

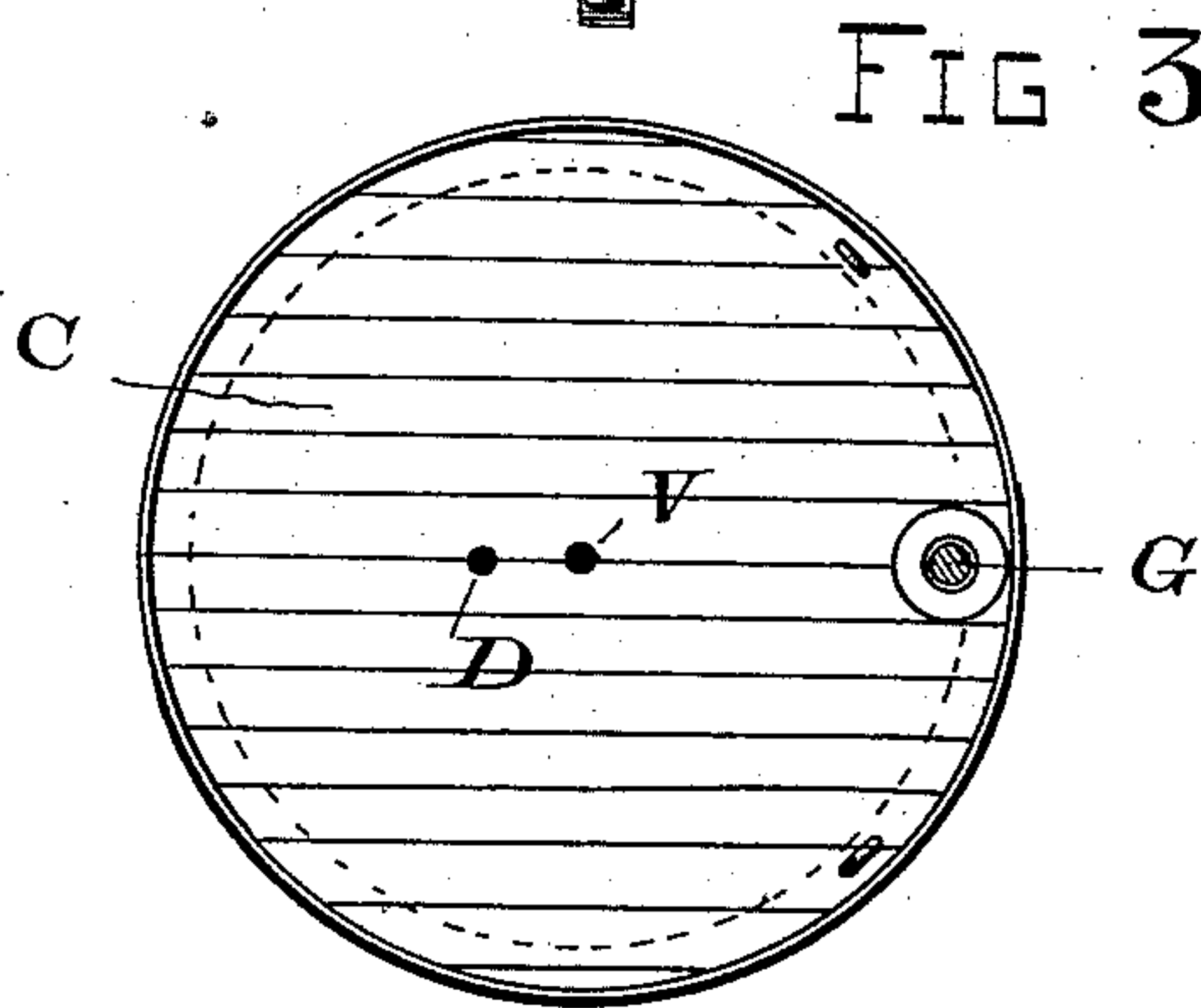
