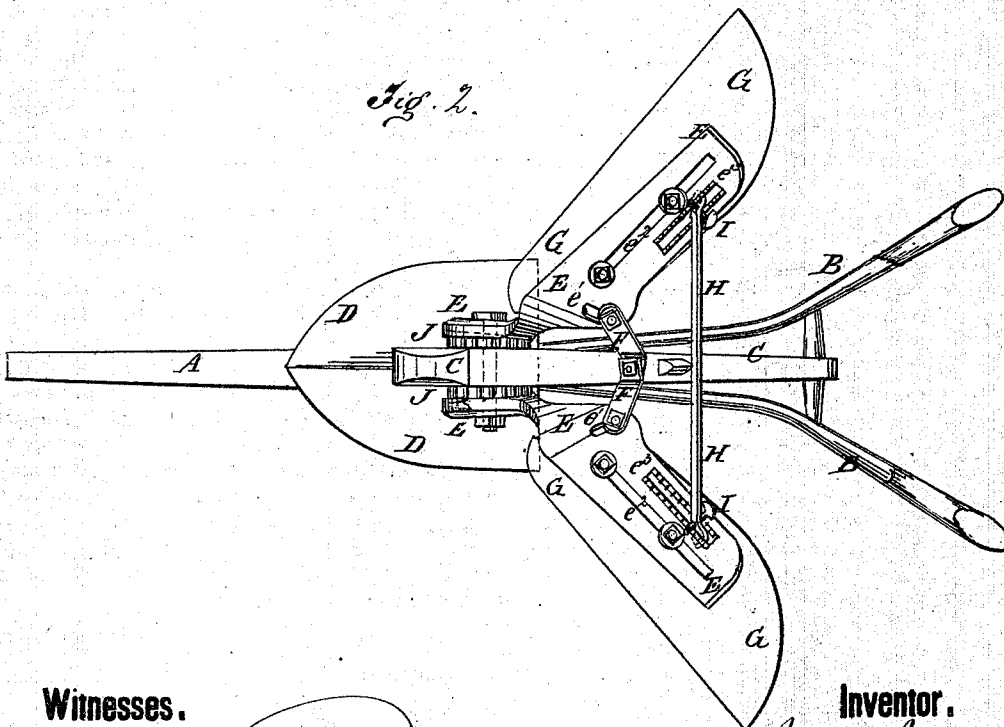
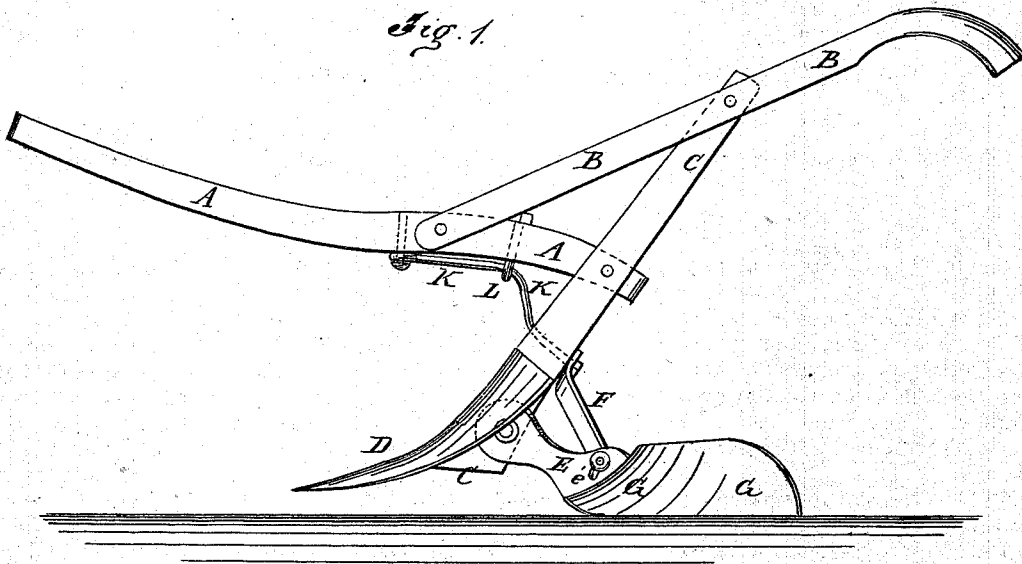


I. A. BENEDICT.
Winged Plow.

No. 146,225.

Patented Jan. 6, 1874.



Witnesses.

Chas. Nida.
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UNITED STATES PATENT OFFICE.

ISAAC A. BENEDICT, OF WEST SPRINGFIELD, PENNSYLVANIA.

IMPROVEMENT IN WINGED PLOWS.

Specification forming part of Letters Patent No. **146,225**, dated January 6, 1874; application filed October 4, 1873.

To all whom it may concern:

Be it known that I, ISAAC A. BENEDICT, of West Springfield, in the county of Erie and State of Pennsylvania, have invented a new and useful Improvement in Winged Plows, of which the following is a specification:

Figure 1 is a side view of my improved winged plow. Fig. 2 is a bottom view of the same.

Similar letters of reference indicate corresponding parts.

My invention has for its object to improve the construction of the winged plow or horsehoe for which Letters Patent No. 109,999 were granted to me December 13, 1870, so as to make it more convenient in use and more reliable in operation.

The invention will first be fully described, and then pointed out in the claims.

A is the beam. B are the handles. C is the standard, and D is a shovel-plow. To the opposite sides of the lower end of the standard C are pivoted the forward ends of the arms E, by a bolt passing through said standard and arms. F are braces, the upper ends of which are bolted to the rear side of the standard C, and their lower ends are secured to the upper forward parts of the arms E by bolts, which pass through short slots e^1 in said arms, so that the rear ends of the arms E may be raised and lowered, as required. G are the wings, which are secured to the arms E by bolts, which pass through longitudinal slots e^2 in said arms, as shown in Fig. 2, so that the wings may be expanded and contracted, as required. The inward pressure upon the wings is sustained by the cross-bar or brace H, the ends of which pass through longitudinal slots e^3 in the arms E, and are bent into hook form to give them a firm hold upon the said arms E. The brace-bar H is further secured in place by keys I, driven through holes in the said bar H, and which rest in one or the other of

the notches formed in the arms E, along the edges of the slots e^3 , to prevent the ends of the brace H from slipping when adjusted. By this construction, by removing or loosening the keys I the wings G may be spread apart or drawn toward each other, as may be desired, and when adjusted and the keys I replaced the wings will be held securely in place and firmly supported against inward pressure. J are wedge-wheels, through holes in the center of which pass the bolts by which the inner ends of the arms E are secured and pivoted to the standard C. The wedge-wheels J are interposed between the ends of the arms E and the standard C, so that by turning the wheels J the pitch and spread of the wings may be adjusted as required. The draft-strain upon the shovel D and wings G is sustained by the brace-rod K, the lower end of which is secured to the lower part of the standard C. The brace-rod K passes through an eyebolt or keeper, L, projects along the under side of the beam A, and its forward end is secured to said beam A, as shown in Fig. 1.

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

1. The brace-rod H and keys I, in connection with the notched slots e^3 of the arms E, substantially as herein shown and described.

2. The combination of arms E E and wedge-wheels J J, clamped by the same pivot-bolt to the standard C, as described, whereby the wings may be expanded or contracted to suit wide or narrow rows, and turned down flat for shallow culture, or set up for hilling corn or potatoes.

ISAAC A. BENEDICT.

Witnesses:

M. W. ROBISON,
H. E. CROUCH,
WM. BENEDICT.