

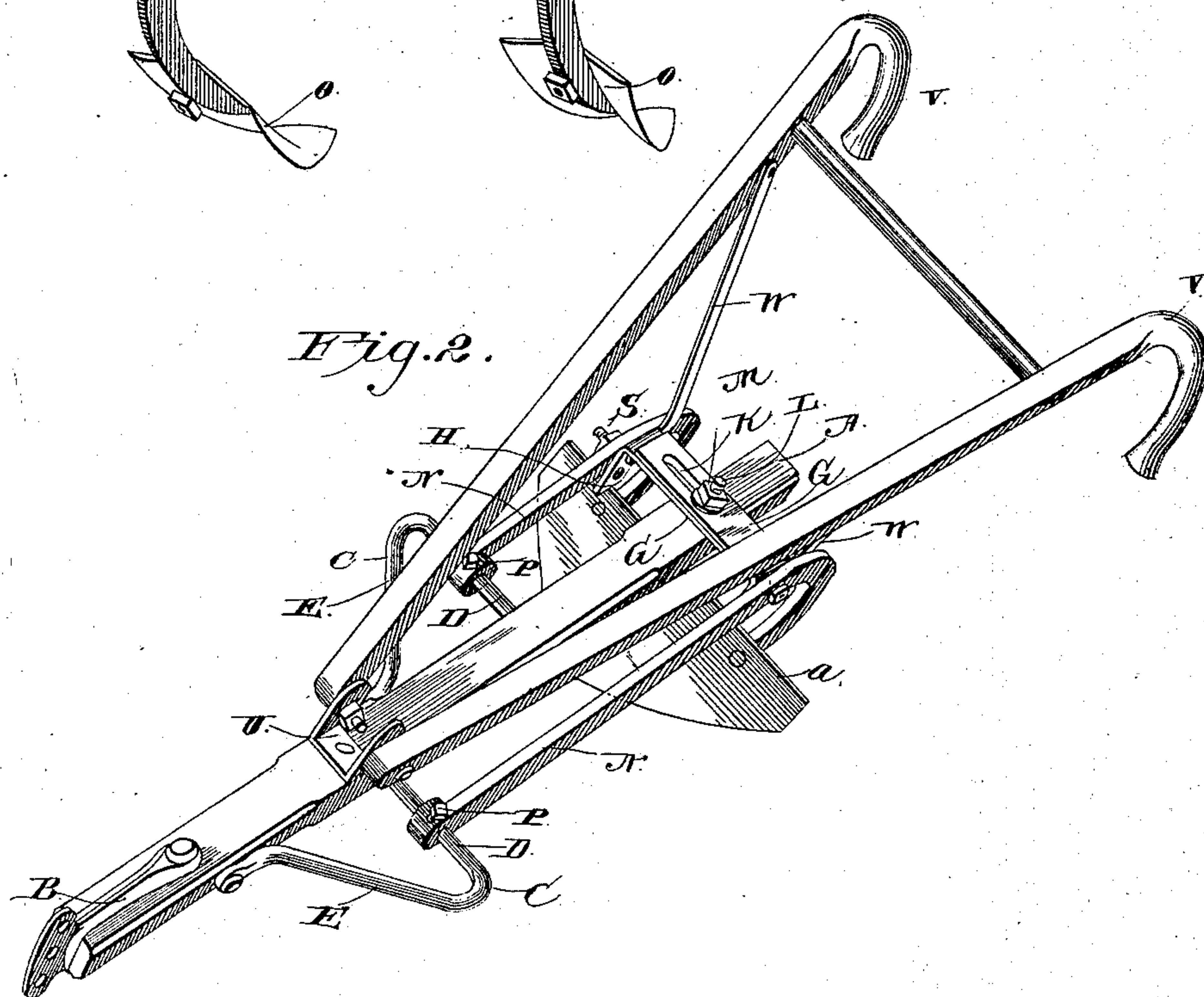
