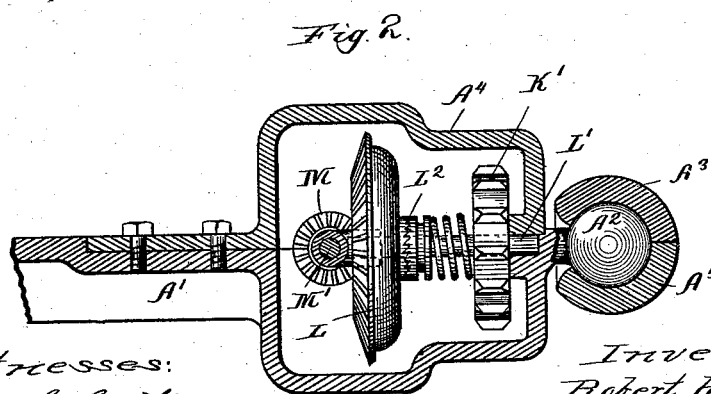
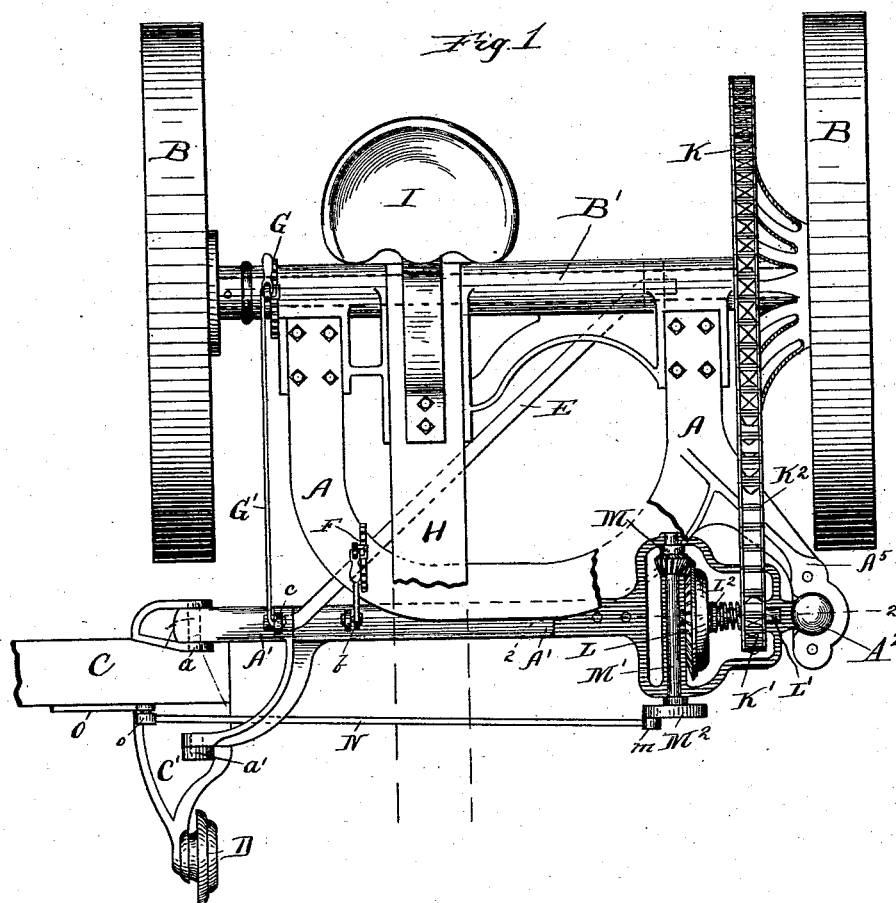


R. H. DIXON.
MOWING MACHINE.

Patented July 7, 1891.



Witnesses:
 Sen. C. Curtis
 & M. Munday.

Inventor:
Robert H. Dixon

By William Worth Burson,
his Attorney:

UNITED STATES PATENT OFFICE.

ROBERT H. DIXON, OF STILLWATER, MINNESOTA.

MOWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 455,482, dated July 7, 1891.

Application filed October 29, 1890. Serial No. 369,746. (No model.)

To all whom it may concern:

Be it known that I, ROBERT H. DIXON, a citizen of the United States, residing at Stillwater, in the county of Washington and State of Minnesota, have invented certain new and useful Improvements in Mowing-Machines, of which the following is a specification.

