

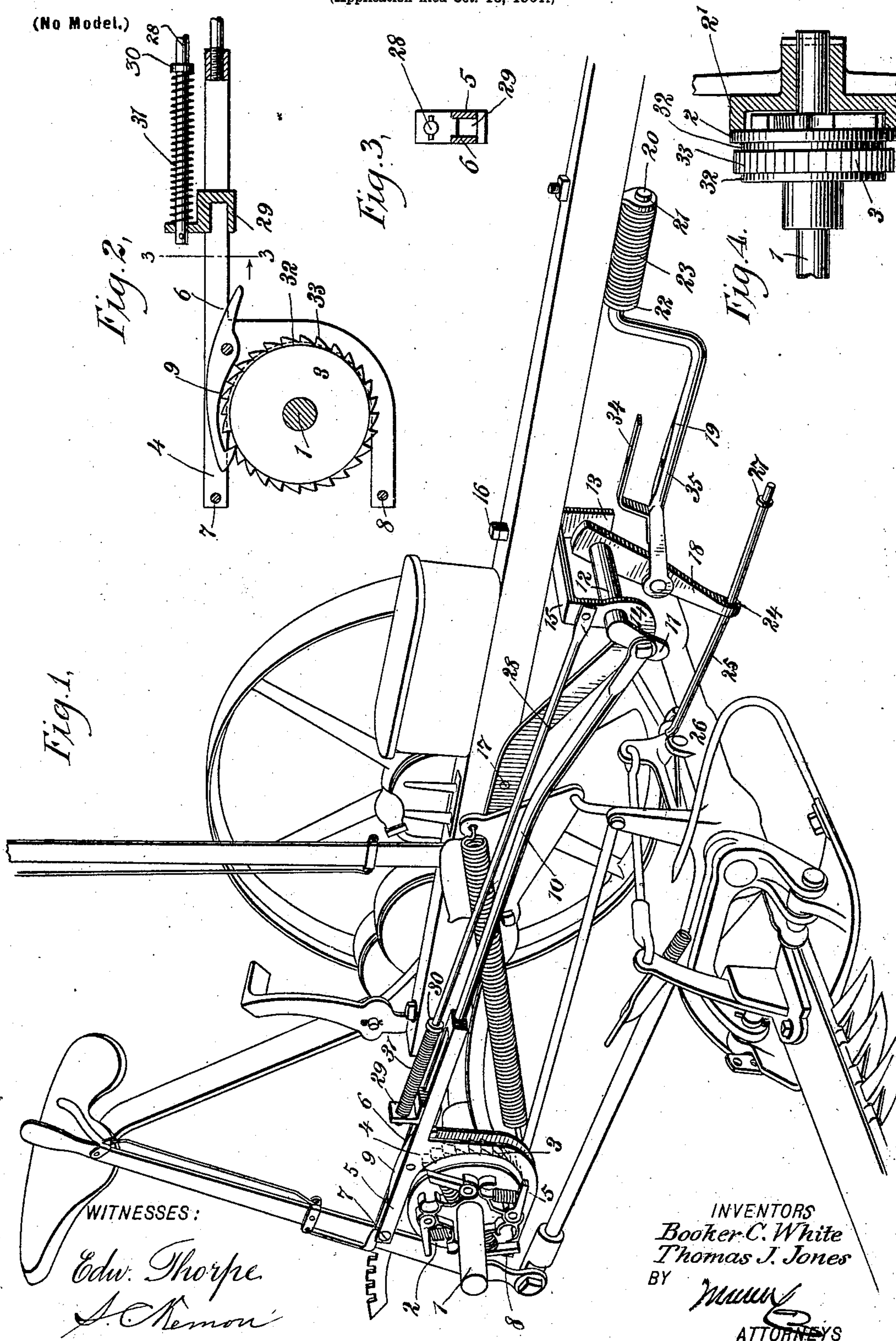
No. 710,228.

Patented Sept. 30, 1902.

B. C. WHITE & T. J. JONES.  
MOWING MACHINE.

(Application filed Oct. 16, 1901.)

(No Model.)





# UNITED STATES PATENT OFFICE.

BOOKER COLEMAN WHITE AND THOMAS JOSEPH JONES, OF CATLIN,  
ILLINOIS; SAID JONES ASSIGNOR TO SAID WHITE.

## MOWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 710,228, dated September 30, 1902.

Application filed October 16, 1901. Serial No. 78,810. (No model.)

*To all whom it may concern:*

Be it known that we, BOOKER COLEMAN WHITE and THOMAS JOSEPH JONES, citizens of the United States, and residents of Catlin, in the county of Vermilion and State of Illinois, have invented a new and Improved Mowing-Machine, of which the following is a full, clear, and exact description.

