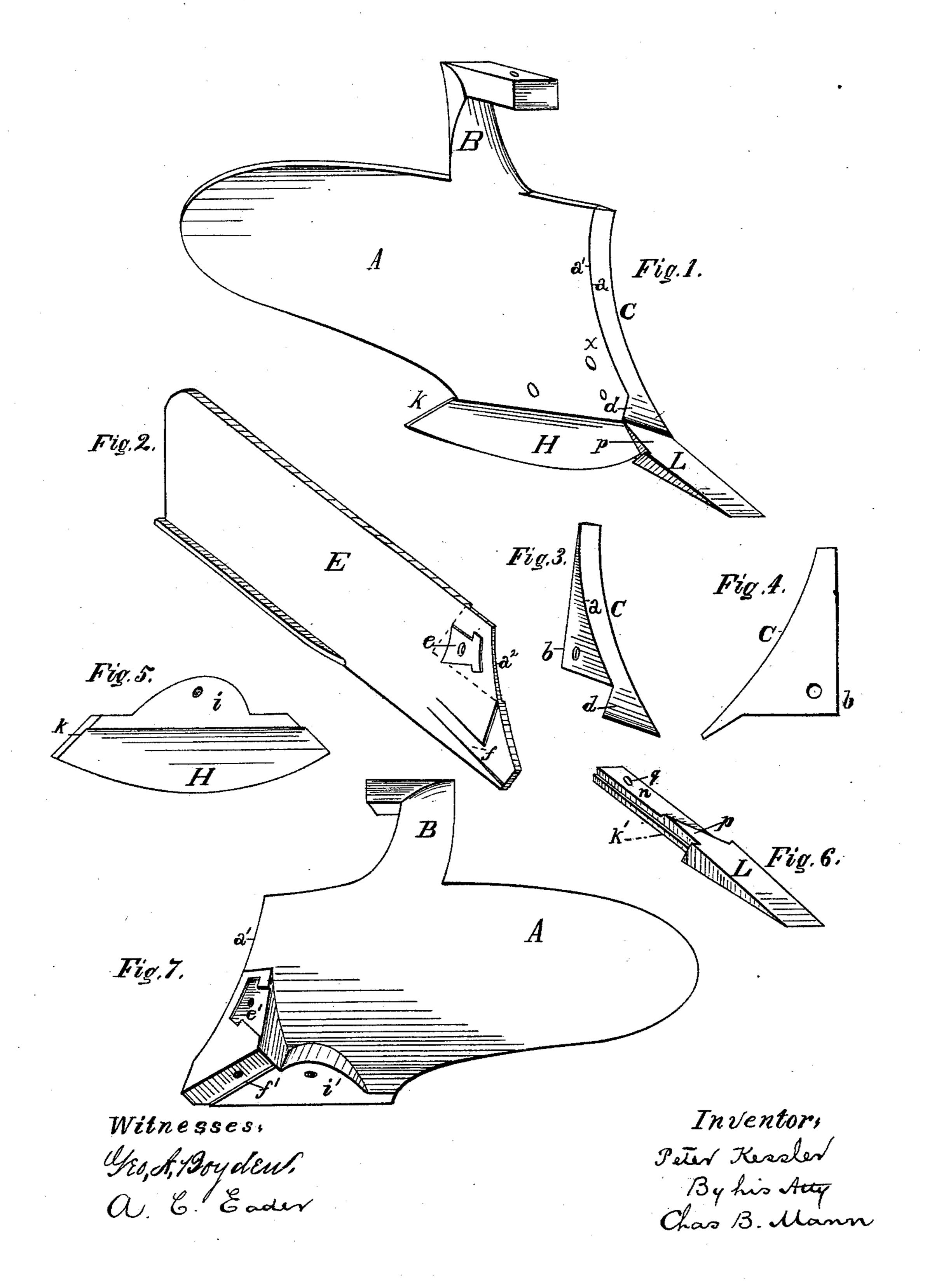
P. KESSLER.
Plow.

No. 223,361.

Patented Jan. 6, 1880.



## United States Patent Office.

PETER KESSLER, OF BUTLER, MARYLAND.

