

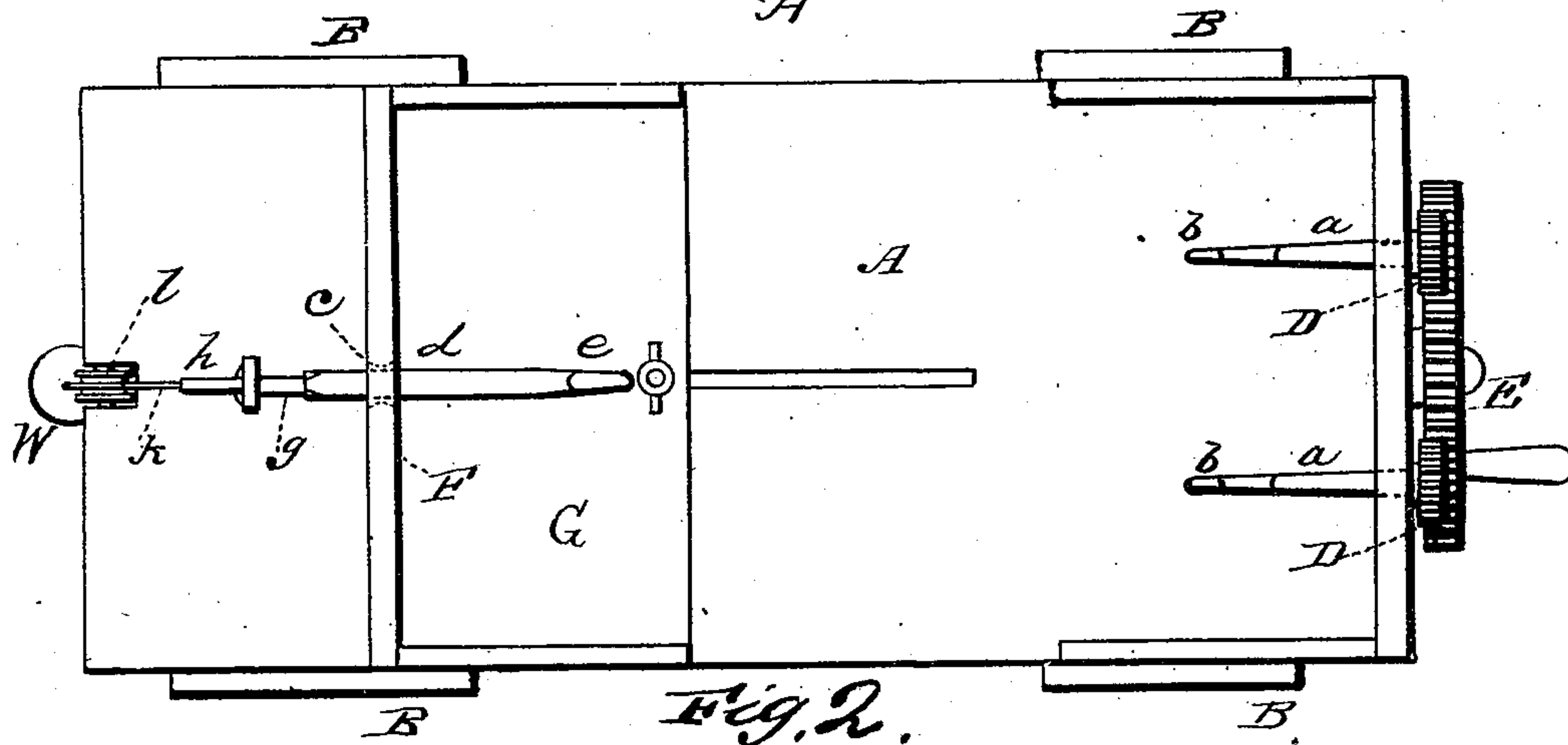
