(No Model.)

A. S. GILKEY.

CULTIVATOR ATTACHMENT.

No. 481,667. Patented Aug. 30, 1892.

Fig. 1.

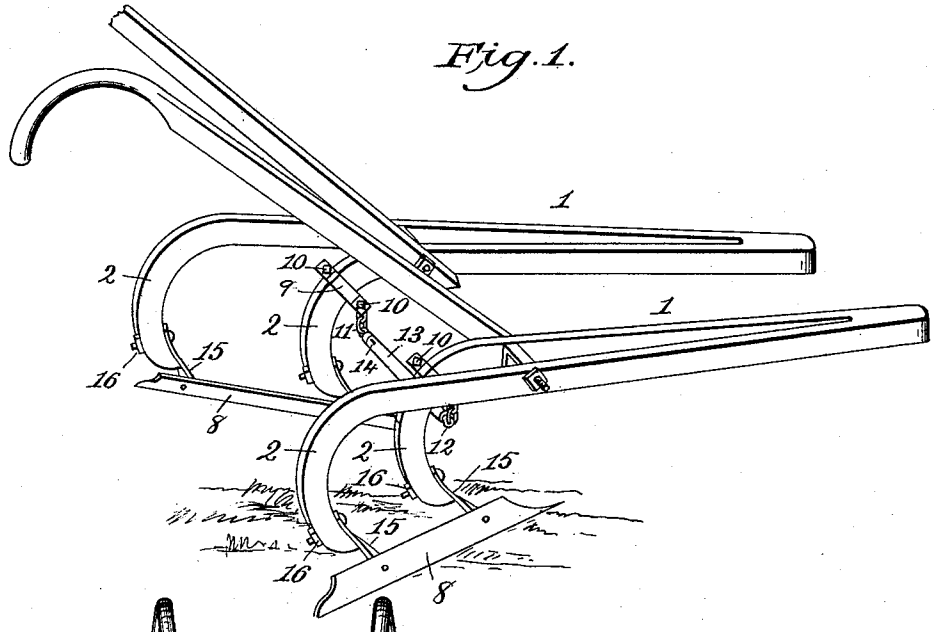


Fig. 2.

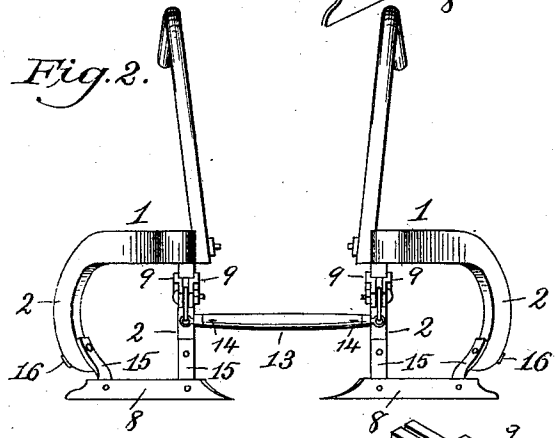


Fig. 3.

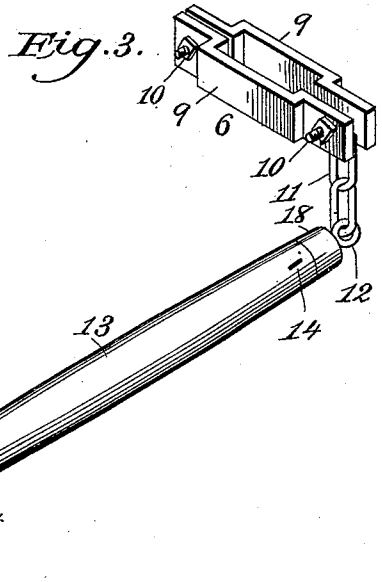
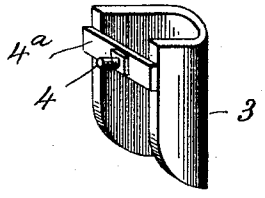


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

ALBERT S. GILKEY, OF BURLINGTON, KANSAS.

CULTIVATOR ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 481,667, dated August 30, 1892.

Application filed October 9, 1891. Serial No. 408,239. (No model.)

To all whom it may concern:

Be it known that I, ALBERT S. GILKEY, a citizen of the United States, residing at Burlington, in the county of Coffey and State of Kansas, have invented a new and useful Cultivator Attachment, of which the following is a specification.

