(No Model.)

G. N. DEXTER, Jr.

PLOW.

No. 290,669. Patented Dec. 25, 1883.

Fig. 1.

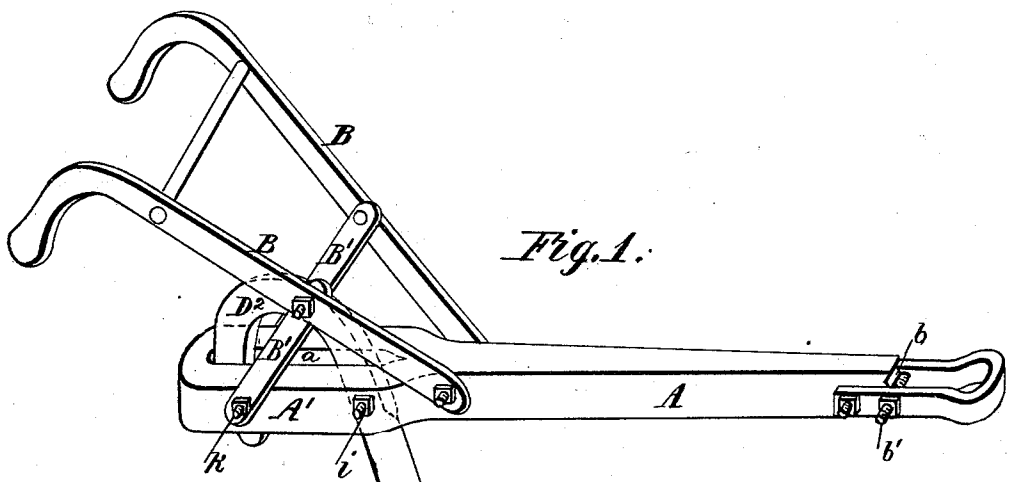


Fig. 2.

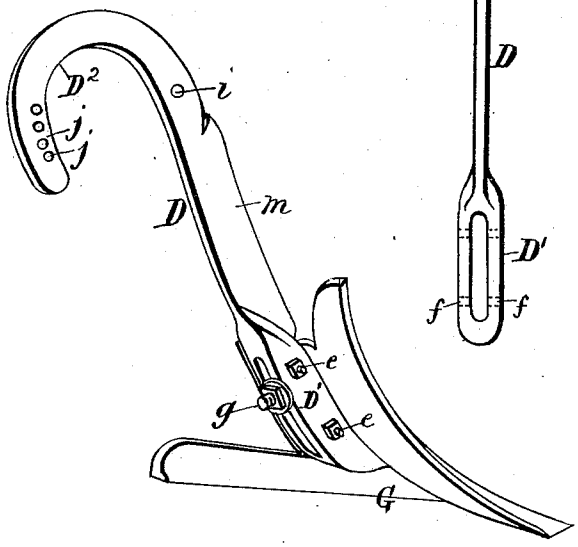
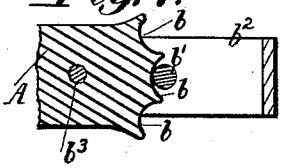


Fig. 3.

Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE N. DEXTER, JR., OF MADISON, GEORGIA.

PLOW.

SPECIFICATION forming part of Letters Patent No. 290,669, dated December 25, 1883.

Application filed October 6, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE N. DEXTER, Jr., a citizen of the United States, residing at Madison, in the county of Morgan and State of Georgia, have invented a new and useful Improvement in Plows, of which the following, taken in connection with the annexed drawings and letters of reference thereon, is a specification.

My invention relates, specially, to plows which are required to cut their way through land overrun with closely-matted high and tough grass, weeds, and roots; and the objects of my improvements are to provide a strong and light plow having an iron beam and a single adjustable iron standard, which is sharp-edged above the mold-board and below the beam, and passed up through an oblong loop-slot in the beam, there pivoted, and curved backward above the beam into a bow-brace, and its rear end turning downward and passing into the said loop-slot, where it is secured to the beam by an adjustable bolt, as will be hereinafter described.

Another object is to so construct and combine the said beam, standard, and the handle-braces that the one bolt for fastening the lower ends of the handle-braces shall serve as the means for holding both the said ends of the braces and the curved bracing end of the standard.

In the accompanying drawings, Figure 1 is a perspective view of my improved plow as seen from the front and furrow side, the mold-board being removed and the landside-bar in position. Fig. 2 is a perspective view of the standard with mold-board in position, and as seen from the rear and furrow side. Fig. 3 is a back view of the standard in detail; and Fig. 4 is a broken vertical section of the end of the beam, clevis, and bolts.

