

J. Lueth
Wheel Cultivator
No 94,497. Patented Sept 7, 1869.

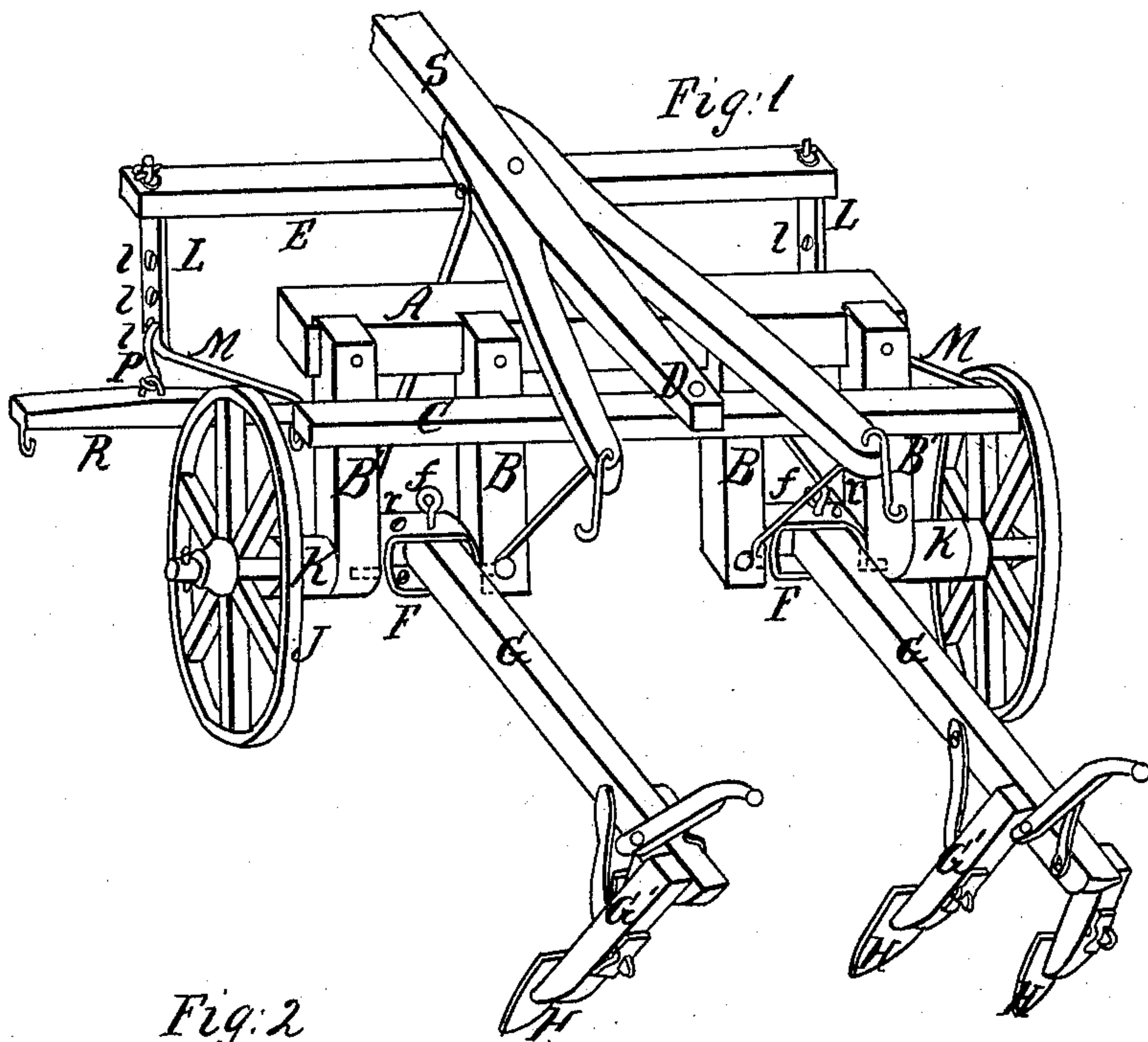


Fig: 2

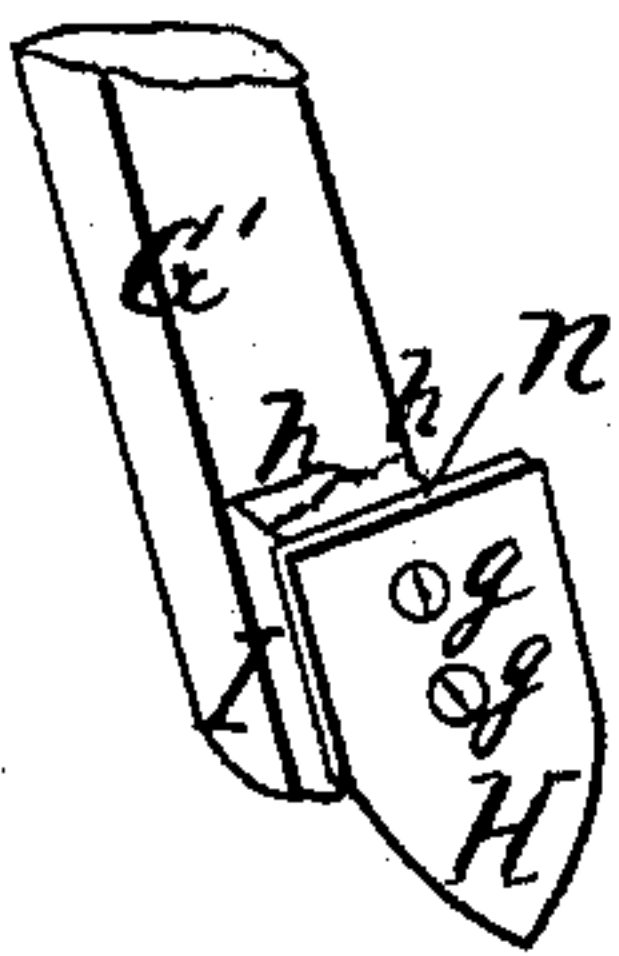


Fig: 4

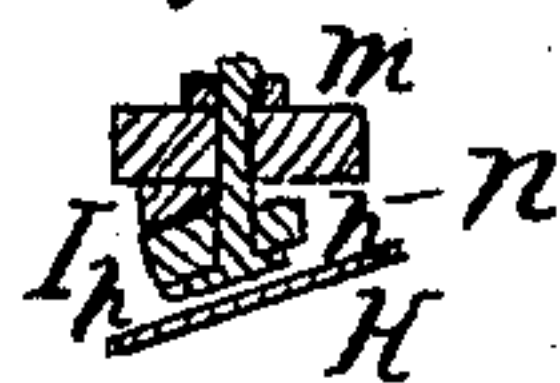


Fig: 3

