

(No Model.)

W. S. PATES.
GUIDE RUNNER FOR PLOWS.

No. 353,232.

Patented Nov. 23, 1886.

Fig. 1.

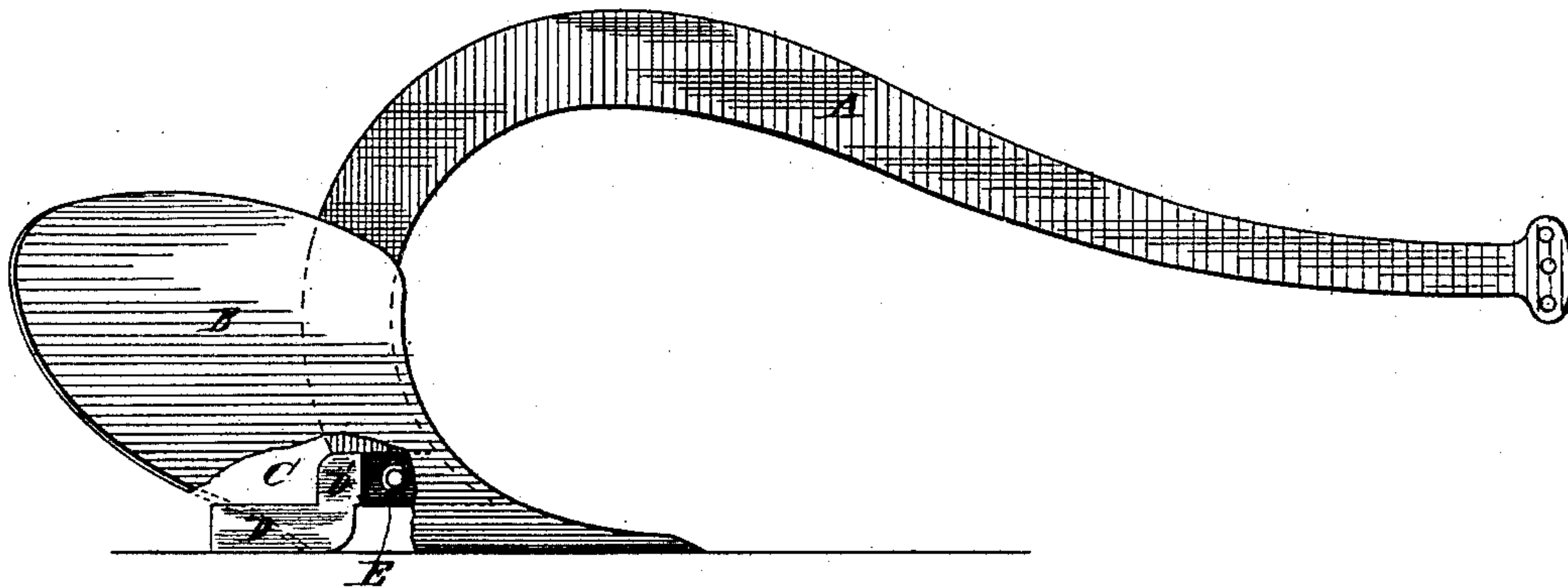
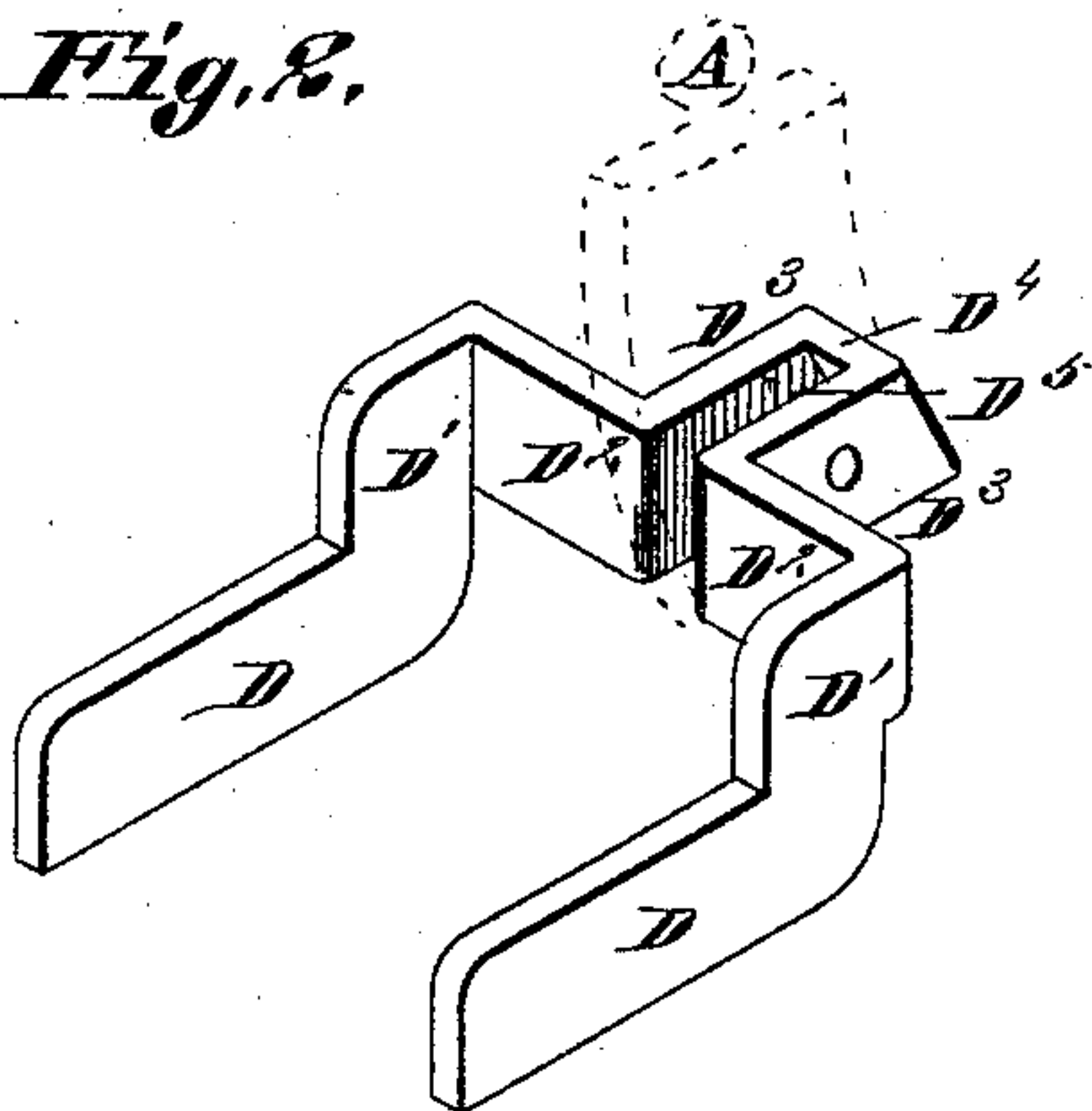


