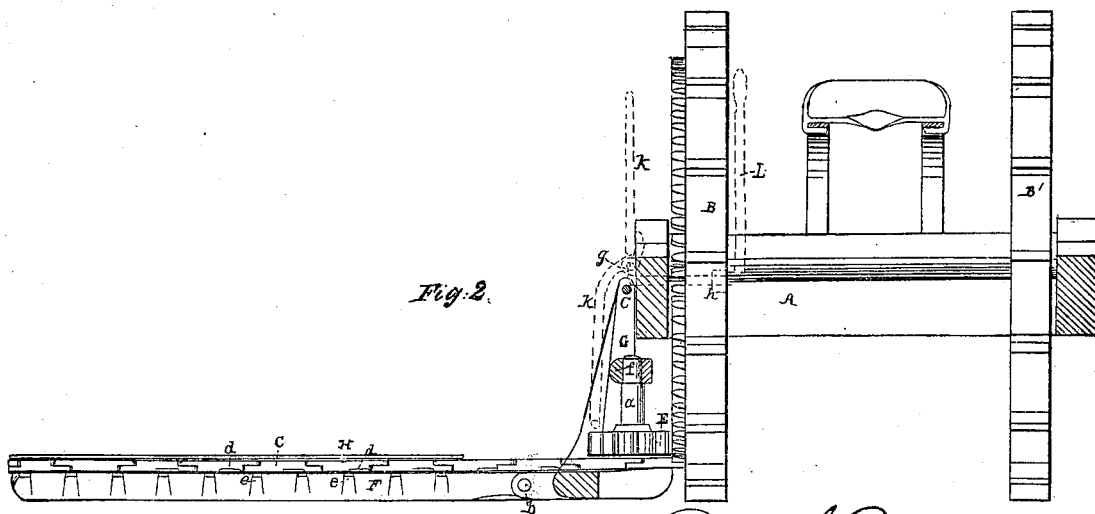
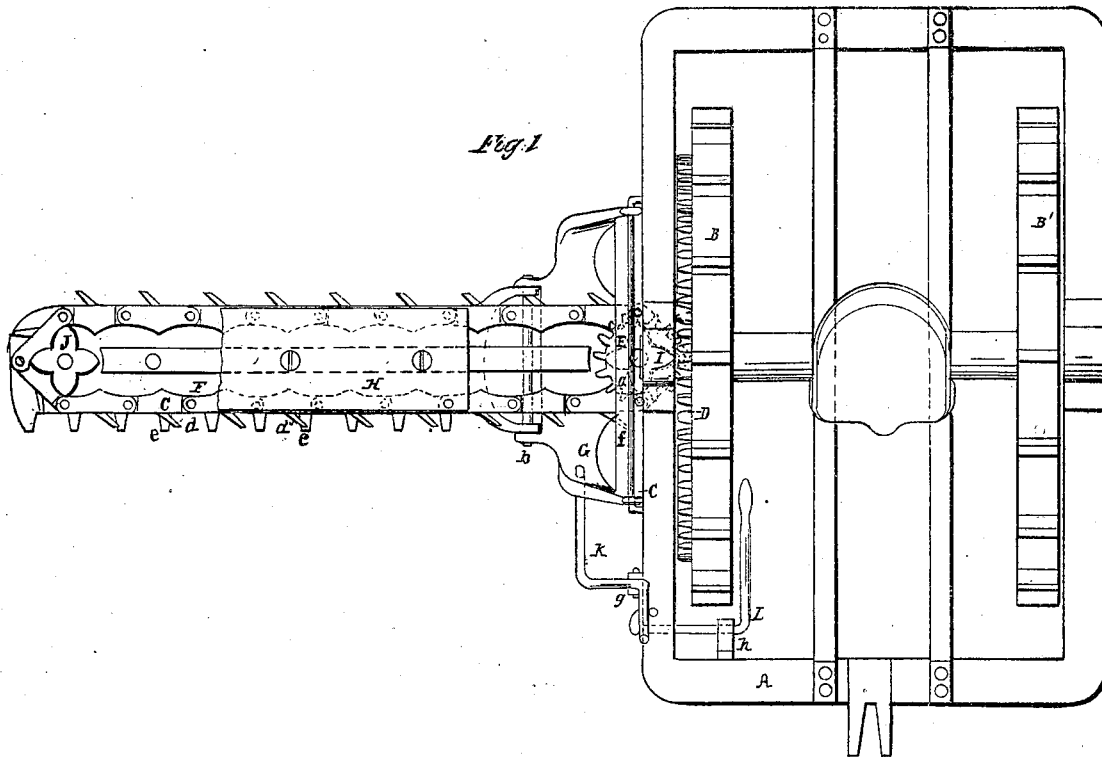


D. D. Whither
Mower.

No 106903.

