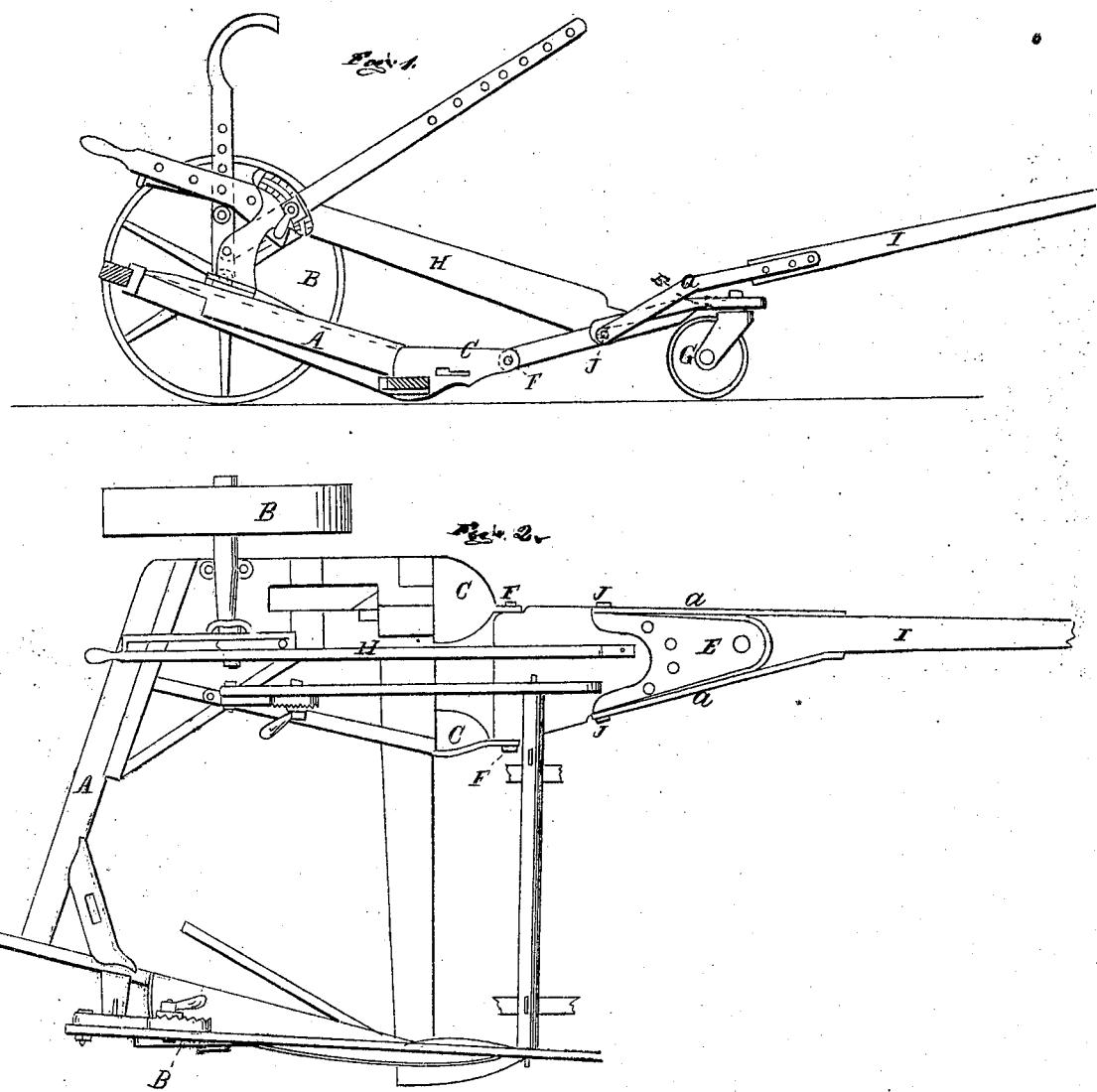


H. Marcellus,
Mower.

No. 19,999.

Patented April 20, 1858



UNITED STATES PATENT OFFICE.

H. MARCELLUS, OF AMSTERDAM, NEW YORK.

IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. 19,999, dated April 20, 1858.

