

W. A. Sharpe,
Mower.

No. 93013..

Patented July 27 1869

FIG 2

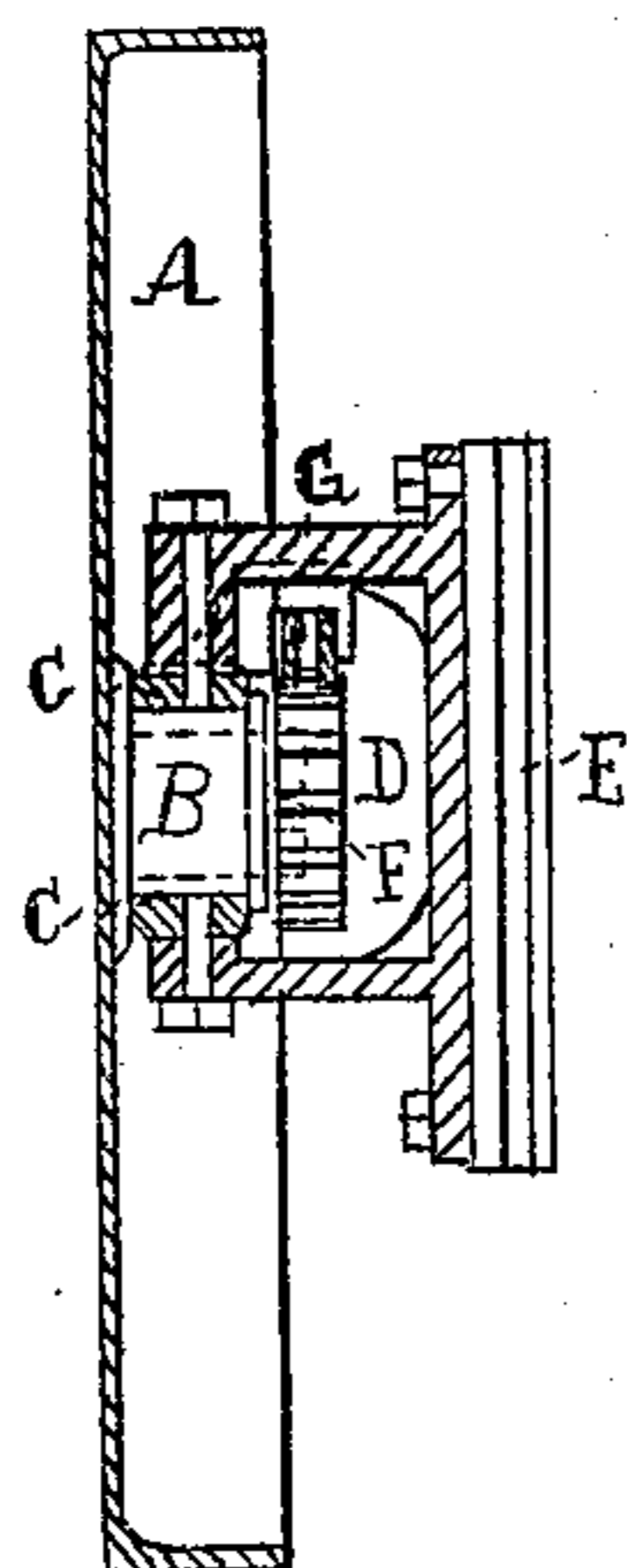


