No. 799,329. PATENTED SEPT. 12, 1905.

W. L. GOULDIN.

ADJUSTABLE DEVICE FOR CULTIVATOR BARS.

APPLICATION FILED JUNE 28, 1905.

Fig. 1.

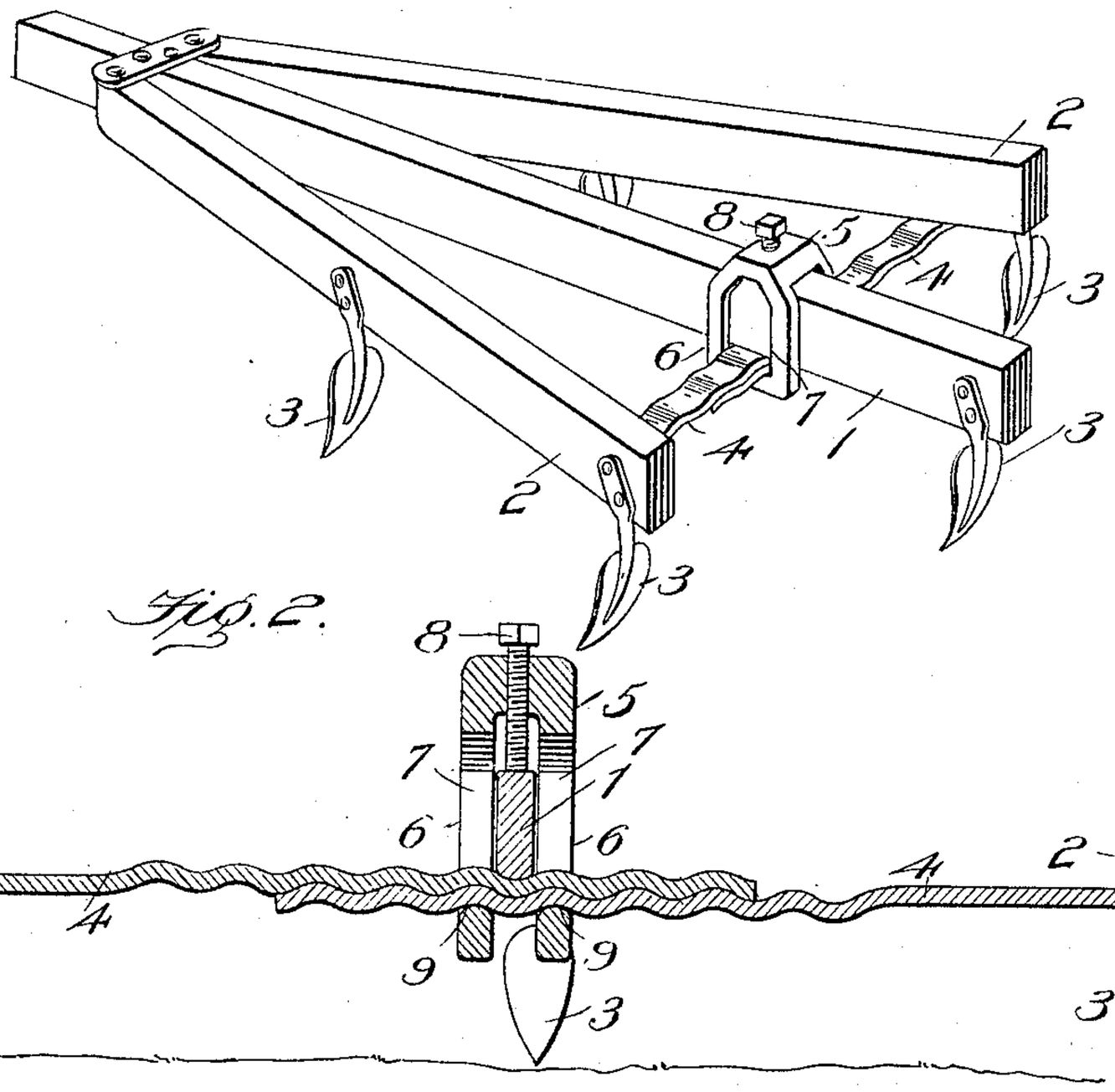


Fig. 3.

