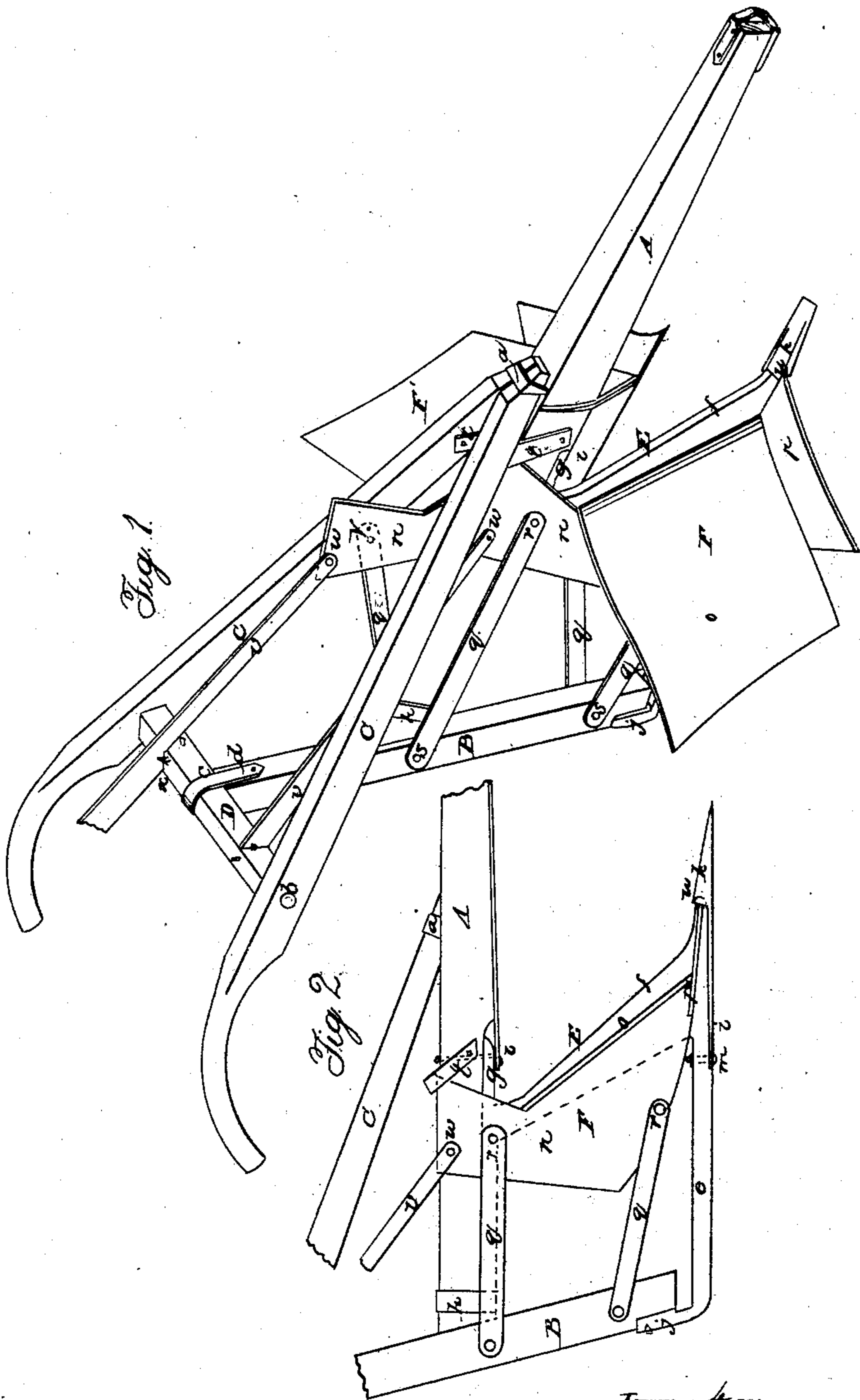


R. H. EWING.

Side-Hill Plow.

Patented Nov. 27, 1860.

No. 30,726.



Witnesses:
Geo. Pyburn
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UNITED STATES PATENT OFFICE.