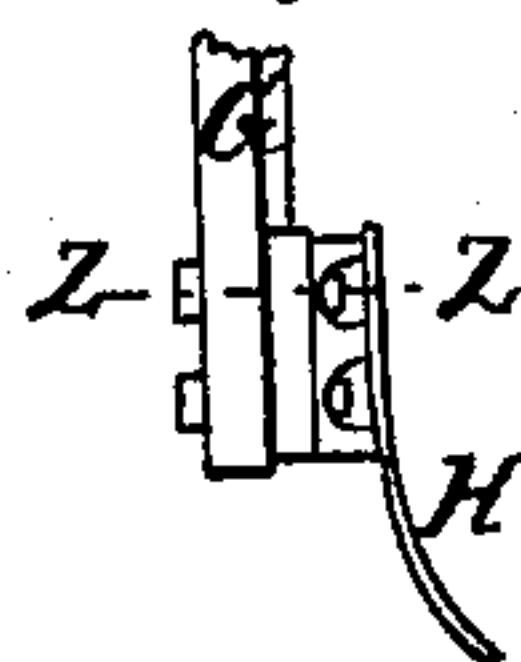
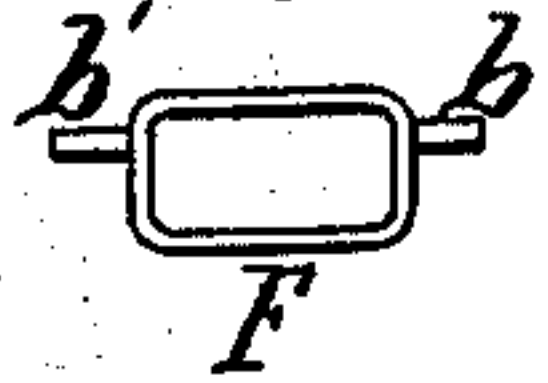


Fig: 5



Witnesses

George Vail
Thomas Kerr

Inventor

John Lueth
By his attorney
G. H. Chapin

UNITED STATES PATENT OFFICE.

