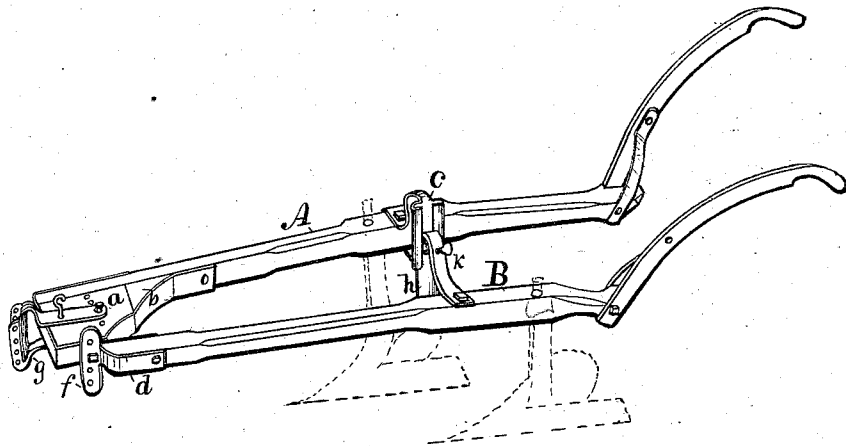


J. O. MINOR.

Plow.

No. 160,836.

Patented March 16, 1875.



Witnesses.

J. R. Major.

Wm. Douglas.

Inventor,

John O. Minor.

Attorney, Thomas G. Orwig.

UNITED STATES PATENT OFFICE.

JOHN O. MINOR, OF BEDFORD, IOWA, ASSIGNOR OF NINE-TENTHS HIS RIGHT TO P. H. OXLEY, JOHN P. BELL, BURSON FORDYCE, A. J. LITTLEIR, SIMON WRIGHT, J. T. KING, P. D. CURRAN, W. A. WEBB, AND D. GRIFFITH.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **160,836**, dated March 16, 1875; application filed April 28, 1874.

To all whom it may concern:

Be it known that I, JOHN O. MINOR, of Bedford, in the county of Taylor and State of Iowa, have invented an Improved Double Plow, of which the following is a specification:

My invention consists in simple, strong, and durable devices for coupling two plows together, in such a manner that the draft will be in a central line relative to the two beams and their plows, and that the beams may be vertically adjusted to raise and lower the plows, and thereby regulate the depth of their furrows, all as hereinafter fully set forth.

My drawing is a perspective view illustrating the construction and operation of my invention.

A represents a plow-beam of common form. *a* is a block bolted to the side and front end of the beam, and braced and protected by the plate *b*. *c* is an open loop suspended vertically at the side and central portion of the beam, by suitable braces bolted to the plow-beam. This loop forms a bearing for a slide of corresponding form carried by the second plow-beam. *B* is the second plow-beam. *d* is a forked metal plate incasing the front end of the beam *B*. The front and closed end of the plate *d* has perforated extensions upward and downward. A bolt, *f*, passed through one of the holes in the plate *d*, and through the block *a* and beam *A*, pivots the front end of the beam *B* to the side of the block *a*, and couples the front ends of the beams together. By changing the bolt *f* in the holes of the plate *d* the front end of the beam *B* is raised and lowered to regulate the depth of the plow attached thereto. *g* is a clevis, held with bolts to the block *a*, and midway between the two beams, to bring the draft of the team in a line central to the complete double plow. *h* is a slide, supported by braces attached to the beam *B* at a point parallel with the loop *c* on the beam *A*. This slide *h* connects with the

loop *c*, and, together with their supports or braces, they form an adjustable coupling device, to hold and lock the two beams rigidly together. *k* is a set-screw, which secures the slide *h* rigidly to its bearing or loop *c*. The front ends of the beams are pivoted together, and the rear coupling is adjustable, and the rear ends of the beams and their plows can, therefore, by means of the set-screw *k*, slide *h*, and loop or bearing *c*, be readily raised and lowered relative to each other and to the ground.

By this means of combination the plows can be set to run at even or irregular depth, as desired. The advance plow can be set to skim the sod or surface, and the rear one to turn the subsoil.

Two common right or left plows, of any form or style desired, can be thus coupled together, so that one person and three horses can do as much as two persons and four horses can accomplish with two single plows in the same given time.

I am aware that two plows have been coupled together to run parallel with each other, but I claim that my manner of coupling is new and advantageous.

I claim as my invention—

1. The perforated plate *d* on the front end of the beam *B*, in combination with the block *a* on the beam *A*, and the adjustable coupling devices *c h k* on the central portions of the beams *A* and *B*, substantially as shown and described, and for the purposes specified.

2. The loop or bearing *c* on the beam *A*, and having the groove *c'*, in combination with the loop *h* on the beam *B*, having the slide *h'* carrying the set-screw *k*, substantially as described, and for the purposes specified.

JOHN O. MINOR.

Witnesses:

RUSSELL B. KINSELL,
W. F. CONKLIN.