

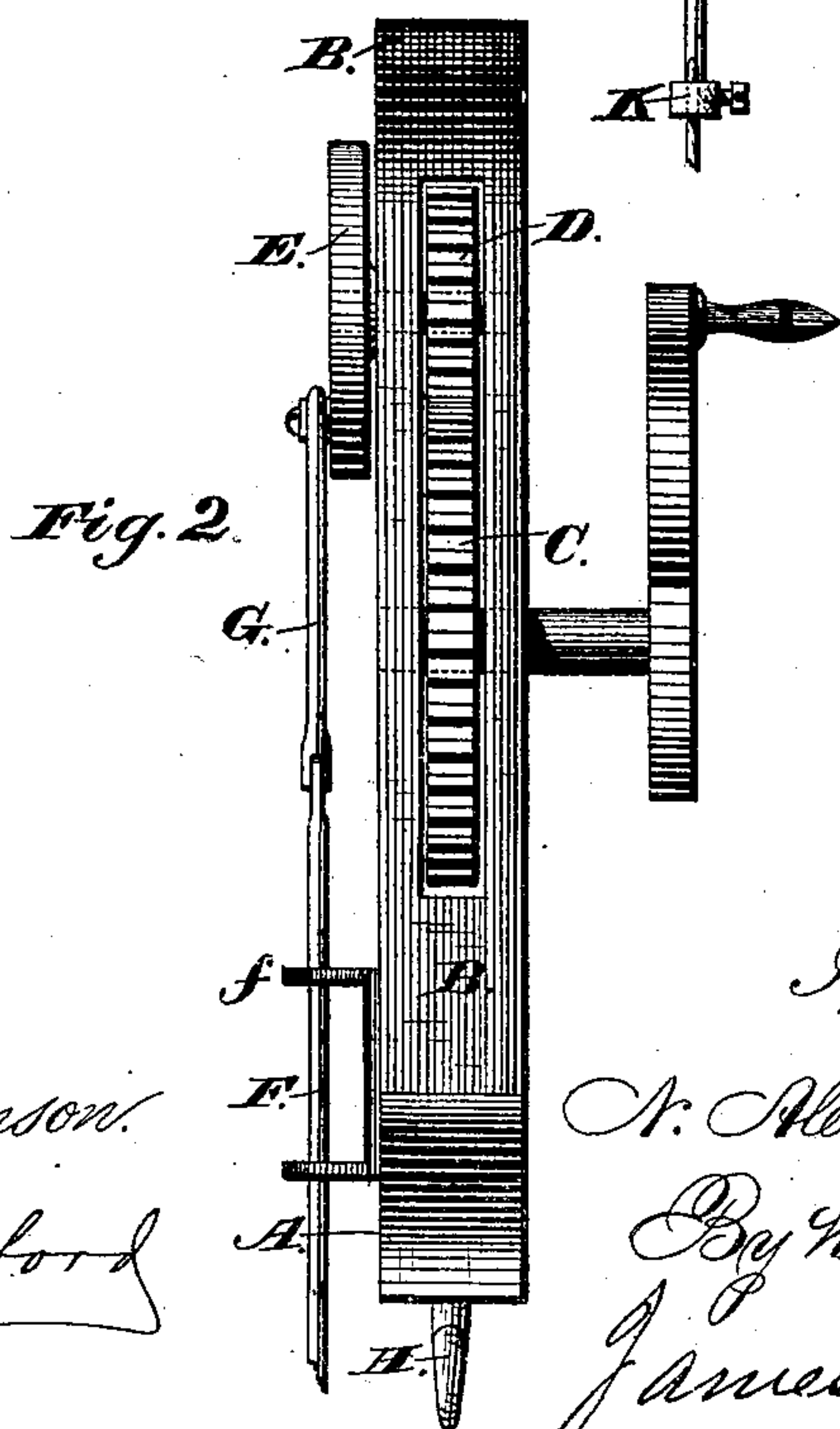