This invention relates to improvements in listed-corn cultivators, and has special reference to an attachment for the ordinary corn-cultivator of the sulky pattern, whereby it is adapted for cultivating listed corn.

The objects and advantages of the invention, together with the novel features thereof, will be particularly pointed out in the following description and claims.

Referring to the drawings, Figure 1 is a perspective of a cultivator provided with my improved attachment, whereby it is adapted for cultivating listed corn. Fig. 2 is a front elevation of the same. Fig. 3 is a detail in perspective of the clamps and yoke-bar. Fig. 4 is a detail in perspective of a casting that may be employed at the lower ends of cylindrical standards.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates the two diverging cultivator-beams composing a gang, (there being two gangs employed,) which beams converge at their front ends and are designed to be attached to the arch of an ordinary cultivator. The beams are curved downwardly at their rear ends to form pairs of standards 2, the inner standard of each pair being located slightly in advance of the outer standard thereof. To the front faces of the four standards there are connected feet-bars 15, the same being widened toward their lower ends and given a quarter-twist, as shown. These feet-bars are provided with bolt-openings, whereby through the medium of bolts 16 they may be adjusted upon the standards. To the lower ends of the feet-bars are bolted the opposite converging blades 8. In instances where the standards 2 are cylindrical I prefer to employ the U-shaped wrought-iron castings 3. (Shown in Fig. 4.) With these castings bridge-pieces 4^a are employed, the same spanning the rear edges of the castings and the standards and perforated for the reception of set-screws 4, which pass through the bridge-pieces and into the standards and serve as means of securing the castings in position. To the front faces of the castings there are adjustably connected by the bolts 5 the heretofore-described twisted feet 15, which carry the blades 8. Whether the casting are or are not employed for the purpose of connecting the feet to the standards, clamps 6 are secured to the inner standards 2, and when simply the twisted feet alone are employed said clamps encircle the upper ends of the same, thus serving as an additional securing means for the feet.

9 designates the opposite angular members or sections of the clamp. The ends of these sections embrace the front and rear edges of the standards and are clamped in position through bolts 10, passing through perforations formed in said clamping-sections. When in position upon the standards, the front ends of the clamping-sections do not quite meet, and thus room is left for the end links of a pair of chains 11. The chains 11 engage with eyebolts 12, driven into the ends of the cross-bar 13, and the eyebolts are secured in position by keys 14, driven transversely through the bar near its ends and through corresponding perforations in the inner ends of the eyebolts. Ferrules 18 serve to strengthen the bar 13 against splitting.

In operation it will be seen that the cultivator straddles the list or furrow in which the young corn is planted, thoroughly cultivating the opposite sides of the furrow and destroying all weeds, grass, &c., that may be present. It will be understood that ordinary fenders may be applied for the purpose of preserving the tender corn against injury and that the blades may be adjusted so as to run deep or shallow and will be properly disposed with relation to the sides of the furrow. The twists given to the bars converge the front ends of the blades or shears, so that the dirt is thrown away from the young plant and the ridge of the furrow decreased. The bar 13 overcomes the general tendency of the gangs to approach each other, and thus infringe upon the corn, and the links 11 give sufficient slack to permit of any independent movement of the gangs that may be required.

Having described my invention, what I claim is—

1. The combination, with the diverging beams of the two-gang cultivator, of the opposite pairs of metal clamps embracing the inner standards of the beams, bolts passed through the ends of the clamps, a transverse bar, and short chains connected to the ends of the bar and to the front bolts of the clamps, substantially as specified.

2. The combination, with the two-gang cultivator-beams, of the transverse bar 13, the eyebolts 12, inserted in the ends of the bar and provided with perforations, keys passed through the ends of the bar and the perforations, and short chains connecting the eyes to the cultivator-standards, substantially as specified.

3. The combination, with the lower diverging ends of opposite pairs of cultivator-beams, of cast-metal sockets receiving the same, set-bolts passed through the sockets and bearing on the beams, perforated twisted bars, bolts connecting the same with the sockets, and the plowshare pivotally connected to the lower ends of the bars, substantially as specified.

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

ALBERT S. GILKEY.

Witnesses:
GEO. SCHENCK,
L. H. SCOTT.