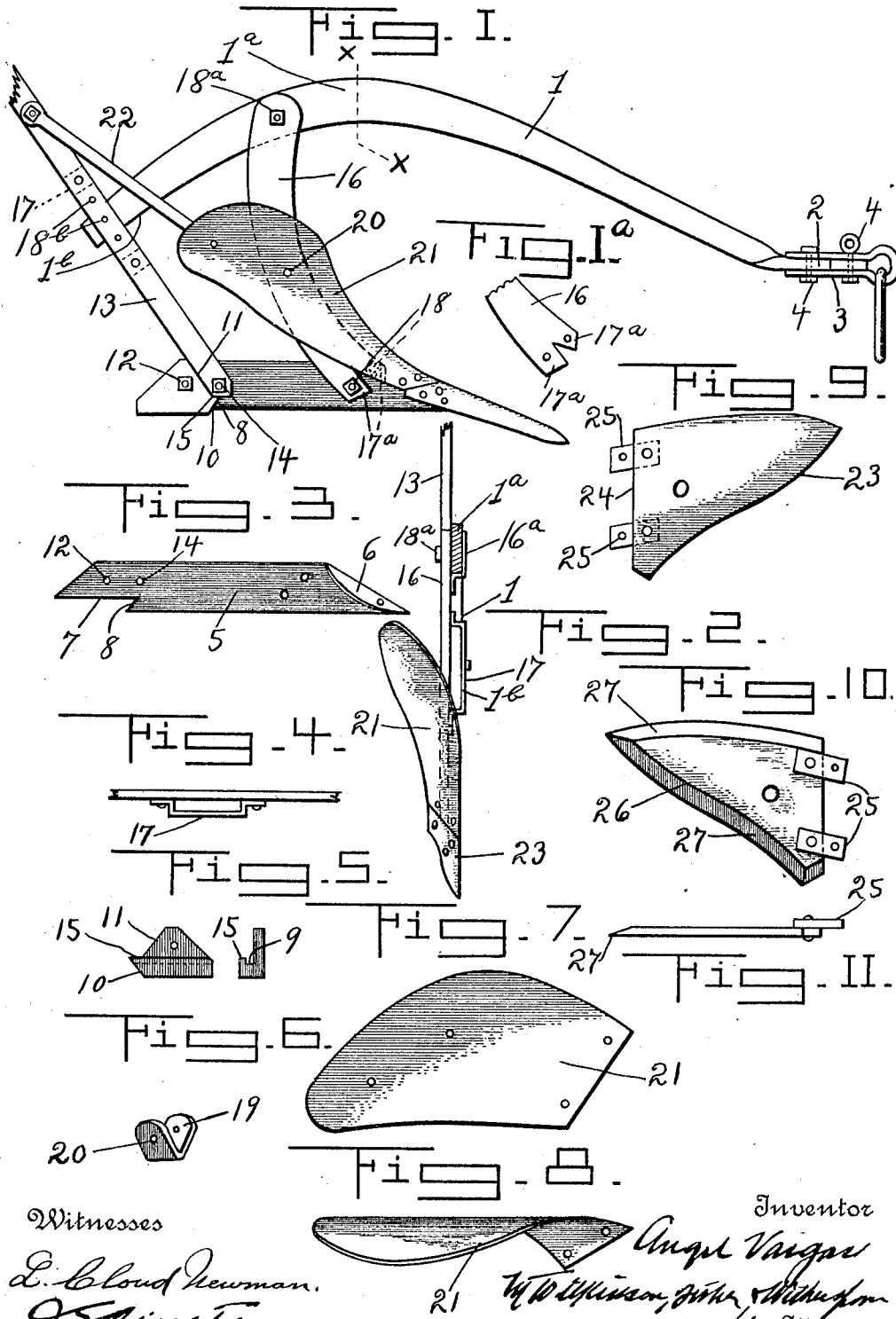


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PLOW.

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To all whom it may concern:

Be it known that I, ANGEL VARGAS, a citizen of the Philippine Islands, residing at Iloilo, in the Philippine Islands, have invented certain new and useful Improvements in Plows; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in plows, and the primary object of the invention is to provide a plow of comparatively light construction, but which will work the ground with substantially the same effective results as plows of a much heavier type.

In the development of agricultural conditions in the Philippine Islands it has been found that with the present invention it is possible to accomplish the same results with a much lighter plow than American plows imported into the islands, that is to say, with the present invention it is possible to plow or cut through the earth readily and at the same time control the depth of the cut as desired.

Other objects and advantages will appear in the following description, and the particular features of novelty will be pointed out in the claims. The invention, however, is not restricted to the exact details shown and described, still for the purpose of disclosure reference is had to the accompanying drawings illustrating a practical and preferred embodiment of the same, in which drawings like characters designate the same parts in the several views, and in which—

Figure 1 is a view in side elevation of my improved plow, a portion of the handle being broken away. Fig. 1^a is a detail view of the lower end of the standard. Fig. 2 is a cross section on the line *x—x* of Fig. 1, looking to the left. Fig. 3 is a detail elevational view of the land side. Fig. 4 is a fragmentary view in rear elevation, showing an angle bar for containing the adjustable end of the plow beam. Fig. 5 designates a land side attachment in side and end elevation. Fig. 6 is a detail view of an angle plate for securing the mold board to the plow standard. Figs. 7 and 8 are plan and edge views of the mold board. Fig. 9 is a top plan view of the plowshare. Figs. 10 and 11 are respectively a bottom plan view and a side elevation of the plowshare.

