

(No Model.)

N. SWAGER.  
ATTACHMENT FOR TONGUELESS PLOWS.

No. 466,197.

Patented Dec. 29, 1891.

FIG. 1.

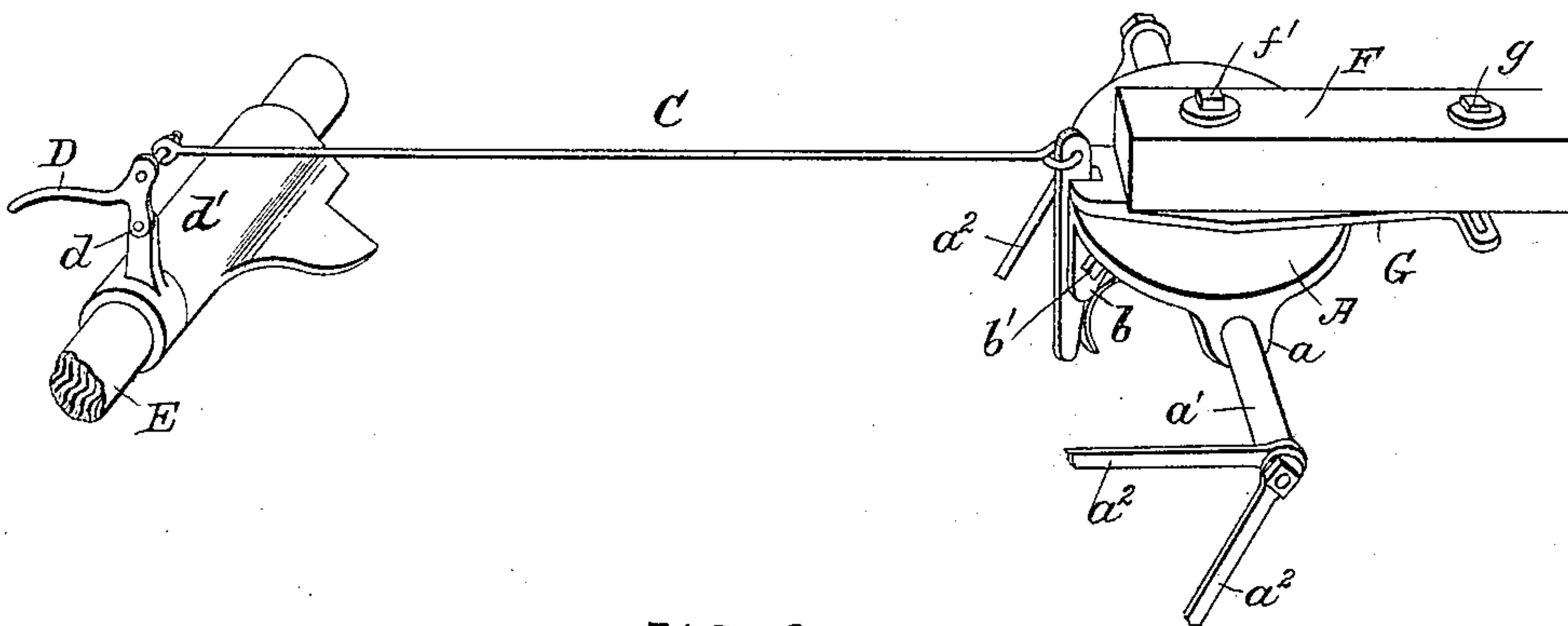


FIG. 2.

