(No Model.)

D. F. HUNT.

WHEEL CULTIVATOR.

No. 441,414. Patented Nov. 25, 1890.

Fig. 1.

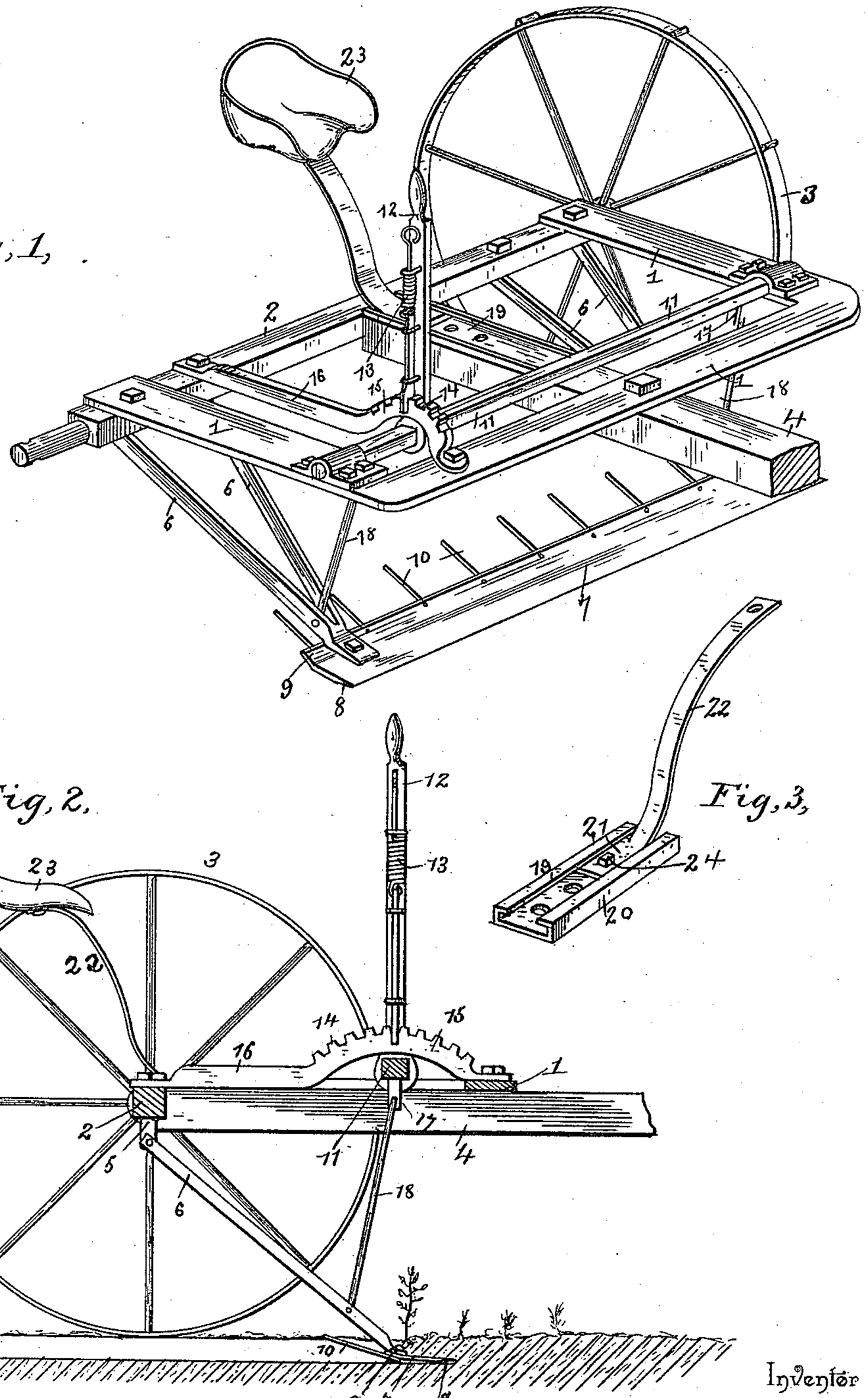

Fig. 2.

Fig. 3.

Witnesses

Jas. K. McCathran

Wm. Bagger

Inventor

Doctor F. Hunt

By his Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

DOCTOR FRANKLIN HUNT, OF ELBERTON, WASHINGTON.

WHEEL-CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 441,414, dated November 25, 1890.

Application filed July 15, 1890. Serial No. 358,794. (No model.)