To all whom it may concern:

Be it known that I, H. MARCELLUS, of Amsterdam, in the county of Montgomery and State of New York, have invented a new and useful Improvement in Harvesters; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side sectional view of a harvester with my improvement applied to it. Fig. 2 is a plan or top view of the same.

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

This invention relates to an improvement in that class of harvesters in which a pole-plank is employed to serve as a rest or bearing for a lever by which the cutting device is raised and lowered.

The invention consists in attaching the draft-pole to the pole-plank at a point intermediate between the easter-wheel at the outer end of the pole-plank and the point where the pole-plank is connected with the machine, whereby several advantages are obtained over similar machines, as hereinafter shown.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the frame of a harvester, which is mounted on wheels B B'.

C C are metal hounds, attached to one end of the frame A, near the driving-wheel D.

E is a pole-plank, the back end of which is attached to the hounds C C by a bolt, F, the pole-plank being allowed to work freely on the bolt F. To the outer end of the pole-plank E a easter-wheel, G, is attached.

To the pole-plank E a lever, H, is attached, by which the cutting device at the front end of the frame may be raised and lowered; and I is the draft-pole, the back end of which has two metal draft-bars, a a, attached. These draft-bars are not parallel with each other, but diverge so that the front part of the pole-plank E may fit between them, as shown clearly in Fig. 2. The inner ends of the draft-bars are connected to the pole-plank by means of a bolt, J, which passes through both ends of the bars and transversely through the pole-plank. The bolt J passes through the pole-plank at a point between the easter-wheel G and the bolt F,

which connects the pole-plank with the machine, and this point should be at a little back of the center of the pole-plank in order to obtain the best results. I do not, however, confine myself to any precise point between the easter-wheel G and bolt F for connecting the draft-bars to the pole-plank, but prefer the point as stated and shown in the drawings.

The object of the pole-plank E is to form a bearing for the purpose of elevating the cutting device, said bearing relieving the team of the weight of the machine when the cutters are raised, for formerly the pressure was sustained by the draft-pole. In the original application of the pole-plank it was attached to the machine independently of the draft-pole, but provided, as herein shown, with a easter-wheel at its outer end. This independent connection of the pole-plank was very objectionable, as in case of the easter-wheel passing into abrupt hollows the front end of the machine would be immediately depressed and the sickle run into the ground. Another objection attending this connection was that the draft-bars a a were necessarily long, extending the whole length of the pole-plank, and consequently the draft-pole could not be made stiff or firm; it would have a lateral sprung or vibration. By my improvement it will be seen that these objections are avoided. The draft-bars a a are of moderate length, so that the draft-pole may be made stiff, and the easter-wheel G is prevented from passing into abrupt hollows, in consequence of being connected to the draft-pole, the "pull" keeping the front end of the pole-plank, and consequently the sickle, in an elevated state. Attempts have been made to obviate the disadvantages attending the independent connection of the pole-plank with the machine by attaching the front end of the pole-plank directly to the draft-pole, and having the easter-wheel attached to the back end of the draft-pole. This plan, however, was unsuccessful, for the machine could not be "backed" well. Frequently in attempting to "back," the front end of the pole-plank and the back end of the tongue would rise upward, and the power could not be applied to the machine, for the tongue and pole-plank, instead of transmitting the power from the team backward to the machine, would act like a jointed bar to which the line of press-

ure was applied out of line with the pole and pole-plank; and in order to be able to back the machine at all the front end of the pole-plank was required to be raised. By my improvement this difficulty is avoided.

I do not claim the pole-plank E, with caster-wheel G attached, for relieving the draft-pole of the weight of the front end of the machine when the sickle is raised, for that has been previously used; nor do I claim attaching the draft-pole to the pole-plank irrespective of the particular arrangement or the point where the pole is attached, as herein shown and described; but,

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

Connecting the draft-bars *a a* of the draft-pole to the pole-plank E at a point intermediate between its caster-wheel G, at the front end of the pole-plank, and the point of connection of the pole-plank with the machine, substantially as herein shown and described, for the purpose set forth.

HENRY MARCELLUS.

Witnesses:

GEO. C. BELL,
HARRY BELL.