Our invention relates to mowing-machines, and has for its object the production of a machine in which the cutting mechanism is set in operation as soon as the draft is applied to the machine, but before the machine moves forward. In mowing-machines there is always a tendency of the knives to become clogged with the cut material, whereby the machine is with difficulty started from a position of rest and whereby the knives do not at first act with as great efficiency as they do after they have become unclogged by running a few strokes. With our improved device, which may be attached to any mower, the motive power is first applied toward starting the sickle, which is given a few preparatory strokes, thereby unclogging the cutting mechanism and rendering it more efficient for cutting, and then the power is applied in the usual way to move the machine forward and operate the cutter in the usual manner.

Our invention consists in the parts herein-after specifically set forth and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a mower with our improvement attached thereto, the right-hand ground-wheel being removed. Fig. 2 is a detail sectional view showing the ratchet-wheel, pawl-carrying yoke, and pawl-releasing block. Fig. 3 is a section of both parallel members of the yoke, taken at a point indicated by the line 3-3 of Fig. 2. Fig. 4 is a detail view of the ratchet-wheel and adjacent parts.

1 is the main axle of the machine. 2 is a pawl-disk mounted thereon and adapted to cooperate with a ratchet-wheel 2' upon the ground-wheel and rotate the axle with the forward movement of the ground-wheel, but to allow the ground-wheel to turn freely thereon

in a backward direction in a manner which is well known, and 3 is a ratchet-wheel keyed to the axle 1. Partly surrounding this wheel is a pawl-carrying yoke 4, composed of the two parallel-spaced members 5 and 6, integral at their forward ends and united at their rear by the pins 7 and 8. These members occupy a position on either side of the teeth of the ratchet-wheel, which project between them, as shown in Figs. 1 and 2, and they are supported against any up-and-down motion by the smooth portions 32 of the periphery of the wheel 3 on either side of the ratchet-teeth 33. Pivoted between the members of the yoke is a pawl 9. The yoke is adapted to be moved in a forward direction when the machine is started, thereby turning the ratchet-wheel 3 and axle 1 and actuating the sickle before the ground-wheels are turned. With this end in view the yoke is connected by a rod 10 with the downwardly-projecting arm 11 of the rock-shaft 12, which is journaled in the arms 13 and 14 of the bracket 15, secured to the tongue of the mower at 16 and 17.

Depending from the rock-shaft 12 is an arm 18, to whose middle portion is pivoted the forked rear end of the member 19. Above the middle portion 35 of the member 19 is an arm 34, between which and the portion 35 the doubletree is to be secured. The member 19 is bent up so that its forward portion 20 is close to the tongue and parallel thereto. This end is supported by an eyebolt 21, which passes through the tongue.

22 is a collar carried by the portion 20, between which collar and eyebolt 21 is a coiled spring 23. The lower end of the arm 18 is apertured at 24, and passing through the aperture is a rod 25, which is secured at its rear end to the coupling-bar 26 and at its forward end carries a collar or nut 27, which limits the forward movement of the arm 18.

28 is a rod secured at its forward end to the bracket 15, and its rear end is loosely mounted in a sliding block 29, which is supported and guided by the members 5 and 6 of the yoke 4. Surrounding the rod 28, between a collar 30 and the block 29, is a coiled spring 31.

The operation of our device is as follows: When the machine is at rest, the parts are in



the positions shown in Figs. 1 and 2. As soon as the draft is applied through the doubletree to the member 19 the latter moves forward, compressing the spring 23 until the arm 18 reaches the limit of its throw. The yoke 4, carrying the pawl 9, is drawn forward through the operation of the parts 10, 11, and 12, thus turning the ratchet-wheel 3 and operating the sickle, as previously described. As the yoke moves forward the forward down-curved end of the pawl strikes the sliding block 29, which yields, compressing the spring 31, and at the same time the pawl is turned on its pivot and thrown out of engagement with the ratchet-teeth. The spring 31 now holds the pawl out of engagement while the machine is drawn forward and operated in the usual manner. Whenever the team is stopped or the draft ceases, the spring 23 throws the parts 19, 18, 12, 11, 10, and 4 back to their former position and the pawl 9 falls into engagement with a tooth of the ratchet-wheel 3.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. In a mowing-machine, the combination of the axle, the ratchet-wheel fixed thereto,

the pawl and yoke, and means for reciprocating said yoke, comprising a longitudinally-movable rod, a draft appliance attached to the latter, and a spring, whereby the rod may be drawn forward and held by draft applied thereto and may be returned to its original position by the elasticity of the spring when the draft ceases.

2. In a mowing-machine, the combination of the axle, the ratchet-wheel fixed thereto, the pawl and yoke, and means for reciprocating said yoke, comprising a longitudinally-movable rod, a draft appliance attached to the latter, a spring, and means for limiting the forward movement of said rod, whereby the rod may be drawn forward and held by draft applied thereto and may be returned to its original position by the elasticity of the spring when the draft ceases.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

BOOKER COLEMAN WHITE.  
THOMAS JOSEPH JONES.

Witnesses:

JOSEPH F. CROSBY,  
T. F. TERPENING.