P. GALLAGHER.

Plow-Clevis.

No 4,292. Patented Nov. 26, 1845

Fig. 2.

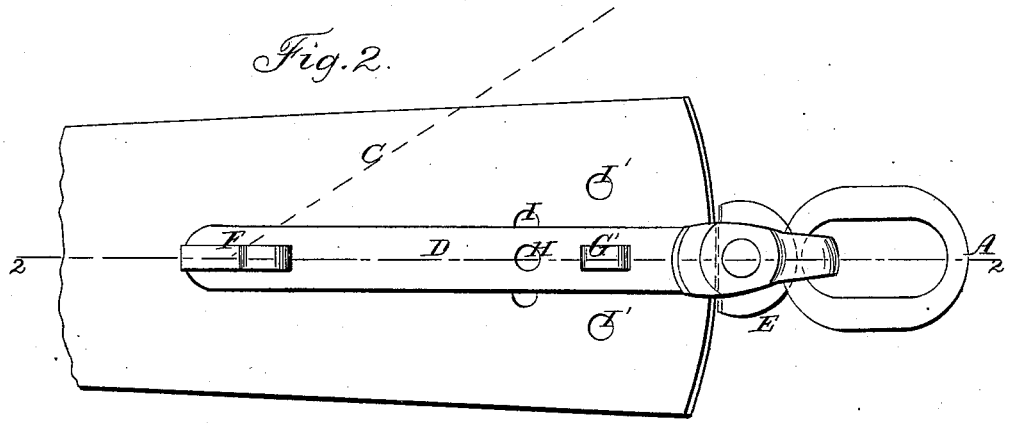
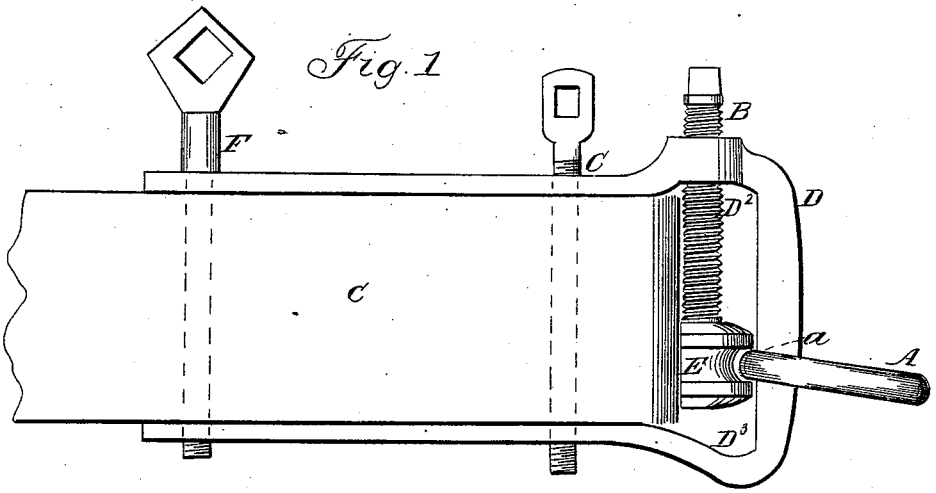


Fig. 1



UNITED STATES PATENT OFFICE.

PATRICK GALLAGHER, OF CHAMBERSBURG, PENNSYLVANIA.

IMPROVEMENT IN PLOW-CLEVISES.

Specification forming part of Letters Patent No. **4,292**, dated November 26, 1845.

To all whom it may concern:

Be it known that I, PATRICK GALLAGHER, of Chambersburg, in the county of Franklin and State of Pennsylvania, have invented a new and useful Improvement in Plows, being a mode of regulating the draft of the plow to any degree required, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a vertical section of a part of the beam with the improvement attached. Fig. 2 is a top or bird's-eye view of the same, showing the clevis, grooved segment-head of the screw, and the link in a straight line coincident with the center line, 2 2, of the beam, in which position the screw cannot turn, the straight side of the head being near or against the end of the beam. When it is desired to turn the screw for raising or lowering the segment-head the key G must be drawn from the clevis and beam and applied to the square head of the screw B, the clevis being first turned on the pin F till the head is brought to the right or left of the beam.

This improvement consists in raising and lowering the link A to regulate the draft of the plow to any degree by means of a vertical screw-bolt, B, arranged in front of the end of the beam C, and working in a female screw formed in the upper part of the clevis D, having a square head formed on its upper end, by which it is turned, and a segment of a grooved wheel or head, E, forming part of the screw-bolt or fixed permanently on its lower end, the periphery of which nearly touches the front part of the clevis. The segment taken off the grooved wheel is equal to the depth of the groove, so that when that part is turned next to the front part of the clevis (which may be done by turning the clevis to the right or left on its center F) the space between the two will be sufficient to allow the ring to which the horses are attached to pass between and be confined in the groove between the wheel and front part of the clevis, as represented at *a* in Fig. 1, and caused to ascend and descend with the screw-bolt B, as may be desired, to regulate the draft of the plow. When the segment-wheel or pulley is as high as it will go, and it is desired to increase the depth of cut or furrow, the link may be placed above the wheel or grooved segment-head between the top of the clevis and said head at D^2, and when it is as low as it will go, and it is desired to lessen the depth of furrow, the link is placed below the grooved head at D^3.

The usual notches in the clevis for holding the ring are dispensed with, thereby rendering the clevis stronger, the ring being held at the desired point against the inside of the vertical part of clevis without the danger of falling as long as the curved side of the segment is toward the front of the clevis.

The clevis D moves on a pin or bolt, F, passing through the beam C, and is held in any desired position by means of an additional pin or bolt or key, G, passing through openings H in the clevis and through a series of corresponding openings, I, formed in the beam on lines scribed from the bolt F, those, I′, on the line next to the front end of the beam being immediately in front of the spaces between those on the next curved line. When it is desired to give or take land from the plow the bolt G is removed, and the front part of the clevis moved toward either side of the beam until the opening in the clevis is over the desired opening in the beam, when the pin or bolt G is again inserted.

I do not claim adjusting the clevis with a screw and moving swivel-hook, as in the Gallatin plow; but

What I do claim as my invention and improvement, and which I desire to secure by Letters Patent, is—

The mode of raising and lowering and confining the ring A against the inner side of the front or vertical part of the clevis D by means of a segment grooved wheel or head, E, raised and lowered by a vertical screw, B, turning in a female screw in the upper or horizontal part of the clevis, by which combination and arrangement the weakening of the clevis, arising from the necessity of cutting the usual notches in it for holding the ring is avoided and the dropping of the ring is prevented, the said segment grooved wheel holding the ring against the front part of the clevis at the height desired, and made adjustable to any required level for various depths of plowing.

PATRICK GALLAGHER.

Witnesses:
EDMUND MAHER,
WM. P. ELLIOT.