

(No Model.)

S. O. MASON.
CULTIVATOR.

No. 282,341.

Patented July 31, 1883.

Fig. 1.

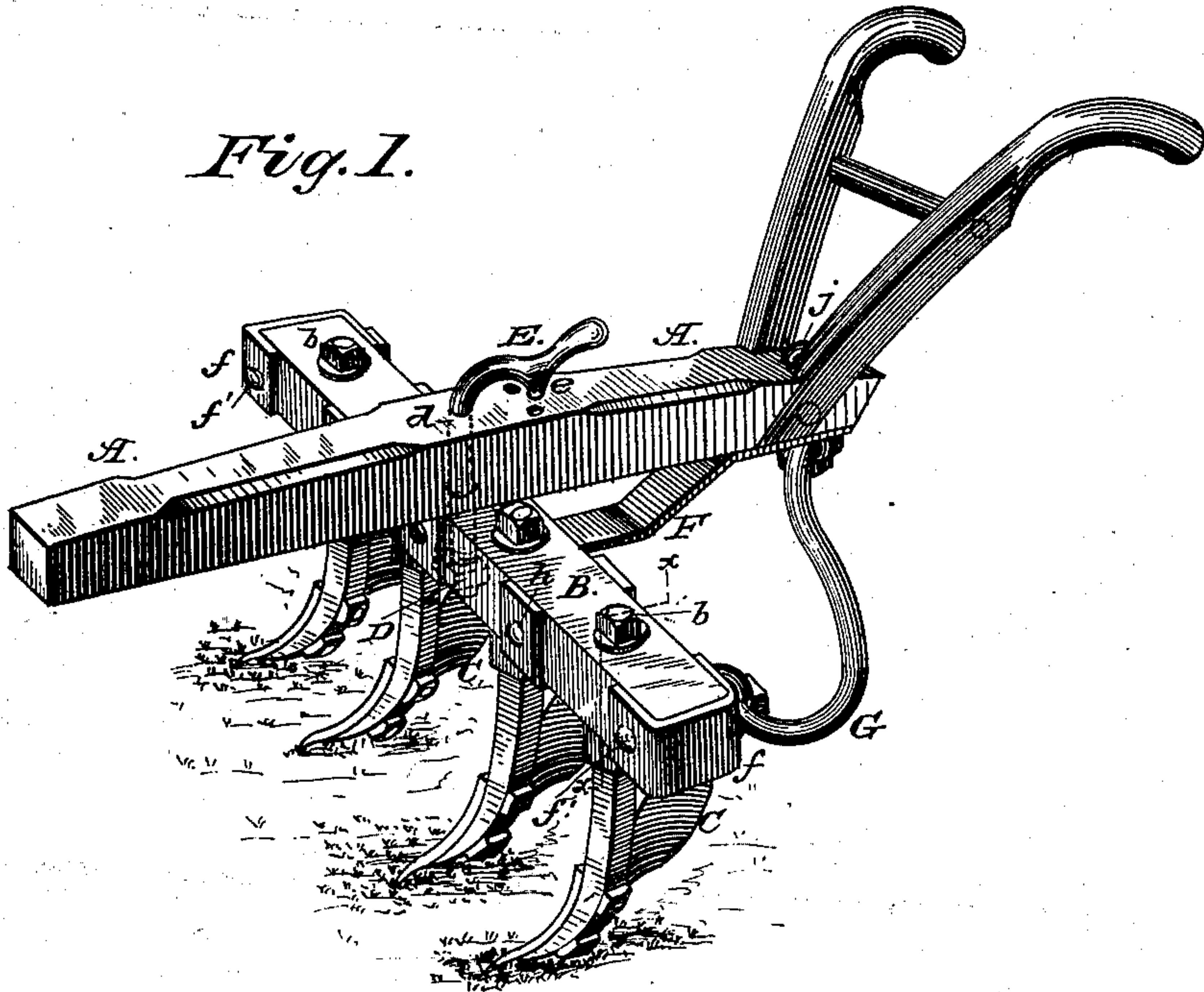


Fig. 2.