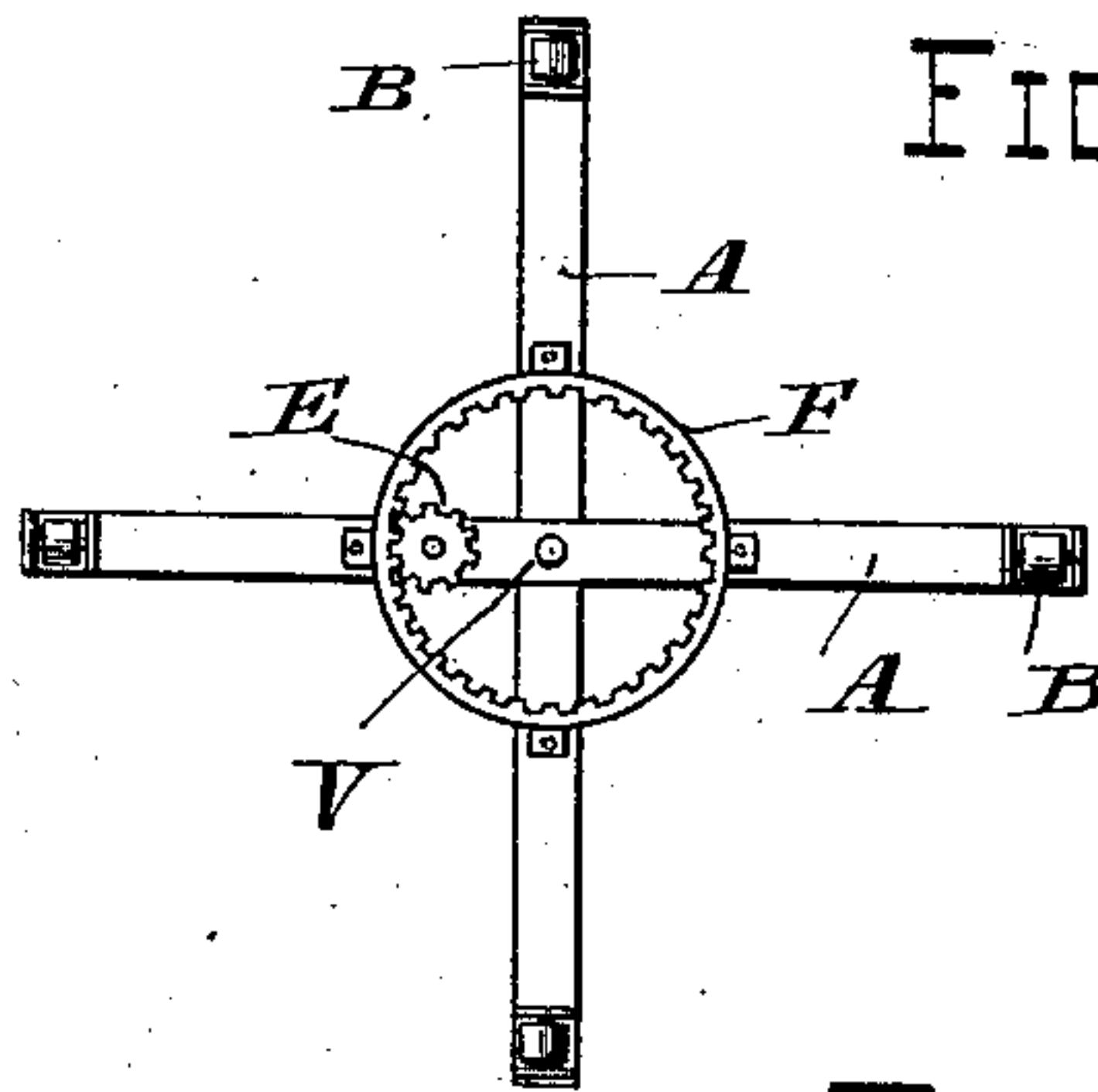