To all whom it may concern:

Be it known that I, DOCTOR FRANKLIN HUNT, a citizen of the United States, residing at Elberton, in the county of Whitman and State of Washington, have invented a new and useful Wheel-Cultivator, of which the following is a specification.

This invention relates to wheel-cultivators for the purpose of cultivating summer-fallow land; and it has for its object to construct a machine of this class which shall be simple, durable, inexpensive, and easily manipulated, and which shall act as a thorough and effective stalk and weed cutter and exterminator.

With these ends in view the invention consists in the improved construction, arrangement, and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a perspective view of my improved wheel-cultivator. Fig. 2 is a longitudinal sectional view of the same, taken to one side of the tongue and looking in the direction of the adjusting-lever. Fig. 3 is a detail view illustrating the means for connecting the driver's seat adjustably with the tongue.

Like numerals of reference indicate like parts in all the figures.

1 designates a U-shaped frame, the rear ends of the sides of which are bolted upon the ends of the axle 2, upon the spindles of which the wheels 3 3 are journaled. The tongue 4 is likewise bolted or otherwise secured to the under side of the axle and to the front cross-bar of the frame. The under side of the axle is provided with eyebolts 5 5, to which are pivotally connected the arms 6, having converging lower ends, to which the cultivator-blade 7 is firmly bolted, riveted, or otherwise secured. Said cultivator-blade may be of a length about equal to the length of the axle between the wheels; it may be of any desired width—say from six to eight inches—and it is provided with a sharp front cutting-edge 8 and with an upturned rear edge 9, from which a series of elastic fingers or prongs 10 extend in an upward and rearward direction.

Journaled in suitable bearings transversely upon the frame 1 is a rock-shaft 11, having a hand-lever 12, provided with a spring-actuated catch 13, adapted to engage any one of a series of notches 14 in a segment 15, formed upon a brace 16, which connects the front end or cross-bar of the frame 1 with the axle.

The rock-shaft 11 is provided with radially-extending arms 17, which are connected by means of pivoted rods or pitmen 18 with the lower or front ends of the arms 6, carrying the cultivator-blade 7. It will thus be seen that by manipulating the lever 12 the rock-shaft 11 may be turned so as to raise or lower the cultivator-blade, which latter may be retained at any desired adjustment by the spring-actuated catch 13, engaging one of the notches 14 in the segment 15.

The tongue of the machine is provided on its upper side in front of the axle with a plate 19, having flanges 20, which are turned upwardly toward each other, so as to form guides for a longitudinally-sliding plate 21, from the rear edge of which a spring 22 extends in an upward and rearward direction, carrying at its upper end the driver's seat 23. A pin or bolt 24 may be employed for retaining the plate 21 with its attachments in any desired position. It will thus be seen that the driver's seat is capable of being adjusted longitudinally to any desired position, thereby enabling the weight of the driver to be utilized for the purpose of holding the cultivator-blade to its work with any desired degree of force.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of my invention will be readily understood by those skilled in the art to which it appertains. The cultivator-blade, as will be seen, cuts under the sod, thereby severing the roots of the weeds and stalks and stubble. The sod is lifted over the upturned rear edge of the cutter and over the upwardly-extending elastic fingers, whereby it is thoroughly broken and pulverized, leaving the ground in excellent condition for subsequent operations.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, of the United States, is—

1. The combination of the U-shaped frame, the axle having the supporting-wheels, the forwardly-converging arms hinged to the under side of the axle, the blade or cutter secured to said arms, a rock-shaft mounted upon

the frame and having radially-extending arms, pitmen connecting said arms with the arms carrying the blade, and means for adjusting the rock-shaft and for retaining it at any desired adjustment, substantially as set forth.

2. The combination of the frame, the axle secured at the rear end of the same and having the supporting-wheels, the tongue secured to the axle and to the frame, the converging arms hinged to the under side of the axle and carrying the cultivator-blade at their lower ends, a rock-shaft journaled upon the frame and having radially-extending arms and a hand-lever, pitmen connecting the arms of the rock-shaft with the arms carrying the cultivator-blade, a brace connecting the axle with the front end of the frame and having a notched segment, and a spring-catch attached to the hand-lever and engaging said notched segment, substantially as set forth.

3. The combination of the frame, the tongue, the plate secured upon the latter and having upturned and inturned flanges, the plate mounted slidingly in the guides thus formed, and the spring extending upwardly and rearwardly from said plate and carrying the driver's seat, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

DOCTOR FRANKLIN HUNT.

Witnesses:
J. I. McCoy,
J. E. Connor.