

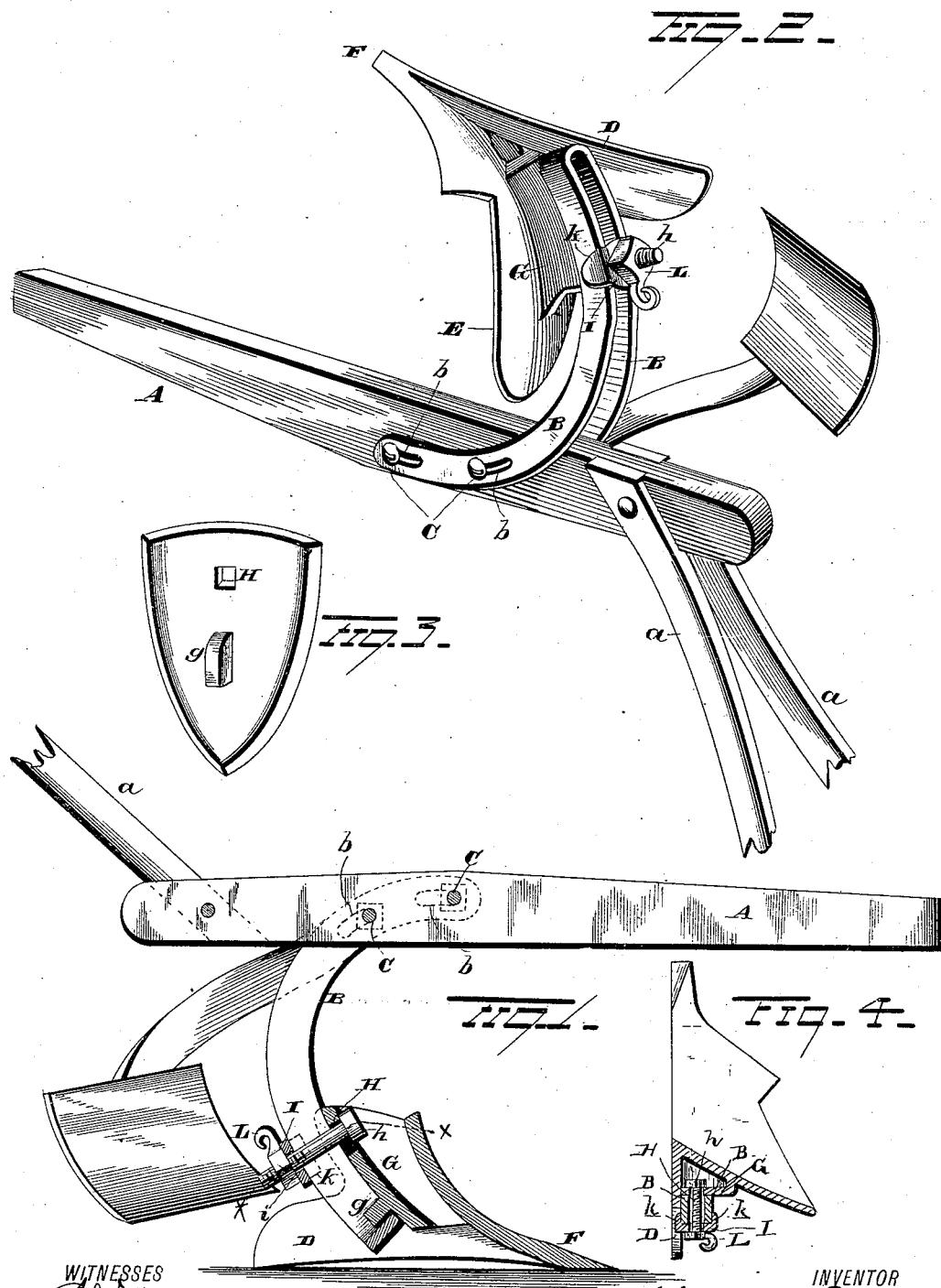
(No Model.)

W. W. SPEER.

PLOW.

No. 306,873.

Patented Oct. 21, 1884.



WITNESSES

*S. H. Nottingham*  
*Geo. L. Downing.*

INVENTOR

William W. Speer  
By Leggett & Leggett

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

WILLIAM W. SPEER, OF PITTSBURG, PENNSYLVANIA.