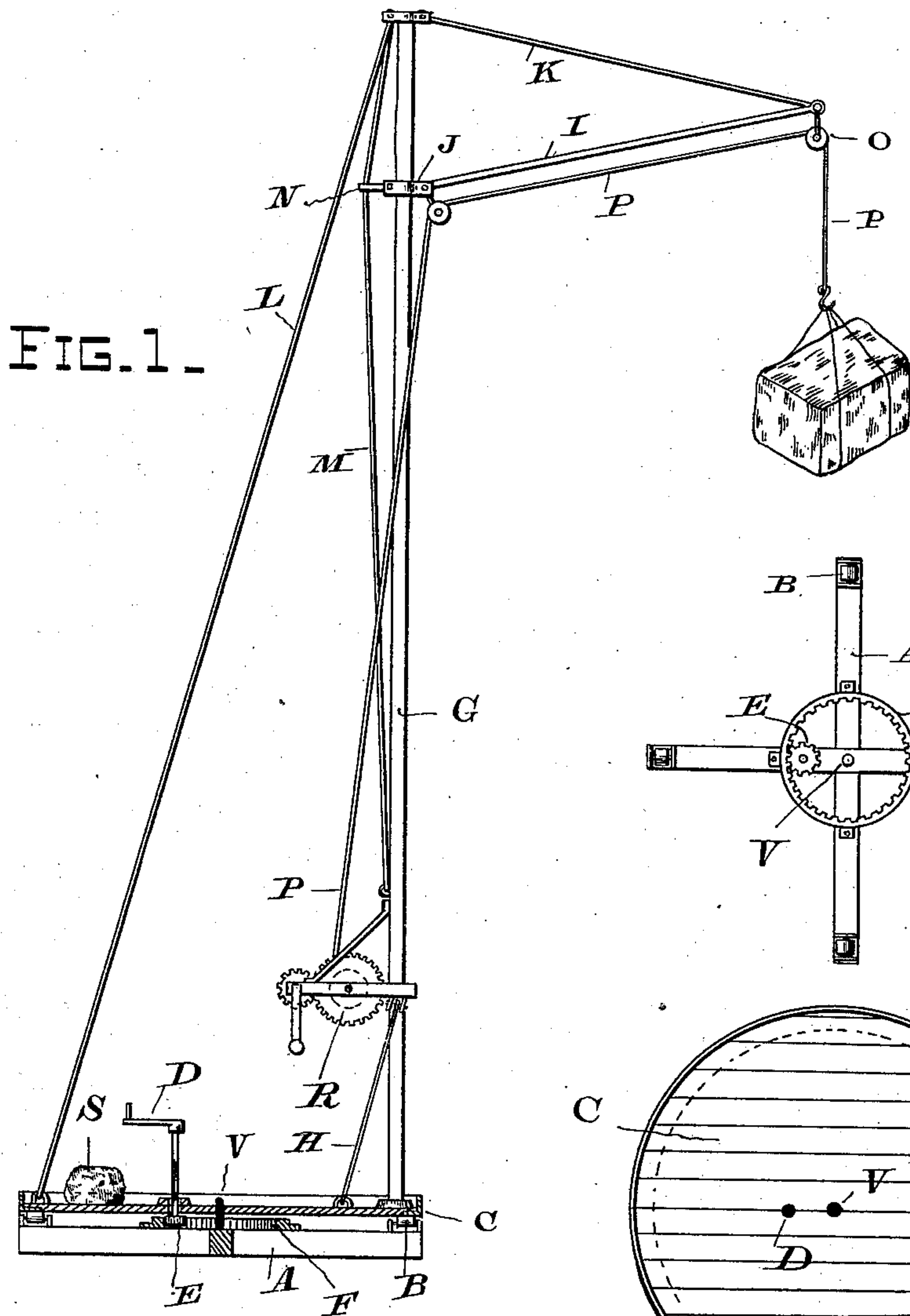
(No Model.)