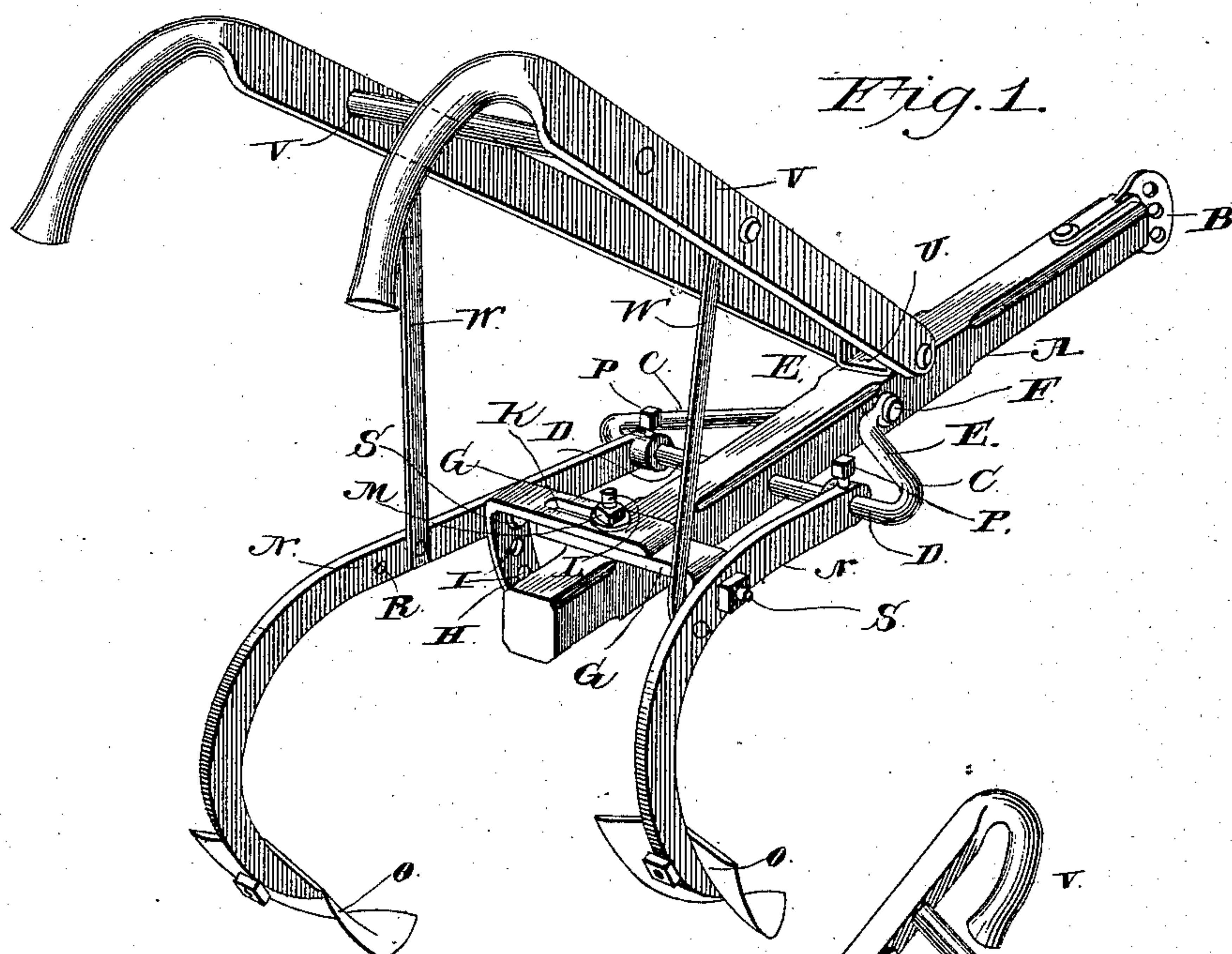
(No Model.)

