

(No Model.)

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PLOW.

No. 253,489.

Patented Feb. 14, 1882.

Fig. 1.

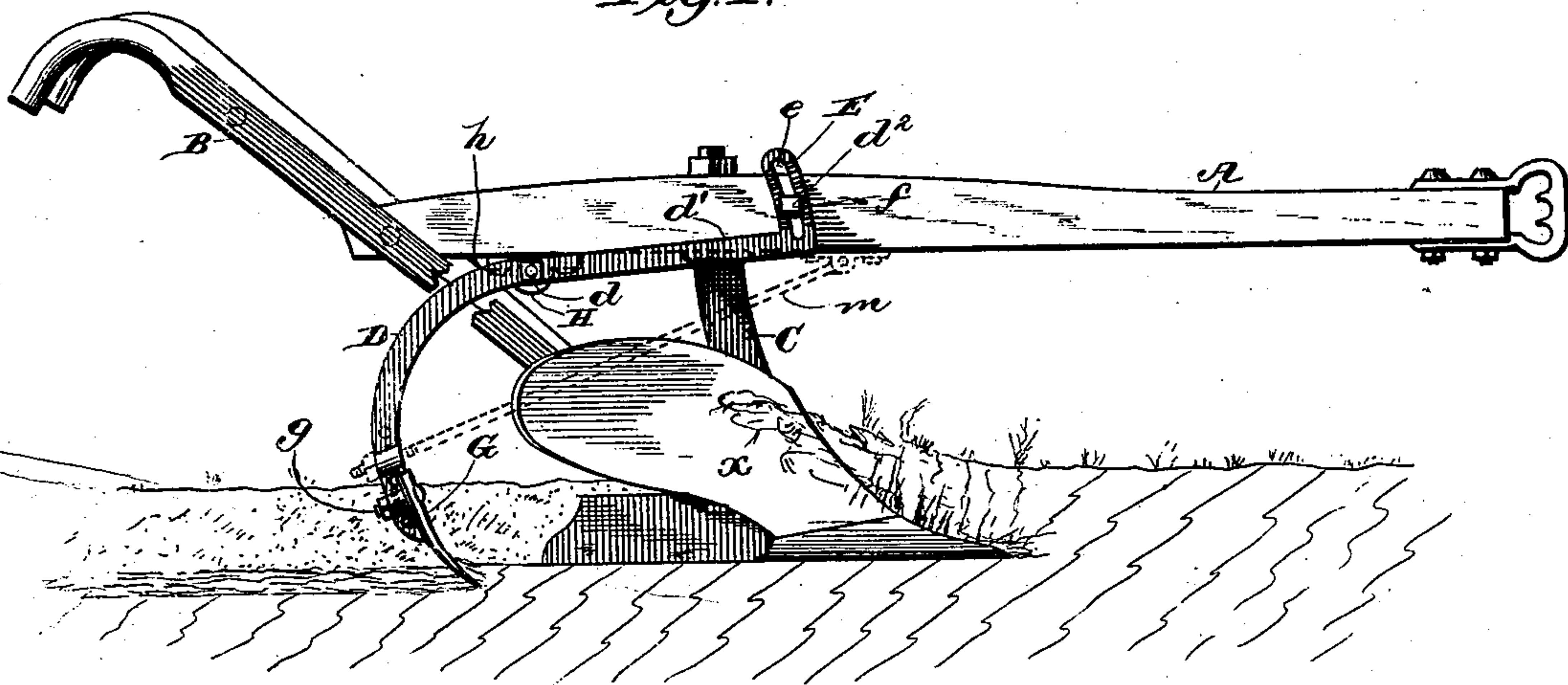
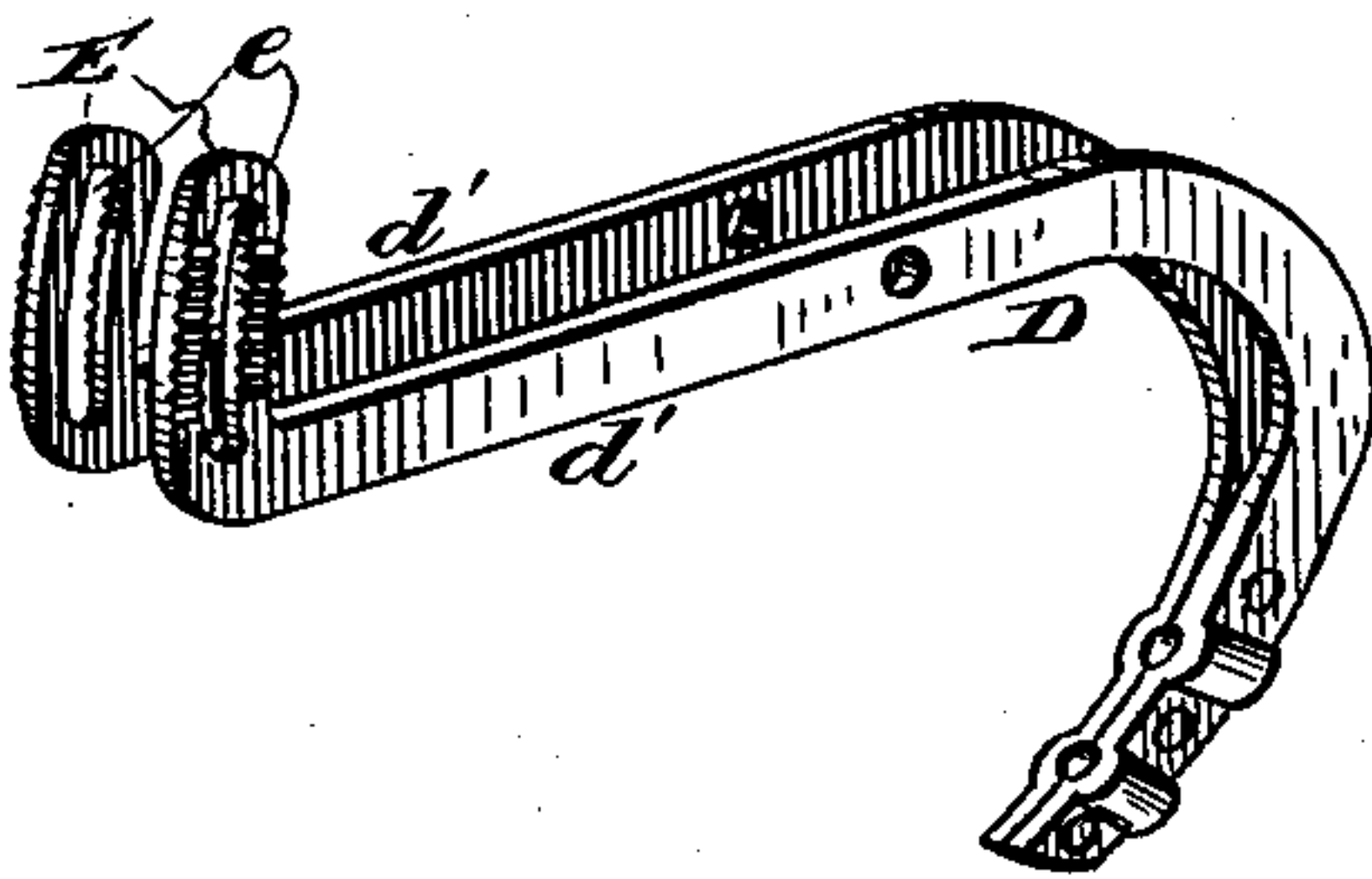


