

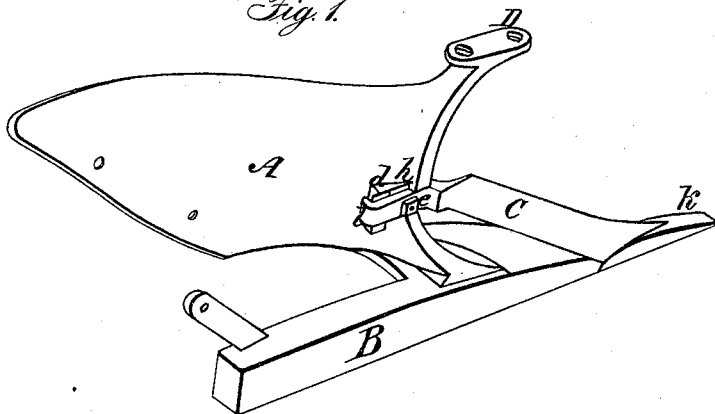
F. C. SMITH.

Plow-Colter.

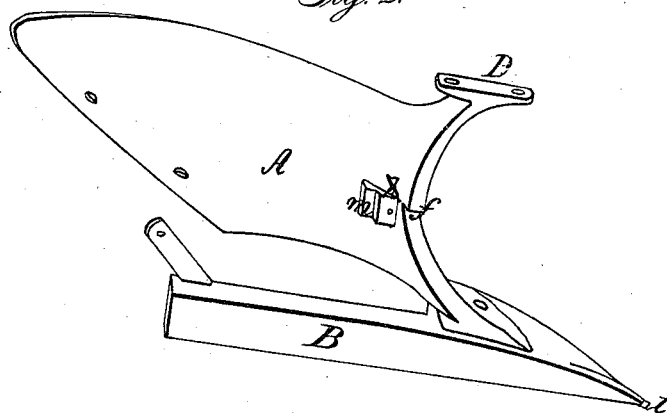
No. 5,526,

Patented Apr. 25, 1848.

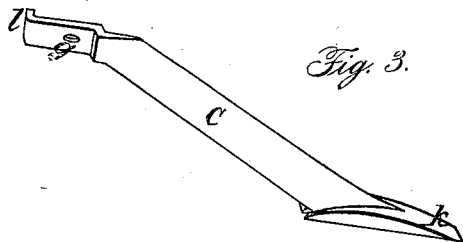
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



# UNITED STATES PATENT OFFICE.

FREDERICK C. SMITH, OF HARPER'S FERRY, VIRGINIA.

## IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 5,526, dated April 25, 1848.

*To all whom it may concern:*

Be it known that I, FREDERICK C. SMITH, of Harper's Ferry, in the county of Jefferson and State of Virginia, have invented a new and Improved Plow, which I denominate the "Brace-Colter Plow;" and I do hereby declare the following to be a full, clear, and exact description of the construction and operation thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the mold-board, share, and colter of my improved plow, united to each other and detached from the beam and handles. Fig. 2 is a perspective view of the share and mold-board united to each other and detached from the other parts of the plow, and Fig. 3 is a perspective view of the colter detached.

The nature of my invention consists in the combination of a colter with the share and mold-board in such a manner that the colter serves not only the purpose of a colter, but also as a cutting-edge at the front of the mold-board and as a supporting-brace for securing the share and mold-board to each other.

Similar letters refer to corresponding parts in all the figures.

A is the mold-board. B is the share, and C is the colter. D is a plate on the standard, rising from the front edge of the mold board, to which the beam is attached.

The colter C is inclined at an angle of about thirty six degrees. Its lower end terminates in the horizontal point *k*.

The colter is secured to the mold board and share as follows: A mortise or socket is formed in the rear end of the point *k* for the reception of a tenon or point, *i*, on the front end of the share.

*f* is a shoulder on the inner side of the front edge of the mold-board.

*h* is a lug cast on the inner side of the mold-board immediately in the rear of the shoulder *f*. The point or tenon *i* having been inserted in the socket at the rear end of the point *k*, the

horizontal shank at the upper end of the colter is passed under the shoulder *f* and is secured to the lug *h* by the screw-bolt *e*.

*l* is a lip at the rear end of the horizontal shank of the colter.

*m* is a recess in the lug *h* for the reception of the key or wedge *d*.

*g* is a slot in the horizontal shank of the colter, through which the screw-bolt *e* passes. The key *d* presses against the lip *l* at the rear end of the shank of the colter, and in combination with the screw-bolt *e* and the shoulder *f* confines the mold-board to the point of the share in so perfect a manner as to impart great stiffness and strength to the combined mold-board, share, and colter. The point at which the colter is secured to the mold-board is just above its rubbing-surface, and it projects out in front of the mold-board a sufficient distance to prevent the rubbish and trash as it passes up over the colter from accumulating on the front edge of the mold-board. In practice it is found that no rubbish adheres to the inclined colter or mold-board to obstruct the progress of my brace-colter plow; but it is all discharged and covered by the furrow.

Having thus fully described the construction and operation of my self-clearing brace-colter plow, what I claim therein as new, and desire to secure by Letters Patent, is—

The combination of the inclined self-clearing colter and point (in one piece) with the share and mold-board in such a manner that the colter serves not only the purpose of a colter, but also as a cutting-edge for the mold-board and a supporting-brace for giving stiffness and strength to the share and mold-board, substantially as herein set forth, not confining myself to the identical manner of accomplishing this object, as herein set forth, but to something substantially the same.

F. C. SMITH.

Witnesses:

Z. C. ROBBINS,

GUY C. HUMPHRIES.