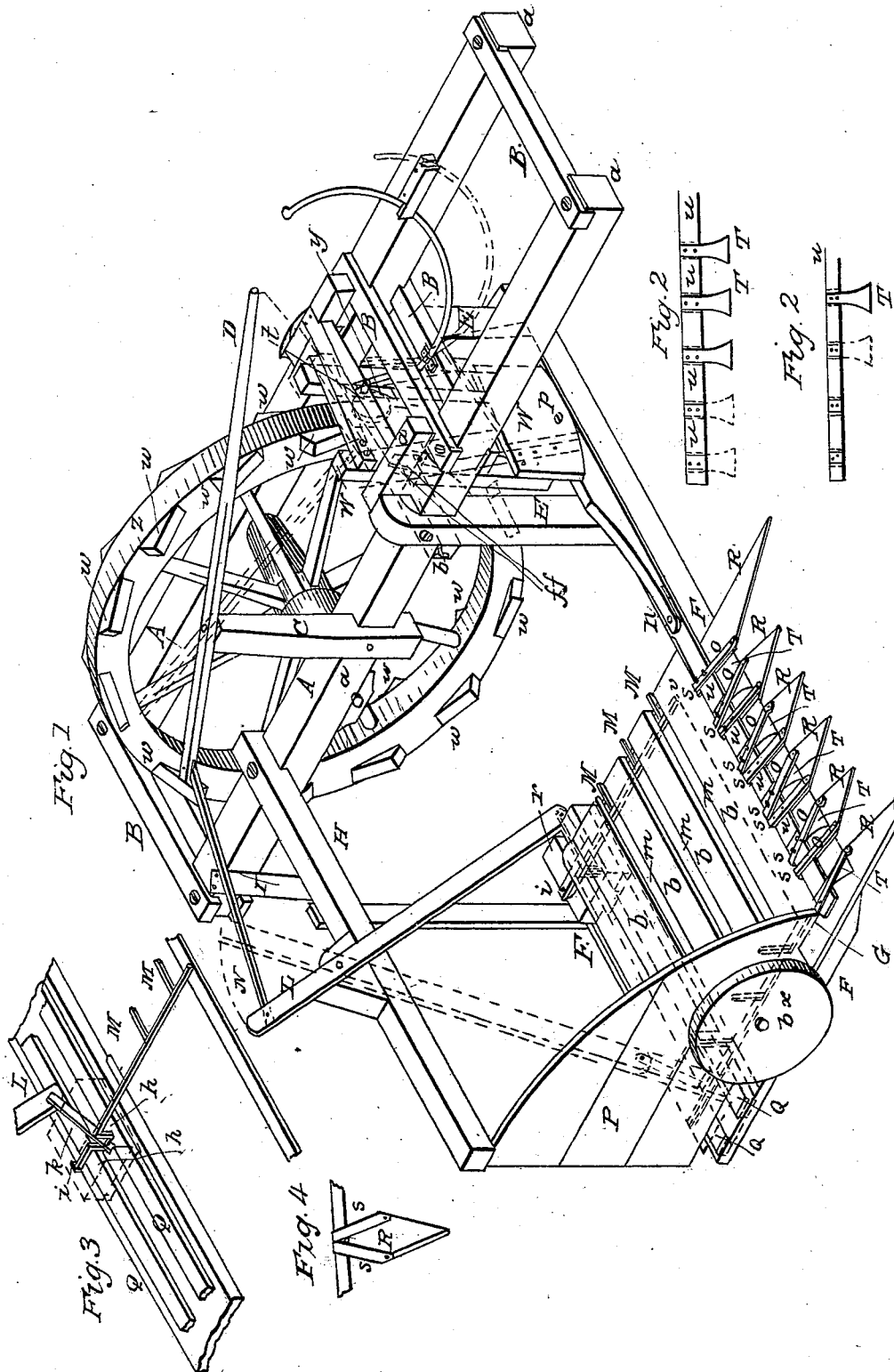


C. FOSTER.
Harvester Cutter and Raker.

No. 4,461.

Patented April 18, 1846.



UNITED STATES PATENT OFFICE.

CLINTON FOSTER, OF LA PORTE COUNTY, INDIANA.

IMPROVEMENT IN REAPING-MACHINES.

Specification forming part of Letters Patent No. 4,461, dated April 18, 1846.

