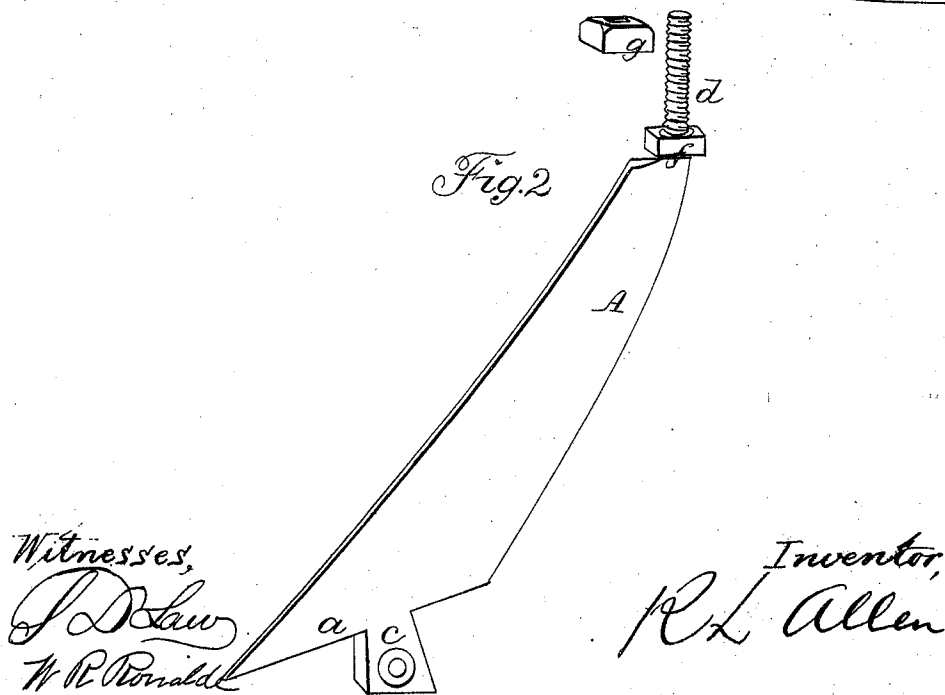
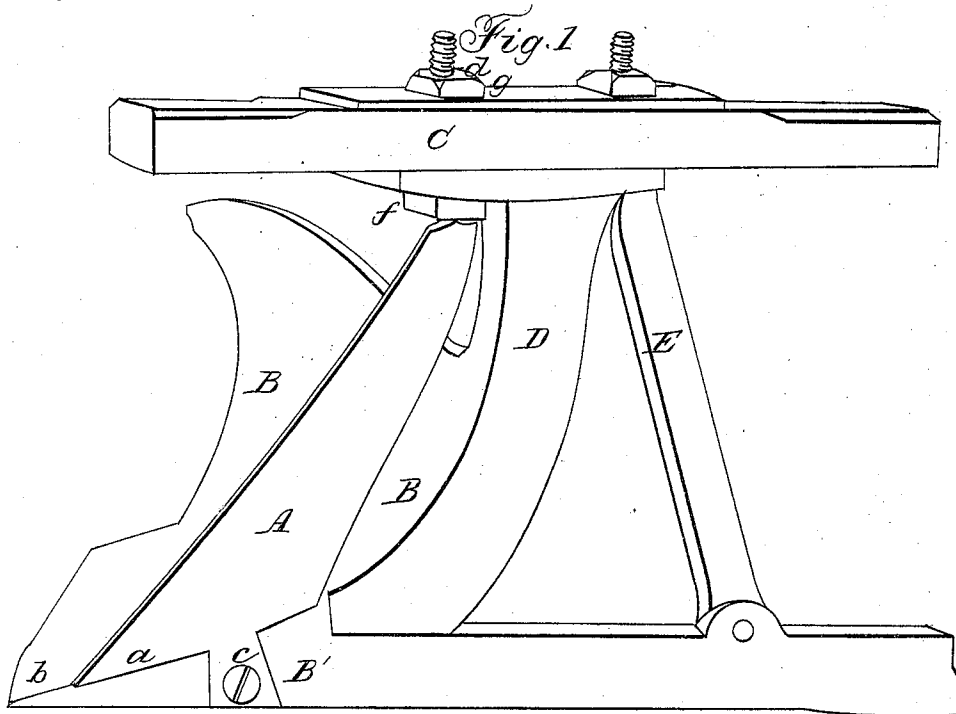


R. L. ALLEN.

Plow.