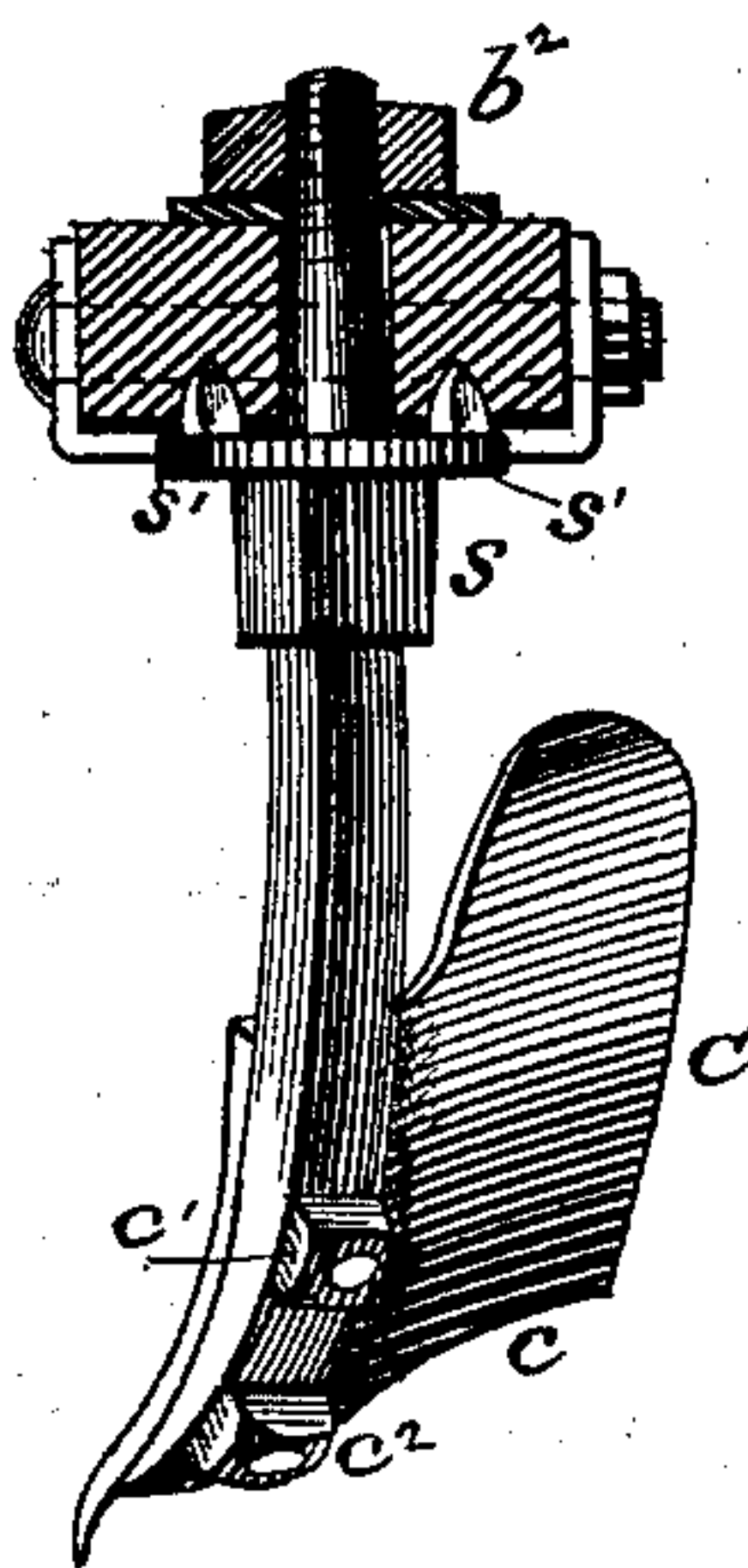