Patented Aug 30 1870



Witnesses:

J. H. Cornish
Fred. Hayner

Daniel D. Whither
per Brown Cornish & Co

UNITED STATES PATENT OFFICE.

DANIEL D. WHITKER, OF NEW YORK, N. Y., ASSIGNOR TO JAMES MCGHEE
FOR ONE-HALF OF THE INVENTION.

IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. **106,903**, dated August 30, 1870; antedated August 18, 1870.

To all whom it may concern:

Be it known that I, DANIEL D. WHITKER, of the city, county, and State of New York, have invented a new and useful Improvement in Mowers and Reapers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 represents a plan of a mower and reaper constructed in accordance with my improvement, and Fig. 2 a partly-sectional front view of the same.

Similar letters of reference indicate corresponding parts.

The improvement relates to mowers and reapers in which an endless chain of cutters is used; and the invention consists in a certain combination and arrangement of the endless chain of cutters with the finger-bar and a stirrup pivoted to the main frame, and carrying the cutting apparatus, together with other pertaining devices, as hereinafter described, the whole constituting a simple and efficient combination of parts for support, control, and operation of the cutting apparatus.

Referring to the accompanying drawings, A represents the main frame of the machine, and B B' its running-wheels, the inner one, B, of which is made the driver to the endless chain, C, of cutters by or through a side gear, D, on said driving-wheel being made to operate a pinion, E, on a vertical shaft, *a*. F is the finger-bar, pivoted, as at *b*, to a stirrup, G, which is hinged or pivoted, as at *c*, to the main frame.

The endless chain, C, of cutters is made to travel on or over the finger-bar—that is, between it and the top plate, H, which may be bent down at its forward edge to guide the chain; or any other suitable guiding construction of parts may be adopted. Said chain has its links so constructed as that they gear into pinions I J, the one J of which is arranged at or near the outer end of the finger-bar, while the other one, I, is carried by the vertical shaft *a* below the operating-pinion E. In this way the endless chain C is properly carried and driven to effect the cut by means of knives or cutters *d*, with one or more of which each link of the chain is provided, said cutters being so constructed and arranged as that they travel directly over the tops of the fingers *e* and make a shear-cut.

The stirrup G is constructed with a cross

or connecting bar, *f*, which forms an upper bearing to the shaft *a*, the lower bearing of which is in a lower extension of said stirrup.

K is a lever, connected with the forward portion of the main frame, with its fulcrum as at *g*, and within reach of the driver from his seat. This lever K is connected at its bottom with the stirrup G, so that on the driver bearing said lever laterally toward him it is made to tilt or throw up the whole cutting apparatus from the pivot *c* of the stirrup as a center of motion, whenever it is required to so raise said parts, as in running to or from the field, or in passing over obstacles. The range of such adjustment of the cutting apparatus may be from a horizontal to a vertical position, and in making such adjustment the pinion E, carried by the stirrup G, is necessarily thrown out of gear with the wheel or gear D, so that all motion to the endless chain, C, of cutters ceases.

In connection with the lever K is another lever, L, having its fulcrum, as at *h*, on the front end of the main frame. This last-mentioned lever has connected with it a spring, or is made to form a spring, so that when worked inward or back it is caused to lock or hold in an elastic but secure manner the lever K from being worked to elevate the cutting apparatus. This, in connection with the jointed or stirrup attachment of the cutting apparatus, steadily retains the latter, but not in too rigid a manner, to or in its cutting position.

When the lever L is thrown forward it ceases to lock the lever K, which then is free to move to elevate the cutting apparatus, said lever L being suitably crooked or bent, and said lever K formed (as represented in the drawing or other suitable manner) to secure such action or actions.

The driver's seat it is preferred to arrange so that it rests on springs, and is made capable of being slid on or along the same to effect a more perfect balance of the machine.

What is here claimed, and desired to be secured by Letters Patent, is—

The combination of the endless-chain cutters C, finger-bar F, pinions I and J, operating-pinion E, wheel D, stirrup G, and levers K and L, arranged and operating as described.

D. D. WHITKER.

Witnesses:

W. W. BEACH,
LEWIS E. MANNING.