

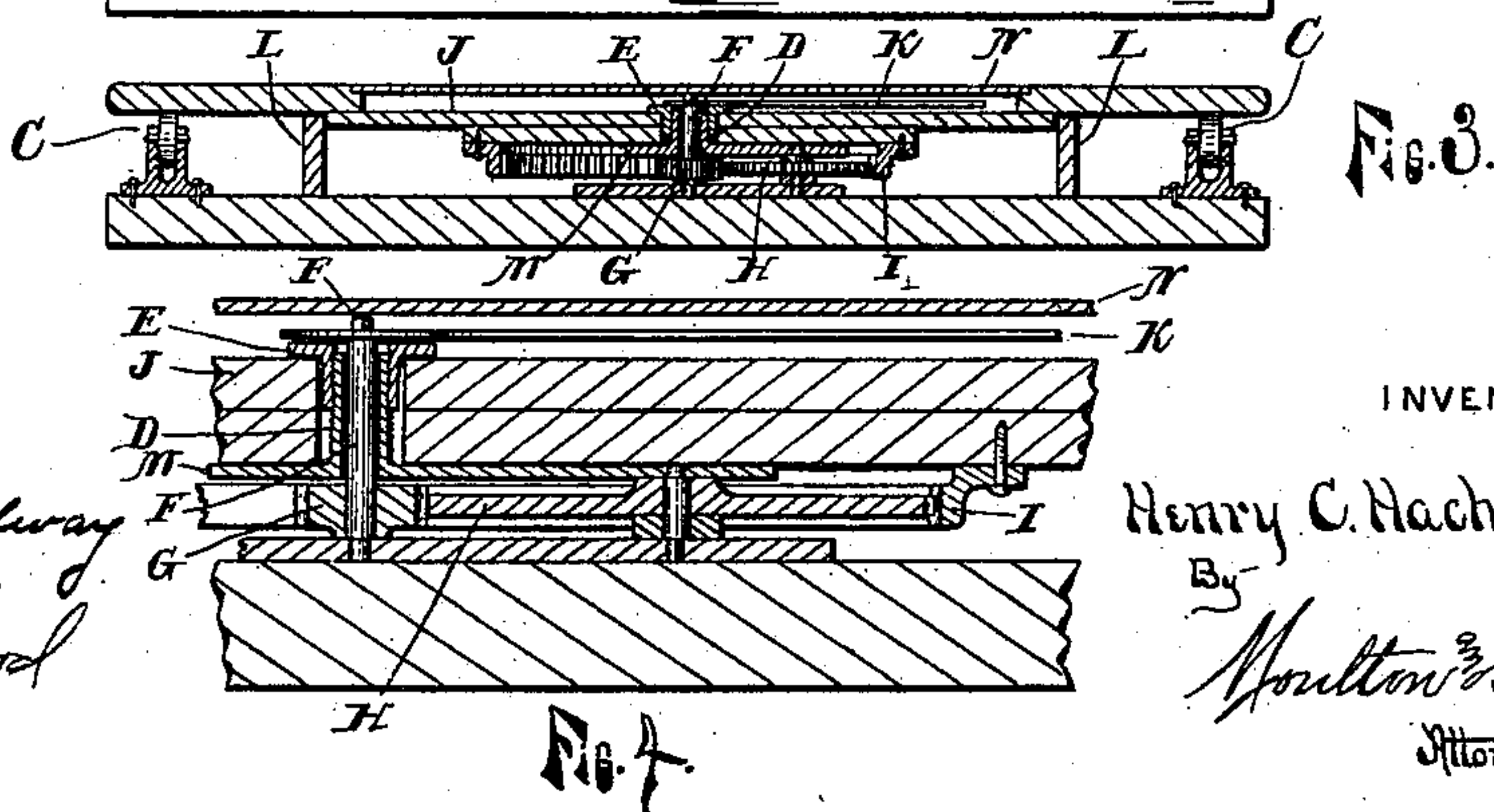
