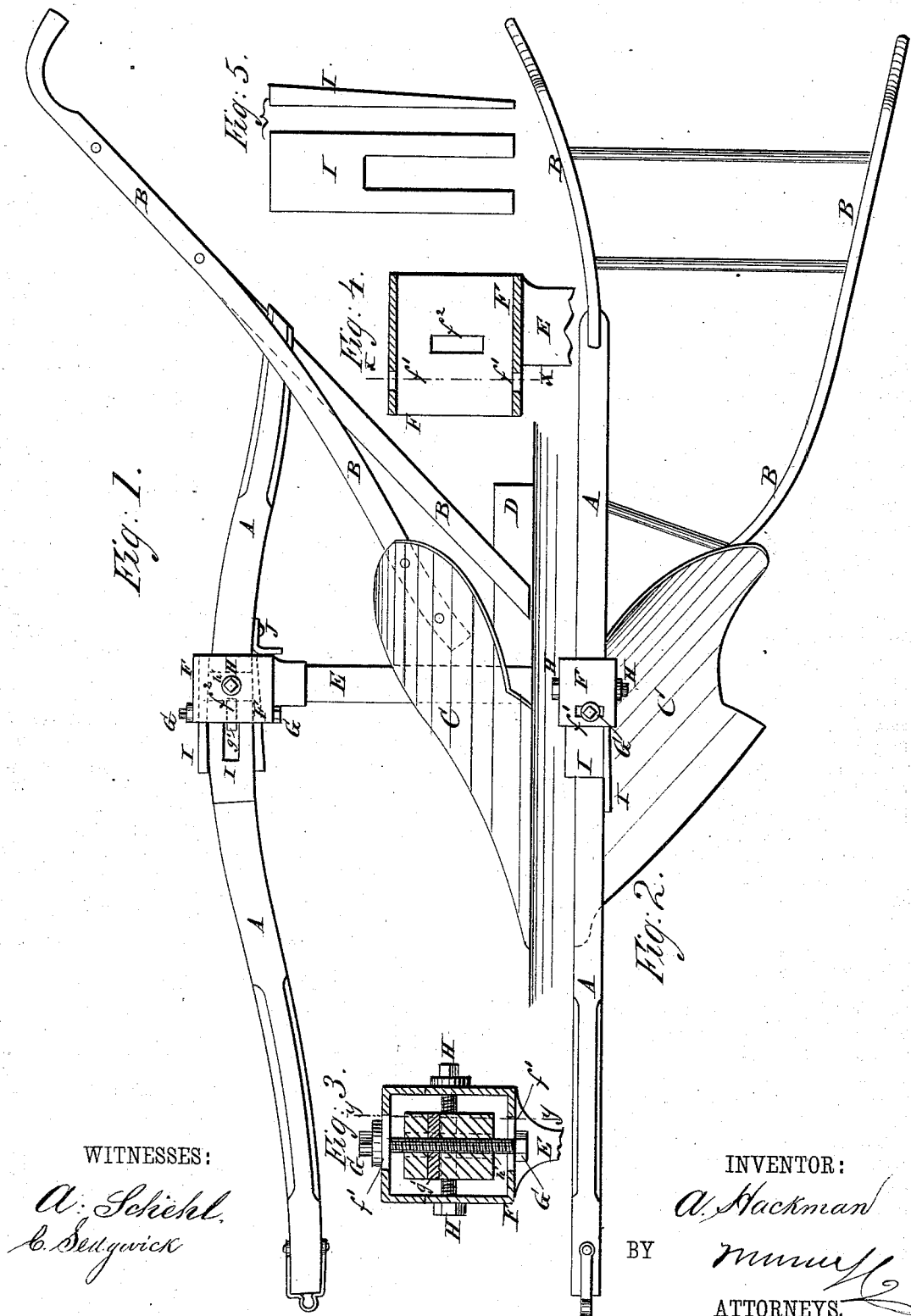


A. HACKMAN.
Plow.

No. 217,368.

Patented July 8, 1879.



WITNESSES:

A. Schiel.
C. Selgwick

INVENTOR:

A. Hackman

BY

Munnell
ATTORNEYS.

UNITED STATES PATENT OFFICE.

AMANDES HACKMAN, OF BLAKESBURG, IOWA.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **217,368**, dated July 8, 1879; application filed April 29, 1879.

To all whom it may concern:

Be it known that I, AMANDES HACKMAN, of Blakesburg, in the county of Wapello and State of Iowa, have invented a new and useful Improvement in Plows, of which the following is a specification.

Figure 1 is a side view of a plow to which my improvement has been applied. Fig. 2 is a top view of the same. Fig. 3 is a cross-section of the beam and beam-socket, taken through the line *xx*, Fig. 4. Fig. 4 is a detail section of the beam-socket, taken through the line *yy*, Fig. 3. Fig. 5 is a detail side and edge view of one of the slotted wedges.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish plows which shall be so constructed that they may be readily adjusted to cut a deeper, a shallower, a wider, or a narrower furrow, as may be desired, and which shall be simple in construction and convenient and reliable in use, being easily adjusted, and holding the plow firmly and securely in place.

The invention consists in the combination of the socket provided with slots, the swiveled screws, and the slotted wedges with the standard and the beam, as hereinafter fully described.

A represents the beam, B the handles, C the mold-boards, D the land-side, and E the standard, of a plow. Upon the upper end of the standard E is formed, or to it is attached, a socket, F, through which the beam A passes, and the cavity of which is made larger than the beam A, so that the said beam may have a vertical and a lateral movement within the said socket.

The socket F projects in front of the forward edge of the standard E, and in the upper and lower side of the said projecting part are formed short cross-slots *f*¹, in which are swiveled the ends of a screw, G, which passes vertically through the beam A.

In case the beam A is wood a nut, *g'*, should be let into it for the screw G to pass through. In case the beam A is iron a screw-hole is formed through it to receive the screw G, so that the beam A can be raised and lowered to adjust the plow to cut a deeper or shallower furrow by turning the said screw G.

In the sides of the socket F are formed short vertical slots *f*², in which are swiveled the ends of a screw, H, which passes through the beam A.

In case the beam A be wood a nut, *h'*, should be let into it to receive the screw H. In case the beam A be iron a screw-hole may be formed through it to receive the said screw H, so that the beam A can be moved laterally to adjust the plow to cut a wider or a narrower furrow by turning the said screw H.

I are wedges, which are slotted longitudinally from their forward ends to receive the screws G H, so that they can be driven into the socket F above and at the sides of the beam A when adjusted, to protect the said screws G H from lateral strain.

To the under side of the beam A, at the rear of the socket F, is attached an arm of an angle-iron, J, the other arm of which projects downward for the lower part of the socket F to rest against, to strengthen the standard E against the draft-strain and relieve the bolts G H.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the socket F, provided with the slots *f*¹ *f*², the swiveled screws G H, and the slotted wedges I with the standard E and the beam A, substantially as and for the purpose set forth.

AMANDES HACKMAN.

Witnesses:

D. C. RYBOLT,
JOHN LOBER.