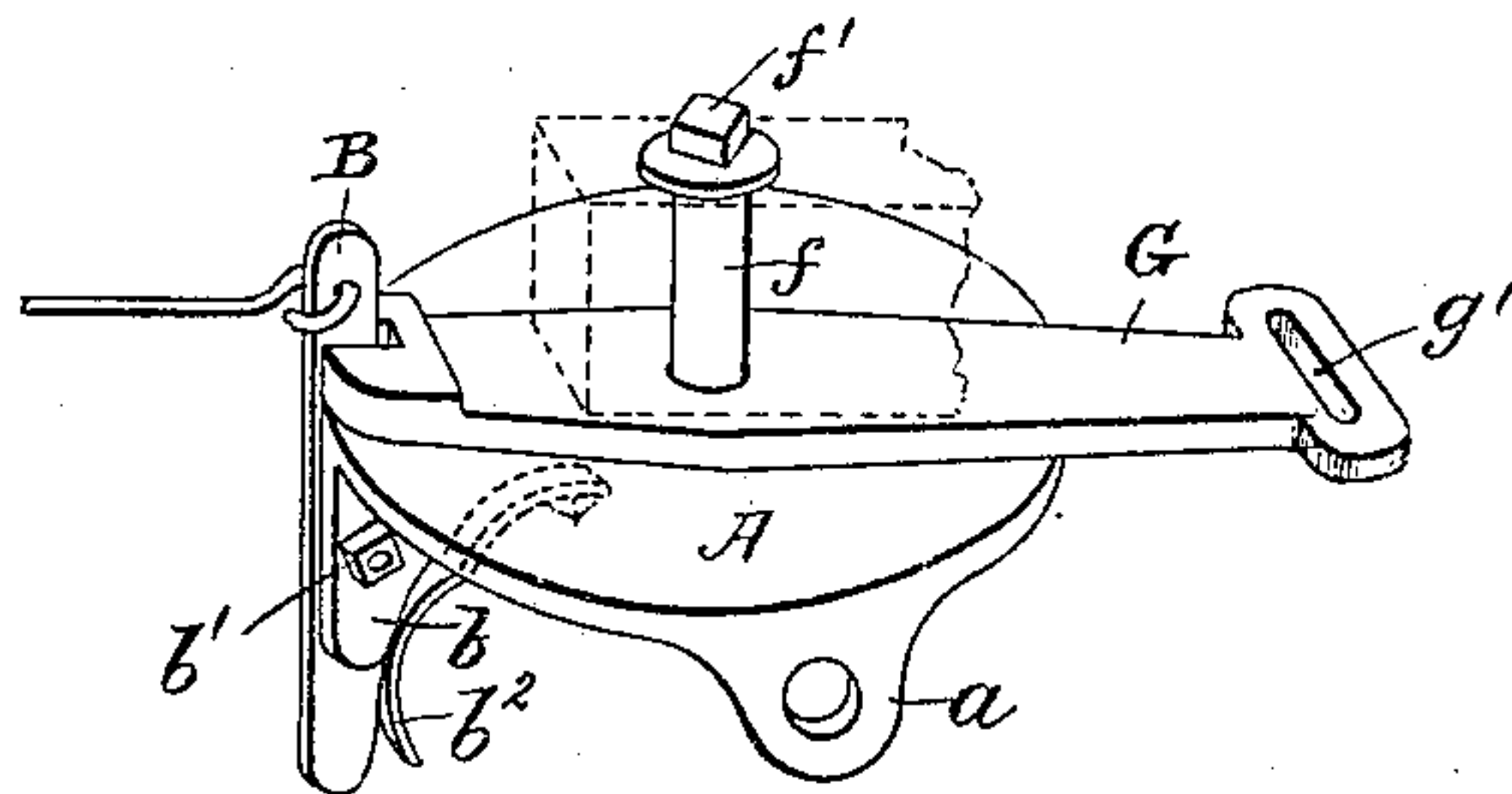


FIG. 4.

