

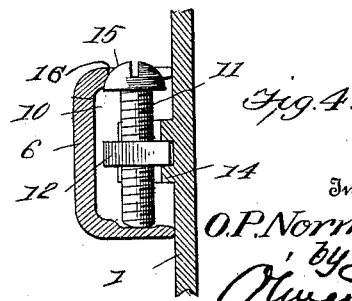
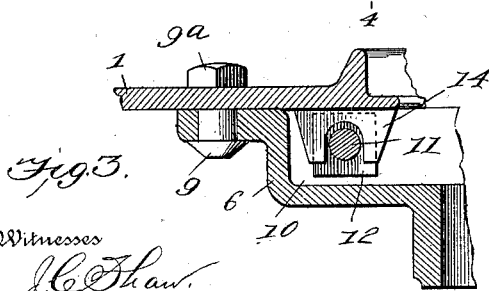
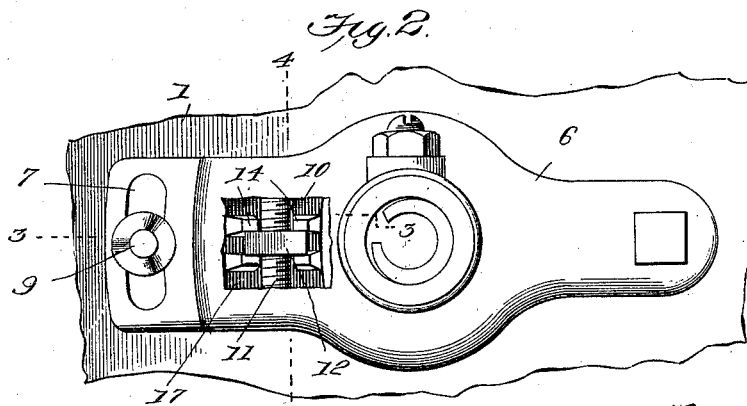
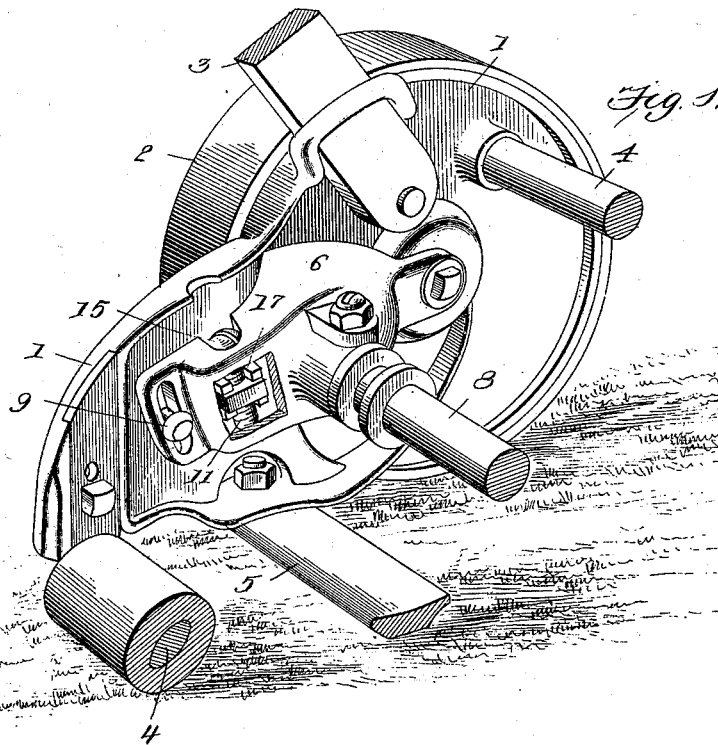
No. 647,513.

Patented Apr. 17, 1900.

O. P. NORMAN.
LAWN MOWER.

(Application filed Dec. 9, 1899.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

OLIVER P. NORMAN, OF RICHMOND, INDIANA, ASSIGNOR TO THE F. & N. LAWN MOWER COMPANY, OF SAME PLACE.

LAWN-MOWER.

SPECIFICATION forming part of Letters Patent No. 647,513, dated April 17, 1900.

Application filed December 9, 1899. Serial No. 739,837. (No model.)

To all whom it may concern:

Be it known that I, OLIVER P. NORMAN, a citizen of the United States, residing at Richmond, in the county of Wayne and State of Indiana, have invented a new and useful Lawn-Mower, of which the following is a specification.