2 Sheets—Sheet 1.

W. R. CRAIG.
COTTON SCRAPER AND SWEEP.

No. 388,398.

Patented Aug. 28, 1888.



Witnesses.

M. C. Fowler.
E. J. Siggers.

Inventor,
William R. Craig.

By *his* Attorneys

C. A. Snowdon.

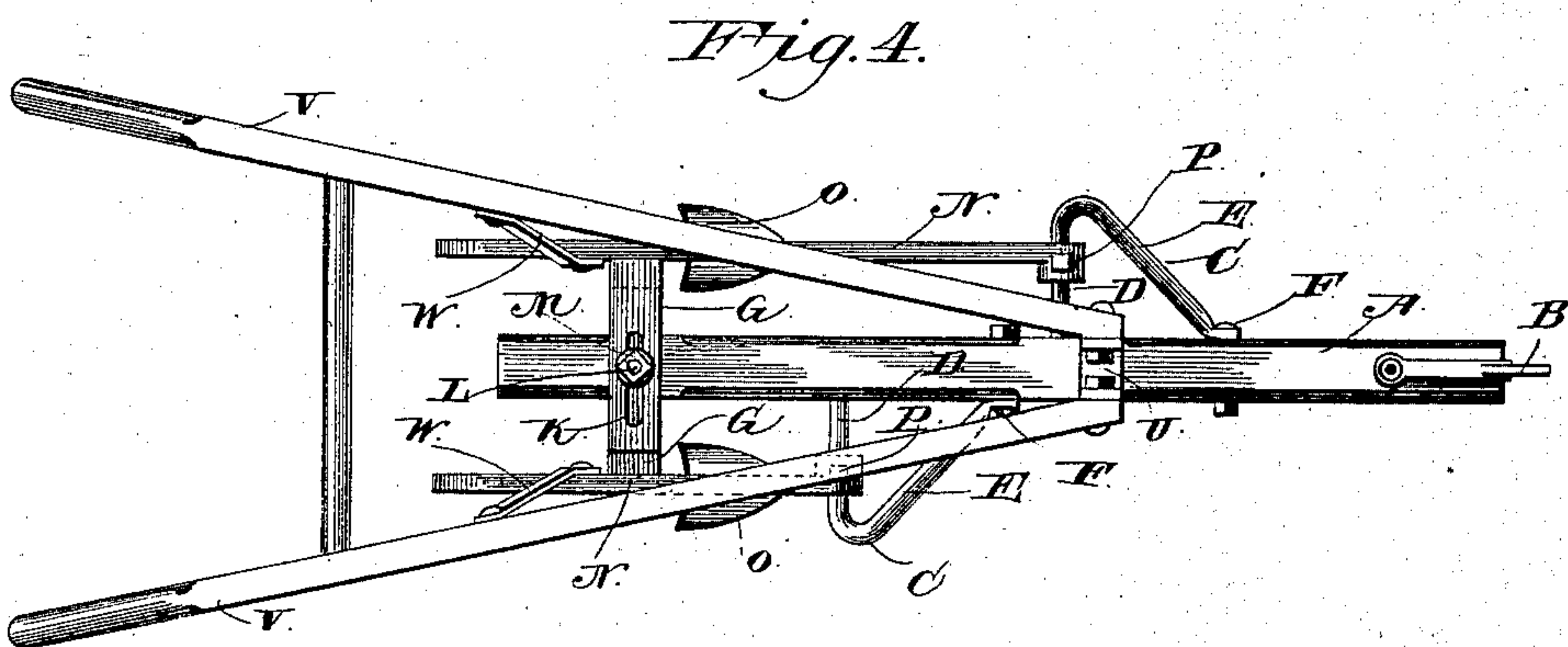
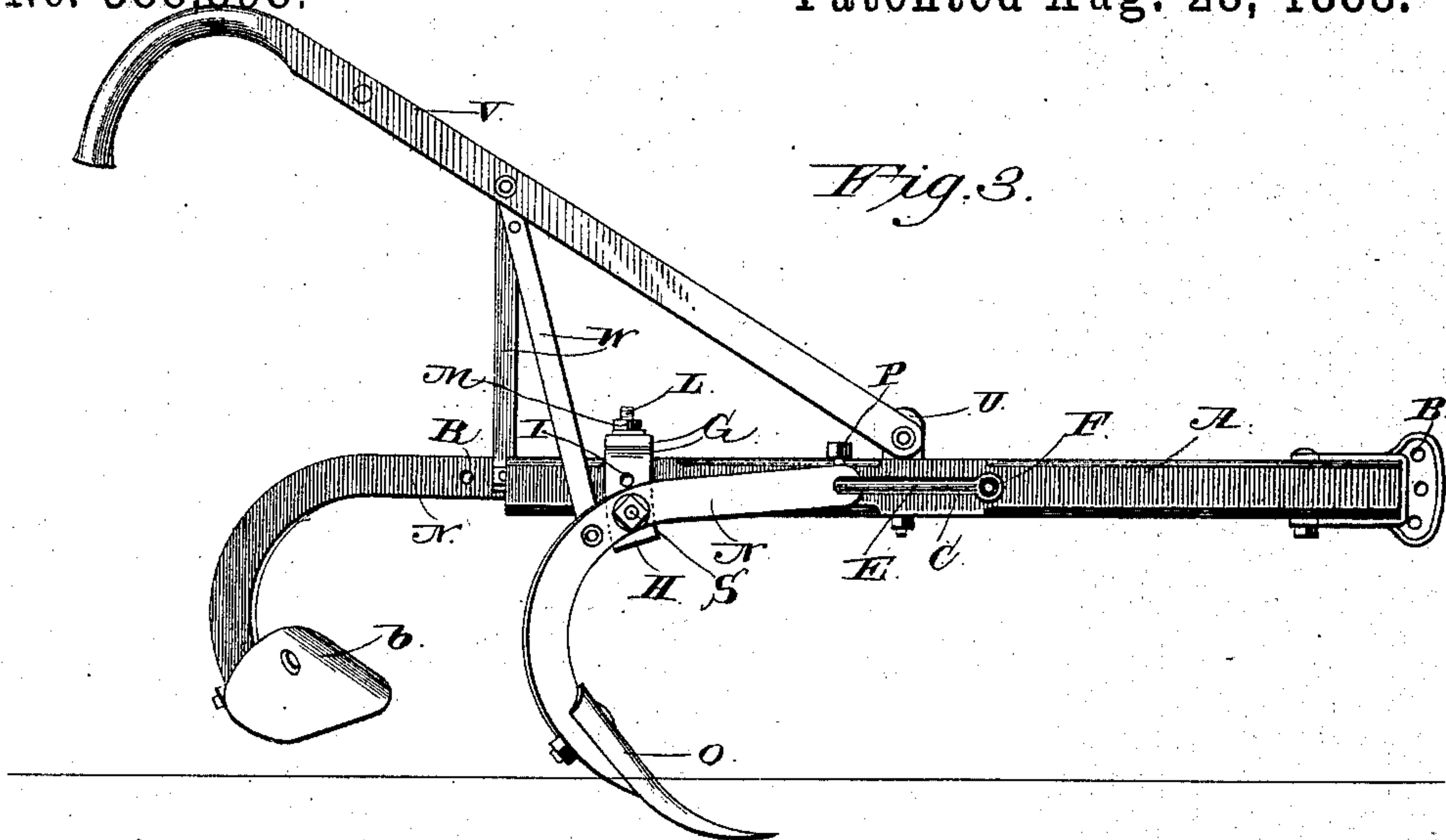
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UNITED STATES PATENT OFFICE.

