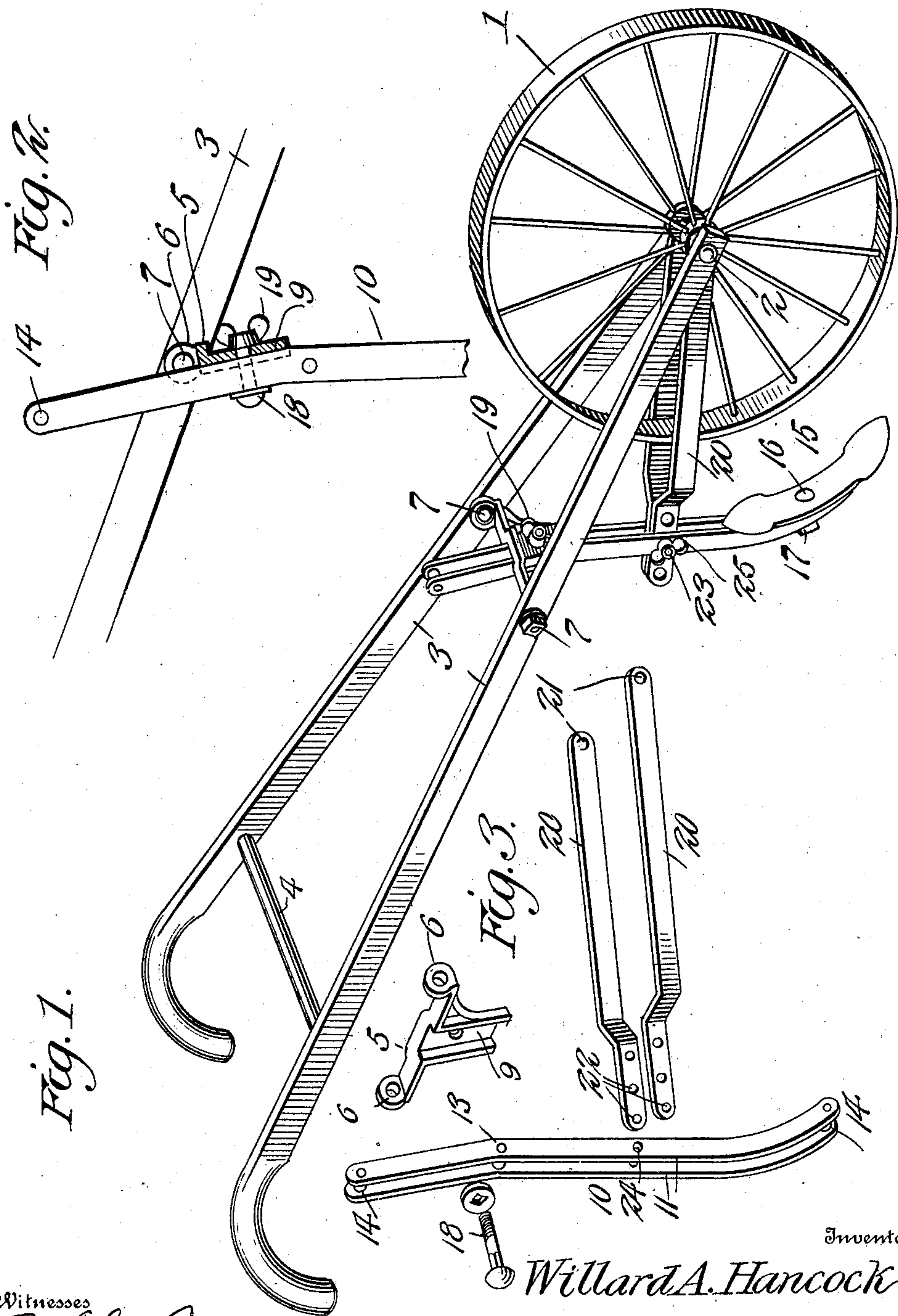


No. 897,094.

PATENTED AUG. 25, 1908.

W. A. HANCOCK.  
CULTIVATOR.

APPLICATION FILED JAN. 21, 1908.



Witnesses  
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# UNITED STATES PATENT OFFICE.

WILLARD A. HANCOCK, OF MONTROSE, IOWA.

## CULTIVATOR.

No. 897,094.

Specification of Letters Patent.

Patented Aug. 25, 1908.