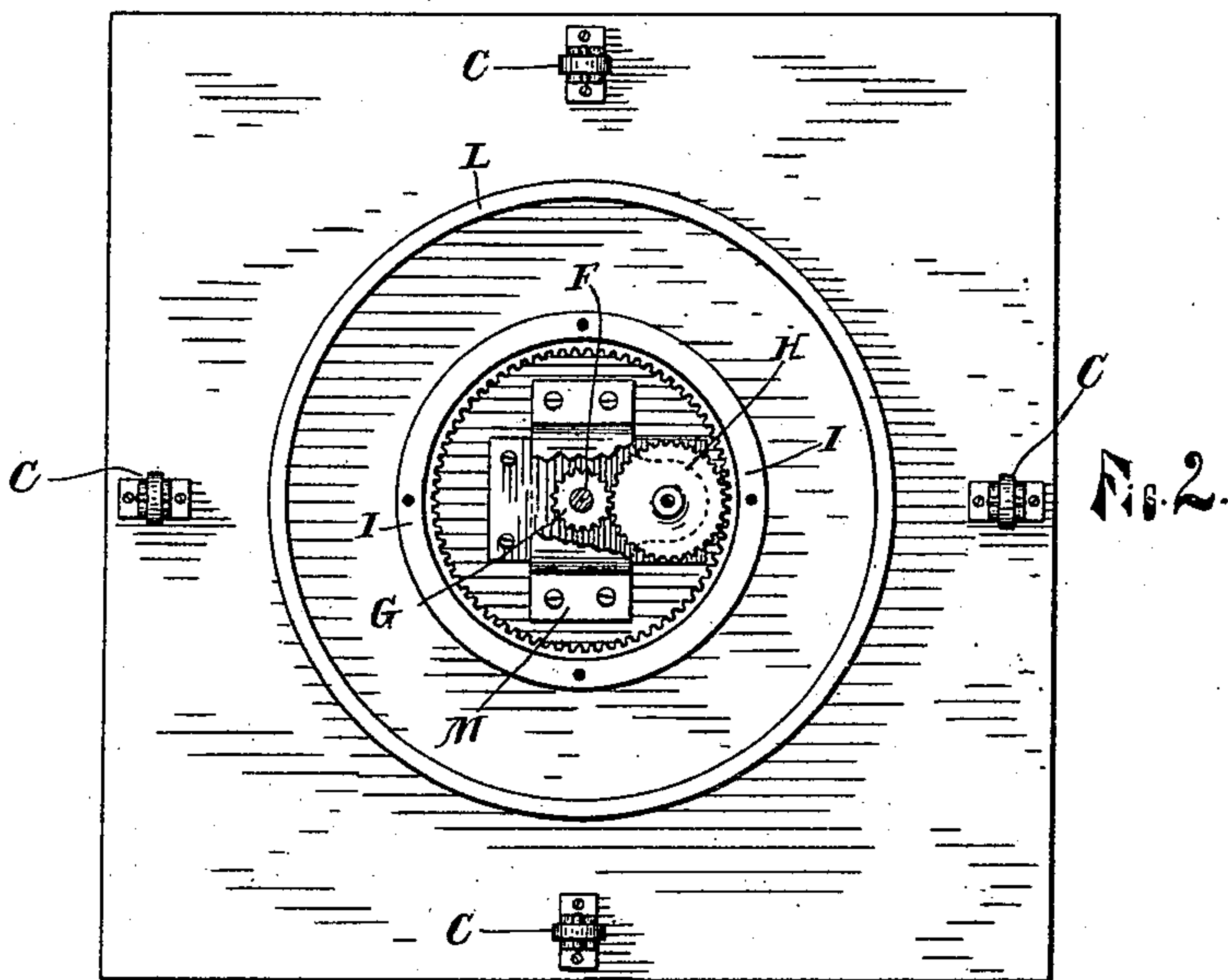
