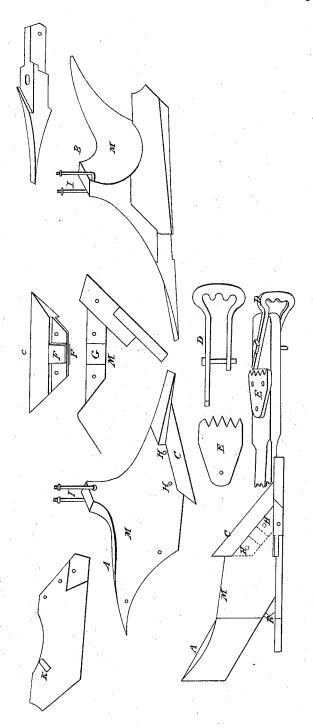
Patented July 17. 1837



UNITED STATES PATENT OFFICE.

J. B. NORTON, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 273, dated July 17, 1837.

To all whom it may concern:

Be it known that I, JOB B. NORTON, of the city of Philadelphia, have invented new and useful Improvements in what is known as the "Self-Sharpening Plow;" and I do hereby declare that the following is a full and exact de-

scription thereof.

The principle of one of the improvements here to be described consists in giving the plow a greater or less inclination to the right hand or left of the line of its draft for the purpose of increasing or diminishing the width of the furrow, as occasion shall require. This may be done by providing a plate of iron, E, and fixing it flatwise upon the top of the beam, with its forward edge about four inches back of the bolt that secures the clevis. The thickness of this plate may be half an inch or more, and its forward edge, which should be about four inches wide, is to be indented or formed into teeth or cogs, all equidistant from the bolt of the clevis D, and the upper branch or arm of the clevis is to extend back from the bolt, so that when fixed in its place the end shall come into one or the other of the spaces between the teeth of the plate to which it is to be fitted. This appendage may be called the "graduator;" and it will be perceived that as the point of this branch of the clevis is placed in either of the spaces thus prepared for it either on one side or the other of the center, the forward end of the clevis will, of course, be canted in the opposite direction; the clevis-bolt, as a pivot, being the center of such movement, and in this way the direction of the plow and width of the furrow may be graduated at discretion.

Another of the improvements consists in the manner of securing the plowshare C to the

mold-board M.

In order to give additional strength to the share, and to connectit with more firmness than heretofore, a section of it, about the center in respect to its length, an inch and a half wide, more or less, is to have its surface raised on

each side of the plate about one-fourth of an inch, or less, in nature of a flange, F. This is to extend from the shoulder provided in the share for the edge of the mold-board to the back edge of the share; and on the under side of the mold-board a groove, G, is to be provided to receive this flange or raised surface snugly within it, they being fitted to each other for that purpose. In addition to this, the share should be secured to the mold-board by two screw-bolts, H H, instead of one, as heretofore.

As a further improvement, the mold-board may be fastened to the beam by means of a staple, I, passing through a perforation provided for it in the upper part of the mold-board, with the branches of the staple extended up through the beam, and there secured by nuts, screwthreads being cut upon them for the purpose.

A still further improvement consists in a projection, K, to be provided on the inner part of the landside of the plow as a bulb or stud, extending from the surface a distance about equal to the thickness of the lower end of the plowhandle, it being for the purpose of a rest or guard to that end of the handle, and to secure it against any upward inclination. It of course should be so placed as to come in contact with the upper surface of the handle.

What I claim of the improvements above specified and described as my own invention, and desire to secure by Letters Patent, is—

The graduator as respects its principle.
The manner of strengthening and secur-

ing the share to the mold-board.

3. The projection or bulb on the inner part of the landside of the plow, against which the plow-handle rests.

4. The method of securing the mold-board to the beam by the staple, in the manner before

described.

J. B. NORTON.

Witnesses:

J. C. Lansing, Daniel Whiting.