N. Butler,

Cultivator.

No. 93,412. Patented Aug. 10. 1869.

Fig. 1.

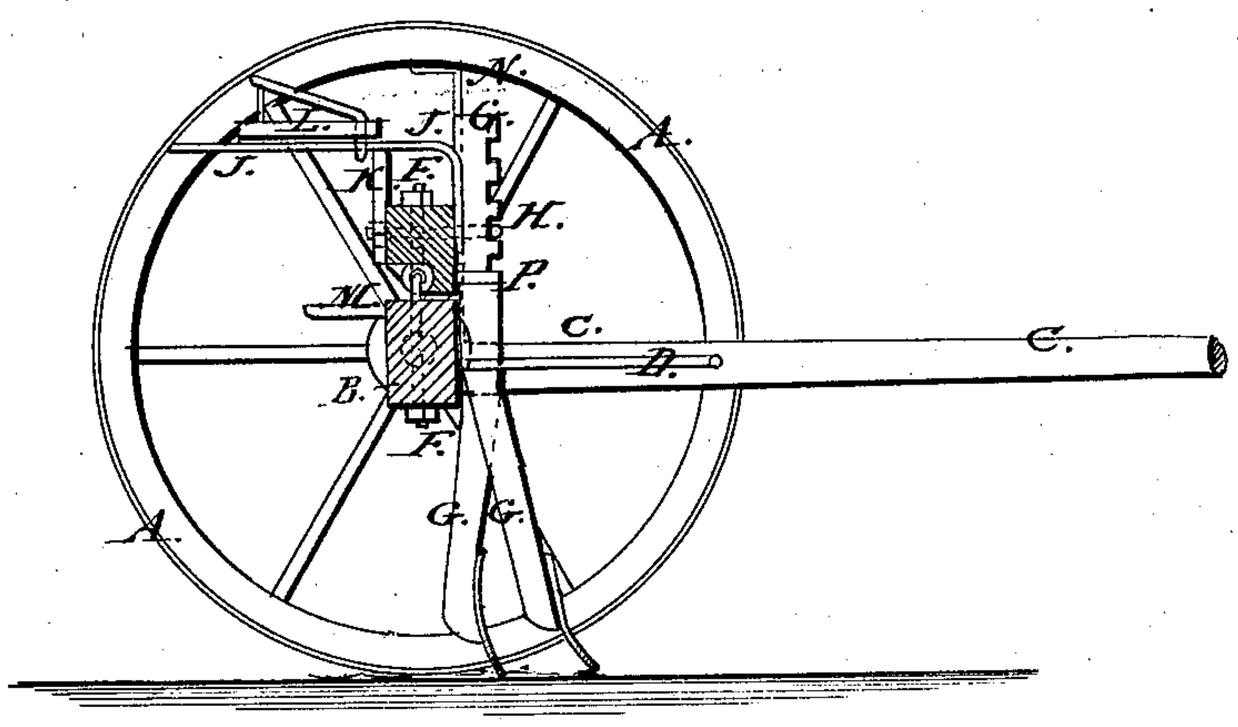

Fig. 2.

Witnesses;
Chas. Nida
Geo. W. Mabee

Inventor;
N Butler
per Munn & Co.

UNITED STATES PATENT OFFICE.

NATHAN BUTTLER, OF OTTERVILLE, MISSOURI, ASSIGNOR TO HIMSELF AND D. S. BUTLER, OF SAME PLACE.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. **93,412,** dated August 10, 1869.

To all whom it may concern:

Be it known that I, NATHAN BUTTLER, of Otterville, in the county of Cooper and State of Missouri, have invented a new and usefnl Improvement in Cultivators; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a detail sectional view of my improved cultivator, taken through the line *x x*, Fig. 2. Fig. 2 is a front view of the same.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved cultivator which shall be simple in construction and convenient in operation, being so constructed and arranged that the plows may be readily adjusted to run at a greater or less depth in the ground, and that the plows may be easily raised away from the ground, when desired, by a simple movement of the driver's seat; and it consists in the construction and combination of various parts of the machine, as hereinafter more fully described.

A represents the wheels, which revolve upon the journals of the axle B, to which the tongue C is rigidly attached. The attachment of the tongue C to the axle B should be strengthened with hounds or braces D, to make the connection between said parts stronger.

E is a bolster placed upon the upper side of the axle B, and hinged to said axle by means of eyebolts F or other suitable hinges.

The rear lower edge of the bolster E is beveled off, so that the said bolster may be turned back sufficiently to raise the plow away from the ground when desired.

G are the plow-standards, which are secured to the bolster E by loops H, the arms of which loops pass through the bolster E, and are detachably secured in place by nuts. The upper part of the forward side of the plow-standards G is notched to receive the loops H, so that the said standards may be raised and lowered, according to the depth at which it is desired to have the plows work in the ground, by simply loosening the nuts upon the arms of the loops H. The plow-standards G are so formed that their rear sides may rest against the forward side of the axle B, so that the draft-strain may be supported by said axle. The lower parts of the standards G may be straight, or may be inclined forward at different or at any desired angle, according as it is desired to have the plows work in line, or one in advance of the other.

I are the plows, which may be made in the form of shovel-plows, diamond plows, bull-tongue plows, or some of one form and some of another form, as may be desired.

J are arms projecting horizontally in the rear of the bolster E, and the forward ends of which are bent downward, and are securely attached to the forward side of the bolster E. The arms J are further supported and strengthened by standards or supports K, attached to the rear side of the bolster E, and upon the upper ends of which rest the arms J, as shown in Fig. 1.

L is the driver's seat, which is attached to the arms J in such a way as to slide back and forth freely.

M is a small platform or foot-rest, attached to the rear part of the axle B, as shown in Fig. 1. The bolster E is locked, when the plows are in working positions, by the lever N, the lower end of which is pivoted to the axle B, and the upper part of which catches upon a catch, O, attached to the forward side of the hinged bolster E, as shown in Fig. 2.

P are guides attached to the bolster E, upon each side of the standards G to support said standards against side movement.

By this construction, when the driver wishes to raise the plows from the ground to pass obstructions, or for any other purpose, he detaches the lever N, and, by a movement of his body, pushes the seat L back, so that his weight may overbalance the weight of the plows and raise them from the ground. When he desires to have the plows again operate, he rises to his feet upon a small platform or foot-rest M, and the weight of the plows brings the machine again into working position, in which position they are locked by the lever N.

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

1. The bolster E, hinged to the axle B, and beveled upon its rear lower edge, substan-

tially as herein shown and described, and for the purpose set forth.

2. The combination of the rearwardly-projecting arms J, sliding seat L, and foot-rest or platform M with the hinged bolster E and axle B, substantially as herein shown and described, and for the purpose set forth.

3. The notched plow-standards G, adjustably secured to the hinged bolster E by means of the detachable loops H, in combination with the said hinged bolster E and axle B, substantially as herein shown and described, and for the purpose set forth.

4. An improved cultivator, formed by the combination of the wheel A, axle B, tongue C, hinged bolster E, arms J, sliding seat L, foot-rest or platform M, and plow-standards G with each other, substantially as herein shown and described, and for the purposes set forth.

NATHAN BUTTLER.

Witnesses:
MOSES EILENBERGER,
JAMES TAYLOR.