J. J. Wilber, Mower.

Jo. 37656

Fig. 1. minhh, m

Patented. Feb. 10. 1863.





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UNITED STATES PATENT OFFICE.

JOHN D. WILBER, OF POUGHKEEPSIE, NEW YORK.

IMPROVEMENT IN MOWING-MACHINES.

Specification forming part of Letters Patent No. 37,656, dated February 10, 1863.

To all whom it may concern:

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Be it known that I, JOHN D. WILBER, of Poughkeepsie, in the county of Dutchess and State of New York, have invented a new and Improved Mowing-Machine; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side sectional view of my invention, taken in the line x x, Fig. 2. Fig. 2 is a plan or top view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

The object of this invention is to obtain a mowing-machine in which all side draft will be avoided, and one which will leave the cut grass in a loose light state, be of easy draft, and capable of cutting directly back and forth, so as to avoid the trouble and inconvenience of cutting around a piece of grass. To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it with reference to the drawings.

shaft, K, which is placed in the back part of the main frame C, parallel with the axle A. On the shaft K, at about its center, there is placed a bevel-wheel, L, which gears into a bevel-pinion, M, on the outer end of a small shaft, N, placed longitudinally in the main frame C. The shaft N is provided with a crank, c, which is connected by a rod, O, with a lever, P. This lever P is attached by a fulcrum-pin, d, with one of the side bars, a, of the main frame C, and the front end of said lever is attached to one end of the sickle E. Each side bar, a, of the main frame C is connected to the semicircular bar G by a chain, e, and to one end of the side bars, a, a lever, Q, is attached, said lever extending upward within the reach of the driver on the seat H.

R is a double-tree, which is attached to the draft-pole F, and has a whiffletree, S, at each end of it. The double-tree R is of considerable length, so that the horses will be beyond the ends of the finger-bar, as will be seen by referring to Fig. 2. By this arrangement it will be seen that each wheel B is a drivingwheel, and hence no side draft can be produced by the action of the sickle-driving mechanism, and as the team is directly in front of the finger-bar and sickle there can be no side draft occasioned by the position of the line of draft relatively with the sickle, as is the case when the finger-bar and sickle are at one side of the team. The chains *e e* form a connection between the main frame C, and admits of the finger-bar being taken off from the surface of the ground, thereby greatly diminishing the draft of the machine, and at any time when necessary—as in passing over obstructions, turning the machine, &c.—the finger-bar and sickle may be elevated by throwing back the lever Q. As the machine is drawn along one horse walks in the grass and the other over the mown or cut surface; but this is no objection, as the next cut or swath is made directly back adjoining the other, and the grass lodged by the horse will be bent over toward the machine, thereby facilitating rather than retarding the cutting process. This machine may be constructed equally as cheap as the ordinary ones in use, and it is extremely durable, there being no parts liable to get out of repair, as there are none which are subjected to any great stress or strain. The

A represents an axle having its wheels B B of equal diameter and placed loosely upon it.

C is the main frame of the machine, composed of two parallel side bars, a a, connected by cross-bars b, and having the finger-bar D attached to their front ends. The front parts of the side bars, aa, are curved outward, as shown in Fig. 2, in order that the finger-bar may be of sufficient length.

E is the sickle, which may be of the ordinary reciprocating kind, and fitted on the finger-bar in the usual or in any proper way. The side bars, *a a*, of the main frame are fitted loosely on the axle A, so that they will turn freely upon it, and the part of the main frame in front of the axle is heavier than that of the back part, so that the finger-bar will have a tendency to rest upon the ground. Frepresents the draft-pole, which is attached permanently to the front end of a semicircular bar, G, the end of said bar being also fitted loosely on the axle A, so that they will turn freely upon it. The bar G has the driver's seat H attached to it by upright bars or supports b'. Each wheel B has a geared rim, I, secured concentrically to it, and into these rims pinions J J gear, said pinions being on the ends of a

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mowing-machines in most common use-those having the finger-bar and sickle projecting out from one side of the main frame—not only cause a great side draft, but also one liable to be broken. The finger-bar is subjected to a great strain, especially if its movement is resisted by an obstruction.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The main frame C, constructed and fitted on the axle A, as shown, in combination with the semicircular bar G, also fitted on the axle A, and having the suspension-chains e e attached to it at some distance on each side of the draft-pole F, so as to bring the said chains as

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nearly vertical as possible, all as herein set forth.

2. The combination of the draft-pole F, attached centrally to the main frame, the cutting apparatus D E, placed centrally in front of and driven by both the wheels BB, and a double-tree, R, of such length and so placed as to separate the single-trees SS to a distance greater than the length of the cutting apparatus, all as herein shown and described, and for the purposes set forth.

JOHN D. WILBER.

Witnesses: E. J. WILBER, J. I. JACKSON, Jr.

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