To all whom it may concern:

Be it known that I, CLINTON FOSTER, of the county of La Porte and State of Indiana, have invented a new and useful machine for the purpose of cutting and raking all kinds of grain and hemp, which I call a "Cutter and Raker;" and I do hereby declare that the following is a full and exact description, reference being had to the accompanying drawings, which make a part of this specification—

Figure 1 representing the machine in a state of readiness for use; Fig. 2, the steel bar to which the knives or cutters are attached; Fig. 3, the rake which deposits the grain, after being cut, in gavels on the ground; Fig. 4, one of the angular points that divide the grain and gather it within reach of the knives and cutters.

The nature of my invention consists in a framed machine on wheels, set in motion by horse-power, so arranged that the grain is cut and gathered as the machine advances.

In Fig. 1, A A are two parts of a stitible frame, which, if prolonged at a a, would make shafts for a horse or horses, by which it is to be drawn.

B B B B are cross-pieces, which are joined to A A by screws and nuts from the frame. To one of the last-mentioned cross-pieces a coupling-pole may be attached, while the front part of the frame rests upon a car, or the axle and forward wheels of a wagon, which will supersede the use of shafts.

C is an upright post attached to the frame A A, and projecting upward to support the lever D; E E, two strong pieces of wood on each side of the frame A A, and projecting downward to support the frame-work F F F of the cutter and raker. H is another timber running horizontally of the frame A A, and connects the upper part of the frame F F F.

I is a brace. K is a piece of wood attached to the timber H to support the second lever, L.

N is an iron rod to connect the levers L and D at f and g, which operate as herein last described; O, an upright post to connect and secure the timber H with the frame F F F; P, a board inclosing the rake; Q Q, two dovetailed pieces attached to the frame F F F, to guide the slide r r, which moves through their whole length; i i, an iron rod attached to and carried by the slide r r; h h, a crank or lever to raise or lower the iron teeth M M M, which

are attached to and project from i i, which together form the rake; k, a pitman or rod to connect the crank or lever h h with the second lever, L; l l l l, boards across the frame F F F; m m m, spaces between the boards l l l l, wide enough to allow the action of the teeth M M M freely; R R R R R R, projecting angular points to divide and gather the grain between them.

S S S, &c., are iron or steel knives, sharpened or edged, upon which the cutters T T T T T slide, and are fastened at one end to a part of frame F F F and at the other to the points R R, &c., by bolts, which also fasten the fend-ers o o o o, &c., at their ends, so as to leave a space between the knives S S S, &c., and the iron fend-ers o o o o, &c., sufficient for the cutters T T T T T to pass between them. The cutters are of steel and sharp on two sides, and fastened at proper distances on a movable iron bar, u u, &c., by screws.

The iron bar u u, &c., is connected by a bolt, n, to a wooden slide, v. The slide v is connected by a pin or bolt, p, to a swinging frame, W W W, which frame is connected by a bolt, t, to another frame, X X. The two frames W W W and X X are moved to and from the large wheel Z to throw the machine in or out of gear at pleasure by means of the lever u u.

On the inside of the two upright pieces of the swinging frame W W W are fastened wedge-shaped projections y y, corresponding with similar projections, w w w, &c., upon the wheel Z, which, coming in contact, give motion to the cutters, or the same motion may be produced by traveling rollers.

On each side of the rim of the wheel Z, alternately and at proper distances, are secured wedge-shaped projections or knobs w w w w, &c., to give motion, as already said, to the cutters.

Z is the large wheel revolving upon axle a a within the frame A A A, and supporting the same; f f, two friction-rollers to guide the wheel Z, running in blocks b b, which are attached to the frame A A A.

Fig. 2 exhibits the cutters T T, &c., which may be sunk into the bar u u, level with its surface, and made fast to said bar with screws, so as to be taken off and ground when necessary; b x, a wheel to sustain the frame F F F.

Fig. 3 exhibits the rake and its action, the teeth of which assume a horizontal or perpen-

dicular position (as they pass backward and forward) by the action of this crank or lever *h h*.

Fig. 4 shows one of the angular points *R*, with its knives *S S* attached, without the fenders *o o*.

Operation: When working the rake by hand the operator moves the lever *D* to the right and left. This gives a similar motion, by means of the connecting-rod *N*, to the second lever, *L*, which, being connected by the pitman *k* (shown in Fig. 3) to the crank-shaft *i i*, carry them, with the slides *r r*, to which they are attached, forward and backward the whole length of the boards *l l l l*. At the same time, by the

operation of the crank *i i*, the teeth *M M M* are elevated as they move forward, raking off the grain in gavels on the ground, and are depressed while returning for another gavel.

What I claim as my invention, and desire to secure by Letters Patent, is—

The manner of constructing the rake, and its connection with the floor of said machine, as herein described.

CLINTON FOSTER.

Witnesses:

J. BIGELOW,
S. A. PEUGH.