H. AUSTIN & I. SCOVILLE.

PORTABLE DERRICK.

No. 299,504.

Patented June 3, 1884.



WITNESSES -
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UNITED STATES PATENT OFFICE.

HARRIE AUSTIN AND IVES SCOVILLE, OF OAKLAND, CALIFORNIA.

PORTABLE DERRICK.

SPECIFICATION forming part of Letters Patent No. 299,504, dated June 3, 1884.

Application filed February 11, 1884. (No model.)

To all whom it may concern:

Be it known that we, HARRIE AUSTIN and IVES SCOVILLE, citizens of the United States, residing at Oakland, in the county of Alameda and State of California, have invented a new and useful Portable Derrick, of which the following is a specification.

Our invention relates to improvements in derricks, and more particularly to that class known as "portable derricks;" and the objects of our invention are, first, to provide a derrick of cheap and simple construction, the various parts of which may be easily assembled and dismounted, and capable of being operated by one person; second, to provide a derrick with a balanced boom, in which the balancing-weight is located upon the platform or base of the derrick and within easy reach of the person operating the derrick. These objects we accomplish by means of the mechanism illustrated in the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a sectional elevation of our improved derrick. Fig. 2 is a plan view of the base-timbers, and Fig. 3 is a top view of the revolving platform.

Similar letters of reference are used to indicate like parts throughout the several views.

We first construct a foundation or base composed of two timbers, A A, laid at right angles to each other, in the form of a cross. Upon the outer end of each timber, and at equal distances from their point of intersection, we place the friction-rollers B B, upon which rests the movable platform C. This platform is made by bending a piece of angle-iron into the form of a circle, and then boarding the inclosed space over, as is shown in plan in Fig. 3. The said platform is revolved upon the supporting-base by means of a crank-handle, D, which passes through the platform, and is provided with a pinion, E, which meshes with an internally-toothed gear, F, bolted to the cross-timbers beneath the revolving platform. The said revolving platform is pivoted to the base-timbers by a pintle or post, V, as shown in Figs. 1 and 2. The king-post G is stepped near the outer edge of

the platform, and is braced by two side stays, H H. The boom I is secured to a collar, J, clamped at any desired height upon the king-post, and a brace, K, extends from the outer end of the boom to the cap or top of the king-post, from which point a guy-rope or main brace, L, is extended down to the outer edge of the revolving platform, and made fast to a dead-eye at a point diametrically opposite to the step of the king-post. A supplemental brace or shroud, M, is attached to the cap of the king-post, and led down to near the base thereof, and rests against a fork, N, projecting from the collar, to which the boom is attached, as shown in Fig. 1. A pulley-block, O, is attached to the outer end of the boom, and carries the hoisting-rope P, the fall of which is led back over a block, Q, attached to the boom-collar, and thence down to the winch R.

In order to counterbalance the weight of the article being lifted, we place a weight, S, upon that side of the movable platform opposite to the step of the king-post, and this counterweight should at least equal the weight of the article to be lifted by the boom.

In order to swing the load from right to left, and vice versa, the platform is caused to make a semi-revolution, or so much as may be necessary to accomplish the desired effect.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

In a derrick, the combination of the base A, provided with the internally-toothed gear F, friction-rollers B, and supporting the revolving counterbalanced platform C, adapted to be rotated by the crank-handle D and pinion E, and carrying the king-post G, and boom I, all when constructed and arranged to operate substantially in the manner and for the purpose herein shown and set forth.

In testimony that we claim the foregoing we have hereunto set our hands and seals.

HARRIE AUSTIN. [L. S.]
IVES SCOVILLE. [L. S.]

Witnesses:

WILMER BRADFORD,
CHAS. E. KELLY.