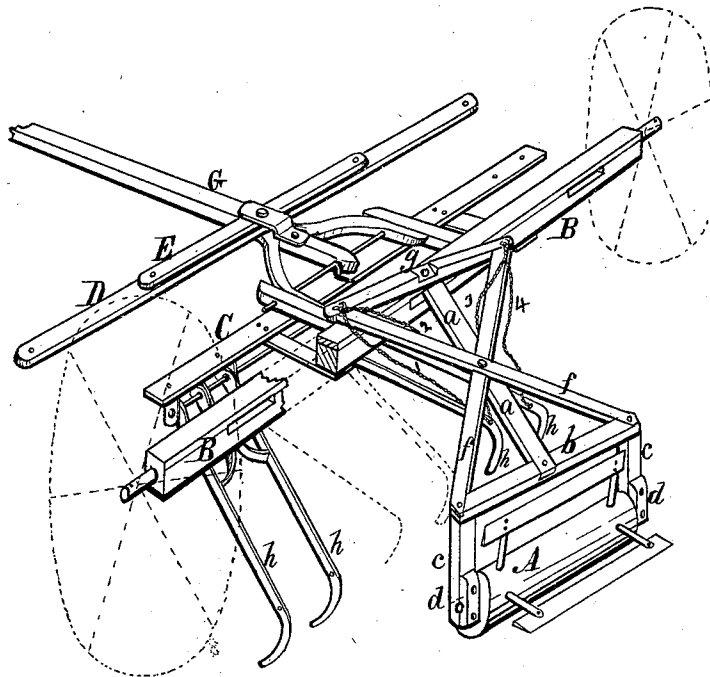


H. HERROLD.
Stalk-Cutters.

No. 151,287.

Patented May 26, 1874.



Witnesses.
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UNITED STATES PATENT OFFICE.

HENRY HERROLD, OF RIDGEDALE, IOWA.

IMPROVEMENT IN STALK-CUTTERS.

Specification forming part of Letters Patent No. 151,287, dated May 26, 1874; application filed February 10, 1874.

To all whom it may concern:

Be it known that I, HENRY HERROLD, of Ridgedale, in the county of Polk and State of Iowa, have invented certain Improvements in Stalk-Cutters, of which the following is a specification:

The object of my invention is to construct and adapt stalk-cutter trucks in such a way that they can be attached singly or in gangs to a two-wheeled carriage, and operated in combination with the carriage, in such a manner that they will automatically lift and clean the drag-hooks combined therewith whenever the carriage is turned. It consists in the form of the frame or truck carrying the rolling knives, and the manner of combining it with the carriage and the drag-hooks, all as hereinafter fully set forth.

My drawing is a perspective view, illustrating the construction and operation of my improvements.

a a is a straight bar, forming the reach of the truck, and is rigidly attached to the cross-piece *b* of the frame, carrying the rolling knives. *c c* are the uprights of the same frame, to which the movable boxes or bearings *d d* are bolted to secure the journals of the roller *A*, to which a series of knives are attached in any suitable way, so that their cutting-edges will strike the stalks as the roller *A* advances and revolves. *f f* are bars, rigidly attached to the ends of the cross-piece *b*, and to the reach *a* at the point where they cross each other, and to the bolster *g*, spanned between their front ends. These trucks may be made of wooden or metal bars, or of wood and metal combined. *B B* represent a carriage-axle. It may be the front axle of a common farm-wagon, and carry one of my trucks, or it may be a long axle adapted to carry two or more of my trucks to form a gang stalk-cutter. Slots in the axle, or between the axle and the bolster-plate on its top, admit the front ends of the truck-reaches *a*, and allow them to be pivoted thereto by pins or bolts passed through the truck-bolster *g*, the axle *B*, and the truck-reaches *a*.

By this means of combining the trucks or stalk-cutters with a carriage, they will always be retained perpendicular by the bolsters *g* bearing upon the axle, and at the same time

be allowed to turn and assume various angles relative to the axle *A*.

1 2 3 4 are flexible cords or chains, attached to the ends of the bolsters *g* and the rear ends of the drag-hooks *h h*. Nos. 1 and 4 cords pass on the outside of the crossed bars *f f* downward and rearward direct to the hooks *h h*. Nos. 2 and 3 pass inside of the bars *f*, and cross each other to connect with the hooks. *C C* is a bar, attached in front and parallel with the axle *A* in any suitable way, to which the front and forked ends of the drag-hooks *h* are pivoted. Ears project downward from the bar *C*, and rods pass through them and the ends of the hooks. By making the ends of the hooks forked, and stringing them on a rod, lateral motion is prevented, and vertical motion only is allowed. *D* is a double-tree, of double the ordinary length required for two horses. *E* is one of ordinary length. By pivoting both to the tongue *G* with one bolt, a means is provided for hitching and equalizing the draft of four horses to operate a gang of my trucks and cutters attached to a long axle.

In the operation of my cutter, the hooks *h* drag upon the ground and place the stalks in line with the direction of the carriage, and at right angles with the roller *A* and its cutting-blades, which strike the stalks transversely and cut them into pieces. In turning the team to the left from a straight line, the left ends of the bolsters *g* will be projected in front of the axle, and the cords 2 and 4 attached thereto will draw and lift the hooks *h h*. In turning to the right, a reverse movement of the bolster *g* will produce the same result by means of the cords 1 and 3.

It is, therefore, obvious that, in turning around at the ends of the field, or by a turn whenever desired, the hooks *h* will be automatically lifted, and weeds or other obstructions gathered thereby will be dropped, and the hooks cleaned.

A seat may be attached in any suitable way, and the driver and operator mounted thereon can give his entire attention to the management of the horses, and the cutter or gang of cutters and drag-hooks will perform their functions without his attention or aid.

I claim as my invention—

1. The frame or truck composed of the reach *a*, cross-piece *b*, uprights *c c*, movable bearings *d d*, cross-bars *f f*, and the bolster *g*, substantially as described, and for the purposes specified.

2. The combination of the front end of the truck or bolster *g* and the drag-hooks *h h* by

means of the cords or chains 1 2 3 4, substantially as described, and for the purposes specified.

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Witnesses:

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