1 designates the plow beam, preferably

made of bar metal twisted at right-angles at its forward end, as at 2, to present a flat horizontal end adapted to receive the clevis 3 secured by suitable bolts and pins 4.

5 designates the land side provided at its forward end with the inturned lip 6 adapted to have the lower end of the mold board seat thereon and be secured thereto, and the rear end of the land side being cut away to form the lower edge 7 and the beveled edge 8, the lower edge 7 being adapted to seat within a groove 9 and the beveled edge 8 adapted to seat against the beveled forward edge 10 of a land side block, which block is also provided forwardly with a rearwardly inclining edge 11, the land side block and land side being securely bolted together, as at 12, and the lower end of the handle of the plow 13 being securely bolted to the land side, as at 14, with the rear edge of the lower end of the handle lying against and flush with the inclining edge 11 of the land side block and the lower edge of the handle resting on the ledge or shoulder 15 forming the side wall of the groove 9, it being understood that the land side is of a sufficient thickness to snugly fit within the groove 9, so that the inner edge of the land side rests flush with the inside face of the shoulder 15 forming a side wall of the groove.

16 designates the plow standard securely bolted at its lower forking ends 17^a, by means of the bolts 18, to the land side, the upper end of the standard pivotally supporting the elevated portion 1^a of the curved plow beam by means of the pivot bolt 18^a, the standard 16 lying alongside the plow beam on one face and on its other face being provided with an angle iron 16^a spaced from the standard and straddling the plow beam. The rear end 1^b of the plow beam is disposed within the spaced retaining member 17, which retaining member permits of the vertical adjustment of the plow beam while preventing lateral deviation. As shown, this adjustment may be accomplished by providing a plurality of apertures 18^b in the plow handle, these apertures being arranged in an arc to correspond with an aperture in the end of the plow beam, the apertures so registering that a suitable securing bolt may be inserted for holding the plow beam in any one of several adjustable positions. By this arrangement it will be obvious that the depth of the cut may be regulated as the plow beam and

share are adjusted relatively to each other.

19, Fig. 6, designates an angle plate, one face of which is secured to the standard 16, and the other face of which is disposed at an angle to lie flat against the inside face of the mold board and securely affixed thereto through the medium of apertures and bolts, indicated at 20.

The particular shape of the mold board 21 is more clearly shown in Figs. 1, 2, 7 and 8, from which figures it will be seen that the same is formed of metal of uniform thickness and comparatively thin as compared to cast metal, the mold board being twisted to provide a slightly downward and outward curvature at its upper end, and at its lower end approaching a horizontal position but slightly inclining outwardly. The upper end of the mold board, in addition to being secured to the standard, may be further braced by the rod 22 extending between the plow handle and the mold board.

23 designates the share having a straight rear edge 24 adapted to fit snugly against the lower edge of the mold board, suitable raps of iron 25 coöperating with bolts passing through the mold board and the share to securely hold these parts together.

The share is of substantially uniform thickness, the upper face presenting a flat surface, but the lower face being beveled inwardly and downwardly, as at 26, forms a cutting edge 27 entirely around the share.

From the foregoing it will be observed that not only do I provide a plow which will completely turn up the earth and which may be readily adjusted to make a shallow or deep cut, but also a plow which, owing to the shape of the share and mold board, will make an easy as well as a deep cut, and which, owing to the form of the share and mold board, may be constructed of very light but strong and durable material, thus

decreasing the cost of the plow without decreasing its efficiency.

Having thus described a practical embodiment of the invention, the particular features of novelty will now be pointed out more succinctly in the following claims:—

1. In a plow, the combination with a plowshare and mold board, of a land side secured thereto and provided with a notched heel, a block provided with a groove adapted to engage said notched heel, and a bolt securing said block thereto, the said block being provided with an inclined face and a shoulder, a plow handle having its heel engaging said shoulder, and its rear face engaging the inclined face of said block, said handle being provided with a plurality of perforations, a plow beam, and a bolt adjustably connecting said handle to the heel of said plow beam, substantially as described.

2. In a plow, the combination with a plowshare and mold board, of a land side secured thereto and provided with a notched heel, a block provided with a groove adapted to engage said notched heel, and a bolt securing said block thereto, the said block being provided with an inclined face and a shoulder, a plow handle having its heel engaging said shoulder, and its rear face engaging the inclined face of said block, said handle being provided with a plurality of perforations, a plow beam, and a bolt adjustably connecting said handle to the heel of said plow beam, with a brace connecting the mold board and the plow handle, substantially as described.

In testimony whereof, I affix my signature, in presence of two witnesses.

ANGEL VARGAS.

Witnesses:

GEO. B. VARGAS,
R. E. SULLIVAN.