

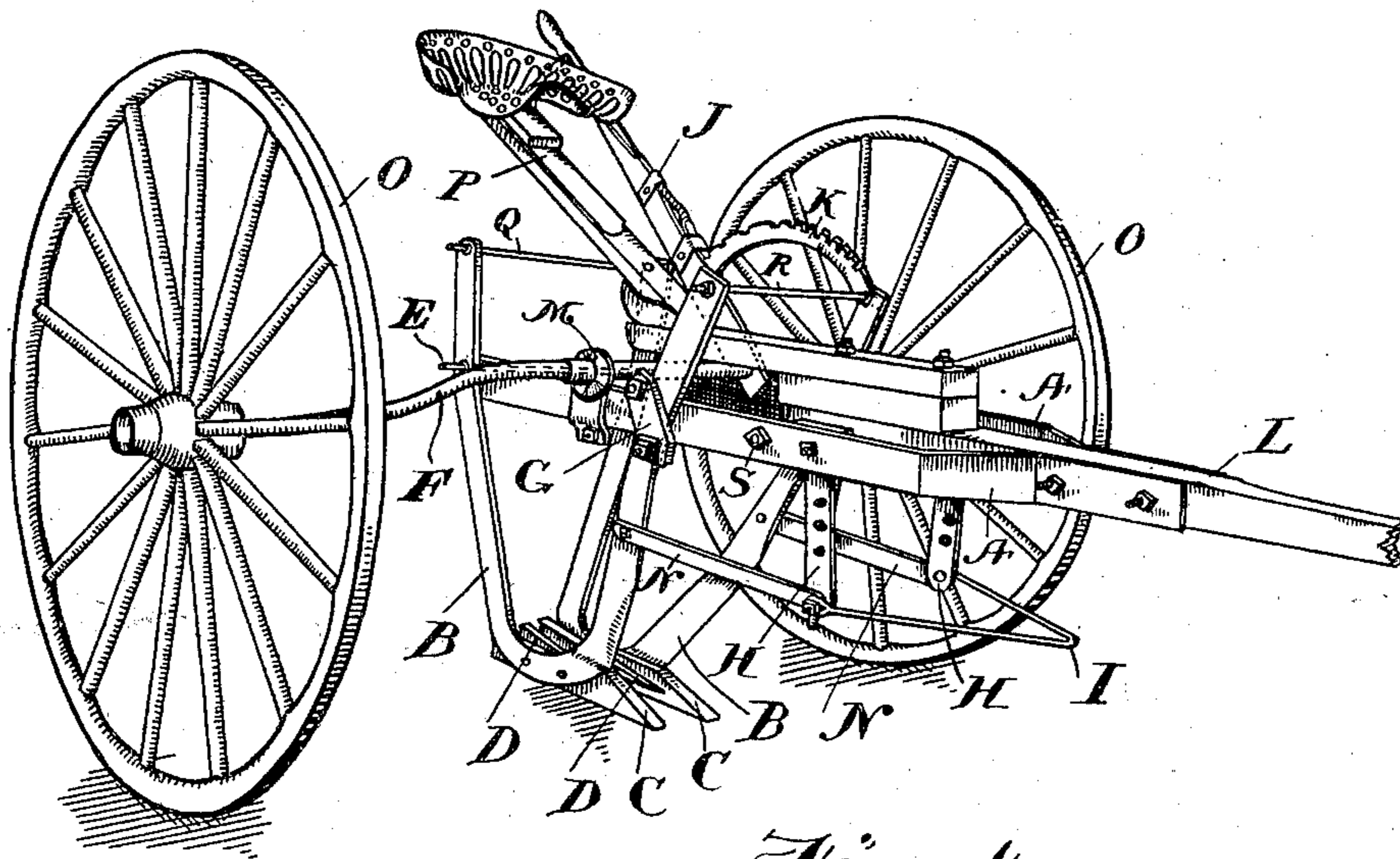
No. 627,209.

Patented June 20, 1899.