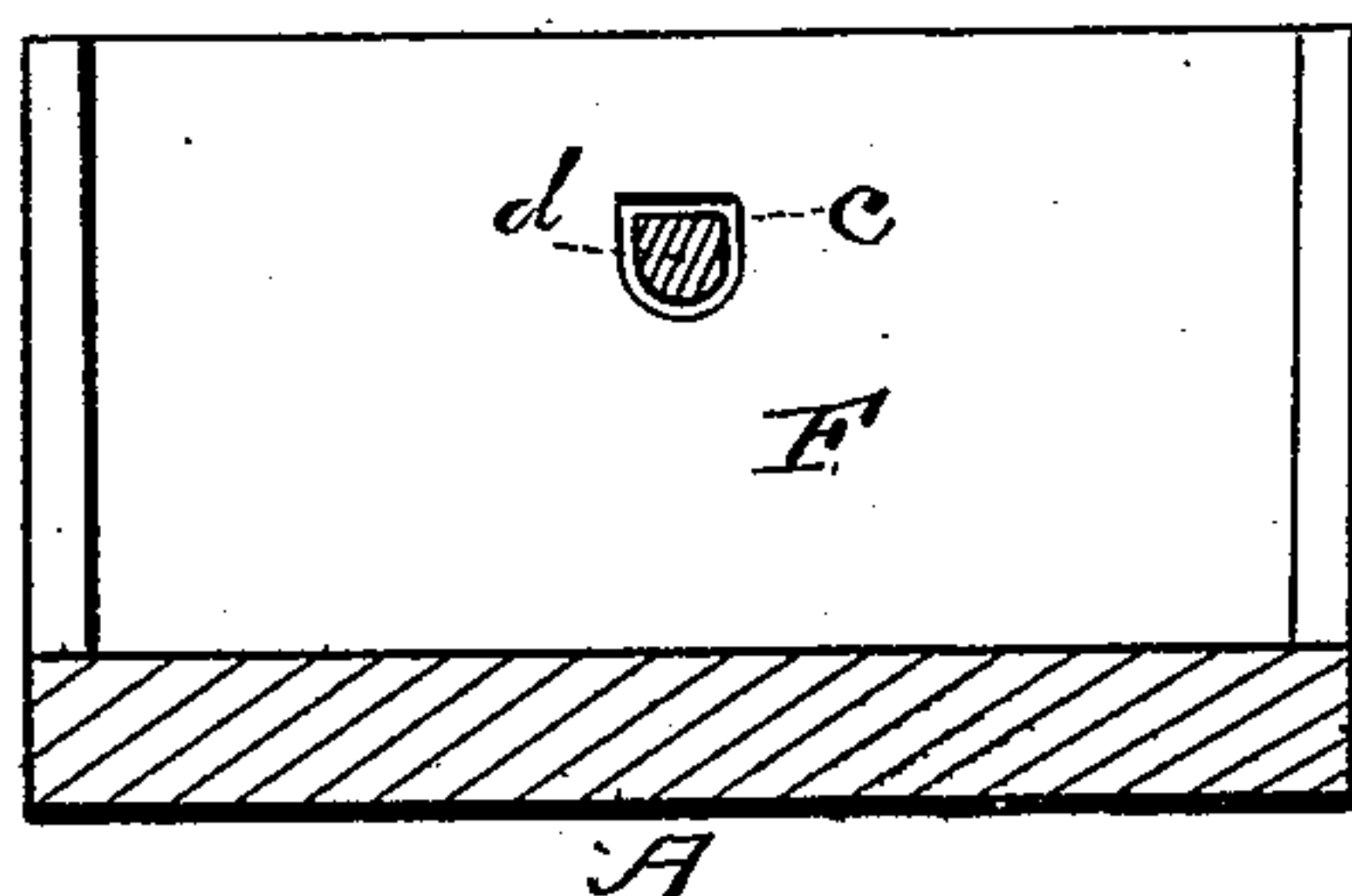