## PLOW.

SPECIFICATION forming part of Letters Patent No. 223,361, dated January 6, 1880. Application filed October 3, 1879.

To all whom it may concern:

Be it known that I, Peter Kessler, of Butler, in the county of Baltimore and State of Maryland, have invented a new and useful 5 Improvement in Plows, of which the following is a specification.

My invention relates to certain improvements in that class of plows in which the point, share, and cutter are separate pieces, and will 10 first be described, and then designated in the claim.

Figure 1 is a view of the several parts of my plow, omitting the beam and handles. Fig. 2 is an inner side view of the land-side. 15 Fig. 3 is an inside view of the cutter. Fig. 4 is an outside view of the cutter. Fig. 5 is a view of the reversible share. Fig. 6 is a view of the reversible point. Fig. 7 is an inside view of the mold-board and standard.

The letter A designates the mold-board; B, the standard or neck, cast integral with the mold-board, whereby the requisite strength is secured with less metal. It will be noticed this neck stands back from the cutter, and is 25 on a line almost directly above the rear extremity of the share. This position of the neck gives to the plow a center draft, the advantages of which are well known, to wit: The plow is of lighter draft, runs steadier, is 30 more easily managed, and less liable to choke.

The letter C designates the cutter. It is provided on the inner side with a shoulder, a, which is adapted to fit on the front edge, a', of the mold-board. The curves of the cutter 35 conform exactly to those of the mold-board, by which the formation of any angle or hollow at x is obviated. The outer side of the cutter, below and at the rear, forms a right angle, b, which fits a recess on the outer side of the 40 land-side, (indicated by a dotted line in Fig. 2,) and is thereby made flush with the land-side. A bolt passes through the right-angled part, securing it to the land-side and mold-board. At the lower cutting extremity of the cutter 45 is a lateral projection, d, serving as a foot to | rest upon the point, by which the point is kept down to its place.

Inasmuch as the cutter is a part that, by reason of much wear, requires frequent renewal, 50 it is important that it have such construction

as will admit of its being of light weight. The form here shown affords this advantage in a

high degree.

The letter E designates the land-side, which is provided with a projecting dovetail lug, e, 55 adapted to fit a recess, e', on the inner side of the mold-board, and also has at its forward end a groove, f, forming one side of a guide or socket, of which the shoulder f' on the under and forward side of the mold-board forms the 60 other side. The curve  $a^2$  on the forward end conforms exactly to the curve a' on the moldboard, and these parts are brought close together, and the curved edge of the two parts are covered by the curved shoulder a of the 65 cutter. By this arrangement the forward end of the land-side is shielded from wear.

In a plow of the largest size this form of land-side will weigh about twenty-six pounds, while the cutter will weigh only six pounds. 70 It will thus be seen that it is important that the parts at the point exposed to wear, and which require frequent renewal, should be, as here shown, integral with the cutter instead

of the land-side.

The letter H designates the share, having opposite the cutting-edge a semicircular projection, i, adapted to be bolted to the part i'on the under side of the mold-board. Each end of the share is provided, though on oppo-80 site sides, with a rabbet, k, which forms a shoulder or seat for the rabbet k' on the shank of the point. By this construction the share is adapted to be reversed.

The letter L designates the point, having a 85 shank, n, provided on either side edge with a rabbet, k', and on the upper and lower surfaces with an angular lug, p, forming an oblique shoulder, which conforms to and rests against the lower edge of the projection or foot d on 90 the cutter. The point is retained in position in the guide or socket heretofore referred to by means of a bolt passing through the hole qin the shank and into the mold-board. It will be seen the point is reversible.

Having described my invention, I claim and desire to secure by Letters Patent of the United States—

The combination, in a plow, of a mold-board and a land-side, each having curves on their 100 forward edges which conform, a cutter provided on the inner side with a curved shoulder, a, which covers the curved edges of the mold-board and land-side, and having at its lower cutting extremity a lateral projection or foot, d, and a reversible point having on its upper and lower surface an angular lug, p,

forming an oblique shoulder, which rests against the aforesaid foot on the cutter, as set forth.

PETER KESSLER.

Witnesses:

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- Chas. B. Mann, Jno. T. Maddox.