

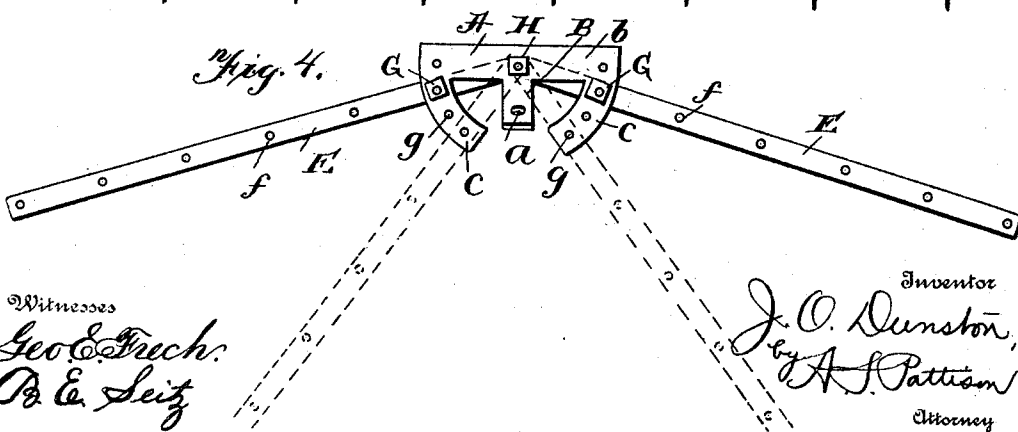
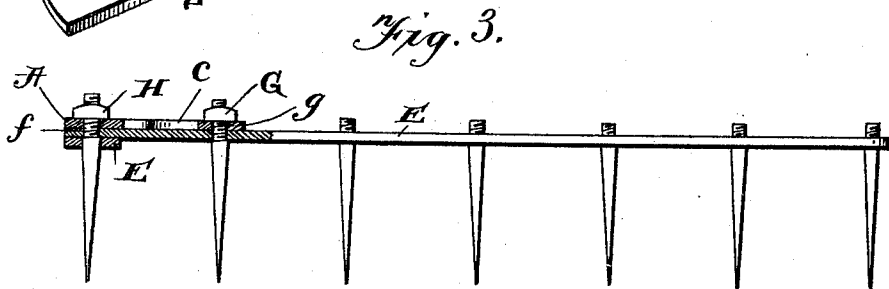
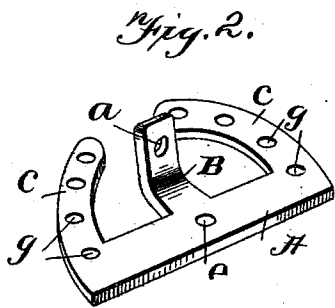
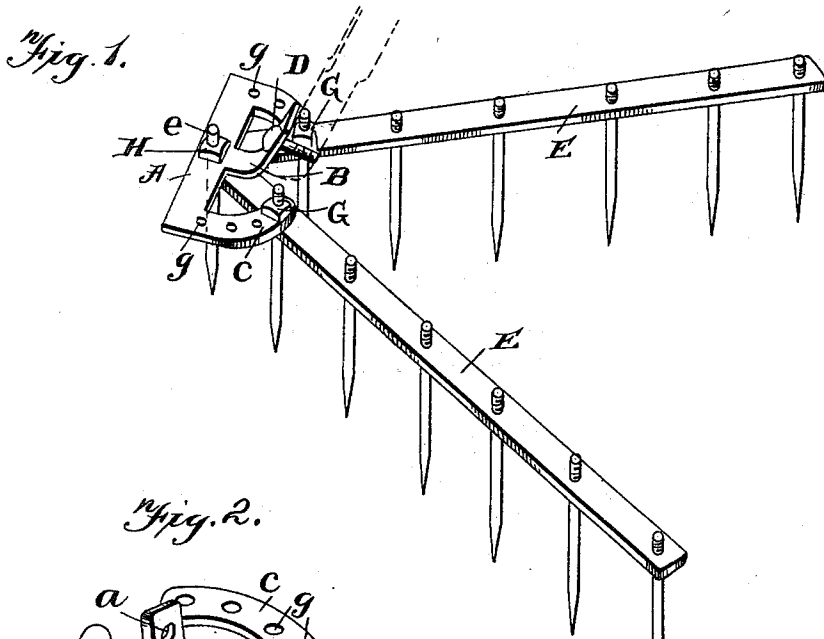
No. 619,151.

Patented Feb. 7, 1899.

J. O. DUNSTON.
CULTIVATOR.

(Application filed Oct. 10, 1898.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

JACKSON O. DUNSTON, OF NEWBERRY, SOUTH CAROLINA.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 619,151, dated February 7, 1899.

Application filed October 10, 1898. Serial No. 693,168. (No model.)

