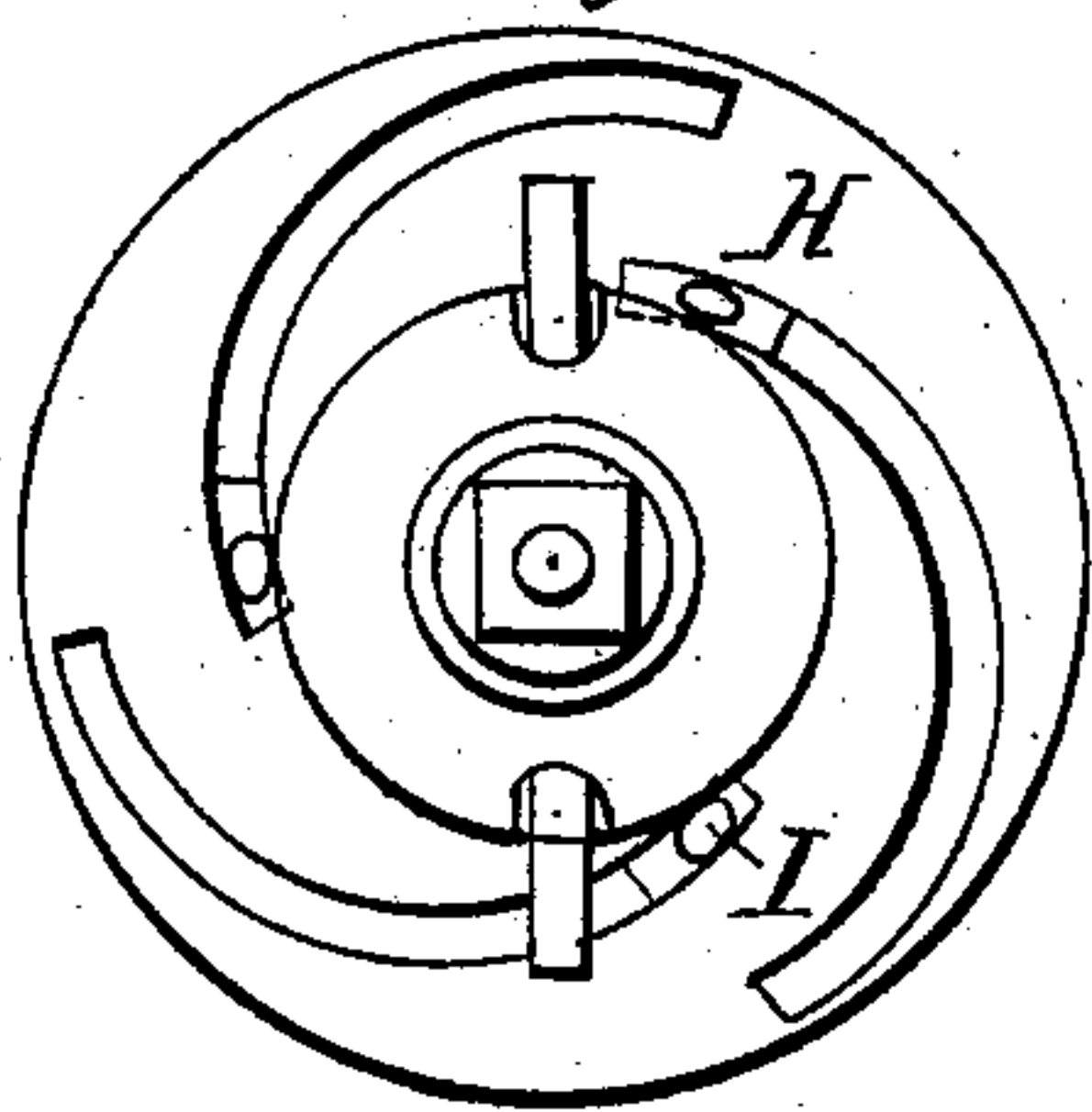
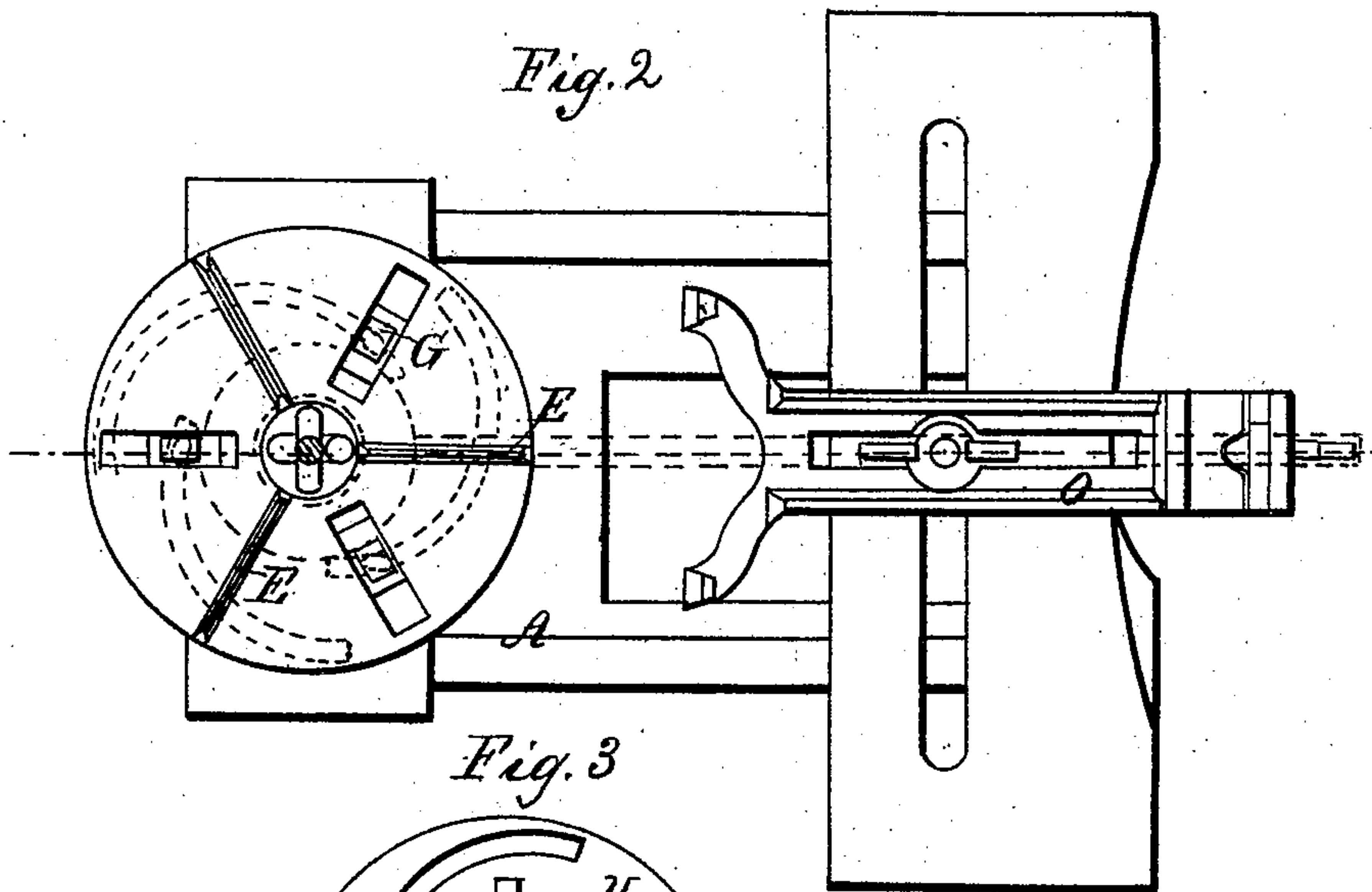