WILLIAM ROBERT CRAIG, OF COLUMBIA, TENNESSEE.

COTTON SCRAPER AND SWEEP.

SPECIFICATION forming part of Letters Patent No. 388,398, dated August 28, 1888.

Application filed May 25, 1888. Serial No. 275,099. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM ROBERT CRAIG, a citizen of the United States, residing at Columbia, in the county of Maury and State of Tennessee, have invented a new and useful Improvement in Combined Cultivators, Cotton Scrapers and Sweeps, of which the following is a specification.

My invention relates to an improvement in double-shovel plows adapted for the attachment of cultivators and cotton-scrapers and cotton-sweeps; 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 accompanying drawings, Figure 1 is a perspective view of my invention when arranged as a cultivator. Fig. 2 is a similar view of the same when arranged as a cotton-sweep. Fig. 3 is a side elevation of the same when arranged as a cotton-scraper. Fig. 4 is a top plan view showing a different arrangement of the cultivator from that shown in Fig. 1.

A represents the beam, which is of suitable length and size, and is provided at its front end with a clevis, B.

C represents a pair of V-shaped yokes, each of which has a right-angled arm, D, and an oblique arm, E. The arms D of the yoke enter a transverse opening in the plow-beam, and the arms E of the said yokes have their outer ends bent nearly at right angles and bear against the sides of the beam and are provided with eyes, through which extends a bolt, F, that serves to connect the said arms firmly to the beam.