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

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PLOW.

SPECIFICATION forming part of Letters Patent No. 253,489, dated February 14, 1882.

Application filed November 23, 1881. (No model.)

To all whom it may concern:

Be it known that we, JOEL J. ADCOCK, G. J. LUMPKIN, and MILTON WHITE, citizens of the United States, residing at Subligna, in the county of Chattooga and State of Georgia, have invented certain new and useful Improvements in Subsoiling-Plows; and we do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

Our invention relates to subsoiling attachment for plows; and the novelty consists in a subsoiling attachment adapted for service upon any plow now in use, as will be embodied in the construction and arrangement of parts hereinafter set forth, and specifically pointed out in the claim.

The object of the invention is not only to provide a simple and efficient attachment to a plow for subsoiling purposes, but to so construct the device that it may readily be applied to plows now in use, whether sulky or other, the only requirement necessary being a beam; and to this end the invention consists essentially in two curved beams welded together at the lower extremity, or a wrought-iron beam bifurcated at its upper portion, and being provided at the upper extremity with a vertical slotted or bolt-holed arm, said slot having a serrated or roughened surface, and also at the lower extremity with means of attachment for a removable point, which follows the plow and disintegrates and pulverizes the subsoil at the bottom of the furrow, and also with means for adjustably securing a tie-rod which connects the attachment to the beam forward of the plow-standard. These curved beams are pivoted to the plow-beam near the rear end, and at such a point that a sudden concussion by reason of coming in contact with a rock, root, or other obstruction will not tend to split the beam when said beam is made of wood. The pivotal point may be made in a socket-plate secured upon the lower side of the beam, the pivotal bolt acting in the socket. The slotted or bolt-holed beam allows such a

vertical adjustment as will allow the plowman to gage the depth of the subsoiler at will, and the removable point may be of any desired form or construction which will subserve the purpose set forth.

The invention is fully illustrated in the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation, partly in section, and Fig. 2 a perspective detail, of the attachment with the point detached.

To enable others skilled in the art to make and use the invention, we will describe the construction of the same and the operation thereof, referring for this purpose to the said drawings, in which similar letters of reference indicate like parts in all the figures.

A represents the plow-beam, B the plow-handles, and C the standard by which the plow proper, *x*, is secured to the beam A.

Pivoted either below or at any intermediate point in the plow-beam A, at *d*, is a curved frame, D, bifurcated in the upper portion, as shown, each arm *d'* of which is adapted to embrace the main beam, to which it is adjustably secured at *d''*. An approximately vertical arm, E, is provided with a slot, *e*, (or bolt-holes,) through which a bolt, *f*, serves to allow adjustably of the frame at will. The lower extremity of the frame D is formed in such a manner as to allow a removable point, G, for subsoiling purposes, to be affixed with proper bolts *g*.

It will readily be seen that, *d* being the pivotal point, the bolt *f* in the arm E will allow the instant and easy adjustability of the depth of the subsoiling device, and that the spring of the bifurcated arms *d'* of the frame D will allow the attachment of the same to any plow now in use. The pivotal bolt *d* operates in a bracket or frame, *h*, secured upon the bottom surface of the beam, and as the bolt *f* passes through the beam considerably above the center, or near the same, we overcome the danger of splitting the beam. A brace or tie-rod, *m*, connects that portion of the frame D near the subsoiling-point G with the beam forward of the standard and greatly strengthens the lower portion of said frame.

Modifications may be made in details of con-

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struction without departing from the principle or sacrificing the advantages of our invention.

We are aware that bifurcated frames with removable points and adjusting devices, as shown
5 in Patent No. 178,815, of 1876, are not new, and such devices, broadly, are not sought to be covered. The strain in that construction being at two points, each near the center of the beam, tends to split the beam, and especially so in
10 the absence of proper tie-rods.

What we claim is—

The bifurcated frame D, formed of the two diverging arms d' , cross-heads E, having slots e , and pivoting-bracket H, combined with the

beam A, pivotal bolt d , adjusting-bolt f , and 15 tie-rod m , the frame being adapted to be applied to ordinary mold-board plows, as and for the purposes herein set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

JOEL J. ADCOCK.
GEORGE J. LUMPKIN.
MILTON WHITE.

Witnesses:

GEORGE R. PONDER,
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