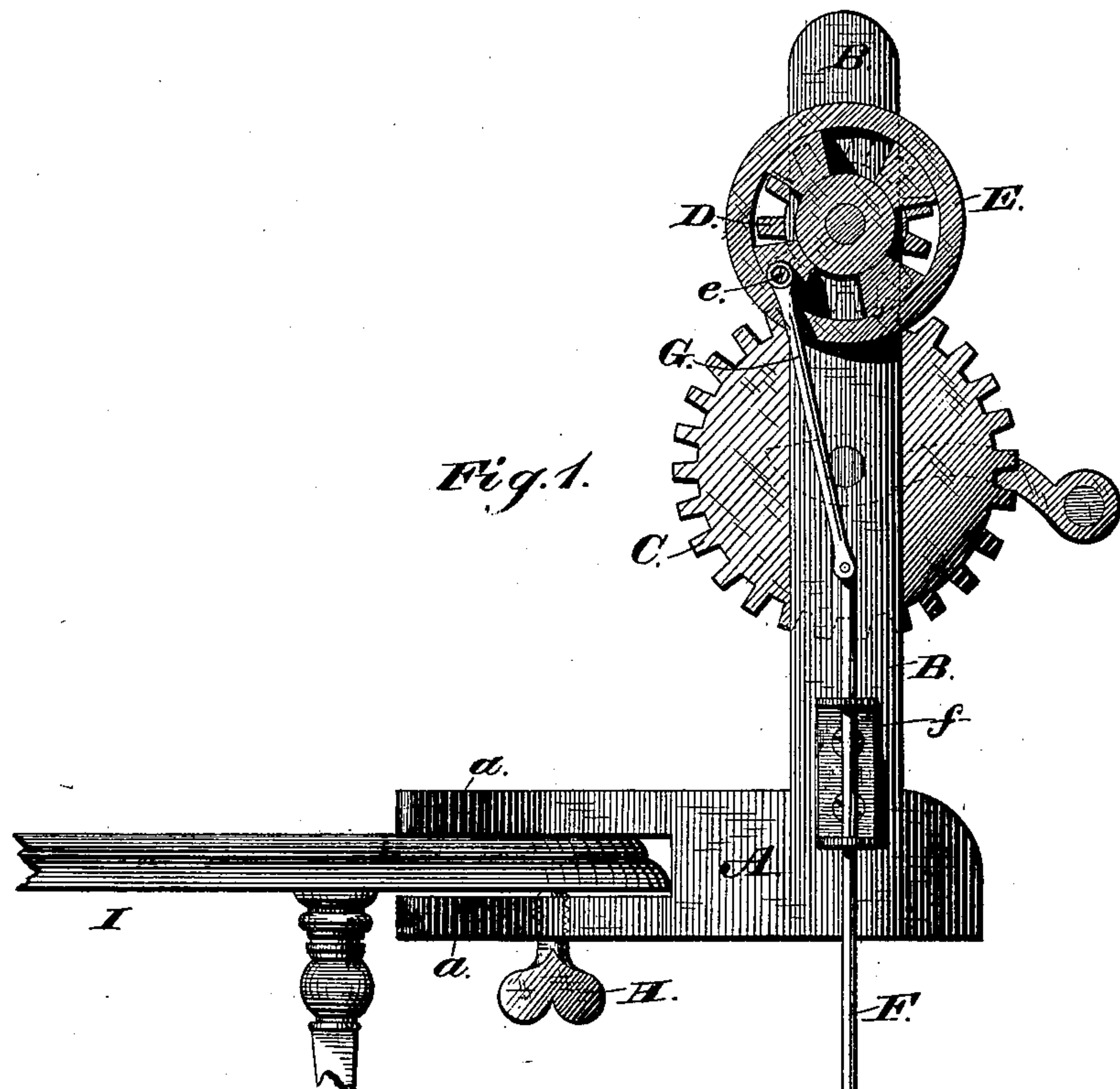
(No Model.)

