(No Model.)

# E. SCHREFFLER.

## LAWN MOWER.

No. 568,146. Patented Sept. 22, 1896.

*Fig. 1.*

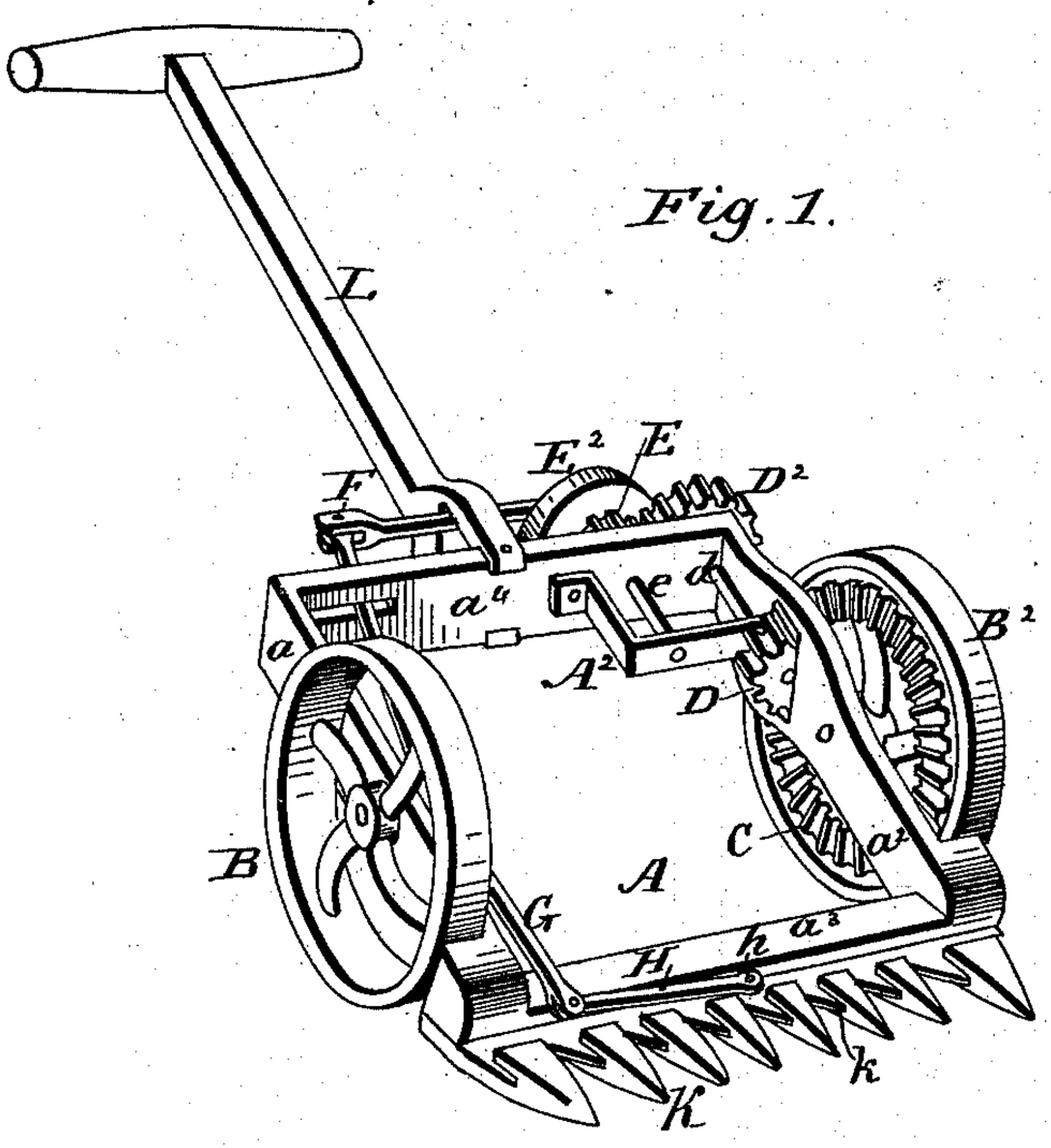
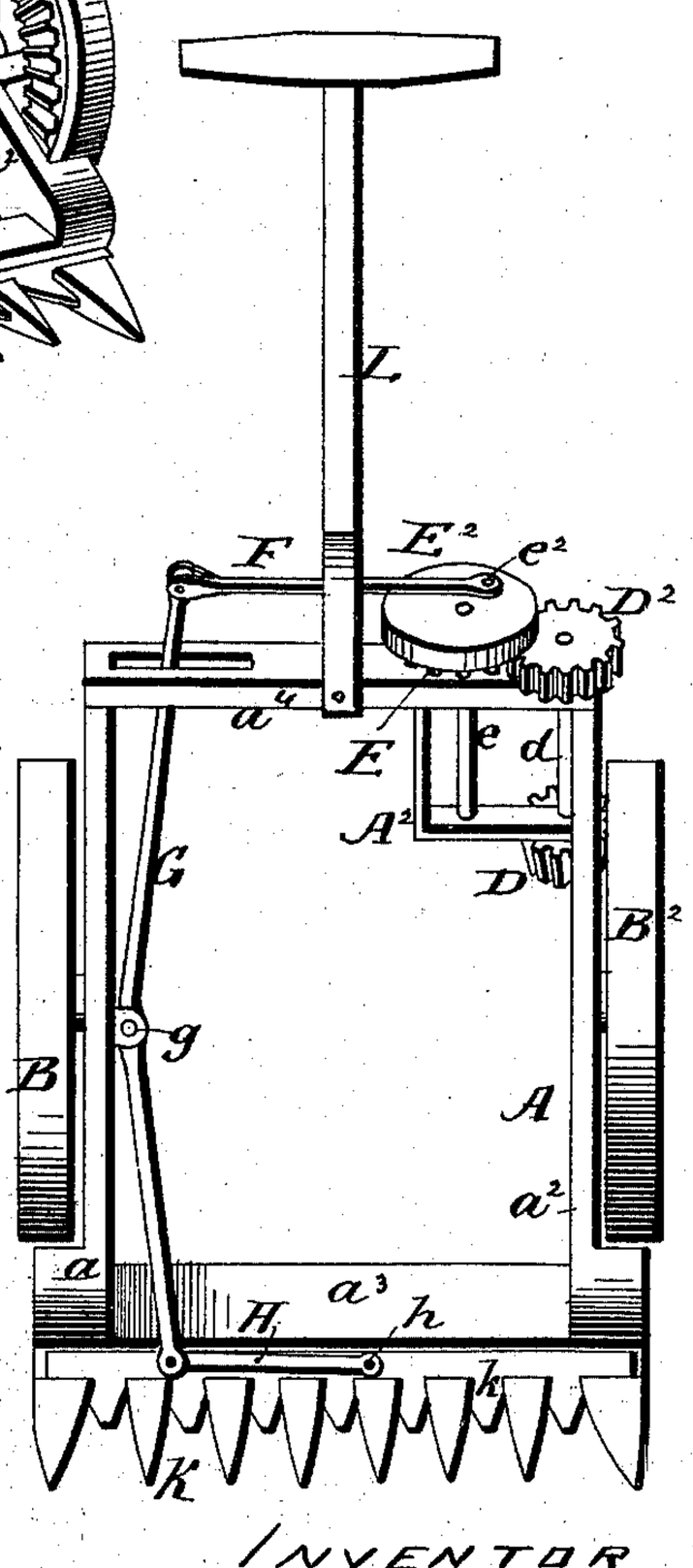