To all whom it may concern:

Be it known that I, JACKSON O. DUNSTON, a citizen of the United States, residing at Newberry, in the county of Newberry and State of South Carolina, have invented new and useful Improvements in Cultivators, of which the following is a specification.

My invention relates to an improvement in cultivators, and pertains to a device constructed and adapted to be connected to the lower end of a plow-stock.

The object of my invention is to provide a cultivator composed of a plate adapted to receive the lower end of a plow-stock and two pivoted tooth-bars, the plate being so constructed that the tooth-bars can be laterally adjusted for expanding or contracting the cultivator, whereby a simple and cheap device is produced capable of attachment to an ordinary plow-stock.

In the accompanying drawings, Figure 1 is a perspective view of a device embodying my invention, a plow-stock being shown in dotted lines. Fig. 2 is a similar view of the supporting-plate detached. Fig. 3 is a vertical sectional view taken longitudinally one of the tooth-bars. Fig. 4 is a plan view of the device, showing in dotted lines the adjustment of the parts.

A is a plate provided at its center with an upwardly-extending ear or projection B. This projection is provided with an opening *a*, through which a clamping-bolt D is adapted to pass, the said bolt is also adapted to pass through the lower end of a plow-stock. If desired, this projection may be elongated for the purpose of providing sufficient length for an additional bolt-opening, whereby a double bolt-fastening may be secured for attaching the plate to the plow-stock. This plate has a transverse forward portion *b* and the rearwardly-curved arms *c*, the latter being provided with a plurality of openings *g*.

E represents two tooth-bars having their forward ends pivoted to the transverse forward portion of the plate at the point *e*, and these bars are provided with a transverse opening *f*, adapted to register with the openings in the arms of the plate. The series of openings in these arms are preferably formed on the arc of a circle drawn from the pivotal point of the tooth-bars, whereby a clamping-

bolt may be passed through either of these openings and through the opening in the tooth-bars for adjusting the bars to swing out straight across and parallel with the front portion of the plate or to drag straight behind or at any other desired angle, as will be readily understood.

The teeth of the cultivator are screw-threaded at their upper ends and screw into openings in the tooth-bars, and one of the teeth of each bar is elongated and passes upward through the tooth-bar and through the openings in the curved arms, whereby they are adapted to receive clamping-nuts G. The pivots of the forward ends of these tooth-bars are formed by one of the cultivator-teeth, which passes through the forward end of the tooth-bars and through the transverse front portion of the plate and receives a clamping-nut H. From this description it will be seen that the cultivator-teeth are constructed and adapted to serve as a pivotal point for the tooth-bars and as clamping-bolts for adjusting the tooth-bars at any desired angle.

From the above description it will be noted that I have produced a cultivator comprising but three parts, one a supporting-plate and the other two the tooth-bars, the same constructed to be attached to a plow-stock.

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

1. A cultivator comprising a plate adapted to be attached to a plow-stock, two tooth-bars pivotally connected at their forward ends to the forward portion of the plate, the plate having rearwardly-extending portions constructed to support the tooth-bars at any desired angle, and clamping members for the tooth-bars, substantially as described.

2. A cultivator comprising a plate having rearwardly-curved arms, a centrally-positioned upwardly-extending plow-stock projection, tooth-bars pivoted at their forward ends to the front portion of the plate, and adjustable means between the tooth-bars and the said arms, substantially as described.

3. A cultivator comprising a plate having a transverse front portion provided at its ends with rearwardly and inwardly curved arms, tooth-bars pivoted at their forward ends to the center of the transverse portion, the rear-

wardly-extending arms having a series of openings formed on the arc of a circle drawn with the pivotal point as a center, the plate having an upwardly and rearwardly extending attaching-arm, and clamping members for the tooth-bars, substantially as described.

4. A cultivator comprising a plate, tooth-bars pivoted at their forward ends to the forward portion of the plate, the plate having a rearwardly-extending disconnected and independent portion constructed to hold the tooth-bars in the desired adjustment, cultivator-tooth carried by the tooth-bars, the forward cultivator-teeth projecting upward through the said plate and tooth-bars, and a clamping member secured to the projecting end of the cultivator-teeth, substantially as and for the purpose described.

5. An improved cultivator comprising a plate having a forward portion A, rearwardly

and inwardly curved arms *c* provided with a plurality of openings, an upwardly-extending intermediate attaching projection adapted to receive and to be attached to a plow-stock, and tooth-bars pivotally connected to the forward portion A of the plate by a single bolt at a common point, the tooth-bars provided with openings adapted to register with the openings in the arms *c* of the plate, and teeth projecting through said openings in the tooth-bars and the arms *c* whereby the teeth serve as clamping members for the tooth-bars, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JACKSON O. DUNSTON.

Witnesses:

GEO. S. MOWER,
FRANK L. BYNUM.