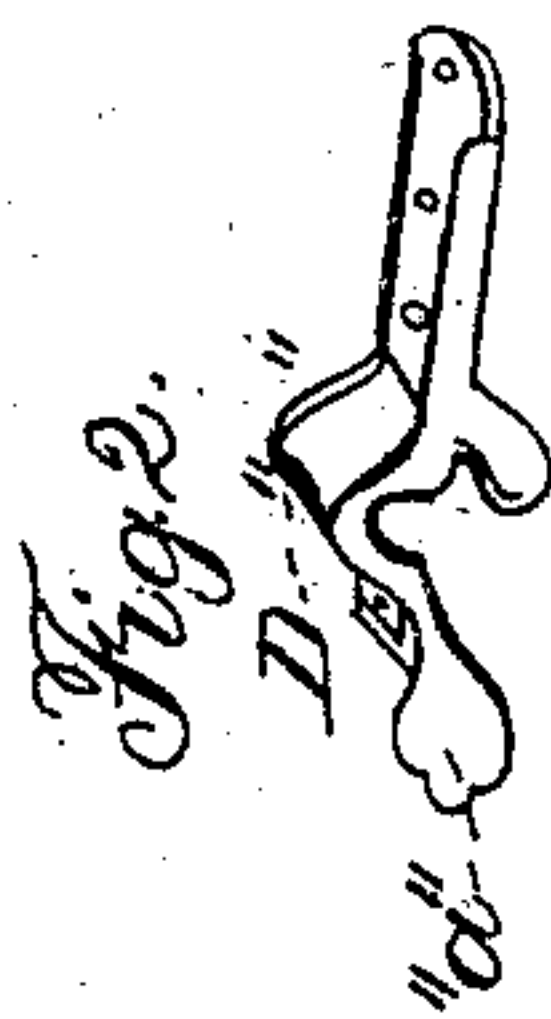
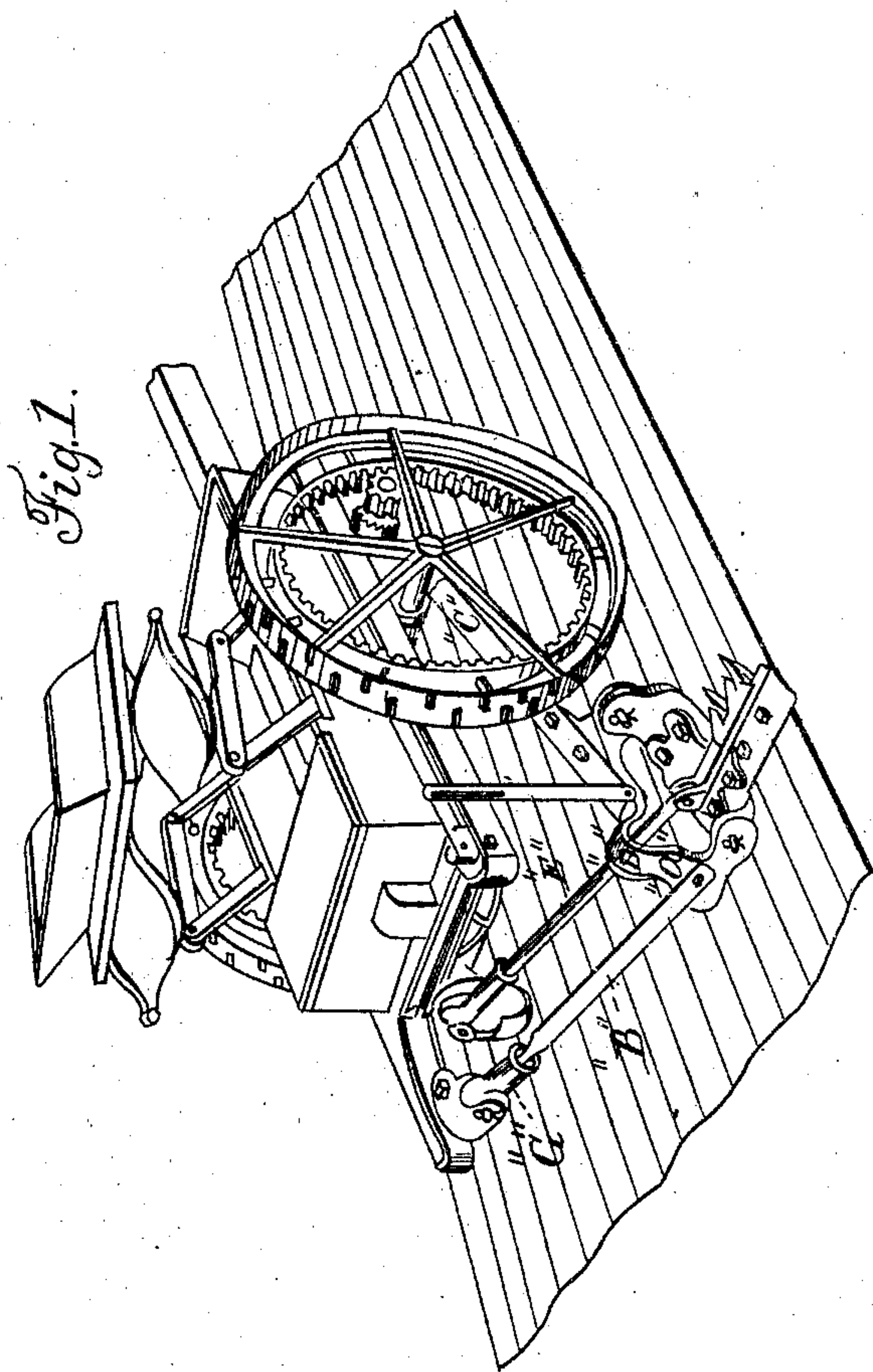


