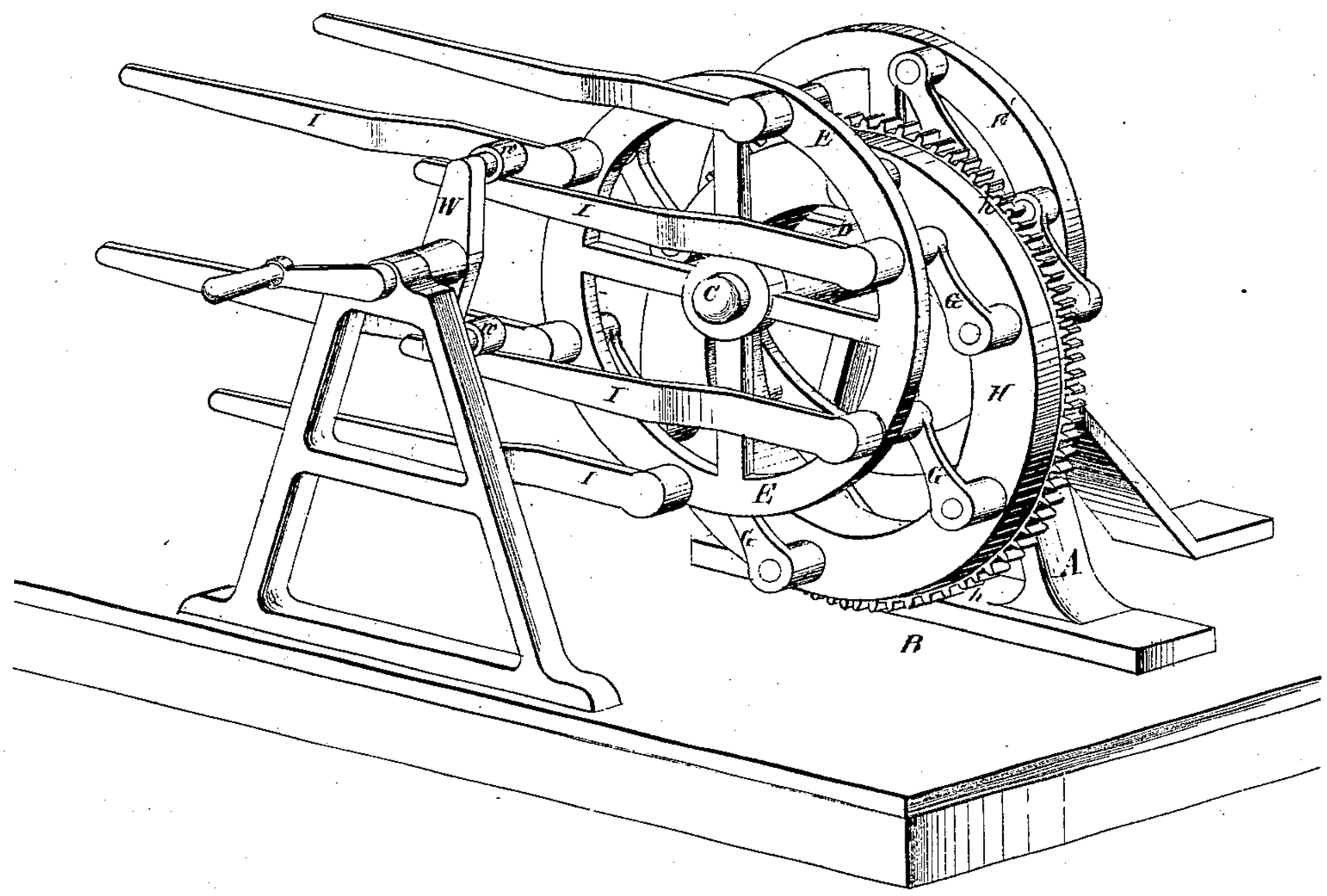
J. WOOLF.

MECHANICAL MOVEMENT.

No. 109,790. Patented Nov. 29, 1870.



WITNESSES:

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JACOB WOOLF, OF BURR OAK, MICHIGAN.

Letters Patent No. 109,790, dated November 29. 1870.

IMPROVEMENT IN MECHANICAL MOVEMENTS.

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

I, JACOB WOOLF, of Burr Oak, in the county of St. Joseph and State of Michigan, have invented a new and useful Improvement in Mechanical Movements, of which the following is a specification.

Nature and Objects of the Invention.

This invention relates to an improvement in machinery, one form of which is described in my patent No. 108,547, granted October 18, 1870, in which I have described a plurality of annular weights retained in eccentric positions by a system of cranks and levers, and employed to impart a continuous and uniform rotary movement to a gear-wheel, from which the power is transmitted to any machinery to be driven.

My present improvement illustrates how a single eccentric annular weight may be made to produce the effect by the aid of a holder or motor operating on the levers in such a constant manner that one lever will be caught before the preceding one is released, whereby the annular weight is retained in its eccentric position.

Description of the Accompanying Drawing.

The drawing represents my device in perspective.

General Description.

The standard A, bed B, and stud-shaft C may be arranged substantially as described in my previous patent.

E E′ are a pair of wheels, of which there may be one or more, mounted upon a sleeve, D, so as to turn freely on the shaft C.

G G are a series of cranks mounted on the wheels E E′, and carrying on their wrists an annular weight, H, which by the said cranks may be held up in an eccentric position.

To the shafts of the cranks, in front of the wheel E, are rigidly attached levers I, which may be arranged in horizontal, vertical, or oblique positions, according to the angles at which they are attached to the cranks.

In this position they are held by driving-arms W, arranged in any desirable number with friction-rollers *w*, to take over the successive levers as the driving-wheel or arms W are revolved.

An endless belt with suitable catching devices may be substituted for the wheel W, if preferred, or some other equivalent may be devised of holding the levers I at the proper angle, and imparting motion to them.

h represents a toothed rim upon the periphery of the annular weight H, through the medium of which the motion may be communicated to any machinery that is to be driven, or to a governor by which the motion is controlled.

The pressure applied to the successive levers causes the cranks G to bear the annular weight H in an elevated or eccentric position, so that its gravity will act on the cranks in a manner to make their motion uniform, without any disposition to stop on a dead-center.

The power may be transmitted from the annular weight H, or from either wheel E or E′, through the medium of either belt or gearing.

Claim.

I claim as my invention—

An annular weight, H, controlled by holding device W of suitable construction, through the medium of one or more levers, I, and two or more cranks, G, substantially as set forth.

JACOB WOOLF.

Witnesses:
H. C. ELLIOTT,
JAS. L. EWIN.