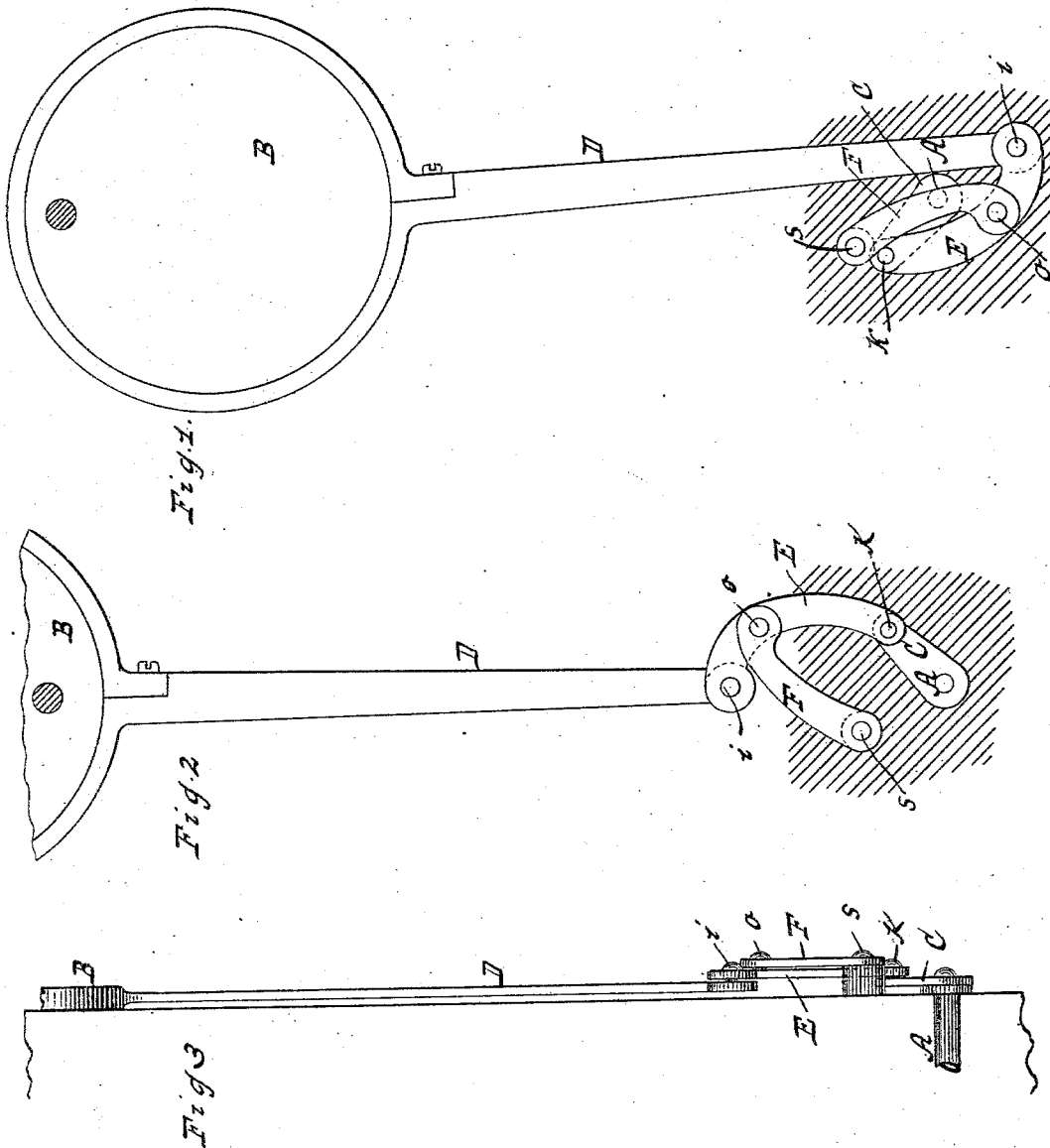


(No Model.)

A. BOECHER.
MECHANICAL MOVEMENT.

No. 303,111.

Patented Aug. 5, 1884.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ADAM BOECHER, OF NEW YORK, N. Y.

MECHANICAL MOVEMENT.

SPECIFICATION forming part of Letters Patent No. 303,111, dated August 5, 1884.

Application filed February 7, 1884. (No model.)

To all whom it may concern:

Be it known that I, ADAM BOECHER, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Mechanical Movements, of which the following is a specification.

My invention relates to mechanical movements for converting continuously rotary motion into rotary reciprocating motion, and especially that class of such movements for which Letters Patent of the United States were granted to me February 13, 1883, No. 272,200.

My present invention consists, essentially, in the pivotal connection of the guide arm or lever to the link, as hereinafter described, to form a fulcrum for the link and permit a comparatively large extent of motion.

My invention is illustrated in the accompanying drawings, in which Figure 1 is a side view showing the parts in one extreme position. Fig. 2 is a like view showing the parts in the other extreme position. Fig. 3 is an edge view.

Similar letters indicate corresponding parts.

The letter A designates a rock-shaft to which motion is to be imparted from an eccentric, B. To this rock-shaft is fixed an arm, C, to which the pitman D of the eccentric is connected by a link, E, the latter being jointed to the arm and pitman, as at *i k*, so that during one half of the motion of the eccentric the arm of the rock-shaft is, through the medium of the link, brought from the position shown in Fig. 1 to that shown in Fig. 2, while during the other half of such motion the arm is returned to the position first named.

F designates a lever, one end of which is pivoted to the link E, as at *o*, the other end thereof being pivoted to a suitable support, as at *s*. This lever F acts as a guide for the link E in its movement under the impulse of the eccentric B, while it also constitutes a fulcrum on which the link turns during the movement which it performs, while its joint *i* is below the point in which both of its joints are in the same horizontal plane, so that if the eccentric has the proper radius to bring the joint *i* below the plane mentioned, the joint *k* of the link moves to a point above it, as shown in Fig. 1, and a comparatively large motion is imparted to the arm C of the rock-shaft. During the movement which the link E performs while the joint *i* thereof is above the joint *k*, the latter forms a fulcrum for the link, so that it practically has two interchangeable fulcrums.

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

The combination, substantially as hereinbefore described, with the rock-shaft having a fixed arm, and the eccentric having a suitable pitman, of the link connecting the pitman to the arm of the rock-shaft, and the guide-lever having one end pivoted to the link.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

ADAM BOECHER. [L. s.]

Witnesses:

W. HAUFF,
CHAS. WAHLERS.