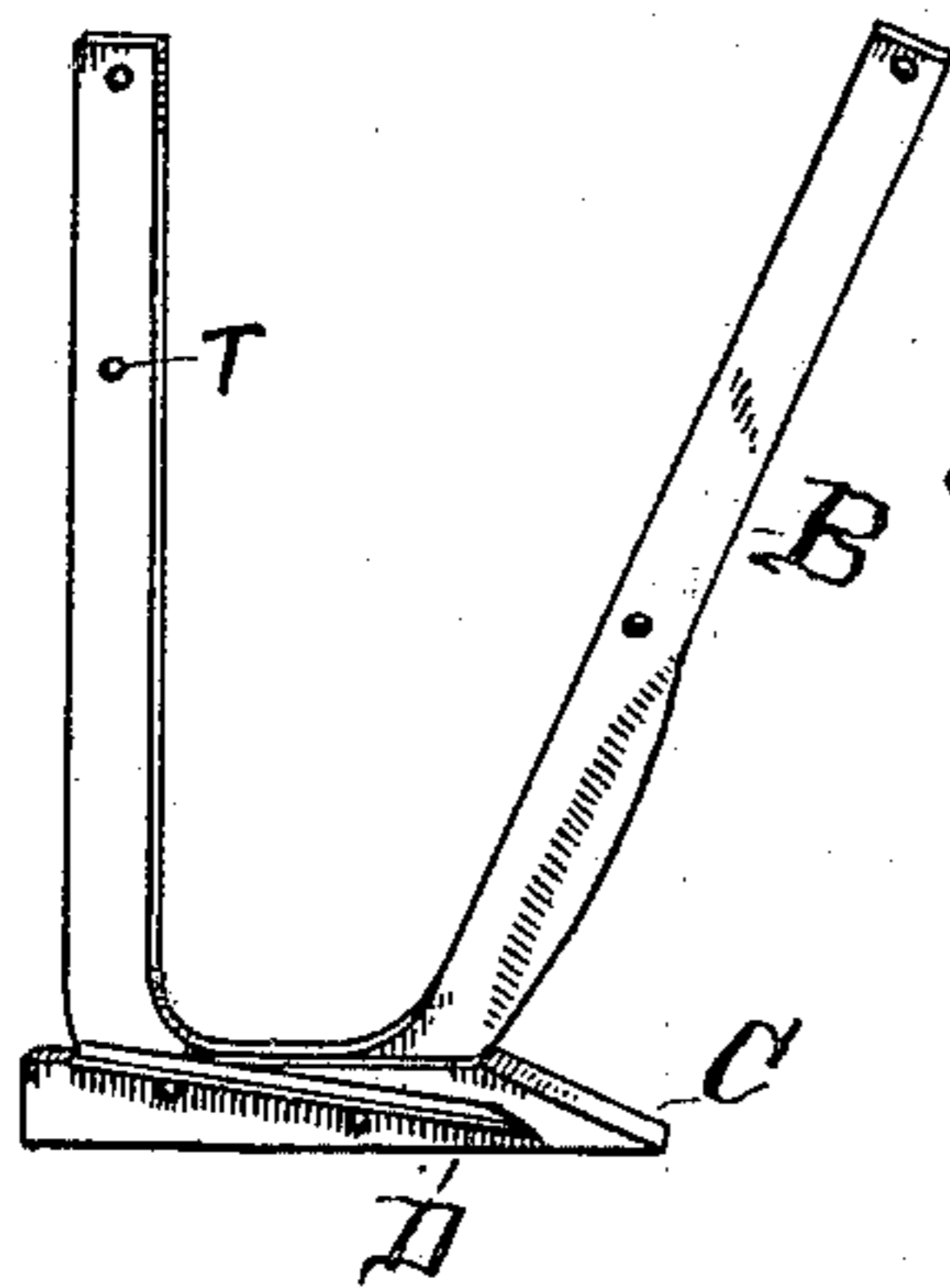
W. F. SCHMIDT.  
BEET PLOW.