G represents a pair of right-angled arms, which have their outer ends turned downward to form standards H, and said standards are curved concentrically with the arms D of yokes C, and are provided with vertically-adjusting openings I. The inner ends of the arms D overlap and bear upon the beam A, and are provided with vertical longitudinal slots K.

L represents a bolt, which extends through the beam, projects upward through the slots K and has a clamping-nut, M, at its upper end, the function of which is to secure the arms G to the beam at any desired lateral adjustment. By this construction the arms G

are adapted to be extended from or drawn to opposite sides of the plow-beam, according to the width of the spaces between the rows of plants.

N represents a pair of metallic beams, which have their rear ends curved downward and adapted for the attachment of the cultivating plows or shovels O in the usual manner. The front ends of said beams N are provided with transverse openings, through which the arms D of the yokes C extend, the front ends of the beams thereby pivoted to the said yokes and adapted to turn in vertical planes thereon, and the said front ends of the beams are further provided with set-screws P, which are adapted to impinge on the arms D, so as to secure the beams firmly thereto. The beams N are further provided at a suitable distance from their front ends with openings R, which are adapted to register with the openings I of the standards H, and bolts S extend through said registering-openings R and I and serve to clamp the beams N to the standards H at any desired vertical adjustment, thus enabling the said beams to be arranged either in the same plane or in different planes, according to the character of the soil and the condition of the growing plants. When one of the beams is arranged higher than the other, one of the cultivating-shovels is caused to work much deeper in level ground than the other, and when thus arranged the shovel which penetrates the earth to only a slight depth will be caused to run nearest the growing plants to avoid injuring the same, while the more deeply-running shovel will thoroughly stir and pulverize the soil at a somewhat greater distance from the plants, and thereby prevent the growth of weeds. When the arms G are extended or contracted so as to move the beams N toward or from each other, the front ends of said beams slide laterally on the front ends of the arms C, the beams thereby being kept parallel at all times. One of the beams is longer than the other, and when the arms D of the yoke are in line with each other one of the cultivating teeth or shovels is caused to operate in advance of the other. If it be desired to have the said shovels or teeth operate abreast of each other, this may be accomplished by securing the yoke which is attached to the longer beam to the beam A at a

distance in advance of its former position, as shown in Fig. 2.

On the upper side of the beam A, on the upper end thereof, is bolted a U-shaped plate, U, to the vertical ears or lugs of which are pivoted the lower front ends of a pair of handles, V. The said handles are each provided with a downward-extending brace-rod, W, said brace-rods having their upper ends pivoted to the handles and their lower ends pivoted to the beams N.

When the beams N are arranged as shown in Fig. 2, with their curved rear ends abreast of each other, a cotton-sweep, a, may be attached to their lower ends in lieu of the cultivating-shovels O, thereby adapting the machine to be used for this purpose.

In Fig. 3 I illustrate another arrangement of my improved cultivator, in which a cultivating-shovel or bull-tongue is secured to the shorter beam on the right-hand side of the machine, and a cotton scraper, b, is secured to the longer beam on the left-hand side of the machine.

Other arrangements of cultivating-shovels and further dispositions of the beams N may be made to suit the varying needs of agriculture.

The longer beam may be arranged on either the right or left side of the beam A and the shorter beam on the opposite side thereof, so as to enable the device to be operated either as a right-hand or a left-hand plow.

Having thus described my invention, I claim—

1. The combination of the beam A, the yokes C on opposite sides thereof, said yokes having the right-angled arms D and the oblique arms E, the latter being bolted at their outer ends to the beam, the beams N, pivoted to and laterally adjustable on the arms D of the yokes, and the extensible arms G, connecting said beams to the beam A, substantially as described.

2. The combination of the beam A, the yokes C on opposite sides thereof, said yokes having the right-angled arms D and the oblique arms E, the latter being bolted at their outer ends to the beam, the beams N, pivoted to and laterally adjustable on the arms D of the yokes, the arms G, secured to and laterally adjustable on the beam A and having the vertical curved standards H at their outer ends, provided with the adjusting-opening I, the bolts L, engaging said openings and the beams N, and thereby adjustably securing said beams to said standards, the handles having the front ends pivotally connected to beam A, and the brace-rods pivoted to said handles and to the beams N, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM ROBERT CRAIG.

Witnesses:

M. F. WILSON,
F. M. NICHOLS.