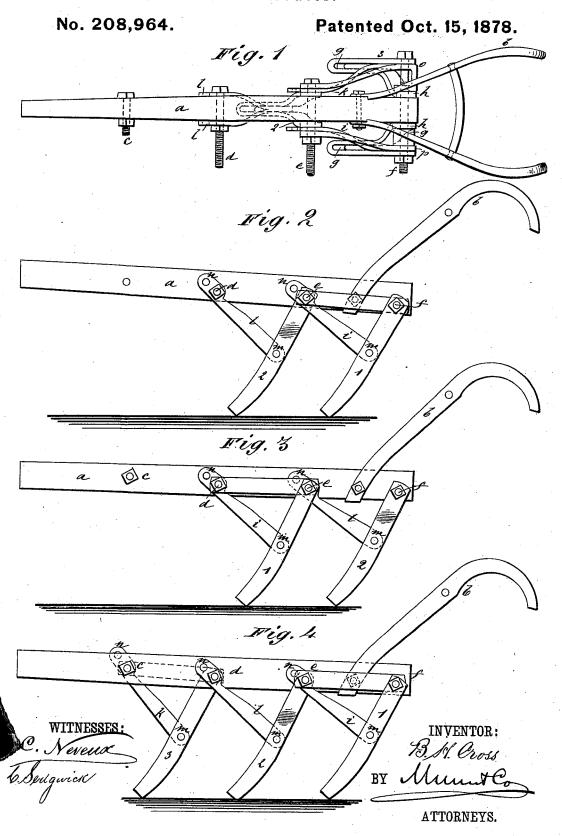
B. H. CROSS. Cultivator.



## UNITED STATES PATENT OFFICE.

BENJAMIN H. CROSS, OF CABANISS, GEORGIA.

## IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. **208,964**, dated October 15, 1878; application filed August 24, 1878.

To all whom it may concern:

Be it known that I, BENJAMIN H. CROSS, of Cabaniss, in the county of Monroe and State of Georgia, have invented a new and Improved Plow and Cultivator, of which the following is a specification:

The object of my invention is to construct a plow adapted to the various kinds of work necessary in the cultivation of cotton and other

The invention will first be described in connection with the drawing, and then pointed out in the claim.

In the accompanying drawings, Figure 1 is a plan view, and Fig. 2 a side elevation, of the plow arranged for opening and bedding land for cotton-planting. Fig. 3 is an elevation of the plow as arranged for opening balks, and Fig. 4 is an elevation of the plow arranged for general plowing.

Similar letters of reference indicate corresponding parts.

a is a plow-beam, having handles b of usual character. 1, 2, and 3 are the plow-standards, attached to the plow-beam a by screwbolts c, d, e, and f, that pass through transverse holes in the beam and through the standards and their braces.

Each of the standards 1, 2, and 3 is formed of a flat strip of metal, bent double lengthwise to form a slot, g, for the attachment of the plowshare and mold-board. (Not shown.)

The standard numbered 1 is bent outward at one side to form an offset, h, that is to be placed next to the plow-beam.

The standard numbered 3 is similarly made, except that the offset h is upon the opposite side of the standard.

The standard numbered 2 is intended to run in line with beam a, and is set off at its upper end in both directions to form a jaw that embraces the beam a.

i and k are braces, connected in the slot g of the standards 1 and 3 by pins m, and bent so that their outer ends come against the side of beam a. These braces i k are each long enough to extend to the hole in beam a next and braces.

in front of the standard, and they are provided with holes for the bolts that secure them.

The brace l of the standard 2 is forked at its outer end (see Fig. 1) to pass at each side of the beam, and is secured by the bolt d.

Each brace i, k, and l is provided with a second hole, n, whereby the angle of the standards may be varied by changing the cross-bolts c, d, or e to those holes.

o is a bracket, placed between the two sides of the standard 3 at the offset h upon the bolt f, Fig. 1, and it extends to the bolt e, which holds its outer end. This bracket o serves to brace the upper end of the standard 3.

The standard 1 is provided with a bracket, p, for a similar purpose; but the bracket p is used in connection with a short sleeve, q, on the bolt f, the action of which is the same as the bent end of bracket o—that is, to keep the two parts of the standards apart and make a solid bearing for the bolts.

The position of the standards upon the beam relatively to each other is to be varied according to the work which is to be done.

As shown in Figs. 1 and 2, the standards 1 and 3 will have a right and left hand plow connected to them, so that they turn a furrow toward the center, while the standard 2 will have a plow for opening a furrow. By leaving off number 2 the plow will then serve for covering corn and cotton.

As arranged in Fig. 4, the plow will answer for general plowing, and will turn three furrows at once, number 2 in this case running in line with the beam, and numbers 3 and 1 to the right and left hand, respectively

the right and left hand, respectively.
Standard numbered 2 may be used alone to form a single plow, in which case it would be placed at the rear of the beam, as seen in Fig. 3.

The brackets a and p can be formed of a solid block of wood, triangular in shape, and having holes for the bolts to pass through.

The bolts *ef* are to be long enough to carry the parts, as shown in Fig. 1, and they are each provided with nuts for securing the standards and braces.

A combined plow and cultivator having the bracket o, bent as described, and arranged

I do not limit myself to the exact details of construction set forth, as they may be varied without departing from my invention.

Having thus described my invention, I claim as new and desire to secure by Letters Pat-BENJAMIN HOWARD CROSS. Witnesses:

NATHAN GOGGEN, STEPHEN D. JACKSON.