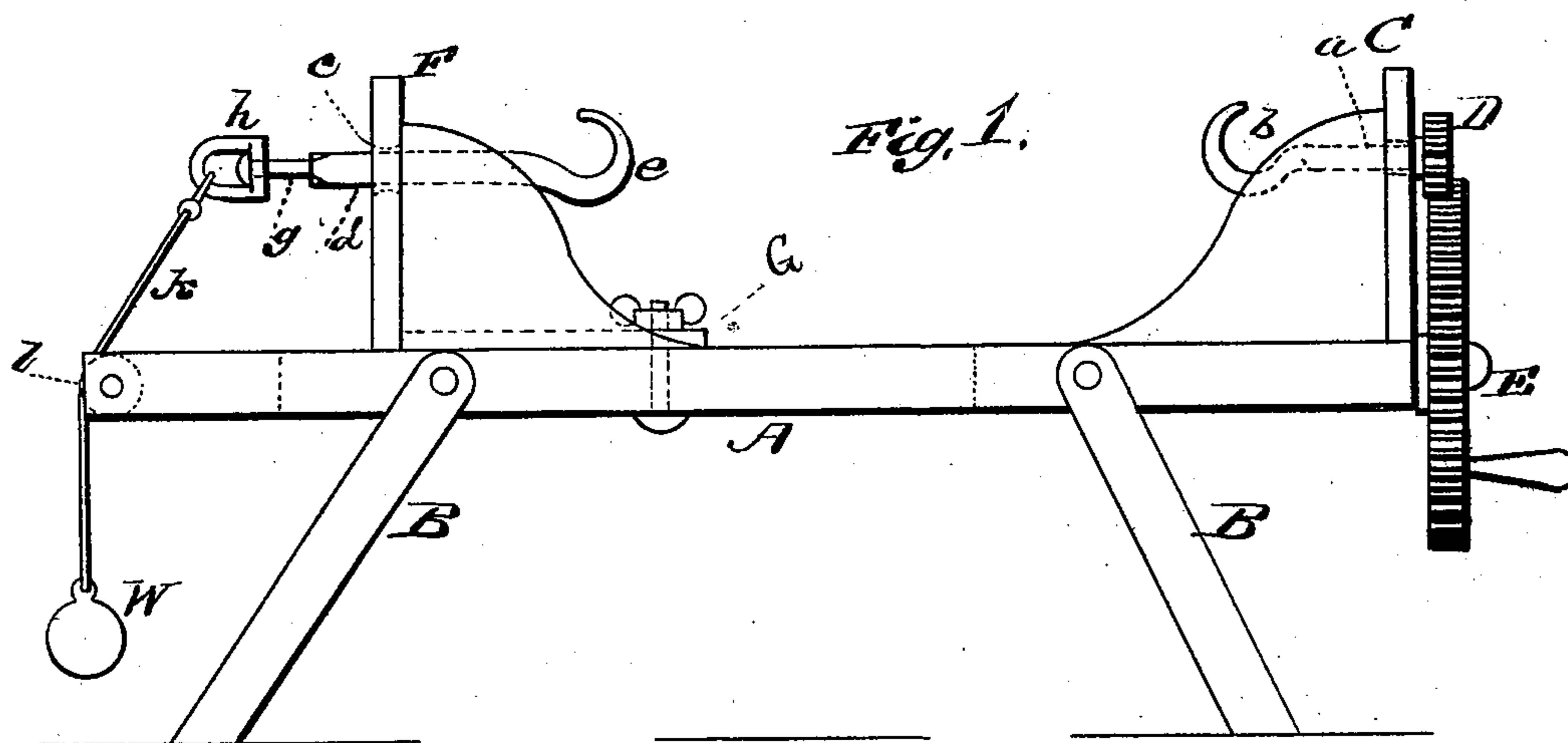
(No Model.)