My invention relates to that class of mowers having two carrying-wheels, both of which are preferably drivers and having a finger-bar jointed to its supporting member and adapted to be tilted by the driver, and is designed as an improvement upon my mower patented under date of September 23, 1890; and the objects of my invention are, first, to provide a support for the knife-operating gearing which shall rock with the finger-bar; second, to provide bearings for the knife-operating gearing in a single piece which shall rock with the finger-bar; third, to connect the knife with its operating crank-wheel by a pitman which shall rock with the finger-bar, and in general to improve the construction and operation of the mower. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of my mechanism. Fig. 2 is a section of Fig. 1 on line 2 2, showing the driving-gearing and clutch.

Similar letters of reference refer to the same parts throughout the several views.

The frame A is pivotally supported upon the axle B' of the wheels B B in the usual manner, and this part of the mechanism may be varied to suit the requirement of construction or wishes of the builder. The rocking coupling-piece A' has its stubbleward end pivoted to the frame A at A². In the construction here shown this pivoted connection is made with a socket in the frame covered by a cap A³, and a ball on the coupling-piece held in said socket; but any other form of construction may be used which will give a free vertical and rocking movement to the inner end of the coupling-piece to which the finger-bar is attached. The finger-bar C, a part only of which is shown, is jointed to the rocking coupling-piece A' by the shoe C' at a and a'. A wheel D may be pivoted on the front end of the shoe C' to assist in carrying the finger-bar when desired. The push-bar E connects the rocking coupling-piece A' and

frame A by pivoted joints, permitting the free movement of the rocking coupling-piece while giving it due support for its work. The lifting-lever F connects the frame A with the rocking coupling-piece A' in the usual manner and does not need a detailed description here. The rocking lever G, attached to frame A and connecting an arm c of the rocking coupling-piece A' by the rod G', is of well-known construction and need not be further described. The wheels B B may be ratcheted to the shaft or axle B' in the usual manner. The sprocket-wheel K is fastened upon shaft B'. The sprocket-wheel K' is fastened to the stubbleward end of shaft L', which has its bearings in the coupling-piece A', upon which shaft is the bevel-gear L and clutch L², constructed and operating in the usual manner. Motion is given to the driving mechanism by the chain K² upon sprocket-wheels K and K'. The bevel-gear L meshes into pinion M, which is fastened on the rear end of shaft M', supported transversely in bearings in coupling-piece A'.

On the front end of shaft M' is the crank-wheel M², on which is the wrist-pin m. The pitman N connects the knife O at its head o, which connection, whether by a stud extending outward from the knife or a hole in said head in which a right-angled turn of the pitman may enter, should be parallel axially with the wrist-pin on the crank-wheel, and the pitman may be a single piece, either made of wood or metal, and its connecting ends provided with holes to attach wrist-pins, or an equivalent connection which should be axially parallel, which construction of the pitman, in connection with the rocking coupling-piece, will permit all needed movements of the finger-bar. It should be noted that the socket A² in frame A is formed upon an arm A⁴, extending stubbleward from said frame between the sprocket-wheels K and K', and that the sprocket K' is close to said socket, and is therefore not materially affected by the vertical movement of the finger-bar end of said coupling-piece.

Various changes can be made in the construction here shown without departing from the scope of my invention, and I do not wish to confine myself to the exact construction here shown.

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

1. In a mowing-machine, the combination of the frame A and a rocking coupling-piece pivoted to said frame substantially in line with the finger-bar and stubbleward of the driving mechanism, said coupling-piece adapted to provide bearings for the knife-driving gearing and to rock with the finger-bar, operating substantially as and for the purpose set forth.

2. The combination of the frame A, the rocking coupling-piece A', pivoted to said frame substantially in line with the finger-bar and stubbleward of the driving mechanism, and a finger-bar pivoted to said rocking coupling-piece with means for operating the same, substantially as specified.

3. The combination of the frame A, the rocking coupling-piece A', with the knife-operating gearing seated thereon, and an arm projecting stubbleward from said frame to provide a pivoted bearing for the stubbleward

end of the rocking coupling-piece substantially in line with the finger-bar, operating substantially as and for the purpose set forth.

4. The combination of the frame A, the rocking coupling-piece A', with the knife-operating gearing seated thereon, the sprocket-wheels K and K', their connecting-chain K², and an arm extending stubbleward from said frame A between said sprocket-wheels to provide a bearing for the end of the said rocking coupling-piece, substantially as set forth.

5. The combination of frame A, the rocking coupling-piece A', with the knife-operating gearing seated thereon and provided with a pivoted ball at its stubbleward end and pivoted substantially in line with the finger-bar, and the arm A⁵, provided with the socket A², operating substantially as and for the purpose specified.

ROBERT H. DIXON.

Witnesses:

E. D. BUFFINGTON,
MARIETTA CAPRON.