*Fig. 2.*




WITNESSES

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EDWARD SCHREFFLER, OF KILLINGER, PENNSYLVANIA.

## LAWN-MOWER.

SPECIFICATION forming part of Letters Patent No. 568,146, dated September 22, 1896.

Application filed March 10, 1896. Serial No. 582,645. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD SCHREFFLER, a citizen of the United States, residing at Killinger, in the county of Dauphin and State of Pennsylvania, have invented certain new and useful Improvements in Lawn-Mowers, of which the following is a specification, reference being had therein to the accompanying drawings.

The object of my invention is to produce a lawn-mower of simple and inexpensive construction adapted to cut grass of any height and close to fences, curbstones, or other obstructions without danger of damaging its parts. I attain this object by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a mowing-machine constructed in accordance with my invention. Fig. 2 is a top view of the same.

In said drawings, A represents the frame, which is rectangular in form and is carried by the wheels B and $B^2$, which revolve upon stud-axles projecting from the sides $a$ and $a^2$ of the frame. The wheel $B^2$ has secured to the inner side of its spokes a slightly-beveled cog-wheel C, to give motion to the balance of the mechanism. Said wheel $B^2$, being the driving-wheel, may have cleats projecting from its periphery, as commonly used in various kinds of mowers.

The frame consists of the two side pieces $a$ and $a^2$, both on the inner side of the carrying-wheels and alongside thereof, the front or cutter bar $a^3$, and the rear piece $a^4$. Said parts $a$ $a^2$ $a^3$ $a^4$ are preferably made integral. Attached to the inner side of the side piece $a^2$ and rear piece $a^4$ there is a brace $A^2$ to provide bearings for a gear-wheel shaft and the pitman-shaft used to operate the reciprocating knife employed with the machine.

The side piece $a^2$ is transversely slotted for the passage of a pinion D, that meshes with the cog-wheel C. Said pinion D is mounted upon a shaft $d$, that is along the inner side of the side piece $a^2$ of the frame. It passes through the brace $A^2$ and through the rear piece $a^4$ of the frame and carries on its rear end a gear-wheel $D^2$. Said gear-wheel $D^2$ meshes with a pinion E, that is mounted upon a shaft $e$ parallel with the side $a^2$ of the frame, and said shaft has bearings in the brace $A^2$ and in the rear piece $a^4$ of the frame and carries on its rear end the pitman-wheel $E^2$. Said wheel $E^2$ has its crank-pin $e^2$ in engagement with one end of a connecting-rod F, the opposite end of which is hinged to one end of a slightly bent lever G, that is pivoted about the middle of its length, at $g$, to a bearing projecting from the inner face of the side piece $a$ of the frame. The opposite end of the lever G is hinged to one end of a connecting-rod H, that has its opposite end pivoted at $h$ to the cutter $k$. Said cutter is guided, as usual, in its reciprocations by the slotted fingers K, that are secured, as usual, to the under side of the cutter-bar $a^3$. To the top and bottom of the rear piece $a^4$ of the frame is secured the handle L, the front end of which is forked to allow for the passage of the connecting-rod F. The rear piece $a^4$ has also a slot along a portion of its length for the passage of the rear portion of the oscillating lever G.

On account of the location occupied by the pitman and gears they are substantially protected from the grass falling in front of them, and they can easily be incased at little expense, if desired. The space between the sides of the frame is also substantially free of obstructions that would otherwise receive the falling grass and prevent it from dropping directly upon the ground.

Having now fully described my invention, I claim—

In a lawn-mower the combination of a four-sided frame having all its sides in the same plane, and in one corner thereof an angular brace $A^2$ uniting two of said sides, two supporting-wheels on stud-axles, a beveled cog-wheel secured to the inner side of one of said wheels, a beveled pinion in engagement with said cog-wheel and having its shaft parallel with the supporting-wheels, and upon said pinion-shaft a gear-wheel in the rear of the frame, a pinion E also in the rear of the frame, the bent lever G pivoted to one of the sides of the frame, and connecting-rods at each end of said lever, with the longitudinally-reciprocating knife substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD SCHREFFLER.

Witnesses:
WM. B. WEST,
WM. H. WEAVER.