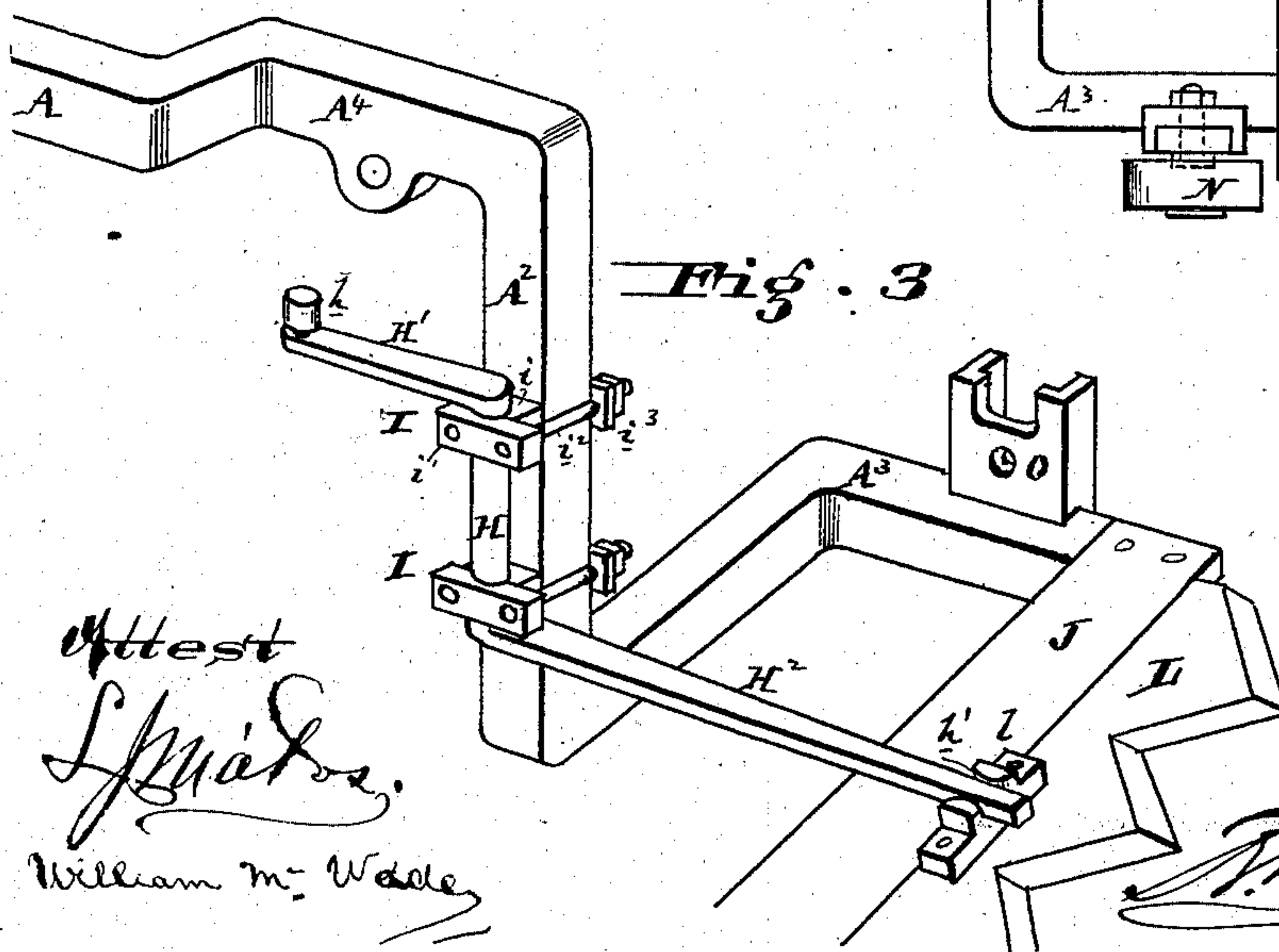