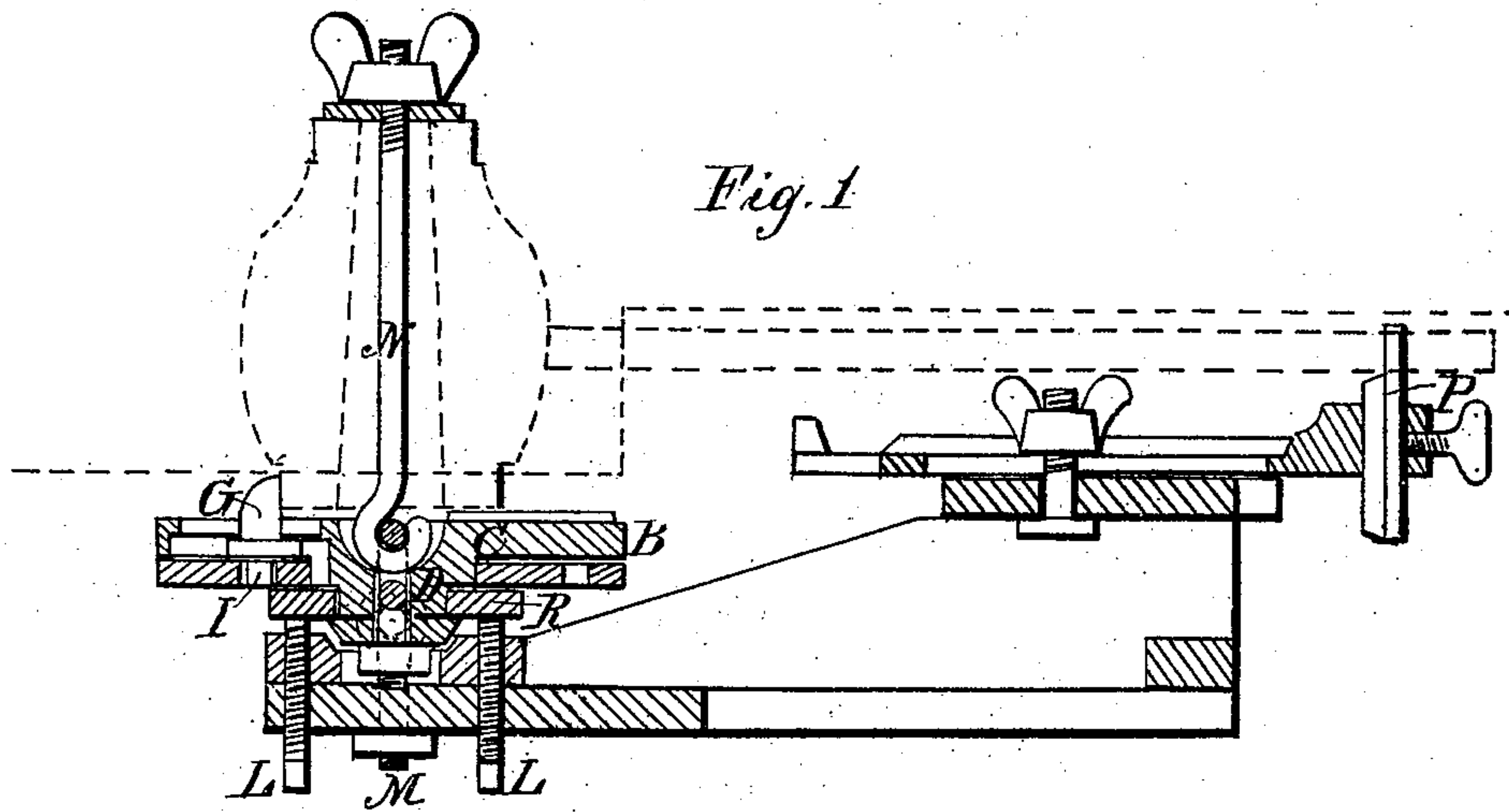