Application filed January 21, 1908. Serial No. 411,949.

*To all whom it may concern:*

Be it known that I, WILLARD A. HANCOCK, a citizen of the United States, residing at Montrose, in the county of Lee and State of Iowa, have invented new and useful Improvements in Cultivators, of which the following is a specification.

This invention relates to cultivators, the object of the invention being to provide a simple and easily and quickly adjustable cultivator attachment for plows, the construction permitting the plow to be adjusted up and down for the purpose of varying the depth of penetration and simultaneously adjusting the handles up and down to suit the height and comfort of the operator.

With the above and other objects in view, the invention consists in the novel construction, combination and arrangement of parts as herein fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a perspective view of a cultivator embodying the present invention. Fig. 2 is an enlarged detail vertical section illustrating the adjustable connection between the standard and the handles. Fig. 3 is a perspective view of the segregated elements by means of which the adjustment is effected.

Referring to the drawings, 1 designates the carrying wheel which may be of any suitable size, the same being journaled on a bolt 2 or its equivalent which connects the forward convergent extremities of the handles 3, the latter being connected and braced relatively to each other by one or more cross bars 4.

In carrying out the present invention, I provide a bracket 5 which extends across between the handles 3 and is provided with perforated ears 6 through which bolts 7 or other equivalent are inserted, said bolts passing also through the handles 3 and forming a pivotal connection between the bracket and the handles. The bracket also comprises a pendent body portion 8 which is recessed on its rear side as shown at 9 to form a vertical extending groove or seat in which the standard 10 is adjustably secured.

The standard 10 is composed of parallel bars 11 the lower ends of which are preferably given a forward curve as shown while the upper ends thereof are bent at 13 and given a slight rearward pitch the purpose of which will hereinafter appear. The bars 11 are secured together at the top and bottom by means of the cross pins 14 which are

shouldered so as to leave a certain amount of space between the side bars 11 which lie parallel with each other.

Secured to the lower end of the standard is a double pointed reversible shovel which is held in place by a bolt 16 which passes between the side bars 11 of the standard and receives a clamping nut 17 by loosening which the shovel 15 may be set up and down in the standard or reversed end for end. The standard is secured to the bracket 5 by means of a bolt 18 which passes through the side bars of the standard and is tightened by means of a thumb nut 19, the bolt 18 passing also through an opening in the body portion of the bracket. This enables the standard to be raised and lowered relatively to the handles 13 for the purpose of regulating the depth of penetration of the shovel and the height of the handles according to the convenience of the operator.

The standard 10 is connected with the axle or bolt 2 by means of a brace consisting of oppositely arranged parallel bars 20 the forward ends of which are formed with holes 21 to receive the bolt or axle 2 while the rear ends thereof are offset inwardly and brought together as shown in Fig. 1, said ends being provided with a series of holes 22 for the reception of a bolt 23 which passes through oppositely arranged holes 24 in the standard and receives a thumb nut 25. As the standard 10 is adjusted up and down, the brace bars 20 swing up and down therewith and the shovel 15 may be set forward or backward by removing the bolt 23 and adjusting it to the desired holes 22. In adjusting the shovel up and down, the standard swings on the brace bars 20 and this would change the pitch of the shovel 15 were it not for the angular disposition of the upper end of the standard which is bent to compensate for the movement of the brace bars 20, the arrangement being such that as the standard is lowered, the upper end thereof is simultaneously carried forward and thus the proper pitch of the shovel is maintained irrespective of the vertical adjustment of the standard.

Having thus described the invention, what is claimed as new, is:—

1. A cultivator comprising a carrying wheel, handles connected to the axle thereof, a bracket pivotally mounted between the handles and connected therewith, a standard adjustable up and down on said bracket,

a shovel carried by said standard, and a brace interposed between the standard and the axle of the carrying wheel, said brace having the standard adjustably connected therewith so as to vary the pitch of the standard and shovel carried thereby.

2. A cultivator comprising a carrying wheel, handles connected therewith, a bracket pivotally mounted between the handles and connected therewith, a standard having its upper end pitched rearward

in relation to the remainder, of the standard and adjustably connected to said bracket, a shovel carried by standard, and a brace interposed between the axle and the carrying wheel.

In testimony whereof I affix my signature in presence of two witnesses.

WILLARD A. HANCOCK.

Witnesses:

WM. COOK,

Mrs. E. G. NEIBEL.