(Application filed Aug. 30, 1897.)

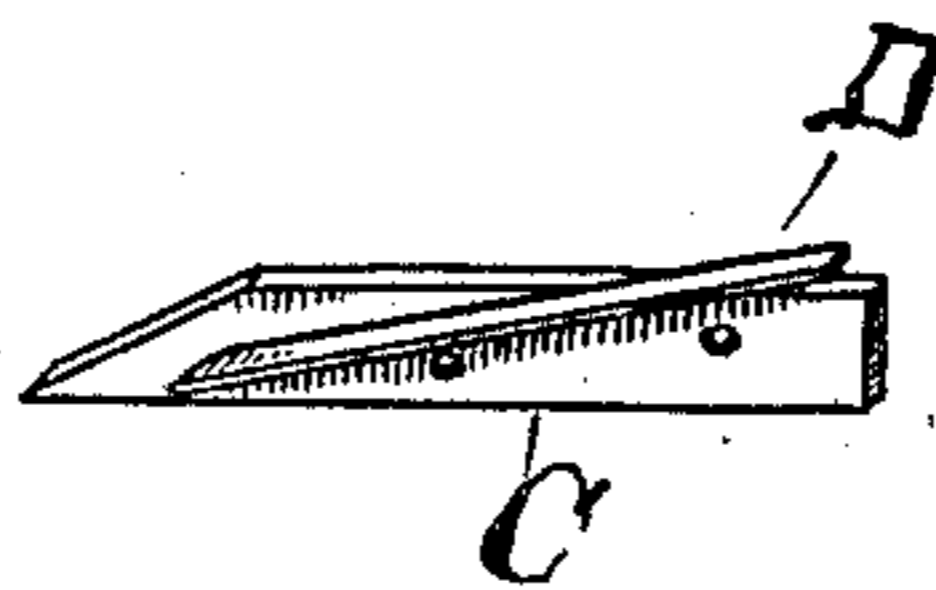
(No Model.)



*Fig. 1*



*Fig. 2*



*Fig. 3*

Witnesses  
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# UNITED STATES PATENT OFFICE.

WILLIAM F. SCHMIDT, OF SALINAS CITY, CALIFORNIA.

## BEET-PLOW.

SPECIFICATION forming part of Letters Patent No. 627,209, dated June 20, 1899.

Application filed August 30, 1897. Serial No. 650,057. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM F. SCHMIDT, a citizen of the United States, residing at Salinas City, in the county of Monterey, State of California, have invented a new and useful Improvement in Beet-Plows, in which two standards are used with removable points at the bottom, upon each of which is also attached a lifter, of which the following is a specification.

The invention relates to improvements in beet-plows; and it consists in certain details of construction and arrangement of parts hereinafter more particularly described in the specification, illustrated in the drawings, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of the machine. Figs. 2 and 3 are details.

The objects of the invention are the production of a light, inexpensive, and effective beet-plow having standards of novel construction to which the points are detachably secured and which standards are vertically and laterally adjustable with relation to the main frame, and also adapted as colters or cutters.

A further object is to provide the points with detachably-secured lifters for raising the beets from the soil when loosened.

A further object is to provide a pull or draft point near the ground.

With these objects in view I will proceed to describe the construction and operation of the machine.

Referring more specifically to the drawings by letter, in which like letters indicate like parts, L represents the tongue or central part of the main frame, which is of wood and has bolted to it on each side metallic hounds A A. These hounds are bent inwardly at their front ends, where they are secured to the tongue by bolts and nuts in the usual manner. They extend rearwardly parallel with and at a short distance from each side of the tongue, and a screw-threaded adjusting-rod S is projected through the hounds and tongue about midway of the hounds and provided with nuts on the inner and outer sides of the hounds and tongue, whereby the former may be adjusted laterally with relation to the tongue. They are preferably composed of metallic plates of

sufficient thickness to afford the required rigidity to the frame and yet sufficiently yielding to allow of the desired degree of lateral or axial adjustment.

