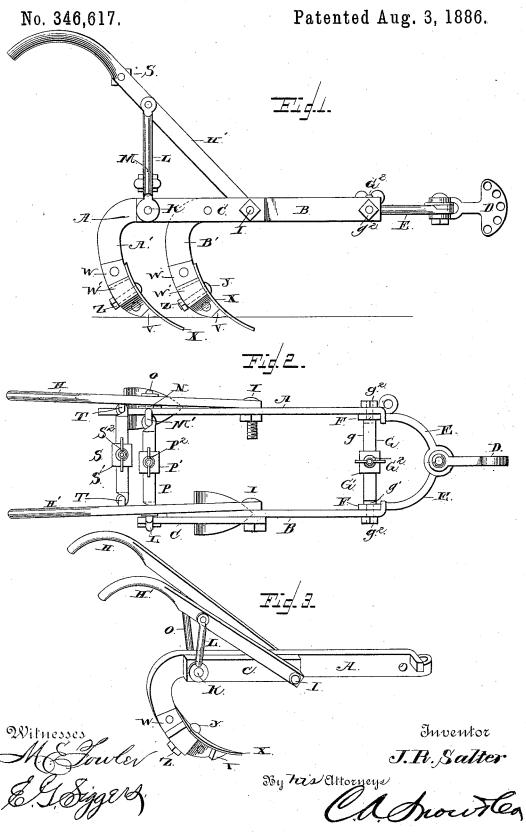
## J. R. SALTER.

CULTIVATOR.



## UNITED STATES PATENT OFFICE.

JOSEPH RILEY SALTER, OF THOMASVILLE, GEORGIA.

## CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 346,617, dated August 3, 1886.

Application filed February 1, 1886. Serial No. 190,476. (No model.)

To all whom it may concern:

Beitknown that I, JOSEPH RILEY SALTER, a citizen of the United States, residing at Thomasville, in the county of Thomas and State of 5 Georgia, have invented a new and useful Improvement in Cultivators, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improvement in convertible double and single cultivators; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is an elevation of my invention as arranged to form a double cultivator. Fig. 2 is a top plan view of the same. Fig. 3 is a perspective view of my invention as arranged to form a single shovel 20 cultivator.

A B represent the beams, which are made of iron, and have their rear ends bent downwardly and curved, as at A' B', to form the feet or standards in the usual way. The beam 25 B is shorter than the beam A, and has a rearwardly-extending arm, C, bolted to it, as shown, to render it equal in length to the said beam B.

D represents a clevis, to which are hinged 30 curved arms E. Eyes F are formed in the rear ends of these arms, and through these eyes, and through openings in the front ends of the beams, pass the threaded ends of the extensible coupling-bar G. This coupling-bar 35 is made of sections g and g', the inner portions of which are flattened, and clamped together by a sleeve, G', and a set screw,  $G^2$ . Nuts  $g^2$  are screwed on the outer threaded ends of the bar G, and bear against the outer sides of the 40 beams.

Hand H'represent handles, that are attached to the beams A and B, respectively, by means of bolts I. A bolt, K, passes transversely through the rear end of the arm C, and to one 45 end of the said bolt is attached a brace-rod, L, the upper end of which is attached to the handle H'. To the inner end of the bolt K is attached a vertical eye-link, M. A bolt, N, secures a brace-rod, O, and an eye-link, M',

to the beam A, the brace-rod O being connected 50 to the handle H.

P represents an extensible coupling bar, which is formed like the bar G, and has a similar sleeve, P', and set-screw P2, the outer ends of the said bar P being linked into the 55 eye-links M and M'. The handles are connected together by an extensible coupling-bar, S, which is like the bars P and G, and is likewise provided with sleeve S' and the set-screw The outer ends of the bar S are connected 60 to the handles by means of eyes T, which are linked to the bar S and secured to the handles. By means of this construction it will be readily understood that the beams A and B are flexibly connected together, so that one may 65 be raised and lowered independently of the other, and it will be also readily understood that the said beams may be adjusted laterally, according to the width of the rows.

When it is desired to connect the cultivator 70 to a single-shovel cultivator, the beams A and B are disconnected, the arm C is removed from beam B and attached to the beam A, and the handles are attached to the said beam, and the brace-rods L and O attached to the arm C and 75 to the handles, as shown in Fig. 3. The lower end of the foot of each beam is provided with a laterally-projecting stud, V, and to the outside of the foot is bolted a plate, W, which is bent to form a recess, W'. This plate serves 80 to form a means for the attachment of the plow or cultivator-shovel X, the rear side of which bears against the front side or edge of the plate, the stud, and the plow-foot, and a bolt, Y passes through the plow or cultivator-shovel, 85 and through the recess W', and has a clamping-nut, Z, on its rear end, which clamps the shovel firmly in place. By providing the beam B with the arm C, forming a rear extension of the said beam, the latter may be made shorter 90 than the beam A, thus enabling the shovels or plows attached to the standards formed at the rear ends of the beams to run one in advance of the other, the arm C serving as a support for the brace-rod of the handle attached to the os shorter beam.

Having thus described my invention, I claim—

1. The combination, in a cultivator, of the beam A, the shorter beam B, connected thereto, and having the rearward-extending detachable arm C, the handles attached to the beams, and the brace-rods therefor, one of the said brace-rods being attached to the beam A, and the other attached to the arm C, forming the rear extension of beam B, substantially as described.

2. The combination of the beams, the flexible clevis-arms E, the extensible coupling-bar G, having its ends pivoted in the front ends of the

said beams, and the extensible coupling bar P, having its ends linked to the beams, whereby the latter may be adjusted laterally and 15 raised or lowered each independently of the other, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

presence of two witnesses.

JOSEPH RILEY SALTER.

## Witnesses:

J. N. CARTER,

J. G. TENNISON.