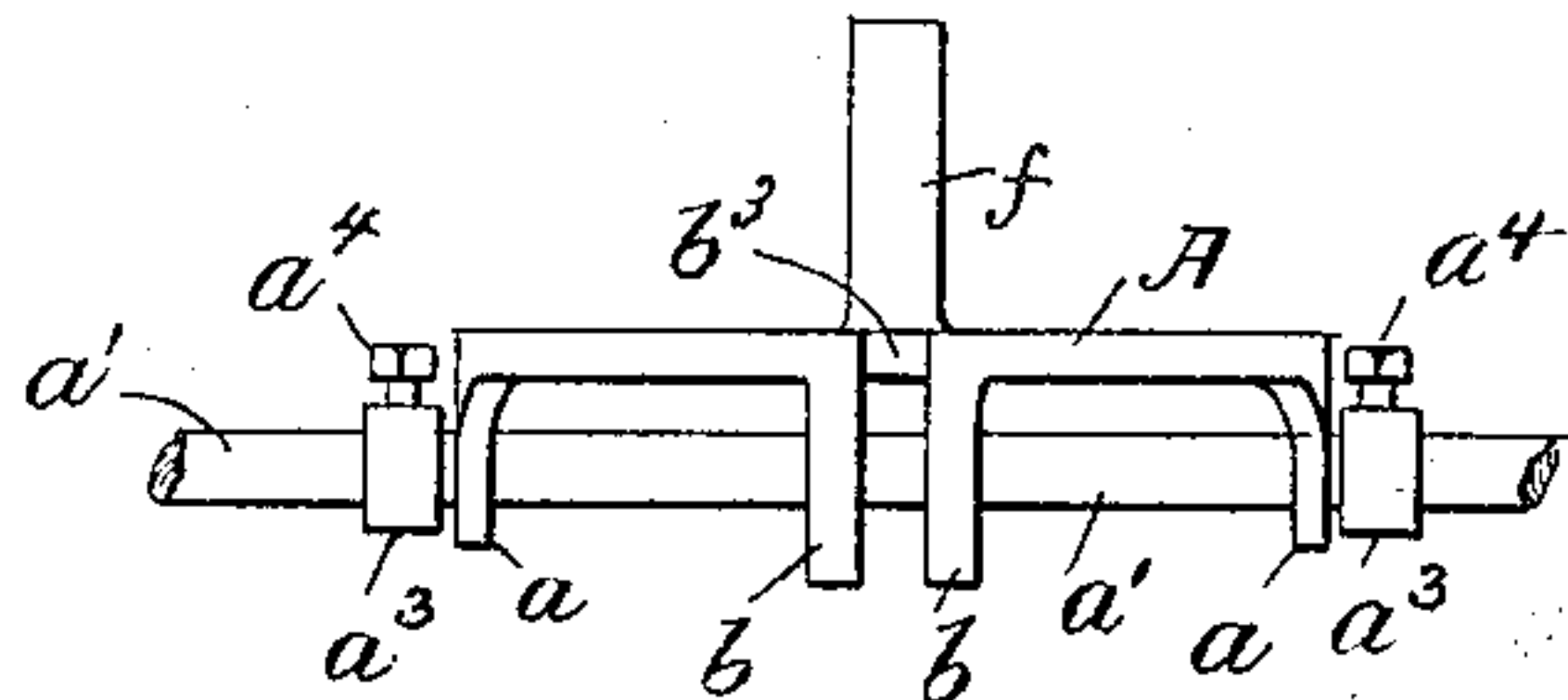
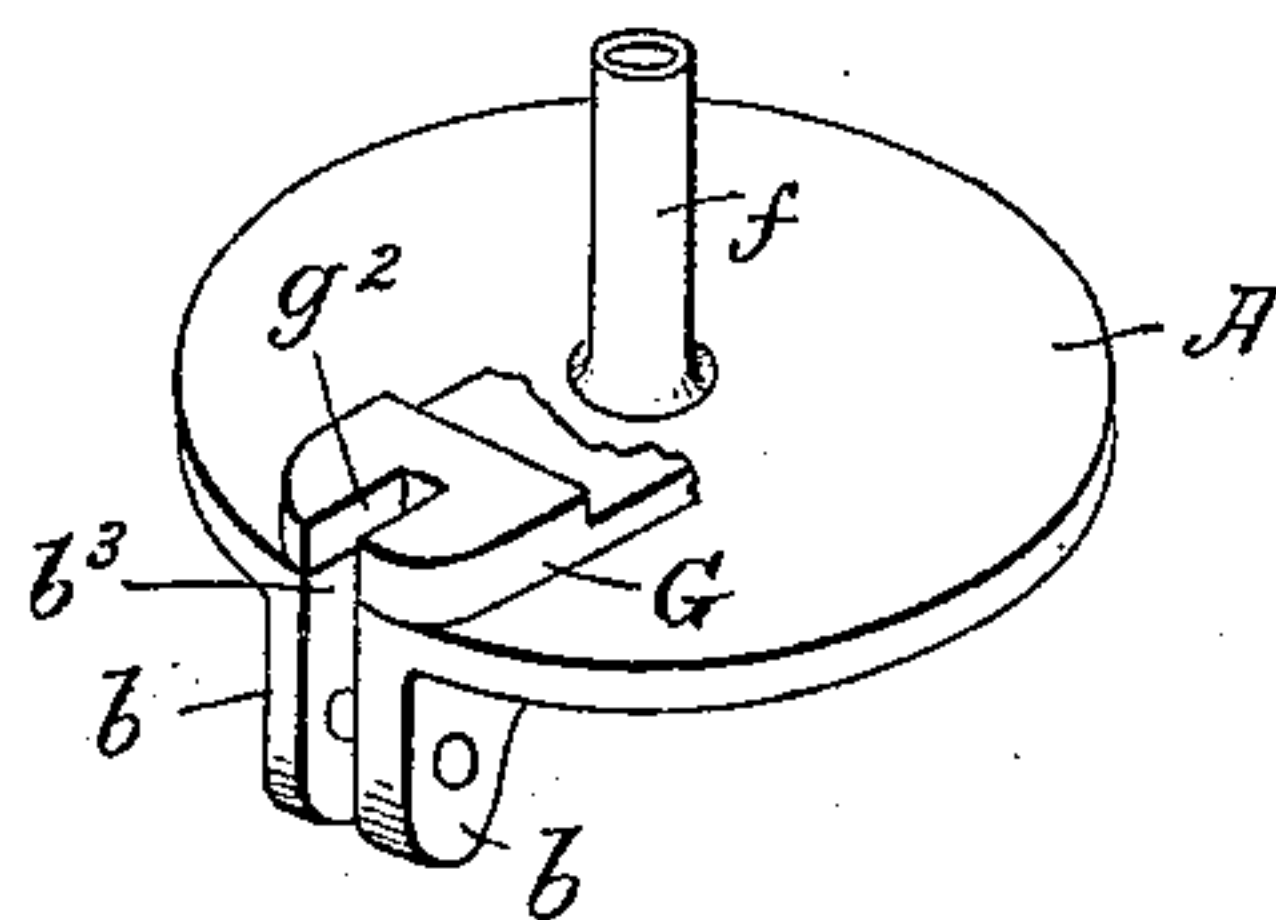


