(No Model.)

U. HASKIN.

MECHANICAL MOVEMENT.

No. 347,294. Patented Aug. 10, 1886.

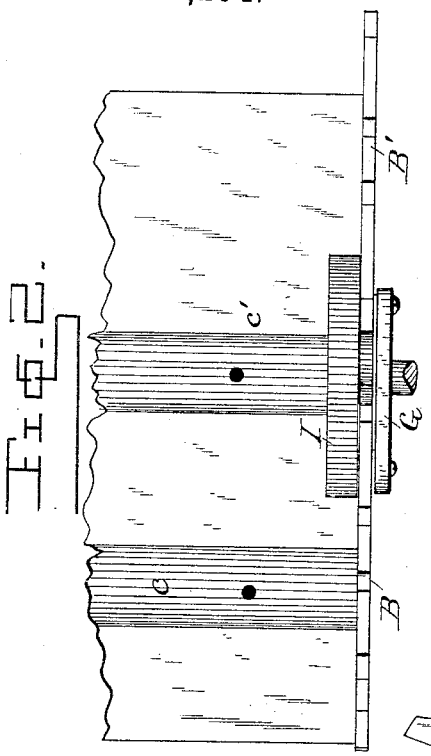

FIG. 2.

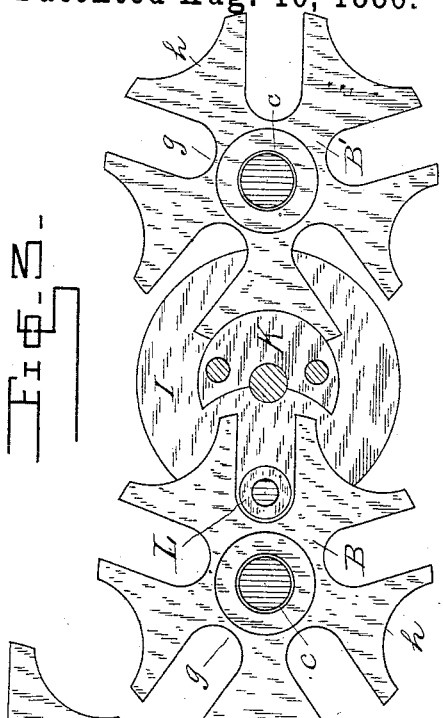

FIG. 3.

