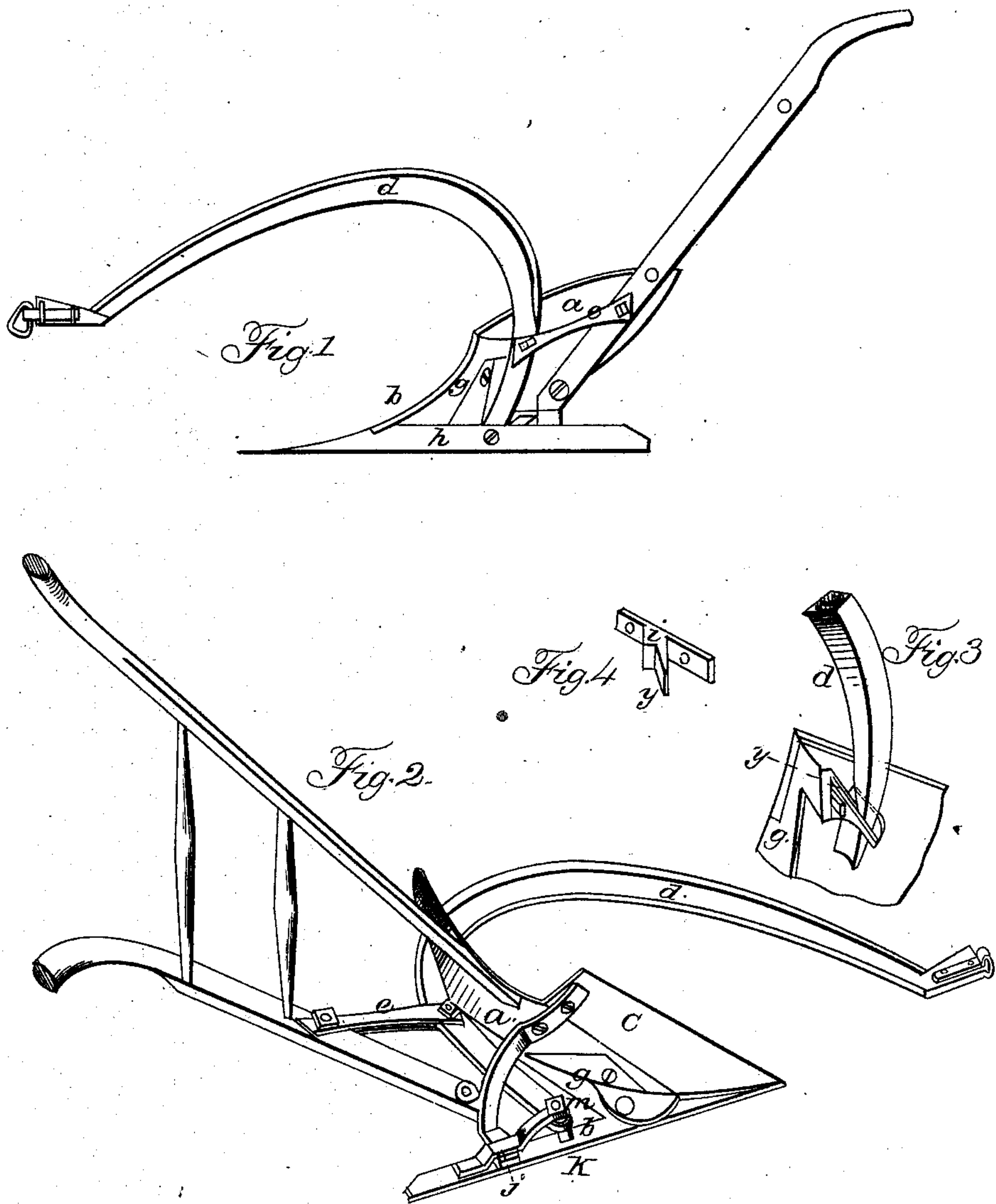


J. VANDEGRIFT.

Plow.

No. 69,867.

Patented Oct. 15, 1867.



Witnesses:  
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# United States Patent Office.

JAMES VANDEGRIFT, OF PRINCETON, ILLINOIS.

*Letters Patent No. 69,867, dated October 15, 1867.*

## IMPROVEMENT IN PLOUGHS.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, JAMES VANDEGRIFT, of Princeton, in the county of Bureau, and State of Illinois, have invented a certain new and useful Improvement in Ploughs; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side elevation.

Figure 2 is a perspective view looking from the under side.

Figures 3 and 4 are diagrams of the devices hereinafter described for attaching the plough-beam, and for adapting it to be shifted from one position to another.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in a novel and improved arrangement of devices, whereby the plough-beam may be readily shifted from one position to another, for the purpose of adapting the plough for either light or heavy draught, as will be hereinafter fully explained.

In order that others skilled in the art to which my invention appertains may be enabled to fully understand and use the same, I will proceed to describe its construction and operation.

In the accompanying drawings, *a* may represent a mould-board, in connection with which is employed a share *c*, formed or cast separately from the mould-board *a*, and secured thereto in such manner that when rendered useless or defective by wear it may be detached from said mould-board and replaced by a new share. *g* represents a plate, which, as illustrated, may be so formed at its lower portion as to provide means for the ready attachment of the share *c*, land-side *h*, and section *b*, to the mould-board *a*, said plate being secured to the mould-board at the land-side edge thereof by screws or otherwise. On the upper end of the plate *g* is formed an enlargement, from which projects a flange, *g'*, the use of which will be presently explained. *d* represents the plough-beam, which is curved in the manner shown, and so applied as to balance the implement longitudinally, and thereby adapt its operation to be performed in a more facile and efficient manner. This beam *d*, which I propose to employ in connection with my invention, is designed to be formed at its upper edge with a flange, in order to impart the requisite strength, without the necessity of forming the beam of large or cumbrous dimensions. The beam *d* is secured to the implement in two places, the first and upper means of attachment being constituted by the flange *g'*, and when the beam is secured in position, the enlargement on the upper end of the plate *g* forms a firm bearing therefor. The beam *d* is fastened to either side of the flange by means of a suitable screw-bolt, which passes through the beam, flange, and strengthening-braces *e*, and which may be readily withdrawn for the purpose of permitting the beam to be moved from side to side of the flange, so as to vary the line of draught, and thus adapt the implement for light or heavy draught, according to the condition of the soil. To adapt the beam *d* for adjustment at its lower extremity, to correspond with the adjustment thereof at its upper point of attachment, I attach to the land-side *h* a strong arm *j*, through which, as also through the beam *d* and the land-side *h*, passes a screw-bolt, *m*. *k* is a collar or cylindrical sleeve, which fits closely upon the screw-bolt *m*, and which may either be interposed between the beam *d* and land-side *h*, or between the said beam and the arm *j*, and thus cause the lower to correspond to the upper point of attachment. It is apparent that the nut by which the screw-bolt *m* holds these several parts together admits of the ready adjustment of the collar *k*. *i* represents a plate, provided with a flange and shoulder. Should it be desired to secure together the mould-board *a* and share *c*, independently of the plate *g*, this plate *i* may be secured to the upper part of the mould-board, and serves to admit of the adjustment of the beam in lieu of the flange *g'*.

By the above-described devices the plough may be quickly put in proper working position to suit different characters of soil, or the nature of the work to be performed.

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

The combination with the beam *d* of the flange *g'*, or its described equivalent, the braces *e*, arm *j*, adjustable collar *k*, and screw *m*, all constructed and arranged in the manner herein shown and described, and employed to adapt the plough for either light or heavy draught, in the manner set forth.

JAMES VANDEGRIFT.

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