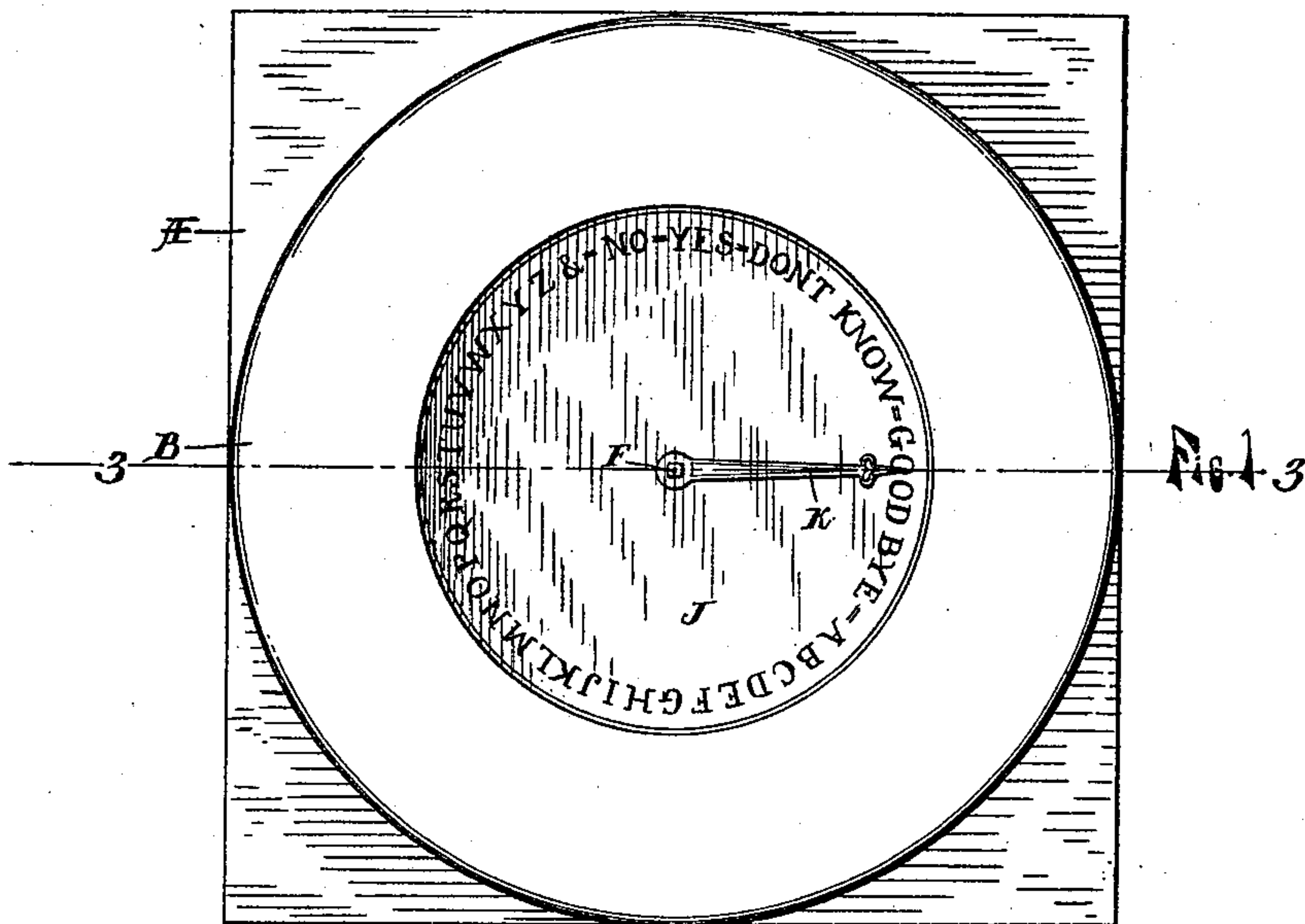
No. 641,507.