In the figures, A represents a single flat solid wrought-metal bar, with a doubled rear extension portion, A′, welded upon it, so as to form a beam for the plow, with a vertical oblong loop-slot, *a*, in it, as shown. The forward end of this bar is widened slightly and made segmental. In this segmental end several adjusting-notches, *b*, for a clevis-adjusting bolt, *b′*, are formed, and upon this notched end a loop or clip clevis, b^2, is bolted, as at b^3, so that its adjusting-bolt *b′* occupies a place forward of the beam in either one or the other of the notches.

I lay no claim to a series of adjusting-holes, nor to the clip-clevis and its adjusting-bolt; but believe it is new to have the notches in the front of the segmental end, whereby the strength of the beam is not impaired, as when holes are formed through it.

To the beam A A′ handles B B and handle-braces B′ B′ are applied, as usual.

D is the standard of the plow. This standard is formed of a single wrought-metal bar, with a doubled metal foot portion, D′, formed on it by bending the bar metal into a loop and welding its ends on each side to the portion D, as shown. This mode of constructing and uniting the bowed portion D′ and the central portion, D, of the standard is very convenient and makes a cheap and durable standard.

I do not lay any specific claim to a slotted foot with curved front seat; but the manner in which it is constructed, as described and shown, of wrought bar-metal bent and welded, I believe is novel and useful. Through this foot portion two bolting-holes are formed, and by means of bolts *e e*, passed through these holes, the landside G is fastened firmly in position, the bolts having two supports, *f f*, upon the loop portion—one on each side of the slot—while by a clamp-bolt, *g*, passed through the mold-board and the slot of the foot, the mold-board is secured in its position, as shown. Above the foot the standard is drawn down at its front edge to a sharp knife-edge, *m*, which knife-edge may be either straight or curved, and it extends up to the beam and slightly beyond the same in the slot *a*, as shown. By this sharp edge the plow perfectly cuts its way through grass, sod, and roots, which the standard is compelled to come in contact with while the plow is working in land overrun with Bermuda, wire, or other grass and obstructions, and thus choking is avoided.

Cutting-edges for standards are common in various descriptions of plows, and I lay no broad and specific claim for a standard provided with a cutting-edge, my invention being a specific construction of a standard combining a loop-foot, sharp edge, and backward-turned bow-brace, such as shown in my drawings.

Above the cutting-edge *m*, and from the point *i*, where the standard is pivoted and fastens to the beam, a curved extension, D^2, is formed on the standard, as shown, and this extension runs back and turns downward, and through the rear

curved portion are made a series of adjusting-holes, *j j j*, into which the bolt *k* of the handle-braces passes. The standard thus constructed is passed through the slot *a* of the beam A, and pivoted to said beam by the pivot *i*, while its bowed bracing portion, which also occupies a place in said slot, is fastened securely by the bolt *k* of the handle-braces. By changing the hole *j* in which the bolt *k* is passed, the plow-point can be thrown up or down, as desired. The bow-brace does not extend down much below the beam, as any considerable extension would cause it to become clogged with the grass and weeds of the field.

It is very important to have the bow-brace run backward and attach to the beam in rear of the pivot *i*, as it thus serves for firmly sustaining the standard while subjected to strain in plowing.

It is also more convenient and cheaper to fasten the bowed portion of the standard and the handle-braces by the one bolt than by separate bolts, and this is rendered practicable by bowing and turning the standard downward and backward, as shown.

I am aware that it is not new to provide a sharp edge on standards or extension-standard portions of plow-beams; also, that bow-bracing extensions are not new in connection with cultivators and drills; also, that forked foot portions have been provided on stock or standard portions of cultivators, and, also, that iron beams are not new; but I am not aware that the constructions and combinations shown and claimed by me have ever before been contrived.

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

1. The new article of manufacture, consisting of the plow-standard D, having the knife-edge *m*, loop foot portion D′, and the backward and downward bowed bracing portion D^2, substantially as and for the purpose described.

2. The sharp-edged standard D, having backward and downward bowed bracing portion D^2, in combination with the looped beam, the handle-braces, and the bolt *k* of said braces, substantially as and for the purpose described.

GEORGE N. DEXTER, JR.

Witnesses:
JOSHUA HILL,
ABRAM K. ACKERMAN.