## PLOW.

SPECIFICATION forming part of Letters Patent No. 306,873, dated October 21, 1884.

Application filed June 16, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM W. SPEER, of Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Plows; 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.

10 My invention relates to an improvement in plows, the object of the same being to unite the mold-board, landside, and point in such a manner that the whole plow proper may be firmly secured to the standard in a simple and ready adjustment by a single bolt; and with this end in view my invention consists in certain features of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

20 In the accompanying drawings, Figure 1 is a vertical longitudinal section of the plow. Fig. 2 is a rear view. Fig. 3 is a modification, and Fig. 4 is a sectional view of the plow, taken on line  $x-x$  of Fig 1.

25 A represents the plow-beam, and  $a$  the handles, secured to the beam in any suitable manner.

The standard B is constructed in the manner fully set forth in Letters Patent No. 290,714, 30 granted to me December 25, 1883, and consists of two upwardly-extending forwardly-curved branches formed of a single piece of metal bent to shape or welded together at the foot, and having two elongated curved slots,  $b$ , in each branch, the slots in one branch occupying positions corresponding to the positions occupied by the slots in the other branch, and adapted to receive bolts C, by which the standard is secured to the beam in different adjustments.

40 The landside D, mold-board E, and point F of the plow proper are preferably cast in one piece, together with the tie-plate or hollow nose G, connecting the landside and mold-board. The rear surface of the tie-plate G is curved to correspond to the curve of the front of the standard B, and is provided near its lower end with the rearwardly-extending lug  $g$ , cast integral with the plate or firmly set therein, and with the oblong closed slot H near its upper portion, adapted to receive the

fastening-bolt  $h$  and allow the head of said bolt to drop out of the way in the rear of the mold-board. A bearing-plate, I, provided with a central perforation,  $i$ , adapted to receive the fastening-bolt  $h$ , and with lips  $k$ , 55 which engage the sides of the standard and hold the same against spreading, rests in contact with the rear of the standard, and forms a bearing for the hand-nut L, which latter engages the threaded end of the fastening-bolt. 60

To adjust the plow to the standard, place it in contact with the front of the standard, with the lug  $g$  between the branches of the standard at its lower end; and place the fastening-bolt  $h$  in the slot H, with threaded end extending rearwardly between the branches of the standard, adjust the bearing-plate thereon, and screw the nut  $h$  up snugly. The plow will now be firmly secured in position, and by means of the curved slots in the standard the 70 point may be set in the required adjustment to cut deeper or more shallow, as desired; or the plow proper may be adjusted in different positions on the curved standard, and the point will be elevated or depressed, thereby 75 affording a more shallow or a deeper cut.

I have represented the plow as secured to my improved standard, which combination forms a very light, effective, and convenient plow; but the plow proper, constructed in the 80 manner described, may be readily secured to any bifurcated or slotted standard, whether curved or straight, and the landside, mold-board, and point may, one or all, be riveted or bolted to the tie-plate, instead of being cast 85 integral.

The modification represented in Fig. 3 consists in a shovel-plow having the lug  $g$  and slot H formed as heretofore described, and this construction would apply equally as well to 90 scooters, sweeps, or scrapers.

It is evident that many slight changes might be made in the form and construction of the several parts without departing from the spirit and scope of my invention; hence I do not 95 wish to limit myself strictly to the construction herein set forth.

I am aware that it is not new to secure a plow to a standard by the use of a single bolt, and do not claim the same broadly; but,

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with an open standard 5 and a plow, of a hollow nose or tie-plate secured to the rear face of the plow, and binding together the mold-board and landside, the said nose or plate shaped to conform to the curve of the standard, and provided with a lug adapt-  
10 ed to be received between the branches of the standard and hold the plow against lateral displacement, a bolt passing through the nose and standard, and a nut for securing the parts together, substantially as set forth.
- 15 2. A plow consisting, essentially, of a U-shaped curved standard secured to the beam through curved slots, a hollow nose or tie-

plate binding together the mold-board, land-side, and point, said plate being constructed to conform to the standard, and provided with 20 a lug adapted to be received between the branches of the standard, and a fastening-bolt passing through the tie-plate and between the branches, the whole constructed in the manner and for the purpose substantially as set 25 forth.

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

WILLIAM W. SPEER.

Witnesses:

THOMAS D. GRAHAM,  
EDWARD W. CULGAN.