No. 52,948.

Patented Mar. 6, 1866.



# UNITED STATES PATENT OFFICE.

RICHARD L. ALLEN, OF NEW YORK, N. Y.

## IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 52,948, dated March 6, 1866.

*To all whom it may concern:*

Be it known that I, RICHARD L. ALLEN, of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Plows; and I do hereby declare that the following is a full, clear, and exact description thereof and of their mode or manner of operation, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and making a part of this specification.

The nature of my invention consists in a new and improved manner or method of connecting and fastening the colter to the share and to the beam, whereby increased stability and efficiency are given to the colter and greater strength to the plow.

In plows using a colter as heretofore constructed, the upper end of the colter has been connected to the beam of the plow near the standard, but by an independent connection, and the lower end of such colter has either been wholly disconnected from the share or connected therewith by only a little spur or projection extending from the bottom of the colter and entering into a slot or recess in the share made to receive it. In the former case the colter was very liable to soon get loose or be bent or broken, and in the latter case any upward draft upon the end of the beam, as when the point of the share might be caught under a root or against any obstacle, tends to spring up the beam and lift the projection of the colter from the recess in the share, and thus leave the colter, as in the other case, without support at the bottom.

My invention has relation to the manner of connecting the colter both to the share and to the beam, and prevents the separation of these several parts from each other.

The lower edge, *a*, or bottom of the colter *A* is shaped to correspond with the upper surface, *b*, of the share or landside *B'*, as shown in Figure 1. From such lower edge of the colter there extends a dovetail projection or tenon, *c*, which fits in and enters a recess or mortise made in the side of the share or landside *B'*,

and the two are then firmly fastened together by a screw, rivet, or the like passing through the tenon *c* and into the share or landside. The colter, by being thus securely fastened to the share, is guarded and protected against side pressure, and also against possible displacement by means of any upward draft or strain at the end of the beam.

The method of securing and fastening the colter to the beam is also peculiar. Instead of merely passing the upper end of the colter through the beam *C* and then fastening it by a nut or key from the top, and by which manner of fastening there is a tendency and liability to spring or force down the ends of the beam more or less, and thus cause an improper strain upon the connections of the several parts, there is placed on the stem *d* of the colter (or the part which is to pass through the beam) a set or check nut, *f*, which is so adjusted as that the beam, when in its proper natural position, will rest upon it, and against which all pressure will come when the securing-nut *g* upon the upper side of the beam is turned down.

By such method of fastening or connecting the beam and colter the proper position or direction of the beam is not interfered with or changed, however closely the nut *g* may be drawn down.

The colter, when thus fastened to both the share and the beam, also becomes and is made a brace between them, sustaining and strengthening each, and protecting the former against sudden shocks and strains produced from coming in contact with stones, roots, or any impediment in the ground.

The colter or the extension of it, *d*, which passes through and by which it is connected to the beam, is also made to take the place of and acts as one of the bolts used to connect the standard *D* to the beam. This simplifies the construction of the plow, reduces somewhat its cost of construction, and the beam is left stronger by reason of fewer holes being bored through it.

The brace *E* is also so placed with respect to the beam and the landside and the colter that it gives, in combination with the colter

A, great strength to the plow, such brace and colter supporting each other and keeping the beam firmly in its proper position.

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

1. Attaching and securing the colter to the plowshare or landside by a dovetail joint or connection, substantially as described.

2. So arranging or placing the colter A and brace E with respect to each other, as described, that they give increased stability and strength to the several parts of the plow.

R. L. ALLEN.

Witnesses:

S. D. LAW,

W. R. RONALDS.