H. M. BELDEN.

Cultivator.

No. 30,796. Patented Dec. 4, 1860.

Fig. 1.

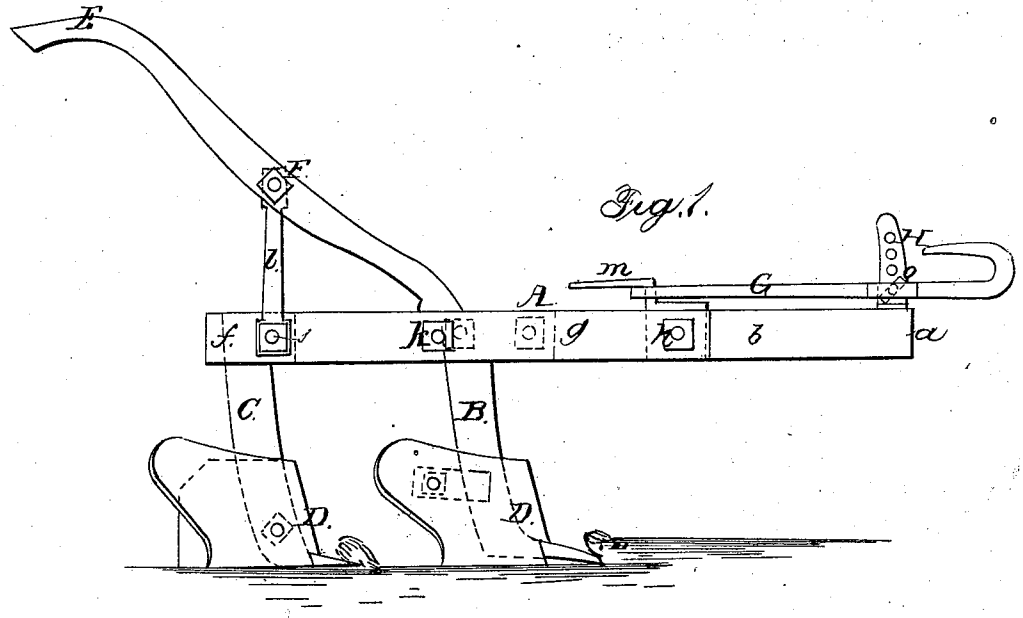
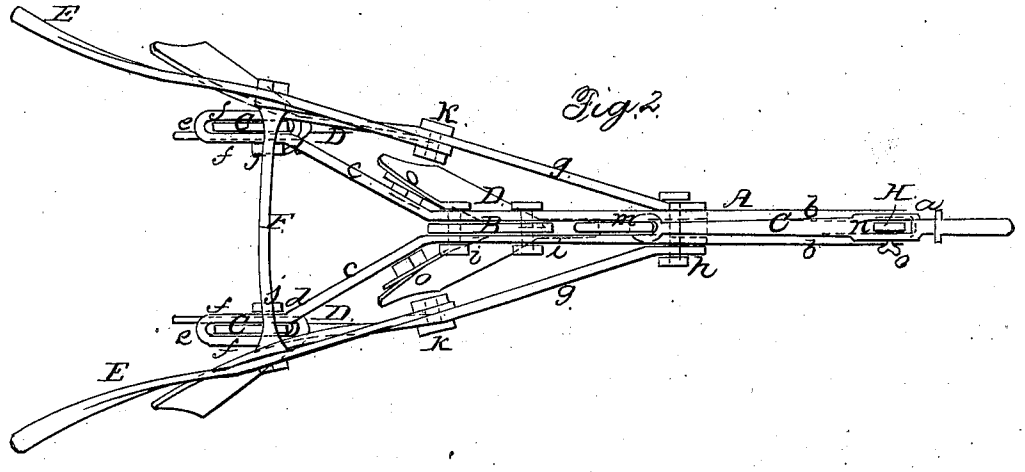


Fig. 2.



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UNITED STATES PATENT OFFICE.

H. M. BELDEN, OF FARMINGTON, OHIO.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. **30,796**, dated December 4, 1860.

To all whom it may concern:

Be it known that I, H. M. BELDEN, of Farmington, in the county of Trumbull and State of Ohio, have invented a new and useful Improvement in the Construction of Cultivators; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side view of a cultivator constructed according to my invention; Fig. 2, a plan or top view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

This invention relates to an improvement in the construction of that class of cultivators which are made of iron. Cultivators of this kind are very durable; but those hitherto introduced have been quite heavy and expensive to construct, and the increased draft, together with the expense, have prevented them from being generally adopted.

The object of the within-described invention is to obviate these difficulties, and by a very simple means—to wit, by forming the frame of a single piece of flat iron, bent as hereinafter shown and described.

To enable those killed in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the frame of the cultivator, which is constructed of a single bar of flat iron. This bar is bent at its center, as shown at *a*, so as to form two parallel side pieces, *b b*, which may be termed the beam of the implement. These side pieces extend back a suitable distance and then diverge at equal angles, forming a V, as shown clearly in Fig. 2, *c c* representing the diverging parts. The ends of the parts *c c* are then bent, each as shown at *d d* and *e e*, to form two parallel parts, *f f*, and the ends of the bar are then again bent obliquely, as shown at *g g*, and are secured to the side pieces, *b b*, by a bolt, *h*.

B is a standard which is secured between the back parts of the side pieces, *b b*, by bolts *i i*; and C C are standards which are secured between the parts *f f* by bolts *j j*. These bolts serve to strengthen the frame as well as to secure the standards to it. To the standards the usual teeth or shares, D, are attached, and to each part *f* of the frame the lower end of a handle, E, is secured by a bolt, *k*. These handles are connected by a cross-rod, E, and supported each by an upright, *l*.

G is a draft-rod, the back end of which catches over a hook, *m*, which is secured between the side pieces, *b b*. This rod has a hole or mortise, *n*, made through it near its front end, through which hole a perforated bar, H, at the front end of the frame passes. The rod G is secured at any desired point on the bar H by a pin, *o*.

From the above description it will be seen that the frame may be very expeditiously constructed, and that a very stiff and durable one may be obtained with but a light weight of metal; and hence the difficulties hitherto attending the construction of the iron-frame cultivators are obviated.

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

The frame A, composed of a single iron bar bent in the form as and for the purpose herein set forth.

HIRAM M. BELDEN.

Witnesses:

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