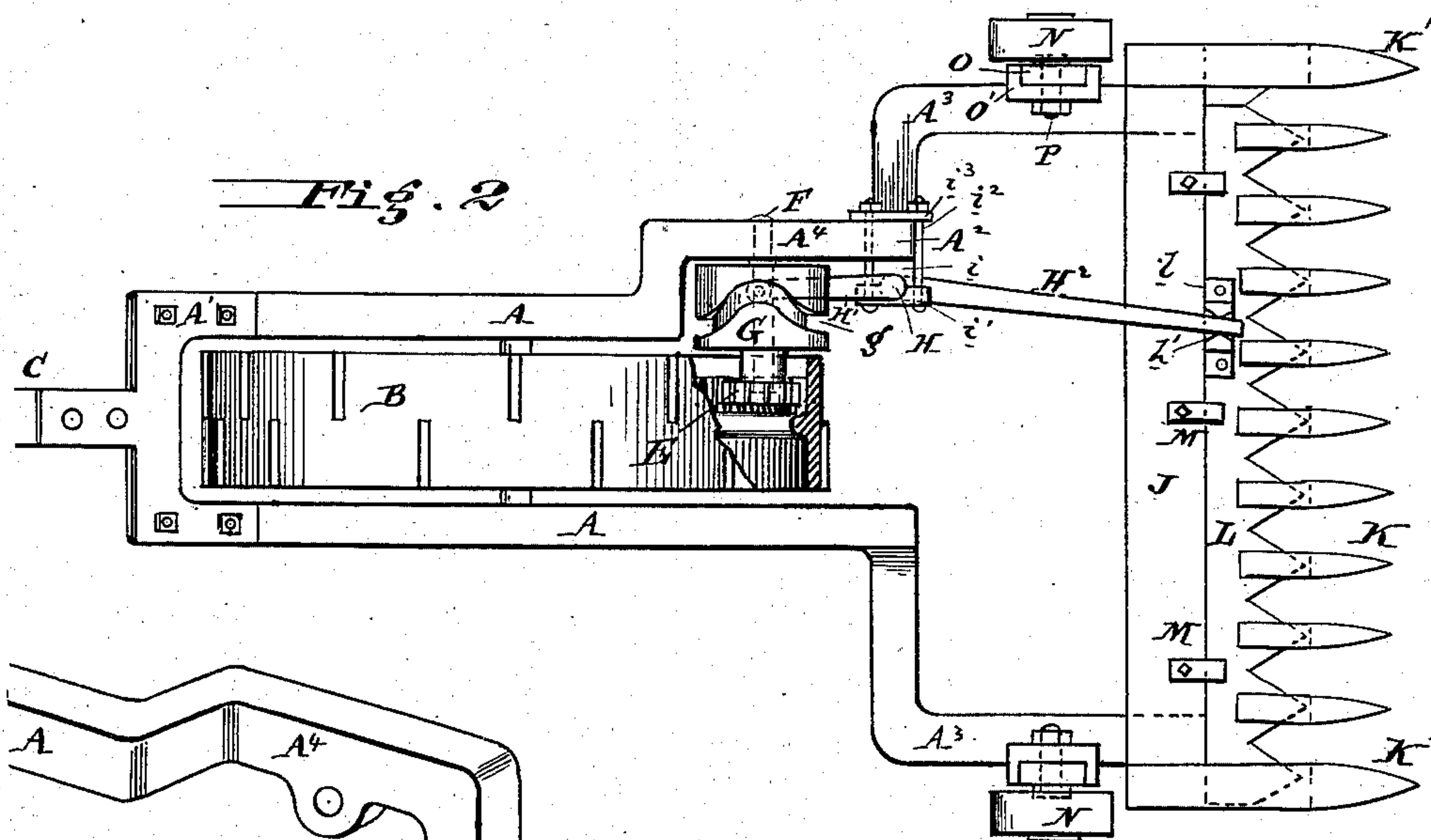