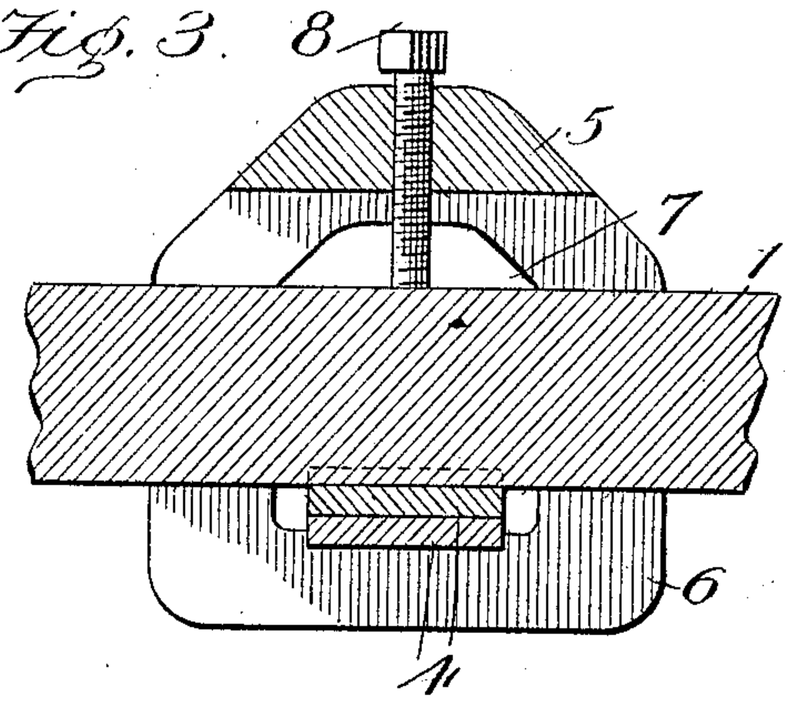
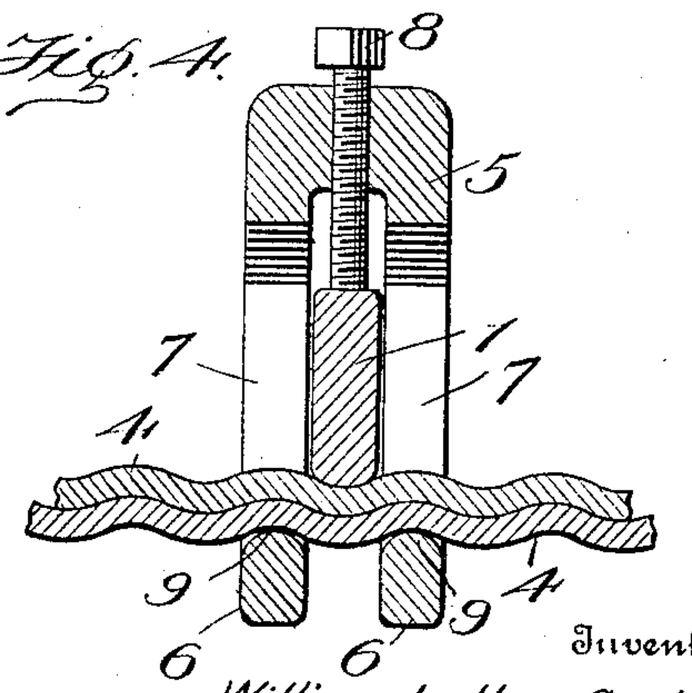


Fig. 4.



Witnesses

Edwin L. Bradford

Anne B. Johnson

Inventor

William Luther Gouldin

By Johnson & Johnson

Attorneys

ANDREW. B. GRAHAM CO., PHOTO-LITHOGRAPHERS. WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM LUTHER GOULDIN, OF GOULDIN, VIRGINIA

ADJUSTABLE DEVICE FOR CULTIVATOR-BARS.

No. 799,329. Specification of Letters Patent. Patented Sept. 12, 1905.

Application filed June 28, 1905. Serial No. 267,443.

To all whom it may concern:

Be it known that I, WILLIAM LUTHER GOULDIN, a citizen of the United States, residing at Gouldin, in the county of Hanover and State of Virginia, have invented certain new and useful Improvements in Adjustable Devices for Cultivator-Bars; and I do hereby 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.

