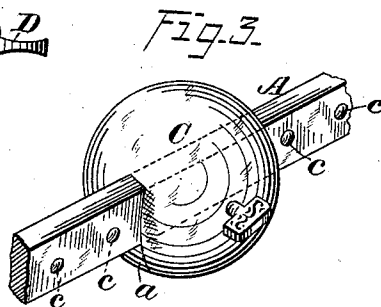
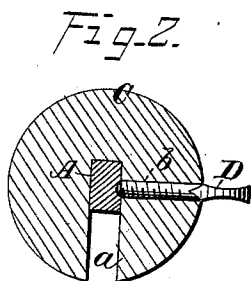
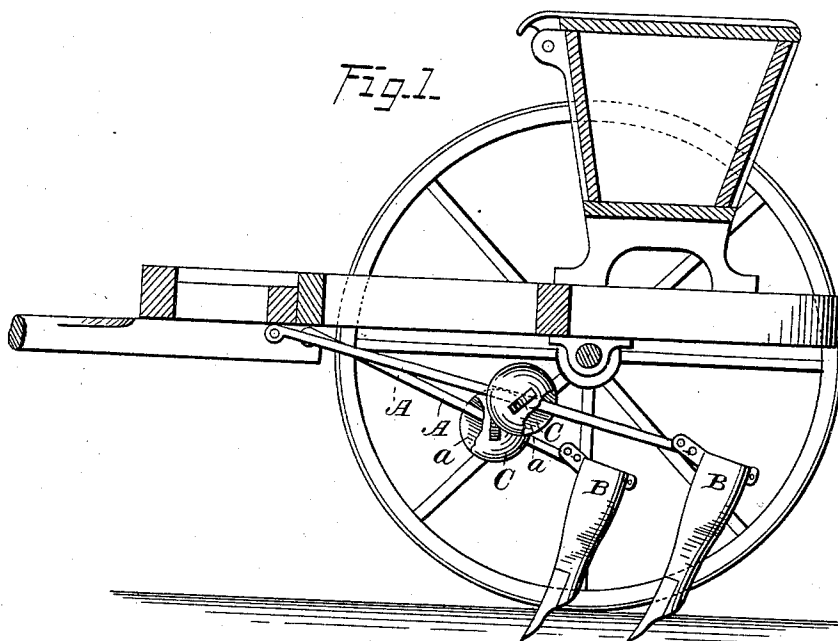


W. Q. PREWITT.
 Mechanism for Adjusting Teeth for Grain-Drills.
 No. 225,640. Patented Mar. 16, 1880.



WITNESSES=

Jas. E. Hutchinson.
J. A. Rutherford.

INVENTOR-

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Att'y.

UNITED STATES PATENT OFFICE.

WILLIAM Q. PREWITT, OF WINCHESTER, KENTUCKY.

MECHANISM FOR ADJUSTING TEETH FOR GRAIN-DRILLS.

SPECIFICATION forming part of Letters Patent No. 225,640, dated March 16, 1880.

Application filed October 24, 1879.

To all whom it may concern:

Be it known that I, WILLIAM Q. PREWITT, of Winchester, in the county of Clarke and State of Kentucky, have invented certain new and useful Improvements in Mechanism for Adjusting Teeth of Grain-Drills, of which the following is a specification.

This invention relates to that class of devices employed to force the hoes of drill-boots into the soil or ground when the same is harder than usual; and the invention consists in combining with the drag-bars a longitudinally-adjustable weight, which is slotted to set over the drag-bar, and is provided with a set-screw to maintain it in its adjusted position, said weight being capable of being moved along the drag-bar to adjust it toward the drill-boot, or toward the pivotal or forward ends of the drag-bar, to increase or diminish the weight exerted on the drill-boot, as will be fully hereinafter described.

In the accompanying drawings, Figure 1 represents the frame of a seeding-machine with my improvement applied to the draw-bars; Fig. 2, a transverse section through one of the weights and drag-bars; and Fig. 3, a perspective view of a portion of one of the drag-bars and adjustable weight, showing a modification.

Referring to the drawings, A indicates the ordinary drag-bars of a grain-drill, pivoted at their forward ends to the frame of the machine, as usual, and B indicates the drill-boots carrying hoes, all of which may be of ordinary and suitable construction.

The drag-bars are each provided with a weight, C, which is slotted, as at *a*, and in this slot are arranged the drag-bars, and the slot forms a guide for the movement of the weight. The weights are preferably of cast metal, in a cylindrical form, and are each provided with a lateral screw-threaded passage, *b*, in which is arranged a set-screw, D, the inner end of the screw being adapted to bear against the side of the drag-bar and by frictional pressure maintain the weight in position; but, if desired, the drag-bars may be provided with a series of spaced recesses, *c*, as shown in Fig. 3, in which the inner end of the set-screw enters, thereby more effectually securing the weight in place and effectually preventing its loss or accidental displacement.

The weight constructed as described embraces the drag-bars, and when the set-screw is loosened is capable of being freely moved longitudinally along the drag-bar; and it is evident that when the weight is adjusted toward the drill-boot its weight tends to force the hoe of the drill-boot into the ground, which is especially effective where the soil or ground is hard and the hoes fail to pass sufficiently into the ground.

When the soil is light, and it is unnecessary to employ the weights, they can either be entirely removed or be adjusted toward the forward or pivotal ends of the drag-bars, when their weight will, of course, be taken up by the fulcrum of the drag-bars. The weights can be adjusted to any position along the drag-bars, the object of which is to regulate the force they exert on the drill-boots, according to the stiffness or hardness of the soil.

Heretofore segmental springs have been attached to a rotating shaft, and bear against the drag-bars with a pressure regulated by the rotation of the shaft; but such are expensive and require a pawl-and-ratchet attachment to secure the shaft in its adjusted position.

I am further aware that a drag-bar has been provided with an adjustable weight; but in all such, so far as I know, the drill-boot has to be detached in order to slip the weight on, or the pivoted end of the drag-bar unhitched for the same purpose, or the drag-bar has been provided with an attached arm on which to hang the weight.

By my invention the weight is provided with a slot extending from or about the center of the weight radially to the periphery, at which latter point the slot is open, forming virtually two jaws, thereby permitting the weight to be readily slipped over the edge of the drag-bar at any point thereon, and the weight is specially adapted to the drag-bars of grain-drills already in use, which is not practicable with devices of a similar nature as heretofore employed.

What I claim is—

The weight C, provided with an angular slot, *a*, extending from or near its center radially to its periphery, at which latter point the slot is open, forming two jaws, one of said jaws

having formed in it a female screw-threaded aperture extending from the periphery to the said slot, and provided with a set-screw, D, said weight being adapted to be readily placed
5 over the edge of the ordinary drag-bar of a grain-drill at any point thereon, and be confined in place by the pressure of the set-screw, as herein shown and described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of 10 the subscribing witnesses.

W. Q. PREWITT.

Witnesses:

JAMES L. NORRIS,

JAMES A. RUTHERFORD.