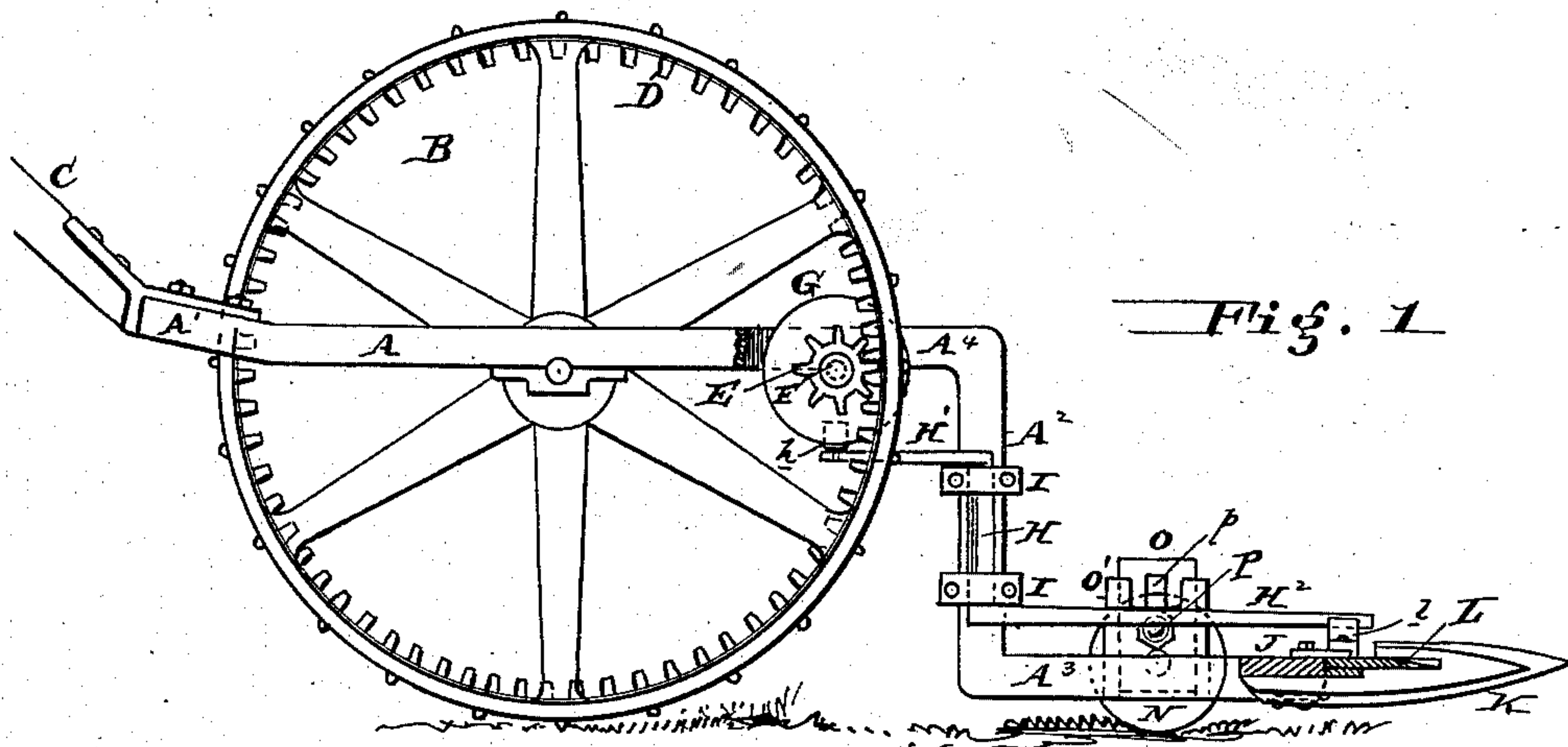