G. A. PARKER.

MACHINE FOR TWISTING GRASS FOR FUEL.

No. 272,757.

Patented Feb. 20, 1883.



WITNESSES
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UNITED STATES PATENT OFFICE.

GEORGE A. PARKER, OF MARLBOROUGH, NEW HAMPSHIRE.

MACHINE FOR TWISTING GRASS FOR FUEL.

SPECIFICATION forming part of Letters Patent No. 272,757, dated February 20, 1883.

Application filed April 8, 1882. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. PARKER, a citizen of the United States, and a resident of Marlborough, in the county of Cheshire and State of New Hampshire, have invented a new and valuable Improvement in Machines for Twisting Grass for Fuel; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a side view of my grass-twister. Fig. 2 is a top or plan view of the same, and Fig. 3 is a detail view.

This invention has relation to machines for twisting prairie-grass for fuel; and it consists in the construction and novel arrangement of parts, as will be hereinafter fully described and specifically claimed.

In the accompanying drawings, the letter A designates a table or elongated frame, having supporting-legs B, which are preferably hinged thereto for convenience in folding.

At one end of the frame is an abutment, C, having bearings for the journal-shafts *a* of the pinions D, which are arranged side by side and engage the teeth of a large driving-wheel, E, which is mounted on a bearing below, or is provided with a journal seated in bearings on the frame. This main wheel E is designed to be turned by hand; or a treadle attachment may be easily arranged so that it can be turned by the action of the foot.

The journal-shafts *a* of the pinions are provided with terminal hooks *b*.

Near the opposite end of the frame is located an adjustable head or abutment, F, having extending through it an opening or bearing, *c*, being in outline of D-shaped form. This abutment F, being secured to the horizontal board G and the side braces, may be rendered adjustable by means of a longitudinal slot in the table A, and in connection therewith a clamping-screw; or any other equivalent adjusting devices may be employed to enable the head F to be moved nearer to or farther from the head C, according to the length of twist required.

Through the D-shaped bearing *c* extends a sliding shank, *d*, having at its end a hook or catch, *e*. The shank *d* of the hook or catch *e* is of similar form in cross-section to the bearing *c*, fitting said bearing easily, but being designed not to turn therein except at one point in rear, where the shank is made cylindrical or in the form of a journal, as at *g*.

To the rear end of the hook or catch *e* is pivoted a swivel-connection, *h*, to which is attached a cord, *k*, which extends over a pulley or bearing, *l*, and carries at its end the retracting-weight W.

The operation of this twisting-machine is as follows: The grass arranged in a long wisp is fastened by one end to one of the pinion-hooks, carried around the hook *e*, and then attached by its other end to the other pinion-hook. The hook or catch being retracted in its bearing, the drive-wheel is turned, rotating the pinions and their hooks until the grass is well twisted, and shortens, drawing the hook or catch through its bearing. When the journal portion of the hook or catch reaches the bearing in the head, it allows the hook or catch to turn freely, and the two twisted strands will at once automatically intertwine by twisting in the opposite direction from that in which they have been separately twisted by the pinion-hooks. In this manner a single twisted bundle is formed which will retain its twisted form when detached from the hooks of the machine. The retracting-weight will then draw the hook or catch back into position for the attachment of another wisp of grass.

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

1. The hay or grass twister, substantially as described, provided with the hook or catch *e*, having a D-shaped shank, and a journal portion near its rear end, adapted to operate substantially as and for the purposes specified.

2. A hay or grass twister having at one end the twisting-hooks *b*, an abutment, C, in which the hooks *b* are journaled, and at the other end an adjustable abutment, F, having a D-shaped bearing, *c*, therein, the hook or

catch *e*, its journal *g*, swivel-connection *h*, cord *k*, and retracting-weight *W*, substantially as specified.

3. The board *G*, abutment *F*, hook or catch
5 *e*, swivel *h*, cord *k*, and retracting-weight *W*,
all combined and adapted to operate in connection with the table *A* and clamping-screw, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GEORGE A. PARKER.

Witnesses:

ELIJAH BOYDEN,
WM. M. NASON.