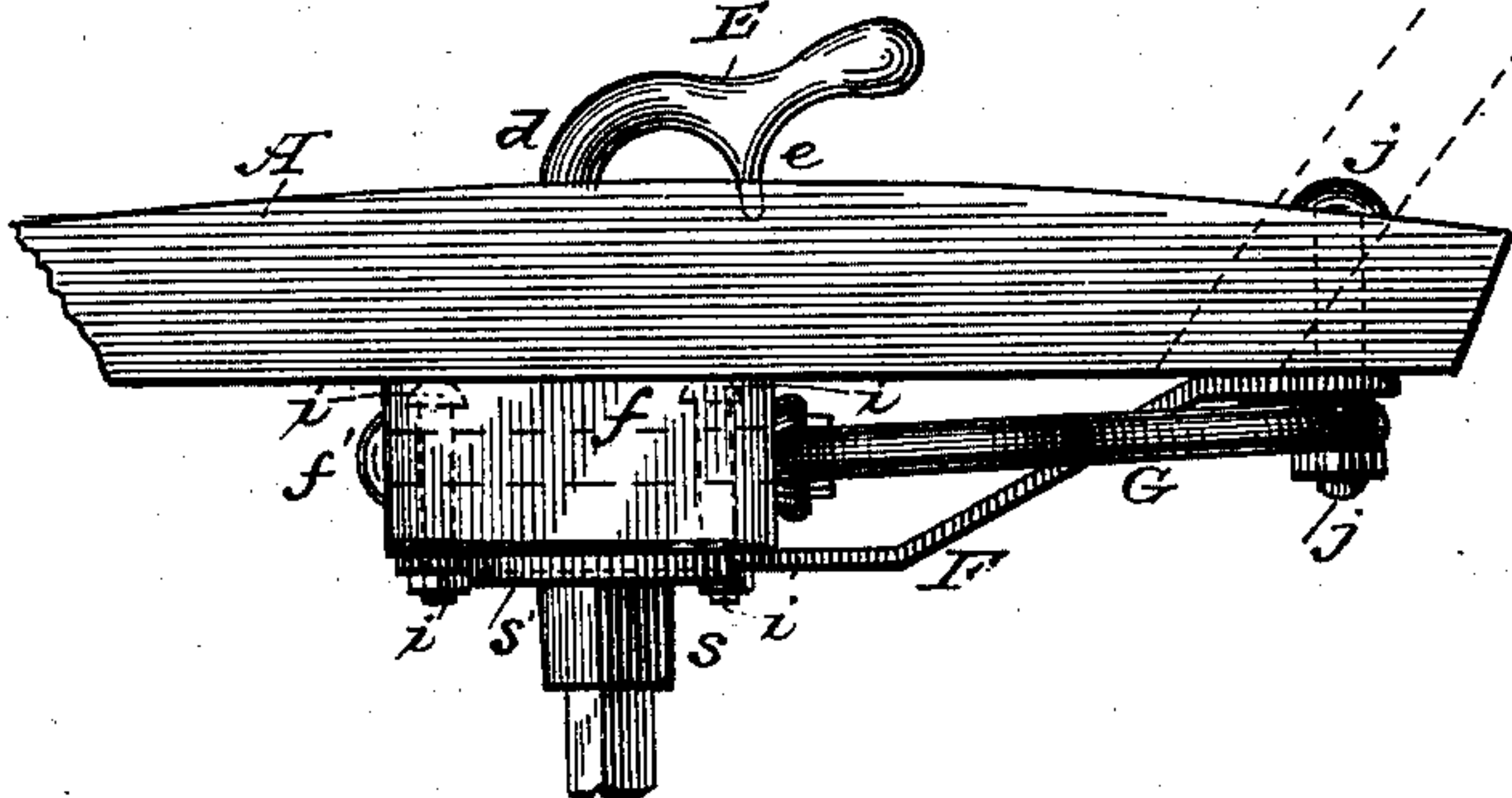