M. G. HUBBARD.

Mower.

No. 44,628.

Patented Oct. 11, 1864.



A. A. Carpenter }
H. J. Spitzer } Witnesses

M. G. Hubbard

UNITED STATES PATENT OFFICE.

M. G. HUBBARD, OF SYRACUSE, NEW YORK.

IMPROVEMENT IN MOWING-MACHINES.

Specification forming part of Letters Patent No. 44,628, dated October 11, 1864.

To all whom it may concern:

Be it known that I, MOSES G. HUBBARD, of the city of Syracuse, in the State of New York, have invented certain new and useful Improvements in Mowing-Machines; and I do hereby declare the following to be a full and clear description thereof, reference being had to the accompanying drawings, in which—

Figure 1 represents a perspective elevation of my whole mowing-machine, in order to show the relative position of the specific parts which I have improved and desire to secure in this patent.

Fig. 2 is a detached view of a part of my machines, known by the name of the "corner-plate," and connects and secures the corner formed by the "surface-spring" C and the "extension" B, and also forms one-half of the hinge by which the cutting apparatus is connected to the machine. I have generally heretofore made this corner-plate straight, so as to require that the pitman E should be curved over it, and thus suffered the serious inconvenience of a crooked pitman, which has been the cause of many accidents and breakages in my machines. I at one time tried to remedy this defect by curving the corner-plate down sufficiently to permit the use of a straight pitman; but the curve necessarily came so near the ground as to interfere with cut grass, and it also prevented the withdrawal of the cutter-bar without first entirely disconnecting the cutting apparatus. These were such serious obstacles and inconveniences that most of my builders preferred to use the straight

corner-plate and crooked pitman; but I have finally so arranged this corner-plate by curving it up, as shown at D, as to permit the use of a straight pitman, E, passing under the said curve D, and which entirely avoids the difficulties heretofore experienced in constructing this part of my machines. I have also heretofore generally made the hinge at left-hand end of the extension B by merely forming an eye on the end of the extension-bar; but the action of the spring-bar C in the vertical movements of the cutting apparatus requires so much rolling motion of this extension-iron as to render a very loose joint necessary at its left-hand end, and this joint, when left loose, very soon begins to wear very seriously. In order to avoid these difficulties I have found that by forming the said eye on the end of the extension-iron by means of a head screwed onto the extension-iron, as shown at G, Fig. 1, the most perfect vertical freedom of the cutting apparatus is permitted, because the extension can roll in the head, and at the same time a perfectly-fitting joint can be made and greater durability thereby attained.

Having thus fully described my improvements in mowing-machines, what I claim therein as new, and desire to secure by Letters Patent, is—

The curve D in the corner-plate, substantially as and for the purpose set forth.

M. G. HUBBARD.

Witnesses:

A. A. CARPENTER,
C. J. Lyster.