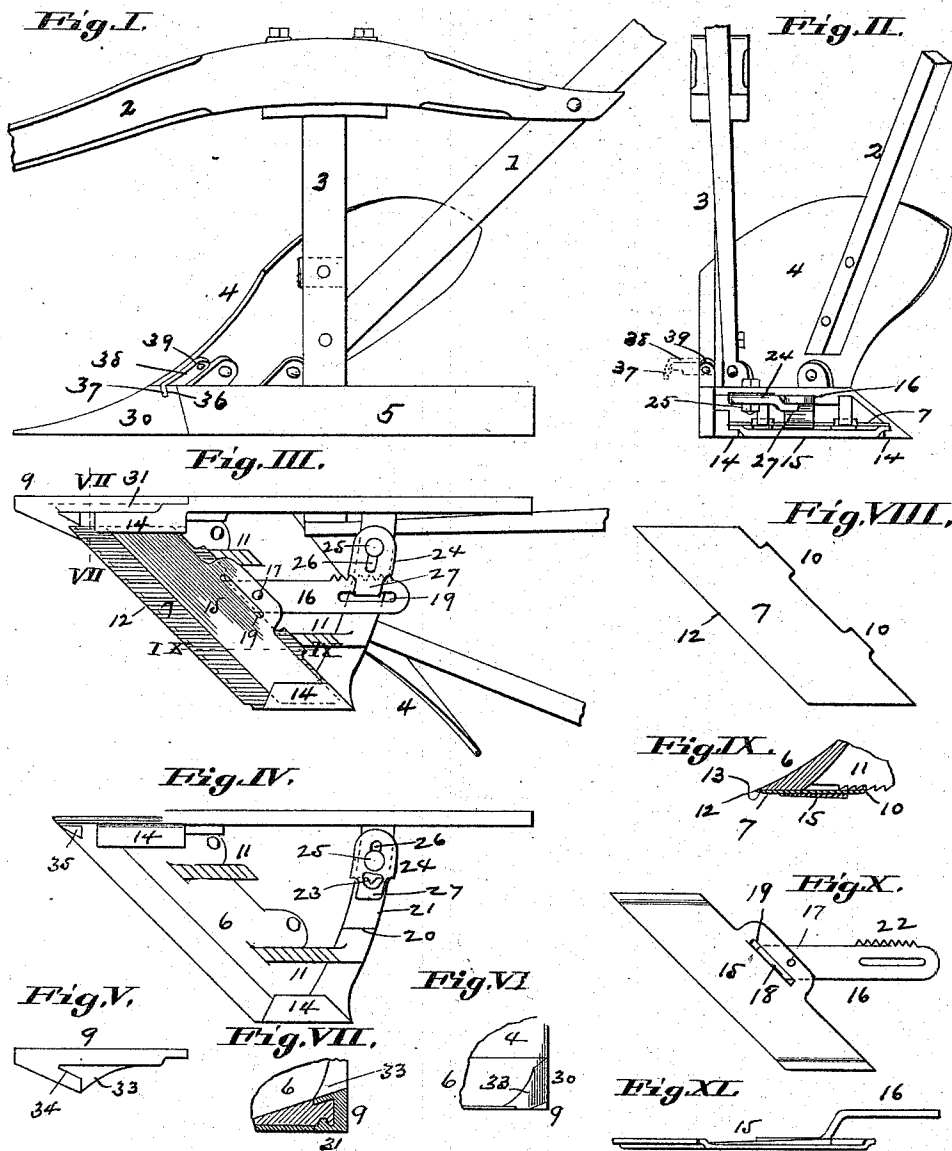


(No Model.)

H. OLDENDORPH. PLOW.

No. 528,107.

Patented Oct. 23, 1894.



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UNITED STATES PATENT OFFICE.

HENRY OLDENDORPH, OF BELLEVILLE, ILLINOIS.

PLOW.

SPECIFICATION forming part of Letters Patent No. 528,107, dated October 23, 1894.

Application filed December 13, 1893. Serial No. 493,565. (No model.)

To all whom it may concern:

Be it known that I, HENRY OLDENDORPH, of Belleville, in the county of St. Clair and State of Illinois, have invented a certain new and useful Improvement in Plows, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to certain improvements in plows, having for its object, to facilitate the use of the plow without having to be taken to the shop to have the shear sharpened.

My invention consists in features of novelty hereinafter fully described and pointed out in the claims.

Figure I is a side elevation of a plow, embodying my invention. Fig. II is a rear elevation. Fig. III is a bottom view. Fig. IV is a bottom view, not showing the mold-board, and having the self-sharpening plate of the shear and the point of the shear removed. Fig. V is a bottom view of the removable point of the shear. Fig. VI is a detail view, showing the lower, front part of the plow, looking from the front. Fig. VII is a section, taken on line VII—VII, Fig. III. Fig. VIII is a top view of the self-sharpening plate of the shear. Fig. IX is a section taken on line IX—IX, Fig. III. Fig. X is a bottom view of the clamp for holding the self-sharpening plate in place. Fig. XI shows the clamp in elevation.