FIG 1

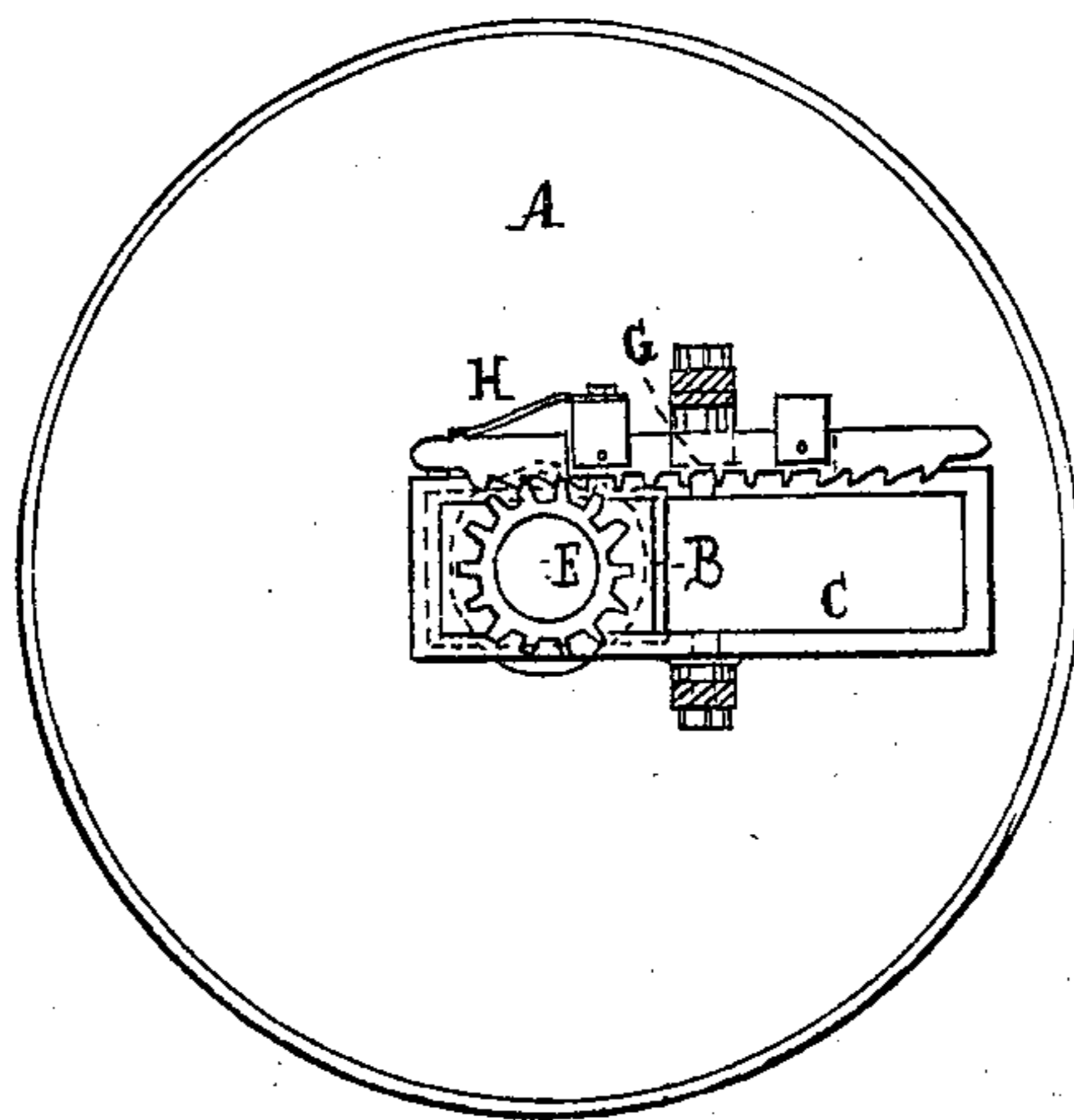
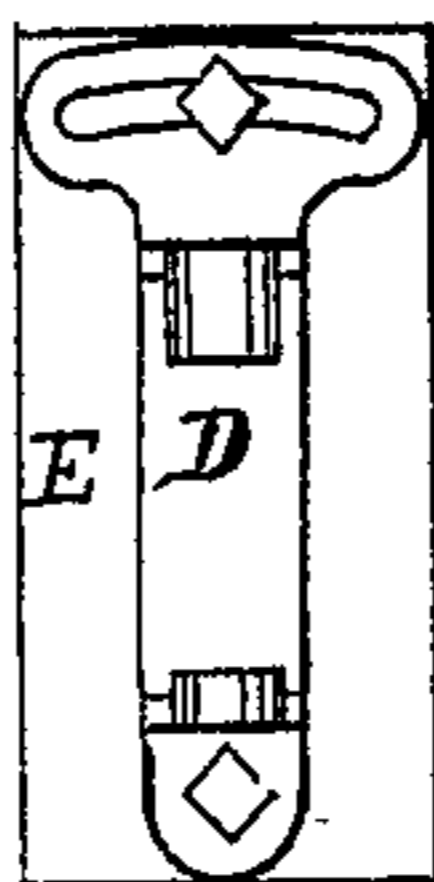