My invention relates to lawn-mowers, and has for its object to provide means for adjusting the rotary cutters relatively to the fixed knife or blade with which they contact in cutting the grass; and it consists in the construction and combination of parts of the same, as will be hereinafter more particularly set forth.

Referring to the accompanying drawings, in which the same reference-numerals indicate corresponding parts in each of the views in which they occur, Figure 1 is a broken perspective view of one end of the lawn-mower embodying my invention. Fig. 2 is a broken end elevation of the same. Fig. 3 is a horizontal sectional view taken on the line 3 3 of Fig. 2, and Fig. 4 is a vertical sectional view taken on the line 4 4 of Fig. 2.

Referring more particularly to the drawings, 1 indicates the end piece of the machine, which is provided with the ordinary ground-wheel 2 and handle 3. Connecting the end pieces together—only one of which is shown, as they are duplicates of each other—are the usual cross-pieces 4 and the blade or knife 5.

Pivotaly mounted at the axis of the ground-wheel is an arm 6, the free end of which is provided with a slot 7, and the intermediate portion is provided with the shaft 8, upon which the rotary blades are mounted. This shaft is rotated in the usual manner and needs no further description or illustration. A bolt 9 passes through the slot 7 and through the end piece 1 for securing the arm in its adjusted position. The outer face of the arm is recessed for the reception of part of the mechanism for rotating the shaft 8, and between said recess and the slot 7 is another recess 10, within which my improved adjusting mechanism is located.

The means for adjusting the arm comprises a screw 11, which extends through a nut 12 and abuts against the top and bottom walls of the recess. The nut is held against ver-

tical movement by means of two bifurcated or notched lugs 14 upon the inner face of the end piece 1 and between which it is located. The head of the screw fits snugly within a perforation or notch 15 in the top wall of the recess, where it may be manipulated by means of an ordinary screw-driver. The nut is of such a size that it cannot rotate between the arm and the end piece when the screw is rotated, and the arm is forced upward by the engagement of the head with the top wall of the recess, which is slightly inclined or beveled around the notch 15, as shown at 16, and it is forced downward by the engagement of the point with the bottom wall of the recess.

By constructing the parts as above described the adjusting mechanism is entirely covered and concealed, except the head of the screw, which is in position to be manipulated at any time, and the parts, except the screw and nut, which are of the ordinary construction, can be cast, thereby making the device very cheap. In the drawings the arm is shown broken away at 17 to disclose the position of the screw and nut; but in practice the wall of the arm over the recess will be continuous or unbroken, except at the notch 15.

When it is desired to adjust the parts of a lawn-mower embodying my invention, the nut 9^a is unloosened and a screw-driver applied to the head of the screw and rotated until the arm has been moved to such an extent that the blades of the rotary cutter will just pass the stationary blade. The nut 9^a is then tightened and the mower is ready for operation.

I have shown my invention in the form in which I have found it most desirable; but I do not limit myself to the particular construction shown, but reserve the right to make such changes and alterations in the same as will come within the scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a lawn-mower the combination with two members, one of which forms an end piece and is provided with a fixed blade and the other one is in the form of a pivoted arm, one of the members being provided with two lugs adjacent to each other and the other one be-

ing provided with shoulders, a nut between the lugs, and a screw through the nut, the head of which engages with one of the shoulders and the point with the other shoulder, substantially as described.

2. In a lawn-mower, the combination with the end piece, provided with a fixed blade and two lugs, of an arm pivotally secured to the end piece and provided with a recessed portion over said lugs, a rotary cutter journaled in the arm, a nut between the lugs, and a screw through the nut the ends of which engage with the walls of said recess, substantially as described.

3. In a lawn-mower, the combination with the end piece provided with a fixed blade and two bifurcated lugs, of an arm pivotally secured to the end piece and provided with a recessed portion over said lugs, the upper wall of which is perforated and beveled around the inner portion thereof, a rotary cutter

journaled in said arm, a nut between the lugs, and a screw through the nut, the head of which fits within the perforation and the point bears against the opposite wall of the recess, substantially as described.

4. In a lawn-mower, the combination with the end piece provided with a fixed blade, of an arm pivotally secured to the end piece at one end and provided at its opposite end with a slot and having a recessed portion intermediate its ends, a rotary cutter journaled in said arm, a bolt through the slot and the end piece, a nut held against movement upon the side of the end piece, and a screw through the nut, the ends of which abut against the walls of the recessed portion of the arm, substantially as described.

OLIVER P. NORMAN.

Witnesses:

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