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J. E. & F. L. ELDER.
WEEDER AND CULTIVATOR.
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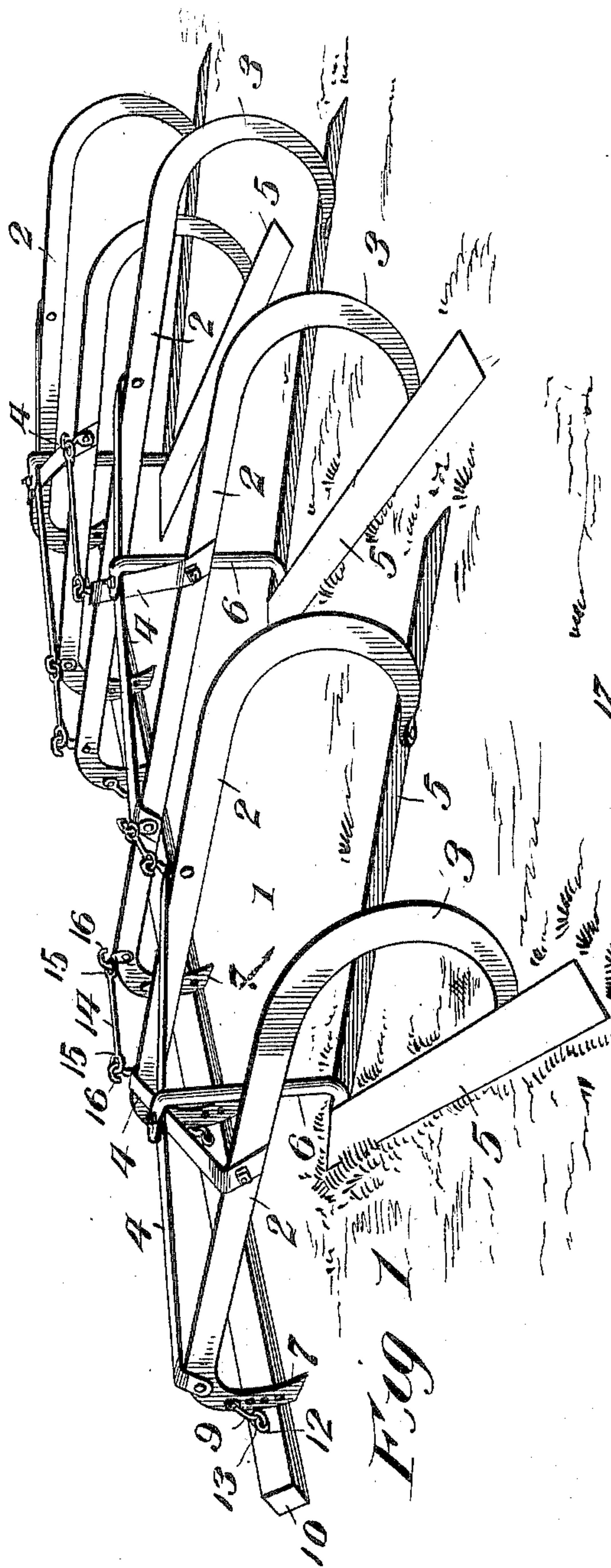


Fig. 1.

Fig. 2.

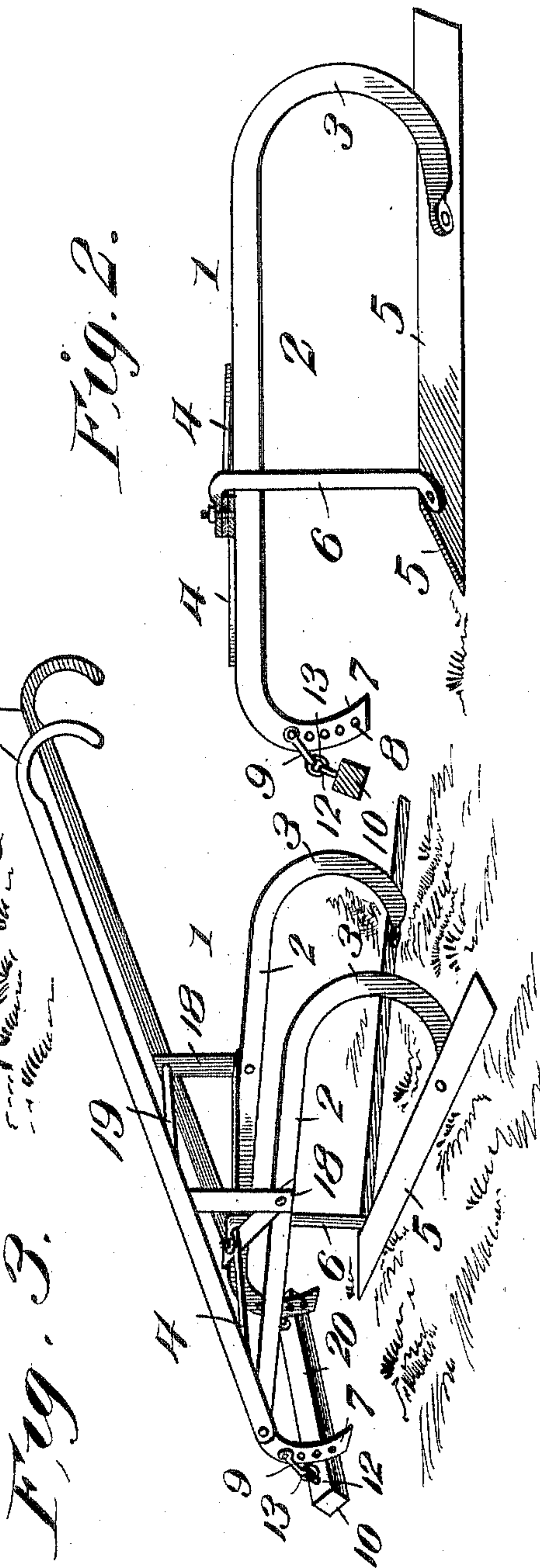


Fig. 3.