FIG. 3.



Attest:

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# UNITED STATES PATENT OFFICE.

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## ATTACHMENT FOR TONGUELESS PLOWS.

SPECIFICATION forming part of Letters Patent No. 466,197, dated December 29, 1891.

Application filed January 30, 1890. Serial No. 338,580. (No model.)

*To all whom it may concern:*

Be it known that I, NELSON SWAGER, a citizen of the United States, residing at Dubuque, in the county of Dubuque and State of Iowa, have invented certain new and useful Improvements in Attachments for Tongueless 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention pertains to certain new and useful improvements in attachments for tongueless plows; and it comprises the detail construction, combination, and arrangement of parts, substantially as hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in perspective illustrative of my invention as attached to a plow. Fig. 2 is an enlarged detail view. Fig. 3 is a similar view with parts broken away. Fig. 4 is a detail view showing means for adjusting main plate or disk.

Referring to the drawings, A designates a circular plate or disk provided with opposite lugs  $a$   $a$ , and  $a'$  is a supporting-bar passed through said lugs and rigidly supported at its ends by rods  $a^2$   $a^2$ , adapted to be secured to a clevis on the front end of a plow-beam. The disk is free to oscillate on its supporting-bar, and may be adjusted laterally and held at any point on bar  $a'$  by two collars  $a^3$ , having set-screws  $a^4$ . This adjustment is for the purpose of adjusting the draft for two or three horses when required.

B is a lever or clutch pivotally secured between parallel lugs  $b$   $b$  of disk A by bolt  $b'$  and normally held perpendicular by a spring  $b^2$ , secured at one end to the under side of said disk. This lever is designed to project through a slot  $b^3$  of disk A, from which it is removed by a rod C, connected to its upper end, said rod being secured at its rear end to a foot or hand lever D, fulcrumed on a stud  $d$  of a sleeve  $d'$  on the plow-axle E.

F is the tongue, provided with an aperture at its rear end for the projection therethrough of a short tube  $f$  of disk A, whereon it is held by a nutted bolt  $f'$ , extending through to the

bottom of disk A. A bar or plate G is secured to the under side of tongue F at the rear end thereof by a nutted bolt  $g$ , passed through a slot  $g'$  in the forward end thereof, said bar or plate being also pivotally secured on tube  $f$ . The rear end of the bar or plate G is provided with a slot  $g^2$ , designed to register or coincide with the slot  $b^3$  of disk A, so that the lever or clutch B will hold said bar and disk together, and thus secure a rigid tongue.

It will be seen that a rigid tongue is readily and easily secured by holding the rear end thereof united to the forward end of the plow-beam through the agency of the lever or clutch and the slotted bar, thus permitting the steady backing or traveling of the plow, and it will also be observed that these parts can be readily disengaged and the tongue permitted to swing freely on its pivot when so desired.

The advantages of my invention will be at once apparent to those skilled in the art, and it will be especially observed that the same greatly enhances the value and usefulness of the class of plows with which employed.

I claim as my invention—

1. The combination, with a plow, of the slotted disk or plate secured to the front end thereof and provided with a central tube, the tongue pivotally secured on said tube and provided with a bar or plate having a slotted end, the spring-pressed lever or clutch for engaging said slotted end of the bar or plate, and the means for operating the same, substantially as set forth.

2. The combination, with a plow, of the slotted disk or plate having apertured lugs, the rigid supporting-bar secured to said plow and passed through said lugs, the tongue pivotally secured to said disk or plate and having a slotted bar or plate, the spring-pressed lever or clutch pivoted between parallel lugs  $b$  of said disk or plate and designed to engage and hold said bar or plate, the rod connected to the upper end thereof, and the foot or hand lever for operating the same, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

NELSON SWAGER.

Witnesses:

JAMES PLAISTER,  
ALEX. SIMPLAT.