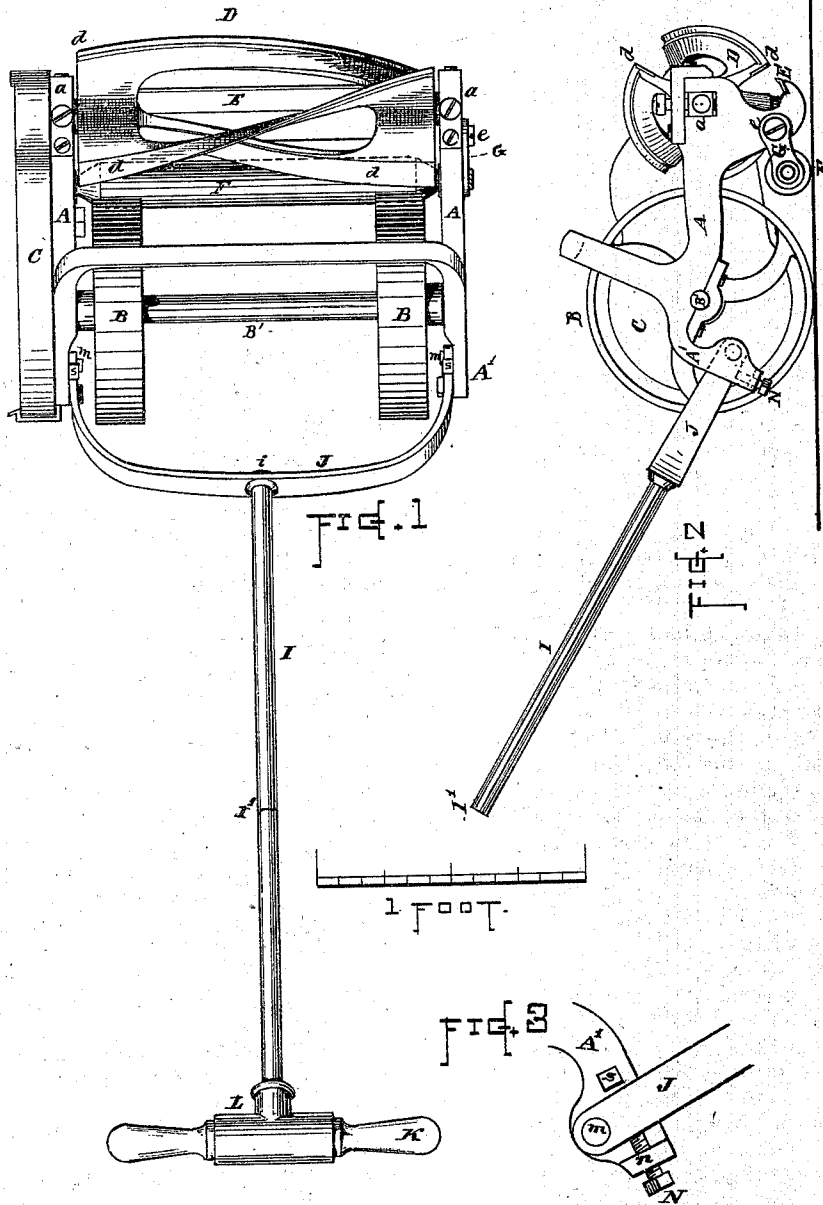


W. ALLEN.
Lawn-Mowers.

No. 144,725.

Patented Nov. 18, 1873.



Inventor,

William Allen

Witnesses,

Chas. H. Burleigh
A. E. Pierce

UNITED STATES PATENT OFFICE.

WILLIAM ALLEN, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN LAWN-MOWERS.

Specification forming part of Letters Patent No. 144,725, dated November 18, 1873; application filed October 17, 1871.

To all whom it may concern:

Be it known that I, WILLIAM ALLEN, of the city and county of Worcester and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Lawn-Mowers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 represents a plan view of my improved lawn-mower. Fig. 2 represents a side view of the same. Fig. 3 represents upon a larger scale a view of one of the tongue-connection joints.

The nature of my invention consists in the combination, with the tongue and frame, of a peculiar tongue-adjusting device, as hereinafter explained.

To enable others skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it in detail.

In the drawings, the parts marked A represent the frame of the machine, which is made of cast metal, in the form shown. B B indicate the traveling-wheels, supported by the shaft B', upon the end of which, within the casing C, is arranged the driving-gear. D indicates the cutter-cylinder, which is supported in adjustable bearings *a* on the forward part of the frame A. The cutter-cylinder D is connected for operation to the driving-shaft B' by means of suitable gear and ratchet devices within the casing C. These gears may be arranged, as described in Letters Patent No. 116,791, granted to me July 11, 1871, or in some other suitable manner, and need not, therefore, be herein described. E indicates the stationary horizontal cutter, against which the grass is cut by the revolving-cylinder cutters. F is the adjusting-roll, made of cast metal and hollow, supported in bearing-arms G, held to the frame by bolts *e*, which can be loosened to allow the arms to be set at any desired height above the ground. I indicates the tongue or pole by which the machine is propelled. Said tongue is made from metallic tubing, with a handle, K, attached to it by a

T-fitting L. A flat metallic band or spring, J, is secured at its center, in a transverse position to the lower end of the tongue I, by means of a bolt, *i*, or other suitable means, and the ends of the band J are bent forward and joined to the frame of the machine, as hereinafter described. The spring-band J of the tongue I is connected to the frame of the machine, and its height adjusted in the following described manner: Small circular bosses or projections *m* are cast upon the inner side of the rear-projecting portions A' of the frame A, which bosses fit into openings formed in the ends of the spring-bar J, and serve as pivots upon which the tongue can swing up and down. Lugs *s* are cast upon the frame A' above the ends of the band J, to prevent the tongue from swinging too far upward, and adjusting-screws N are arranged through flanges *n* on the frame below the band J, which screws are turned up against the under side of said bands, and thereby support the tongue at the desired height. The screws N and lugs *s* are arranged somewhat in rear of a vertical line, passing through the centers of the bosses *m*.

By turning the screws N, the rear end of the tongue and the hand-bar K can be adjusted to a greater or less height, to suit the convenience of the operator, while at the same time there will be space enough left between the bearing ends of the screws and the lugs *s* to allow to the band J a certain freedom of movement, in order that it may not be jerked up and down when the machine passes over inequalities in the ground. By springing the ends of the band J inward, they are freed from the bosses *m*, and the tongue thereby detached from the machine.

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

The combination, with the frame A A' and tongue or pole I J, of the adjusting and supporting screws N and lugs *s*, substantially as shown, for the purpose stated.

WILLIAM ALLEN.

Witnesses:

CHAS. H. BURLEIGH,
A. E. PEIRCE.