified.

2. The combination, with the feed-rollers and their train of gear-wheels *g*, and with the driving-shaft E and its gear-wheel *l*, of the wheel *j* and the lever H, all as shown and described, for the purpose specified.

THOMAS WEBB.

Witnesses:

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