R. H. EWING, OF CLEVELAND, OHIO.

IMPROVEMENT IN HILLSIDE-PLOWS.

Specification forming part of Letters Patent No. 30,726, dated November 27, 1860.

To all whom it may concern:

Be it known that I, R. H. EWING, of Cleves, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Hillside-Plows; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and letters of reference marked thereon, which form part of this specification.

My invention relates more especially to the manner of operating and bringing into use either one of two mold-boards, arranged on the left and right side of a fixed landside, colter, and point or share.

In the accompanying drawings, Figure 1 is a perspective view of my plow, showing the right-side mold-board in position for operating, while the left-side mold-board is elevated, so as to be out of the way. Fig. 2. is a vertical projection or elevation of the plow-irons, &c., showing their connection with the stock of the implement, and the manner of operating the mold-boards.

Like letters of reference designate like parts in both drawings.

A is the main or draft beam, mortised at its rear extremity into B, the main standard. The beam and standard together form the stock of the plow.

C C are the handles, secured to the main beam by a strap, *a*, and to the cross-rail D by a bolt, *b*, running entirely through the same, and secured at the ends by nuts, as shown. The cross-rail D is secured to the main standard by mortise and tenon, and by a strap, *c*, secured by bolt *d*.

E is the plow-iron, consisting, in one piece, of *e*, the sole; *f*, the colter, and *g* the upper plate. This iron is secured to the draft-beam by the strap *h*, passed round the upper plate, *g*, and main beam A, and by the bolt *i*, passed through the other end of upper plate and through main beam; also by *j*, a heel-piece at rear of sole *e*, which is secured to the main standard B. This plow-iron constitutes and forms the fixed landside. The point or share *k* is constructed with a socket into which the end of plow-iron fits, and also with a back-

ward prolongation or arm, *l*, by which it is secured with a bolt, *m*, to the sole *e*. Thus it is movable for being sharpened or repointed.

The mold-boards F F' are movable, or, more properly, adjustable, and are each constructed and secured to the stock of plow, as follows: *n* is the body of mold-board, *o* is the wing, or mold-board proper; and *p* the foot-plate. These in execution will be cast in one piece and attached to the main standard B by two horizontal arms, *q q*, riveted loosely to body of mold-board at *r r*, and securely pivoted to main standard by bolts *s s*. A catch, *t*, on beam A receives the upper point of body or mold-board, and keeps it close to the landside or plow-iron. The lower point of foot-plate *u* slips into a notch or groove in the side of point or share *k*. A rod, *v*, attached by loosely riveting at *w* to upper part of body *n* of mold-board, stops against cross-rail D, and forms a brace or stay to keep the mold-board from against the inertia of the soil in plowing.

The operation and action of my invention are as follows: In plowing on a hillside, the rise being to the left, the left-side mold-board, F', is elevated by means of the rod *v'*, which is hooked onto pin *x* in cross-rail D, and thus held firmly out of the way. The right-side mold-board, F, being in place, is held there by the rod *v* butting against cross-rail D by the catch *t* and groove *u* in point or share *k*. After the forward furrow is plowed the implement is reversed in direction. The hill now being on the right of the plow, the left mold-board, F', is lowered to its place and fixed there, as before described in relation to the right side. The right-side mold-board is now raised out of the way, and in this manner consecutive furrows may be run back and forth to any required extent.

The advantages of my invention need not be enlarged upon, as they are plainly perceptible at sight; and as my invention supplies a desideratum long sought by agriculturists, it cannot fail being recognized.

I am aware that plows having two mold-boards, one on either side of a fixed landside, and capable of being used one at a time, have previously been used, (see Sam. Dennis, Jr.,

New York, March 2, 1858,) and therefore I do not claim broadly a plow of this description or construction; but

What I do claim, and what I wish by Letters Patent to secure, is this:

In a hillside-plow with two mold-boards, F F', the manner of securing and of operating the mold-boards—viz., by means of horizontal

arms *q q*, catch *t*, and groove in point *k*, together with the rods *v*, or their equivalents, all arranged and operating substantially as and for the purposes set forth.

R. H. EWING.

Witnesses:

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