T. Place.

Wheel Mach.

Nº 97,115.

Patented Nov. 23, 1869.



Witnesses
E. W. H. H.
John F. Brooks

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United States Patent Office.

THOMAS PLACE, OF ALFRED CENTRE, NEW YORK.

Letters Patent No. 97,115, dated November 23, 1869.

IMPROVEMENT IN MACHINE FOR MAKING WHEELS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, THOMAS PLACE, of Alfred Centre, in the county of Allegany, and State of New York, have invented a new and useful Improvement in Machines for Boring and Tenoning; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in machines for boring felloes and tenoning spokes, such as patented to me March 12, 1867, No. 62,883, and consists in an improved arrangement of the turn-table, for holding and centring the hub on the carriage, for feeding up to the auger and spoke-holder.

Figure 1 represents a longitudinal sectional elevation of my improvement.

Figure 2 represents a plan view, and

Figure 3 represents a detail view.

Similar letters of reference indicate corresponding parts.

A represents a carriage, for supporting the hub, and moving it up to the boring-tool, to present the end of the spoke thereto.

The said carriage may be arranged in suitable ways, and moved by any suitable means.

B represents a turn-table, for centring and holding the hub, whereof C is an upper plate, having a central boss, D, projecting from the under side, E, radial ribs on the top, and F, radial slots, supporting, centring, and clamping jaws G, for holding the hub.

H is a plate, centred on the boss D, and provided with eccentric slots, engaging projections I of the jaws, and arranged for turning, to close the jaws against the base of the hub, where setting on the ribs E, thereby adjusting the outer surface of the hub upon a true circle, irrespective of the size or truth of the bore of the hub.

Another plate, R, is centred on the boss D below the plate H, and rests on set-screws L, for adjusting the table to any required plane.

These plates constituting the turn-table are confined to the carriage by an eye-bolt, M, in the axis thereof, capable of adjustment vertically, for allowing the set-screws to act on the turn-table, and supporting also a clamping-bolt, N, by which the hub is secured to the said turn-table.

O represents an adjustable rest, for supporting the ends of the spokes, having at its outer end an adjustable vertical slide-rest, P, capable of adjustment for hubs of any height.

The inner end of the rest O is made capable of supporting a felloe for boring the dowel-holes, and may be turned outward, to present the felloe to the same boring-apparatus employed for tenoning the spoke, which, being no part of this invention, is not here described.

The said rest O may also be adjusted to or from the axis of the hub for spokes of different length.

Having thus described my invention,

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

1. The turn-table B, adapted for adjustment upon the carriage A, in any required plane, with reference to the rest O, or boring-tool, by means of the set-screws L and adjustable eye-bolt M, arranged to operate as herein shown and described.

2. The slotted adjustable rest O, provided with the vertically-adjustable slide-rest P and the felloe-support, in combination with the carriage A and turn-table B, as herein described, for the purpose specified.

THOMAS PLACE.

Witnesses:

ISAAC M. LANGWORTHY,
A. B. WOODARD.