B B are U-shaped standards, to the bottoms of which are secured the plows or points C by bolts, as shown in Fig. 2. The rear legs of these standards are pivotally secured to the rear ends of the hounds A at the point T by a rod E, passing through the standards and hounds, and the front legs are secured or held to said hounds by clamps G, adapted to permit of the vertical adjustment of said standards for raising or lowering the points carried thereby. The upper ends of these standards project considerably above the sides A and are connected on opposite sides of the frame by rods Q R, provided with right and left screw-threads at their opposite ends, projecting through like screw-threaded apertures in the upper ends of the standards, or, if preferred, plain holes or openings may be provided for the ends of the rods and nuts provided on the rods on the inner and outer sides of the standards. By means of these adjusting-rods the upper ends of these standards are adapted to be drawn toward each other or forced apart, causing their lower ends, carrying the points or plows C, to approach each other or recede, as desired, the metallic sides or hounds A, forming the fulcrum and outer sides of the frame, being sufficiently yielding to permit the desired adjustment.

Upon the inner faces of the plows or points are secured lifters D, consisting of wedge-shaped pieces, as shown in Fig. 3. These lifters extend rearwardly and upwardly upon an inclined plane and are designed to pass beneath the projecting circumference of the beet near its root and raise it from the soil as the plow or point passes alongside. They are preferably secured to the side of the plow or point by bolts or screws, whereby they may be readily removed when desired for cleaning or renewal.

The forward or front edge of each standard is sharpened to serve as a colter in cutting through the soil or turf.

In order to bring the pull or draft point near the ground, a pull-rod I is provided, the inner ends of which are connected by means

of vertical braces H, depending from the sides A, and horizontal braces N, secured to the standards B at a point below the tongue, as shown in Fig. 1. Holes or openings are provided in the vertical braces H for the purpose of adjustment.

Secured to the rear portion of the frame by clamps or other suitable means is an axle F, provided with wheels O on its ends, by means of which the machine is mounted. A seat P is secured to the frame in the usual manner.

J is a hand-lever arranged within convenient reach of the operator in the seat and properly keyed upon the axle F and having a pawl or ratchet, as shown, adapted to engage a rack K, one end of which is pivoted to the frame and having its opposite end held on one end of the rod R, connecting the upper ends of the forward legs of the standards B B. By means of this lever, operated in connection with rack K, the standards B may be adjusted vertically and the plows or points raised or lowered with relation to the frame.

The evener, to which the draft is applied, is attached to the point of the pull-rod I beneath the tongue, whereby the line of draft is brought near the ground.

I am aware that a lever-and-rack device substantially similar that shown for raising or lowering the points in like machines has been heretofore used and is not new, and I do not claim this broadly; but

What I claim, and desire to secure by Letters Patent, is—

1. A beet-plow consisting of a pair of U-shaped standards provided at their feet with

points and lifters, and adjustably mounted on a main frame, substantially as described.

2. A beet-plow consisting of a pair of U-shaped standards pivotally and adjustably mounted on a main frame and provided with points and lifters detachably secured to their feet, substantially as described.

3. A beet-plow consisting of a pair of double standards pivotally and adjustably mounted on a main frame, and provided with front cutting edges and with points and lifters detachably secured to their feet, substantially as described.

4. A beet-plow consisting of a pair of double standards pivotally and adjustably mounted upon a main frame, connected by adjusting-rods at their upper ends and provided with removable points at their feet having on their inner faces detachably-secured lifters, and means for adjusting the draft or pull to a point beneath the tongue and near the ground, substantially as described.

5. A beet-plow consisting of a main frame composed of a central section and laterally-adjustable sides, a pair of connected U-shaped standards adjustably connected to the frame, points secured to the feet of the standards and provided on their inner faces with detachable lifters, and means whereby the draft or pull may be adjusted to a point near the ground, all arranged and combined substantially as and for the purpose described.

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Witnesses:

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