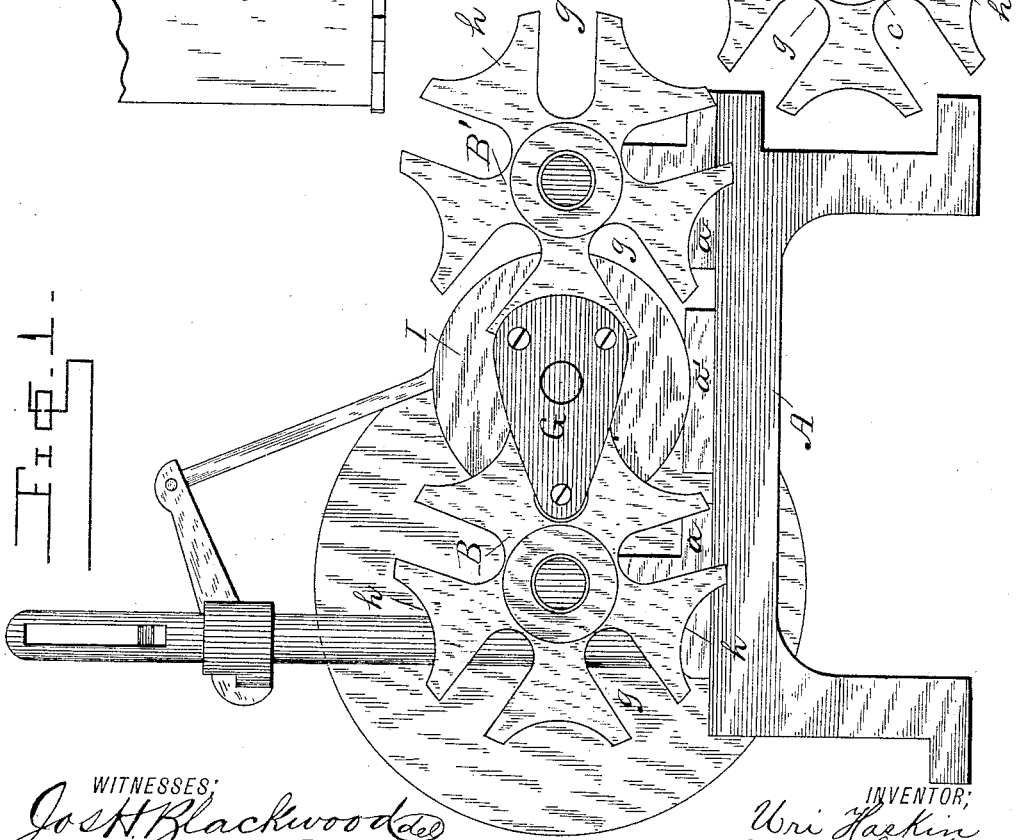

FIG. 1.

WITNESSES:
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UNITED STATES PATENT OFFICE.

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MECHANICAL MOVEMENT.

SPECIFICATION forming part of Letters Patent No. 347,294, dated August 10, 1886.

Application filed December 29, 1885. Serial No. 187,069. (No model.)

To all whom it may concern:

Be it known that I, URI HASKIN, a citizen of the United States, residing at McDonald, in the county of Bradley and State of Tennessee, have invented certain new and useful Improvements in Mechanical Movements; 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 mechanical movements; and it consists of a device, as hereinafter described and claimed, for giving to machinery an intermittent or periodical movement.

My invention is adapted to that class of machines which carry dies on a revolving disk—such as rivet or spike machines or stop-gears—in which it is desired to present the dies carrying the object to be operated on to separate cutting, shaping, and heading mechanisms at uniform intervals.

My invention is illustrated in the accompanying drawings, in which Figure 1 is a view in elevation; Fig. 2, a plan, and Fig. 3 is a detail.

In the drawings, A is the bed-frame.

B B′ are what are sometimes called "star-wheels," and are divided into concave arcs *h* by means of radial slots *g*, the bottoms of which slots are rounded. These wheels are secured to shafts which are inclosed in sleeves *c c*, mounted on pillow-blocks *a a*, arising from the bed-frame.

G is a crank or crank-disk secured to the shaft of a central crank-disk, I, the said shaft inclosed by a sleeve, *c′*, mounted on a central pillow-block, *a′*. To the back of the upper portion of the crank or crank-disk, between it and the disk I, is secured a sector, K, and at the point of the crank G, between it and the disk I, is attached a friction roller or pin, L. In operation, the friction roller or pin L is adapted to enter one of the slots as the latter is inclined toward it, so that in both entering and leaving the slot the roller or pin passes over an incline, which results in a gradual starting and stopping of the wheel, and renders the machine comparatively noiseless in operation when running at a high speed. As the friction roller or pin passes out of a slot the succeeding concave arc engages with the sector, which prevents the wheel from turning farther and holds it in position until the roller L strikes the next slot in the same wheel. The action of the crank G in passing in and out of a slot carries a wheel around the distance equal to the length of one of the arcs. In the structure shown in the accompanying drawings each of the wheels is divided into five equal arcs. It follows, then, that one entire revolution of the crank G gives to each wheel alternately a one-fifth revolution. When, therefore, a die-carrying disk, for instance, is attached to the shaft of one wheel, B, and suitable presenting and shaping dies or other mechanism to the shaft of the other wheel, B′, and the arm of a lever carrying a heading die or hammer to the shaft of the crank G, the article operated upon can be carried along and subjected successively to the different manipulations of the dies at uniform periods of time. But the number of parts may be more or less than five, as may be desired.

Not only is a machine by my arrangement of parts rendered comparatively noiseless when running at a high speed, but I avoid the use of many times the same number of mechanical features generally employed to accomplish the same functions, thus producing a simple instead of a complicated driving mechanism, and consequently reducing friction and saving great expense and securing greater practicable speed of operation.

What I claim is—

A mechanical movement consisting of one or more wheels provided with radial slots and concave arcs, in combination with a crank carrying a friction-pin, a crank-disk, to the shaft of which said pin-carrying crank is secured, and a sector secured between the said crank and disk, arranged substantially as described, and for the purposes set forth.

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

URI HASKIN.

Witnesses:
EDWARD NICHOLS,
BEN B. DALE.