N. A. PENLAND.

MOTIVE POWER.

No. 253,623.

Patented Feb. 14, 1882.



Witnesses:

Jas. E. Hutchinson.
J. A. Rutherford

Inventor.

N. Alexander Penland,
By his Attorney,
James L. Norris.

UNITED STATES PATENT OFFICE.

N. ALEXANDER PENLAND, OF ASHEVILLE, NORTH CAROLINA.

MOTIVE POWER.

SPECIFICATION forming part of Letters Patent No. 253,623, dated February 14, 1882.

Application filed January 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, N. ALEXANDER PENLAND, a citizen of the United States, residing at Asheville, in the county of Buncombe, State of North Carolina, have invented new and useful Improvements in Motive Powers, of which the following is a specification.

This invention relates to mechanism applicable for driving light machinery, in which a rotary motion is converted into a reciprocating motion; and it has for its object to produce a cheap and simple organization of parts, and also to arrange and support the operative members in such manner that the mechanism can be readily secured to the edge of a table or stand when it is to be brought into use. These objects I attain by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the mechanism constructed in accordance with my invention, and Fig. 2 is an elevation viewed at right angles to Fig. 1.

A indicates a horizontal bracket, which is slotted at one end, so as to form a pair of rigid jaws, *a*, adapted to embrace the upper and lower sides of the top of a stand or table at its edge. This bracket carries a vertical standard, B, which is slotted throughout the greater portion of its length for the reception of a pair of gear-wheels, the journals of which have their bearings in the sides of the said standard. The lower and larger gear-wheel, C, has its axle extended out from the standard and provided with a crank-handle. This wheel meshes with the upper smaller gear-wheel, D, the axle of which extends out from the standard on the side opposite to that at which the crank-handle is located, and upon the axle of the upper wheel is mounted a fly-wheel, E, carrying a suitable wrist-pin, *e*, which is screwed into or otherwise detachably connected with the fly-wheel. The vertical reciprocating rod F, which is connected with a churn-dasher or other apparatus to be actuated, works through guides *f*, formed in a bracket or casting secured to the standard, and at its upper end said rod or pitman is connected with the wrist-pin upon the fly or driving wheel by means of a link or short connecting-rod, G. A set-screw, H, is arranged to pass through either one of the jaws of the bracket A, so that when a ledge

or table-edge, I, is received into the space between these jaws the device can be firmly secured in an elevated position above the floor by tightening up the set-screw.

The bracket and standard can be made of metal and cast in one or two pieces, or they can be made of wood, if preferred.

An elastic pad can be provided at the end of the screw, if desired, or the screw can have a square or pointed end, as may be deemed best.

For attaching the reciprocating rod to a churn-dasher, it will have at its lower end a block, K, formed with an opening for receiving the dasher-rod, and a set-screw will be provided for securing the dasher-rod in said block.

When not in use the device can be readily detached from the stand or table and packed away.

What I claim is—

1. In a mechanism for driving light machinery, the combination of the bracket, having at one end a pair of rigid jaws, with the set-screw for securing the bracket to a stand or table, the standard rising from the bracket, and supporting a pair of intermeshing gear-wheels, the fly-wheel upon the axle of one of these gear-wheels, and the reciprocating rod connected by a link with a wrist-pin upon the fly-wheel, substantially as described.

2. The combination, with the bracket, having at one end a pair of rigid jaws and at its remaining end a slotted standard, with the set-screw passing through one of said jaws, the intermeshing gear-wheels C D, arranged in the slotted standard, and having their axles extended out from the standard on opposite sides thereof, the crank-handle upon the axle of one gear-wheel, the fly-wheel upon the axle of the remaining gear-wheel, and the vertical reciprocating rod working through guides attached to the standard, and connecting by a link or connecting-rod with a wrist-pin upon the fly-wheel, substantially as described.

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

N. ALEXANDER PENLAND.

Witnesses:

J. A. BROOKSHIRE,
W. C. BALLARD.