Improvement in the means for adjusting the teeth-carrying side bars of cultivators and in which a pair of said bars are pivotally connected to a central draft-beam and adjusted laterally in relation thereto to vary the distance between said bars is the subject-matter of this patent; and the object of my improvement is to render such adjusting means effective under the clamping function of the saddle-yoke and links connecting the side bars with the central beam, and in the claims appended hereto I will point out the precise improvement, in connection with the accompanying drawings, in which—

Figure 1 represents in perspective so much of a cultivator-frame as illustrates my improved means for adjusting and securing the teeth-carrying side bars thereof. Fig. 2 is a cross-section taken transversely through the adjusting means. Fig. 3 is a vertical section taken lengthwise of the central beam. Fig. 4 is an enlarged cross-section showing my improvement in the adjustable links for the side bars.

1 is the central draft-beam, and 2 2 are the side bars, pivotally connected at their front ends to said beam and each having the usual cultivator-teeth 3. A pair of links 4 4 pivotally connect the rear ends of the side bars and extend transversely, one link lapping with the other, their ends lapping and crossing beneath the beam and clamped to it by a saddle-yoke 5. This saddle-yoke is fitted upon the beam, extends below it on each side, the depending sides 6 having openings 7, through which the lapped ends of the links pass and by which they are clamped to the under side of said beam by a screw 8 passing through a screw-threaded hole in the upper end of said yoke and abutting against the upper side of the beam. In driving the screw upon the beam the saddle-yoke is drawn upward, thereby clamping the lapped ends of the links to the under side of the beam. To render this clamping of the links secure and to hold the links firmly when adjusted to set the bars the proper distance apart under a clamping action is the purpose of my improvement, and this I effect by forming the links with transverse corrugations, so that when lapped upon each other the corrugations of one link will match or fit into the other, a convex surface of such corrugation fitting a concave surface, so that when the links are clamped together the corrugations will act as abutments to prevent the sliding of one link upon the other.

The corrugations are preferably of shallow waving form, and the width between the depending sides of the saddle-yoke is equal to the distance between the concave surfaces of the under side of the lower link, so that said concave surfaces will fit upon the beveled edges 9 of the lower end bars of each side of the yoke, thereby engaging and locking said lower link with the depending sides of the yoke. This construction while interlocking the links with each other interlocks the lower link with the yoke, while the draft-beam is interlocked into a concave surface of the upper link between the depending sides of the yoke, thereby interlocking the beam with the upper corrugated link, and by this construction both links are interlocked with the saddle-yoke and with the draft-beam.

The advantages of the corrugated links are greater rigidity, greater strength, quickness of adjustment, and the interlocking of the pair at a multiple of points without slots or bolts piercing them, making them, in effect, a single rigid link slidable by unclamping the yoke to allow the side bars to be opened or closed, so that the corrugations of one link will be free to pass the corrugations of the other by a distance of one or more corrugations, and in this the single bolt of the yoke is the only part to be released and engaged.

Looking at Fig. 2 it will be noted that the central beam is rounded on its under side to fit into the groove-like corrugation of the upper link and the ends of the sides of the yoke fit into the groove-like corrugations of the lower link, while the meeting faces of the links are engaged by a plurality of interlocking shoulders, and thereby firmly secure the links against endwise movement one upon the other.

I claim—

1. In a cultivator, the draft-beam, the teeth-carrying bars pivoted to said beam, a corrugated link pivotally connected to each bar and lapping each other under said beam, a yoke straddling the beam, extending below it and

having each straddling part engaging corrugations of the under side of the under link, the beam engaging a corrugation of the upper side of the upper link between the link-engaging sides of the saddle, and means for clamping the saddle to the beam and the latter and the corrugated links to the saddle and to the beam.

2. In a cultivator, the draft-beam, the teeth-carrying bars pivoted to said beam, a pair of corrugated links each pivoted to a side bar and lapping under the beam, a yoke secured upon the beam and having its depending sides each engaging a corrugation of the under side of the under link, the beam engaging a corrugation of the upper link between said depending yoke sides, and a clamp-screw engaging the yoke and the beam clamping the beam in engagement with a corrugation of the upper link and the yoke in engagement with a pair of corrugations of the lower link.

3. In a cultivator, the draft-beam, the teeth-carrying side bars, a corrugated link pivoted to each side bar and engaging each other on the under side of the beam, means whereby the corrugated links are clamped together, and to the beam, the under link being clamped in a pair of its corrugations and the upper link clamped by an intermediate corrugation, and means whereby such clamp is effected.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM LUTHER GOULDIN.

Witnesses:
C. L. BAUGHAN,
J. T. BAUGHAN.