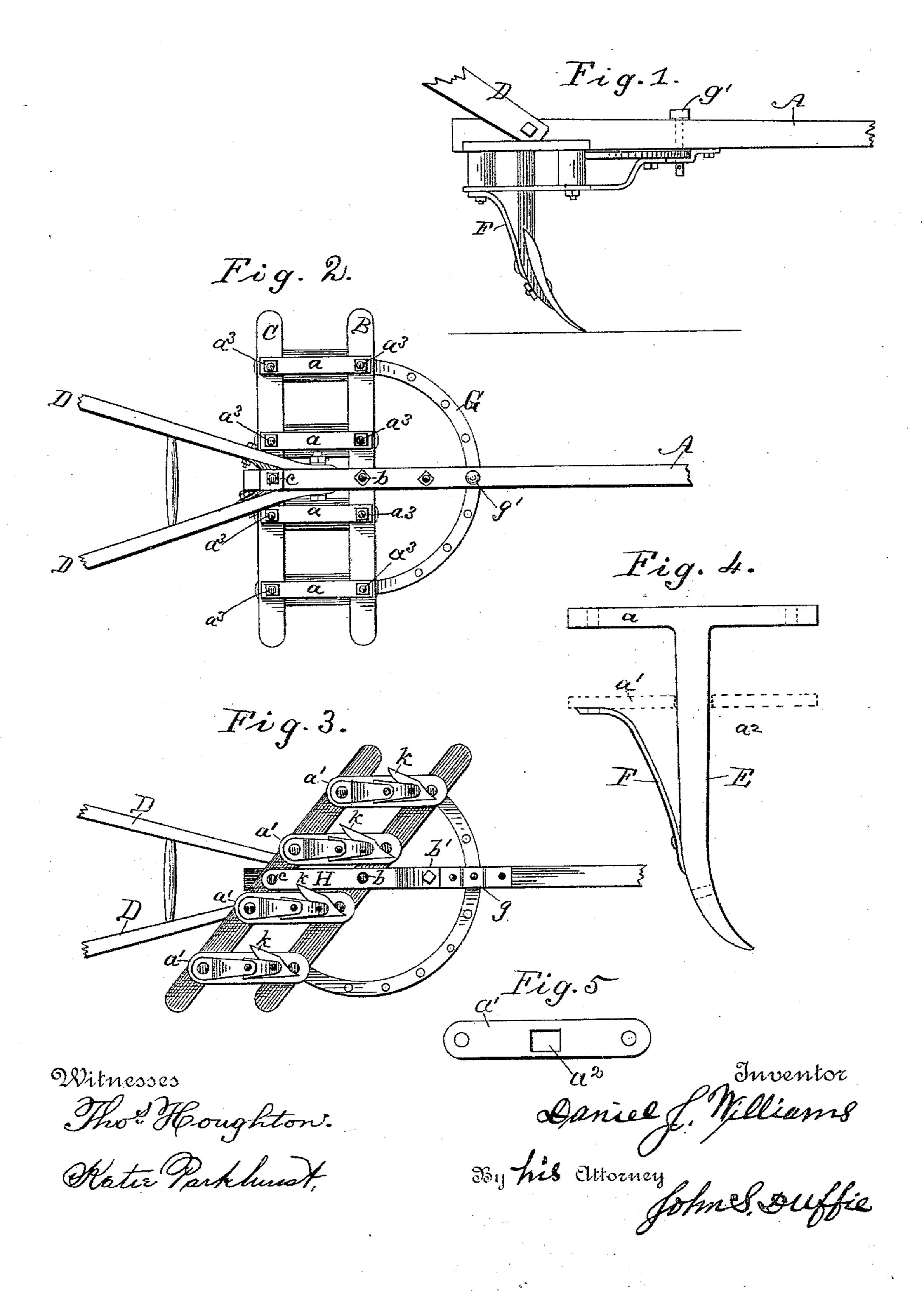
(No Model.)

