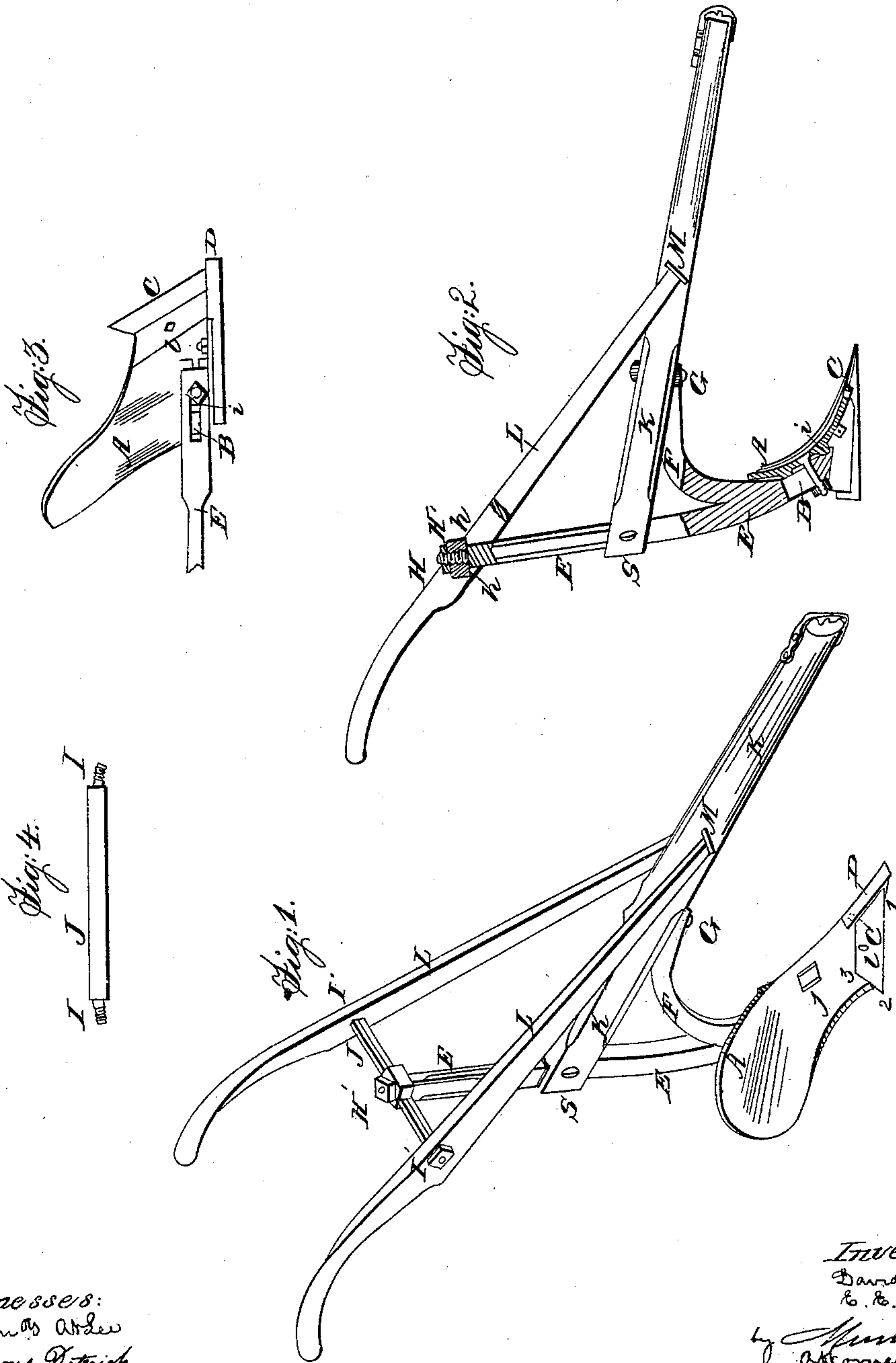


D. H. & E. E. SMITH.

Plow.

No. 27,745.

Patented Apr. 3, 1860.



Witnesses:
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UNITED STATES PATENT OFFICE.

D. H. SMITH AND E. E. SMITH, OF GLENN SPRINGS, SOUTH CAROLINA.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 27,745, dated April 3, 1860.

To all whom it may concern:

Be it known that we, DAVID H. SMITH and E. E. SMITH, of Glenn Springs, in the district of Spartanburg and State of South Carolina, have invented a new and useful Improvement in Plows; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of the plow; Fig. 2, a vertical longitudinal section; Fig. 3, a bottom view of the mold-board, and Fig. 4 a view of a part of the plow-frame.

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

The nature of our invention consists in the arrangement, in a plow, of the several parts hereinafter described.

To enable others skilled in the art to make and use our invention, we will proceed to describe its construction and operation.

The mold-board A of this plow has a cutter, C, attached to its front by means of a screw, L. The shape of this cutter is that of a trapezium, the two oblique sides 1 4 and 2 3 of which converge under equal angles. Thus the cutter C can be reversed whenever the point 2 has been worn off, so as to cause the edge 1 4 to take the place of edge 2 3 and expose point 1 instead of point 2.

The mold-board has two horizontal ridges, *i i*, on its rear side, which rest against the front surface of the foot B of the plow-standard E, this front surface of foot B being straight and of such an inclination that the mold-board and parts connected with it shall be in proper position when the ridges *i i* are placed against said surface of foot B. The mold-board is fastened to the foot B by means of a bolt, *j*, the head of which is countersunk in the front surface of the mold-board, while its shank passes through a slot in the foot B. The nut of this bolt can be loosened and the mold-board placed higher or lower, the slot in the foot B allowing a corresponding play to the bolt *j* and be confined in the desired position by fastening the nut of

bolt *j*. Thus the plow can be adjusted so as to plow to a greater or less depth. The two ridges *i i* are made for the purpose of fitting the mold-board (the general outline of which is curved) to the straight face of the foot B. By arranging the bolt *j* between the two ridges *i i* the mold-board is very firmly held in its place.

An arm, F, of the standard is bolted to the under side of the beam K at G, while the standard itself is fastened to the rear end of the beam at S.

A horizontal brace, J, is fastened to the upper end of the standard E, through the agency of a shoulder, Z, screw-thread H, and nut H'. Both ends, I I, of the brace are screw-threaded and inclined, so as to pass at right angles through the handles L L, to which they are firmly secured by nuts I' I'. The front ends of the handles are fastened to the front portion of the beam at M M. Thus the handles, beam, and standard are connected in a very firm and substantial manner.

It will be understood that in consequence of the ridges *i i* resting against a straight surface the point D of the plow will be of a uniform inclination in relation to the standard, (as it ought to be,) no matter whether the mold-board be adjusted higher or lower. This would not be the case if the ridges on the curved rear surface of the mold-board were made to rest against a curved surface of the foot of the standard.

What we claim as our invention, and desire to secure by Letters Patent, is—

The arrangement of a mold-board, A, a reversible cutter, C, ridges *i i*, inclined and slotted foot B, standard E, with shoulder Z and screw H, and the brace J, with inclined screw-threaded ends I I, the whole substantially as and for the purposes set forth.

The above specification of our improvement in plows signed by us this 27th day of February, 1860.

DAVID H. SMITH.
E. E. SMITH.

Witnesses:

H. WHITE,
B. B. FOSTER.