G. W. KEELER.
MOWING MACHINE.

Patented Sept. 4, 1883.



Attest
Squads.

William M. Wade

Inventor

George W. Keeler

By his atty.

Ph. Smith

UNITED STATES PATENT OFFICE.

GEORGE W. KEELER, OF TELFORD, PENNSYLVANIA.

MOWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 284,435, dated September 4, 1883.

Application filed January 30, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. KEELER, of Telford, Montgomery county, Pennsylvania, have invented an Improvement in Mowing-Machines, of which the following is a specification.

My invention has reference to lawn-mowers, but more particularly to an improvement upon Letters Patent granted to Bender and Bruner, dated April 18, 1882, and numbered 256,537; and it consists in certain improvements in the construction thereof, as fully set forth in the following specification and shown in the accompanying drawings, which form part thereof.

The object of my invention is to simplify the construction of a lawn-mower of this class, thereby making it more durable, less liable to become deranged or get out of order, and much less expensive to construct.

In the drawings, Figure 1 is a side elevation of my improved lawn-mower with part broken away. Fig. 2 is a plan view of same, and Fig. 3 is a perspective view of a part of same.

A is the frame, having the rear preferably bent up slightly, as at A', to which the handle C is secured. The horizontal part of the frame has the drive-wheel B pivoted thereto.

D is an internal gear formed on the inside of the flange of the drive-wheel B.

G is a cam-wheel, having cam-groove *g* in its periphery, and is secured to the pinion E, which meshes directly with the gear D, and is supported by a stud, F, which is screwed into or riveted to the frame in its bent part A⁴, which bent part is so formed to allow the proper location of the cam-wheel G. The lower horizontal part, A³, of the frame is supported upon rollers N, carried on blocks O, adapted to slide in guides O', and provided with slots *p*, through which bolts P pass to secure the blocks in any desired position, to adjust the finger-bar higher or lower with respect to the ground. The ends of the frame A³ are secured to the finger-bar plate J, to which the fingers K are riveted.

L is the knife or cutter, which reciprocates in the fingers, being kept down in place by plates M.

H is a vertical shaft supported by bearings I, formed of blocks *i*¹, bolted to the upright part A² of the frame by bolts *i*², which pass through clamping-plates *i*³. The upper end of the shaft H is provided with an arm, H', carrying a roller or stud, *h*, which works in the groove *g* of the cam-wheel G, and the lower end carries an arm, H², having its end working between two curved or knife edges, *h'*, of blocks *l*, secured to the cutter L.

If desired, the rollers N may be dispensed with and the finger-bar supported on shoes K'; but I prefer to use the adjustable rollers.

By the peculiar construction of bearings I, I am enabled to make the shaft H and its arms H' H² all in one piece and adjust the same properly upon the supporting-frame.

In operation, the wheel B, with its gear D, causes the pinion E and cam-wheel G to rotate, thereby reciprocating the cutter or knife by means of the shaft H and arms H' H² as the machine is pushed over the ground. The drive-wheel B is located in the center and rear of the finger-bar and knife.

I am aware of the patent granted to Cook, December 31, 1867, and make no claim to anything therein shown or described.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a lawn-mower, the drive-wheel B, provided with internal gear, D, in combination with frame A, having vertical part A², stud F, pinion E, cam-wheel G, shaft H, having arms H' H², adjustable bearings for shaft H, the said bearings being arranged for vertical adjustment on part A² of the frame, finger-bar, and cutter or knife, substantially as set forth.

2. In a lawn-mower, the drive-wheel B, provided with internal gear, D, in combination with a frame, stud F, pinion E, cam-wheel G, having cam-groove *g*, shaft *h*, having arms H' H², bearing-blocks *i*¹, bolts *i*², plates *i*³, rollers N, or equivalent supports, finger-bar, and

cutter or knife, the whole forming an organized machine, substantially as and for the purpose specified.

3. In a lawn-mower, the frame, having bent
5 part A⁴, in combination with handle C, single drive-wheel B, provided with internal gear, D, arranged in the center line of the machine, stud F, pinion E, and cam-wheel G, having cam-groove g, supported by said stud, finger-
10 bar, cutter L, and connecting mechanism

whereby the cam-groove transmits reciprocatory motion to the cutter, substantially as and for the purpose specified.

In testimony of which invention I hereunto set my hand.

GEORGE W. KEELER.

Witnesses:

R. M. HUNTER,

R. S. CHILD, Jr.