Witnesses

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WEEDER AND CULTIVATOR.

No. 817,052.

Specification of Letters Patent.

Patented April 3, 1906.

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To all whom it may concern.

Be it known that we, JAMES EDWIN ELDER and FREDRICK L. ELDER, citizens of the United States, residing at Dayton, in the county of Columbia and State of Washington, have invented certain new and useful Improvements in Weeders and Cultivators; and we 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 appertains to make and use the same.

This invention relates to improvements in weeders and cultivators.

The object of the invention is to provide a device of this character which will be particularly adapted for use on summer-fallowed ground to destroy the weeds thereon and to cultivate the same.

A further object is to provide means whereby a number of weeders or cultivators may be connected and drawn together or moved in unison, means being provided to hold the same properly spaced apart.

With the above and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of the device, showing three of the weeders connected and in position. Fig. 2 is a vertical longitudinal sectional view through one of the weeder-frames and the cultivator-blade carried thereby; and Fig. 3 is a detail perspective view of one of the cultivators, showing the manner of attaching handles thereto when the same is used in single form.

Referring more particularly to the drawings, 1 denotes the weeder and cultivator, consisting of a pair of beams 2, at the rear ends of which are formed downwardly and forwardly curved standards 3. Said standards and beams are preferably formed integral and of a single metal bar. The beams 2 are connected together and spaced apart by means of diagonally-arranged crossed brace-bars 4, the outer ends of which are bent downwardly and are bolted or otherwise secured to the outer sides of the beams 2, as shown.

To the forwardly-curved ends of the standards 3 are bolted or otherwise secured the

rear ends of a V-shaped cultivating and weeding blade 5. The forward end and point of said blade are bolted or otherwise secured to the lower right-angularly bent end of a supporting-bar 6, the upper end of which is bolted or otherwise secured to the crossed brace-bars 4. The blade 5 is preferably secured to the supporting-bar 6 and the standards 3, so that the blade will be disposed at an angle, as shown. The forward ends of the beams 2 are bent downwardly and rearwardly, as shown, to form clevis-bars 7, said clevis-bars being provided with a series of apertures 8, whereby a clevis 9 may be adjustably connected therewith. By thus providing an adjustable connection for said clevis the point of the cultivating and weeding blade may be caused to enter the ground more or less deeply, as desired, when the device is drawn along.

In using the device it is intended that two or more of the same be attached and drawn together, and when so used a suitable draft device will be provided, whereby the cultivators may be attached and drawn in unison, said draft device being here shown in the form of a draft-bar 10, which is provided at suitable intervals with clevis connections for attaching the same to the clevises 9 on the ends of the beams 2, said clevis connection being here shown and is preferably in the form of an eyebolt 12, which is passed through the draft-bar 10, said eyebolt being connected to the clevises by means of a ring 13. By this connection the weeders or cultivators will be loosely connected to the draft-bar, thus allowing sufficient play or movement to the same. When the weeders or cultivators are thus connected, the same are held apart at a suitable distance by means of spacing-bars 14, on the ends of which are formed eyes 15, adapted to engage hooks 16, secured to the inner sides of the beams 2 substantially midway between the ends of the same, as shown. When using the device in multiple form, three of the weeders are preferably connected together, and when so connected the beams of the centrally-disposed cultivator are preferably of greater length than the beams of the end cultivators and project beyond the rear of the same, thus causing the central cultivating-blade to work at a point in rear of the side blades.

While the device has been shown and de-

scribed as being used in multiple form, it is frequently desirable that a single arrangement, as shown in Fig. 4 of the drawings, be provided, and when used in this form the same is preferably provided with handles 17, which are bolted at their lower ends to the forward ends of the beams and are preferably attached thereto by means of the bolt which fastens the forward ends of the crossed brace-bars 4. The handle-bars are supported at a proper inclination by means of upwardly-projecting supporting-bars 8, the lower ends of which are bolted to the beams, preferably by means of the bolts which secure the rear ends of the crossed brace-bars 4 thereto. The handles are further provided with cross-bars 19, which brace and connect the same together. When the device is used in single form, as just described, the same is provided with a draft-bar 20, which is connected to the ends of the beams in the same manner as described in connection with the draft-bar 10.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

A weeder and cultivator comprising a pair of beams, downwardly and forwardly curved standards formed integral with the rear ends of said beams, diagonally-disposed, crossed brace-bars to connect said beams together near their front ends, a V-shaped inclined weeding and cultivating blade 5 removably connected to the forwardly-curved ends of said standards, a supporting-bar connected to said crossed brace-bars to support the forward end of said blade, a downwardly and rearwardly curved clevis-bar formed on the forward ends of said beams, said clevis-bar having formed therein a series of apertures whereby a draft-bar may be adjustably connected therewith, a draft-bar connected with the clevis of said beams and forming a brace for said beams, hooks connected with said beams, and a spacing-rod connected with said hooks to hold said weeder and cultivators apart, substantially as described.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

JAMES EDWIN ELDER
FREDRICK L. ELDER.

Witnesses:

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