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM S. PATES, OF ALTON, ILLINOIS.

GUIDE-RUNNER FOR PLOWS.

SPECIFICATION forming part of Letters Patent No. 353,232, dated November 23, 1886.

Application filed June 23, 1886. Serial No. 206,024. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. PATES, of Alton, in the county of Madison and State of Illinois, formerly of Jonesburg, in the
5 county of Montgomery and State of Missouri, have invented a certain new and useful Improvement in Guide-Runners for Plows, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a side elevation, showing the beam and mold-board of the plow, part of the mold-board being broken away and my improved runner attached to the beam. Fig. 2
15 is a perspective view of the runner, showing part of the beam in dotted lines.

My invention is an improvement in double runners for plows.

20 My invention relates to a cheap and durable guide-runner for plows, and which is intended more particularly for listing and planting plows, in connection with which I have shown it, but which may be used on other plows;
25 and my invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Referring to the drawings, A represents the beam, and B the mold-board, of a listing or
30 planting plow.

C represents my improved double runner. This runner is secured to the beam, as shown in Fig. 1, and is preferably made out of one piece of metal, and is also preferably made of
35 the shape shown in Fig. 2, D being the runners proper that bear upon the ground, having upwardly vertical extensions D', horizontally inward extensions D²; horizontally forward

extensions D³, and a portion, D⁴, connecting the inner ends of the parts D³. The runner 40 may be made in this shape either by bending and forging it, or it may be cast in this shape. Between the portions D³ is a socket or opening, D⁵, in which fits the lower end of the beam A, as shown, and in which the beam is 45 held by a pin or bolt, E. The runner, being thus formed in one piece of metal, is strong and durable, and being attached to the beam of the plow it is not liable to get loose or to wrench or distort the other parts of the plow, 50 as it might do were it attached to them.

The two parts D, working upon the bottom of the furrow, give a broad and firm bearing to the plow, filling effectually the functions of such runners. 55

I claim as my invention—

1. A runner for plows having the horizontal rearwardly-extending parts, the vertical parts, the horizontal inwardly-extending parts, the forwardly-extending parts, and the connecting 60 part, substantially as described.

2. As an improved article of manufacture, a double runner for plows formed of a single piece of metal, and constructed to be attached to the beam of the plow, as set forth. 65

3. As a new article of manufacture, a runner for plows formed of a single piece of metal having horizontal parts D, vertical parts D', horizontal inwardly-extending parts D², horizontal forwardly-extending parts D³, and connecting parts D⁴, substantially as shown and 70 described, for the purpose set forth.

WILLIAM S. PATES.

In presence of—

WM. DYER,
A. W. STEVENS.