JOHN LUETH, OF KANKAKEE, ILLINOIS.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 94,497, dated September 7, 1869.

To all whom it may concern:

Be it known that I, JOHN LUETH, of Kankakee, in the county of Kankakee and State of Illinois, have invented an Improved Cultivator; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings and letters marked thereon, making a part of this specification, in which—

Figure 1 is a perspective representation of my improved cultivator; Fig. 2, an enlarged perspective view of one of the hilling-shovels and standards, showing how the shovel is adjusted; Fig. 3, a side elevation of one of the cultivator-standards; Fig. 4, a section of Fig. 2, taken on line Z Z; Fig. 5, an elevation of one of the stirrups to which a shovel-beam is attached.

The nature of the present invention consists in adjusting and holding the hilling-shovels at the required angle by means of grooved wedges locking into grooves formed in either side of the back plates of said shovels, and in supporting the forward ends of the shovel-beams with reversible stirrups, whereby when the latter are inverted the position of the beams is so changed as to draw the shovels deeper in the ground, as the whole is hereinafter set forth.

A B' K represent an elevated axle, provided with depending standards B, which are placed a suitable distance apart to support the inner pivots, *b'*, of metal stirrups L, the pivots *b* at the outer ends of the stirrups having bearings in the vertical parts B' of the elevated axle. These pivots are placed at one side of the center of the stirrups, in order that when the latter are turned down on the pivots, as at Fig. 5, the beams G will draw the shovels H deeper in the ground than when they are turned up, as they are shown in Fig. 1.

The shovels shown at Fig. 1 are secured to the standards G' similarly to those in common use, and therefore need no particular description; but the hilling-shovel used to cultivate rows, and shown at Figs. 2 and 4, is fastened very differently, and made adjustable by the following means: A wedge-shaped piece, I, provided with two or more grooves on one side, and arranged to fit into a grooved shovel-plate, *n*, to which the shovel is fastened in the usual manner, said plate *n* having grooves

on both sides of the bolt *m*, Fig. 4, corresponding to the grooves in the wedge-shaped piece I, provides for so adjusting the shovel H on either side of bolt *m* as to throw the soil to or from a row, as the case may require. This means of placing the shovels on a required angle is very simple and convenient, inasmuch as one or both of the grooves *h* may be used, according to the pitch required, while at the same time, if the bolt is properly turned, the shovel will be held rigidly in place. The device for equalizing the draft consists of a draft-bar, C, which is pivoted to the rear end of the tongue S at D, and connected to an evenner, E, by means of draft-rods M, which are rigidly fastened to depending supports L, attached to the ends of said evenner E, said supports being provided with a series of holes, *l l*, &c., for the convenience of hitching the whiffletrees R at any required distance from the evenner, according to the pressure which the tongue S is to have on the necks of the team. This latter arrangement, however, I do not consider new, but specify it as a part of the complete cultivator.

It will be seen from the drawings that the cultivator is intended for the operator to walk in the rear of the wheels and guide the shovels by hand. If the shovels are required to run deeper in the ground, the pins *f*, with which they are pivoted to the stirrups F, can be removed and the stirrups turned the other side up, as shown at Fig. 5, and the beams again fastened with the pins, two or more pin-holes, *r*, being made through the stirrups in order to set the beam farther apart.

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

1. The wedge-shaped plate I, provided with grooves *h h*, in combination with the grooved back plate, *n*, shovel H, bolt *m*, and standard G', as set forth.

2. The reversible stirrups F, provided with pivots *b b'*, placed at one side of their center, in combination with the beams G, standards G', shovels H, depending standards B, and vertical parts B' of the elevated axle, as and for the purpose set forth.

JOHN LUETH.

Witnesses:

THOMAS KERR,
GEORGE VAIL.