## D. J. WILLIAMS. CULTIVATOR.

No. 373,708.

Patented Nov. 22, 1887.



## United States Patent Office.

DANIEL J. WILLIAMS, OF HAMPTON, ARKANSAS.

## CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 373,708, dated November 22, 1887.

Application filed July 25, 1887. Serial No. 245,224. (No model.)

To all whom it may concern:

Be it known that I, DANIEL J. WILLIAMS, a citizen of the United States, residing at Hampton, in the county of Calhoun and State of 5 Arkansas, have invented certain new and useful Improvements in Cultivators; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it 10 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention has relation to cultivators; and it consists in the novel construction and arrangement of its parts, as hereinafter fully set out in this specification and claim hereto

attached.

20 Referring to the accompanying drawings, Figure 1 is a side elevation of my invention with the handles broken away. Fig. 2 is a top plan view of the same. Fig. 3 is a bottom plan view of the same. Fig. 4 is a side ele-25 vation of one of the plow-standards, its upper end terminating in a bar. Fig. 5 is a face view of one of the lower cross-bars a'.

My invention is described as follows:

The wood portion of my invention consists 30 of the tongue and draft-pole A, and of front and rear cross-beams, B C, and the handles D D, the front ends of which are bolted to the said draft-pole A. Between the crossbeams BC, and a little farther in rear and 35 immediately over the rear cross-beam, C, they are held to the said draft-pole by means of braces. These cross-beams BC run parallel to each other and are pivoted at their middle to the said draft-pole A by means of bolts 40 and nuts b c. These cross-beams are further pivoted together by means of eight (8) iron bars, four (4) of which, a, are the head-piece and a part of the plow-standards E, and are pivoted on the upper face of said cross-beams. 45 The other four (4) a' are considerably wider than the first four mentioned, and are pivoted immediately under the same, and to the lower face of said cross-beams. The last-mentioned cross-bars a' have through their cen-

ter square opening  $a^2$ , through which the said 50 plow-standards E are put, and into which they fit. These cross-bars a a' are perforated at each end and are pivoted to the said crossbeams by bolts and nuts  $a^3$ , which pass through said perforations and through corresponding 55 perforations in said cross-beams. Said plowstandards E are further supported by means of a rear brace, F, which is bolted to the lower end of said standards, and to the lower face of the cross bars a', by means of the rear bolts 60 and nuts, a3. These cross-beams and crossbars are pivoted, so that they may be turned to the right or left at will, and in order to hold them in such position when so turned there is secured to the cross-bar B a perfo- 65 rated circular brace, G, the ends of which are secured between the upper face of said beam B and to the end cross-bars a by means of bolts and nuts  $a^3$ . The brace G works against the lower face of said draft-pole A, and is 70 held up against said face by means of a loop, g and is held rigidly in place by a bolt, g', which passes through draft-pole A and through one of the perforations in said circular brace G, and through the perforation in 75 the said loop g. Said draft-pole is further secured to said cross-beams B C by means of an under brace, H, which is pivoted to the lower face of the said cross beams by means of the bolts and nuts b c, and to the tongue by 80 an additional bolt and nut, b'. To the lower ends of the plow-standards E are secured plowpoints K.

In describing my invention, I have named the material out of which the model is con- 85 structed; but I do not confine myself to any particular material, reserving to myself the right to make my invention, or any part thereof, out of any suitable material. Nor do I confine myself to any particular shape of 90 plow-point, as the said plow-standards E are adapted to carry any plow-point.

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

In a cultivator, substantially as above described, having a draft-pole, A, under brace H, cross-beams B C, and circular brace G, the

cross-bars a', having in their centers square openings a<sup>2</sup>, pivoted to the lower face of said cross-beams, plow-standards E, fitting in said openings, their upper ends terminating in cross-bar a, and being pivoted to the upper face of said cross-beams, their lower ends braced by the brace F, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

DANIEL J. WILLIAMS.

Witnesses:
WILEY J. BUNN,
N. W. THOMPSON.