Referring to the drawings, 1 represents part of the handles, 2 part of the beam, 3 the standard, 4 the mold-board, and 5 the land side of the plow.

6 represents the shear, having an adjustable, self-sharpening plate 7, forming its cutting edge, and having a removable point 9. The plate 7 has ears or projections 10, (see Figs. III, VIII and IX) which engage notched ribs 11 on the under side of the shear, so that the plate may be set forward, as its outer cutting edge 12 becomes worn away. The outer cutting edge is beveled on bottom upwardly, as shown at 13, Fig. IX, and as the plow is worked, the tendency of the constant friction of the soil is to keep the edge of the plate sharp. The ends of the plate fit between inturned lugs 14 on the shear, the outer

lug of which forms an under heel or brace for steadying the plow. (See Figs. II, III and IV.) These lugs also receive a clamp plate 15, which holds the plate 7, with its projections or ears 10, into engagement with the notches of the ribs 11. The clamp plate 15 has an arm 16, pivoted to the clamp plate at 17, and having an up-turned end 18 fitting in a slot 19 in the clamp plate. The back of the arm 16 rests against a shoulder 20 on a bridge-piece or bar 21 that connects the inner end of the shear with the land side. The forward edge of the bar is provided with teeth 22 to be engaged by a point 23 on a button 24, secured by a bolt 25 to the bridge 21, the button having a slot 26 in which the bolt 25 fits. The button has an extended end 27, which fits under the arm 26, as shown in Fig. III. When the plate 7 has been put in place, the clamp plate 15 is slid in under the lugs 14, and the arm 16 is placed with its back against the shoulder 20. The button 24 is then forced with its point 23 into engagement with one of the teeth 22, and the bolt 25 is tightened. This holds the parts firmly in place and prevents the backward movement of the plate 7. As the plate 7 becomes worn at its edge, it may be set forward by simply removing the clamp 15, and causing the ears or lugs 10 of the plate 7 to engage the next notch forward in the ribs 11. The clamp plate is then adjusted again, which holds the plate 7 in place.

The removable point 9 has a vertical wall 30, in line with the land side 5, and it has a bottom wall 31 extending a short distance under the point of the shear, and a top wall 33 that laps over on top of the end of the shear. The bottom of the point has a V-shaped notch 34 that engages with a projection 35 on the under side of the end of the shear, thus holding the point from lateral movement. The upper corner of the wall 30 has a notch 36 for receiving the down-turned end 37 of a button 38, pivoted at 39 to the mold-board. This button holds the point from movement in the direction of the length of the land side. By simply raising the button into the position shown by dotted lines, Fig. II, the point can be removed by drawing it away from the land side, and can be replaced by another, or can be sharpened, and then replaced, and to sharpen the point it

does not necessitate taking the remainder of the shear, or the plow to the shop. This removable point, with the self-sharpening shear plate, adds but little to the cost of the plow, while adding greatly to the length of time it may be used, without the expense and loss of time of frequent visits to the shop to have the plow sharpened.

I claim as my invention—

10 1. In a plow, the shear having notched ribs and an adjustable self-sharpening plate 7, of parallelogram shape arranged horizontally and extending diagonally across the plow and having ears 10 for engaging the notched ribs
15 on the shear, and a clamp for holding the plate in place; substantially as set forth.

2. In a plow, an adjustable self sharpening plate 7 having ears 10, the shear having ribs formed with notches 11, the clamp-plate 15
20 and means for holding the clamp-plate in place which in turn holds the ears of the sharpening plate in engagement with the notches; substantially as set forth.

3. In a plow, the combination of the shear
25 6, having the lugs 14, the adjustable self sharpening plate 7 of parallelogram shape arranged horizontally and extending diagonally across the plow, means for holding the plate to its adjustment in line with the plow,
30 a clamp-plate 15 for securing the plate in

position, and means for holding the clamp-plate in position; substantially as set forth.

4. In a plow, a plate 7, having ears 10 for engaging notched ribs on the shear, and a clamp for holding the plate in place, consisting of a plate 15, having an arm 16 with notches 22, and a button 24 having a point 23; substantially as and for the purpose set forth.

5. In a plow, the combination of a plate 7
40 having ears 10 engaging notched ribs on the shear, and fitting under lugs 14 on the shear, and a clamp for holding the plate in place, consisting of a plate 15 having an arm 16 secured thereto by means of a pin 17, and an
45 end 18 fitting in a slot in the plate; said arm having notches 22 to receive the point 23 of a button 24; substantially as and for the purpose set forth.

6. In a plow, the combination of a mold-
50 board having a projection 35, a point 9 having a notch to receive said projection and a top notch 36, and a button 38, pivoted to the mold-board, having a downward projection engaging the top notch; substantially as set
55 forth.

HENRY OLDENDORPH.

In presence of—

A. M. EBERSOLE,

C. G. EDWARDS.