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

SAMUEL O. MASON, OF SNOW HILL, NORTH CAROLINA.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 282,341, dated July 31, 1883.

Application filed March 12, 1883. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL O. MASON, of Snow Hill, in the county of Greene and State of North Carolina, have invented a new and useful Improvement in Cultivators; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view. Fig. 2 is a sectional detail, showing the connection of the standards to the cross-beam B; and Fig. 3 is a partial side view, showing the connection of the cross-beam and plow-beam.

My invention relates to certain improvements upon the cultivator for which a patent was granted to me, in connection with McDonald Pate and William H. Dail, January 17, 1882, which improvements are designed to give greater strength to the cultivator, prevent splitting of the cross-beam, prevent turning of the shanks of the shovels, and make the blades of the shovels detachable, as hereinafter described.

In the drawings, A represents an ordinary plow-beam provided at its rear end with handles, and having attached to it, in inclined position, the cross-beam B, which should be, for ordinary use, inclined to the draft-beam at about an angle of forty-four degrees. This cross-beam carries the cultivating-shovels C, and it is attached to the draft-beam by a single bolt, *d*, having a bent end, E, with a toe, *e*, adapted to enter one of a series of notches or holes in the top of the beam, in which it may be held by a nut, D, at its lower end, to regulate the inclination of the cross-beam B to the draft-beam.

As so far described the construction does not differ from that already patented, and I will now proceed to describe my improvements.

I have found that the shanks of cultivator-shovels involve a liability to split the wooden cross-beam, and that the cross-beam requires to be more strongly braced to the main draft-beam. To remedy these defects, I place a metallic U-shaped bracket, *f*, around the end of the cross-beam, and fasten it by a horizontal through-bolt, *f'*, and upon the end of this same bolt I fasten the end of a brace-rod, G, that extends across the angle between the cross-beam and

draft-beam and fastens to the bottom of the draft-beam. I also use U-shaped brackets between the cultivator-teeth applied to the under side of the beam B, and secured by a through-bolt, as shown at *h*. To add further strength to the connection of the two beams, a brace, F, is bolted by two bolts, *i i*, to the under side of the cross-beam, and at its rear end is bolted to the under side of the draft-beam by a bolt, *j*, which latter also secures the brace G. It will thus be seen that this bolt *j* does double duty in holding both braces, and that the bolt *f'* also does double duty in holding the other end of brace G and the metal bracket *f*. To hold the shanks of the cultivator-teeth against turning, the shanks of said teeth are made square below and rounded and screw-threaded at the upper end. At the juncture of the square and round parts is a detachable sleeve, *s*, with a square hole through it, and a flange, *s'*, with two teeth or points on its upper face. This sleeve shoulders on the square part of the shank, and when a nut, *b²*, on the upper side of the beam is screwed upon the end of the shank it draws the flanged sleeve up against the under side of the beam, and its teeth are caused to bury in the wood, and by its square fitting on the shank of the tooth the latter is prevented from turning. I also make the wings *c* of the cultivator-teeth detachable by two bolts, *c' c²*, so that when worn new blades may be put on without removing the shanks from the beam.

Having thus described my invention, what I claim as new is—

1. The combination of the beams A and B, the braces F and G, the U-shaped bracket *f*, the bolt *j*, connecting the two braces to the beam, and the through-bolt *f'*, connecting the lever G and the bracket *f* to the cross-beam B, substantially as shown and described.

2. The combination, with the beam B, of the cultivator-tooth having a square shank with rounded and screw-threaded end, the detachable square sleeve *s*, having flange *s'*, and teeth or points upon its upper surface, and the nut *b²*, all arranged substantially as shown and described.

SAMUEL O. MASON.

Witnesses:

MILES RASBERRY,
D. W. PATRICK.