Patented Jan. 16, 1900.

H. C. HACHMUTH.  
DIAL PLANCHETTE.

(Application filed Apr. 15, 1899.)

(No Model.)



WITNESSES:

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# UNITED STATES PATENT OFFICE.

HENRY C. HACHMUTH, OF MILL CREEK, MICHIGAN.

## DIAL-PLANCHETTE.

SPECIFICATION forming part of Letters Patent No. 641,507, dated January 16, 1900.

Application filed April 15, 1899. Serial No. 713,111. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY C. HACHMUTH, a citizen of the United States, residing at Mill Creek, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Dial-Planchettes; and I do hereby 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.

My invention relates to improvements in dial-planchettes; and its object is to provide a device more convenient of operation and having certain new and useful features hereinafter more fully described, and particularly pointed out in the claims.

My invention consists, essentially, in providing a turn-table rotative about a central axis with a dial having the alphabet and other suitable characters or words arranged concentric to said axis, a movable index rotative about the same axis and traversing the alphabet and characters, and gearing connecting the index and turn-table, whereby the index traverses the circuit of the dial, while the table moves through a small arc of its rotation, as will more fully appear by reference to the accompanying drawings, in which—

Figure 1 is a plan view of a device embodying my invention; Fig. 2, the same with the turn-table omitted and a part of the gearing-frame removed; Fig. 3, a vertical section on the line 3 3 of Fig. 1, and Fig. 4 an enlarged portion of the same.

Like letters refer to like parts in all of the figures.

A represents a stationary bed-plate of any suitable shape and material, preferably a square board, and B a movable disk or turn-table rotative about a sleeve D, attached to the frame M and located in the axis of the table B. This table is held in place upon the sleeve D by a collar E, attached to said sleeve. Rolls C, attached to the bed A and suitably journaled, support the table B and permit it to rotate freely. Within the sleeve D is journaled a shaft F, upon which shaft is a pinion G, engaged by a gear H, and said gear is journaled in the frame M and engaged by an internal ring-gear I, attached to the table B and rotative therewith. To the upper end of the shaft F is attached an index K, which at its mov-

able end traverses the letters, words, or character on the dial J, which dial is sunk in the table B and a glass cover N placed above the dial and index to protect the same. A circular ledge L on the bed surrounds the gearing and protects the same from dust.

In operation the turn-table B rotates about its axis very freely, and a slight movement of the same produces a much greater movement of the index due to the action of the connecting-gearing, the result being a wide range of movement of the index with but little movement of the turn-table. Thus the hand of the operator can be conveniently kept in contact with the turn-table at any given place and will not need to move an inconvenient distance to the right or left and only through a small arc to traverse the index around the entire circumference of the dial to indicate any letter, word, or character on the same. It will also be observed that the movements of the turn-table and the dial are in opposite directions, which also reduces the movement of the turn-table necessary to traverse the index over the entire circuit of the dial.

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

1. The combination of a turn-table, a dial, a movable index traversing the dial, and gearing connecting the table and index, whereby the index traverses the entire circuit of the dial while the table traverses a small arc of its revolution, substantially as described.

2. The combination of a turn-table, a dial mounted on said table, a rotative shaft in the axis of the table, an index mounted on the shaft traversing the dial and gearing connecting the shaft and turn-table, substantially as described.

3. The combination of a bed-plate having a sleeve attached to the bed-plate, a turn-table rotative about the sleeve, a dial on the table concentric to its axis, a shaft journaled in the sleeve, an index mounted on the shaft and traversing the dial, a pinion on the shaft, a gear engaging the pinion, and a gear on the table engaging the said gear, substantially as described.

4. A circular turn-table rotative about its central axis an index rotative about the same axis and in the opposite direction, a dial on

the turn-table concentric with the axis thereof and traversed by the index, a rotative shaft in the axis of the turn-table and supporting the index, a pinion on the shaft, an intermediate gear engaging the pinion and rotating on a fixed bearing, and an internal gear attached to the turn-table and rotating therewith, and engaging the intermediate gear; whereby the index and turn-table rotate in

opposite directions about a common axis, substantially as described. 10

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

HENRY C. HACHMUTH.

Witnesses:

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