FIG 3



Wm A. Sharpe
W. W. Johnson } Witnesses

W. A. Sharpe
Inventor

United States Patent Office.

WILLIAM A. SHARPE, OF SYRACUSE, NEW YORK.

Letters Patent No. 93,013, dated July 27, 1869; antedated July 16, 1869.

IMPROVEMENT IN HARVESTERS.

The Schedule referred to in these Letters Patent and making part of the same.

Be it known that I, WILLIAM A. SHARPE, of Syracuse, in the county of Onondaga, and State of New York, have invented an Improved Caster-Wheel for Reaping and Mowing-Machines; and I do hereby declare and ascertain my said invention as follows, referring to the accompanying drawing in illustration thereof, in which—

Figure 1 is an elevation of the wheel and its attachments on the inside, next the platform.

Figure 2 is a section through the axis of the wheel, at right angles to fig. 1.

Figure 3 represents the levelling and draught-plate.

The same letters of reference are used to designate like parts in all the figures.

The wheel A has its tread projecting from one side of the plate or spokes thereof, and the hub or axis also projects on the same side.

A box, B, fits on to this short axis, in which the latter turns. To the inner end of the axis, just outside of box B, a small spur-wheel or pinion, F, is affixed, so as to turn with the caster-wheel A.

The box B is fitted to slide in an oblong rectangular loop or link, C, which is pivoted at its centre to arms projecting from plate D, which is attached to plate E, so as to be levelled by means of a pivot-bolt below and a set-bolt in a slot above, as clearly represented in fig. 3.

The plate E is firmly affixed to the platform of the reaper, and set at the proper height, in the usual way.

The box B, as will be seen at fig. 2, has but one flanch to bear against the link C, the web of the wheel serving for the other.

On the face of the link C are pivoted one or more racks G. (The preferable way is to form a single rack, extending from end to end of the link, and attaching it by pins to the link, the pins passing through vertically oblong holes, so as to allow the rack to rise and clear the teeth of the pinion-wheel F, that gear into it.) Several of the teeth are bevelled off at each end,

as clearly seen at fig. 1, so that when the pinion is at the end of the rack, and continues turning in that direction, it will be freed from the said rack G, but when the motion of the pinion is reversed, the teeth catch upon the escapement-teeth of the rack, and the box B is driven to the opposite end of the link C.

In this way the box B, and consequently the axis of the wheel A, are kept at the rear end of the link whichever way it progresses and the link being pivoted at its centre, the wheel A is made to track whatever curve the link moves in.

It is obvious, if two racks are used, extending from the centre to either end, they must be pivoted at the centre, and the single rack can be, but I prefer pivoting at the ends, as above described.

Springs H can be used to insure the falling of the rack, if found necessary.

This slide-box and pinion, with escapement-rack, may be found useful in other machinery.

Having thus fully set forth my improved caster-wheel,

What I claim therein as new, and for which I desire to secure Letters Patent, is—

1. The combination of the box B and link C, substantially as and for the purpose set forth.
2. Also, in combination with the box and link, the rack or racks G and pinion-wheel F, substantially as and for the purposes mentioned.
3. Also, pivoting the link C, and swivelling the same, substantially as herein specified.
4. Also, the entire combination of parts forming a caster-wheel for a reaping-machine, consisting of the wheel A and the box B, link C, adjustable pivoting-plate D, rack G, and pinion F, as and for the purposes described.

W. A. SHARPE.

Witnesses:

WM. A. SWEET,
WM. W. ST. JOHN.