(No Model.)

G. BROWNE.

PLOW ATTACHMENT.

No. 249,740. Patented Nov. 22, 1881.

Fig. 1

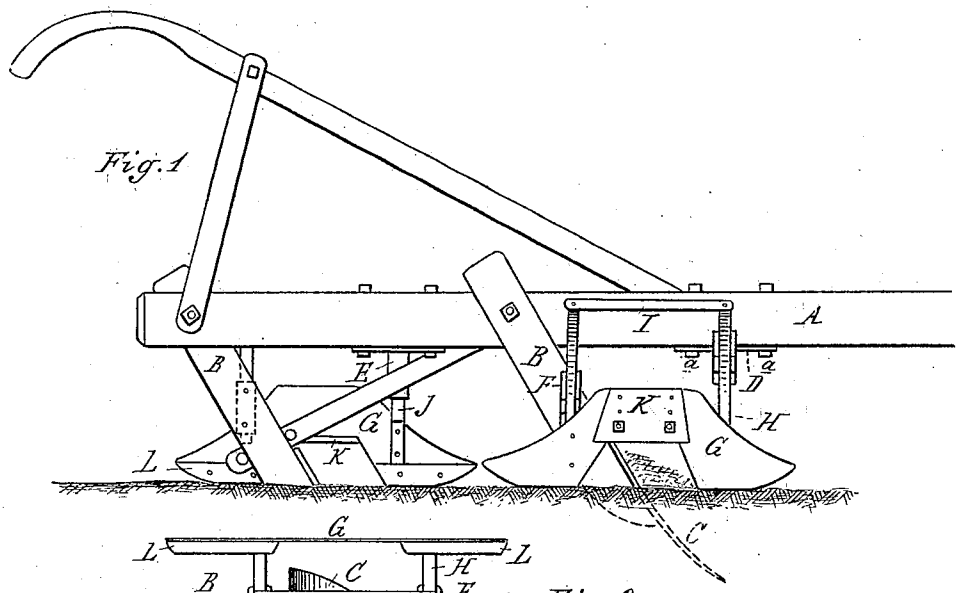


Fig. 2

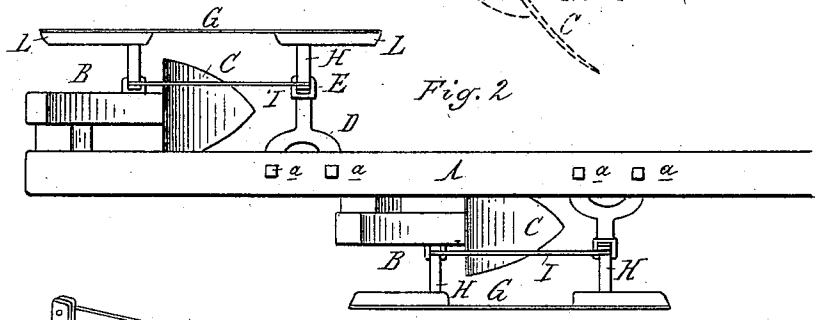


Fig. 3

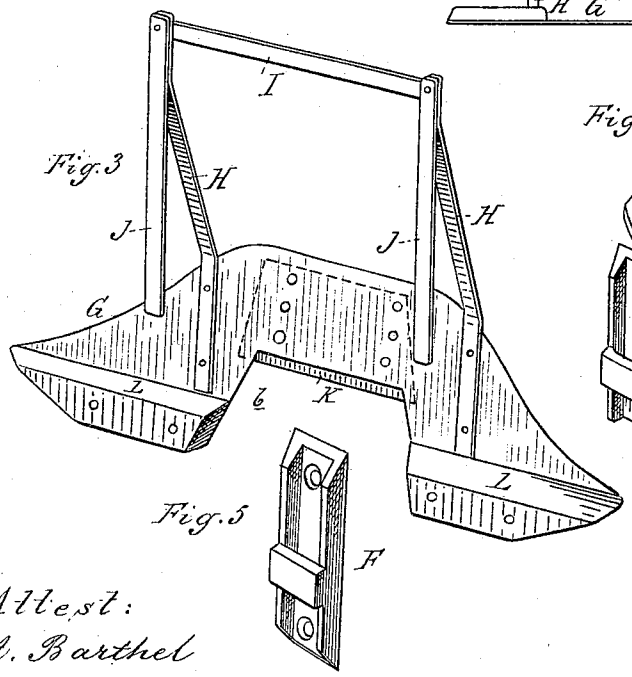


Fig. 4

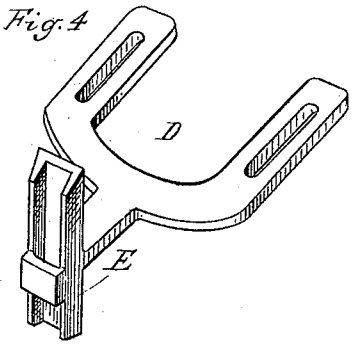


Fig. 5

Attest:
A. Barthel
E. Scully.

Inventor:
George Browne
by Thos. S. Sprague
Atty

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

GROVE BROWNE, OF ADRIAN, MICHIGAN.

PLOW ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 249,740, dated November 22, 1881.

Application filed June 17, 1881. (No model.)

To all whom it may concern:

Be it known that I, GROVE BROWNE, of Adrian, Lenawee county, Michigan, have invented an Improvement in Plow Attachments, of which the following is a specification.

The nature of this invention relates to new and useful improvements in attachments to plows and cultivators, by means of which, when such implements are used for cultivating, for instance, corn in the various stages of its growth, they are prevented from covering up the stalks, while at the same time the latter are straightened up and held in position while a controllable portion of the earth is thrown about their roots.

The invention consists in the peculiar details of construction and combinations of parts for accomplishing this result, as more fully hereinafter set forth.

Figure 1 is a side elevation of a two-horse double-shovel cultivator with my improved attachment thereon. Fig. 2 is a plan view of the same. Fig. 3 is an enlarged and detached perspective of my improved shield and shoe. Fig. 4 is a detached perspective of the T-head slide attachment designed to be adjustably secured to the under side of the beam and to secure thereto the forward end of the shield. Fig. 5 is a detached perspective of the loop, which is designed to be secured to the standard and to secure thereto the rear end of the shield.

In the accompanying drawings, which form a part of this specification, A represents the beam, B the standard, and C the shovel-plow or cultivator-tooth, all being of the usual form and construction.

D represents a bifurcated and slotted plate, provided with a recessed T-head, E, which plate is adjustably secured to the beam by the bolts *a*, so that the device may be laterally adjusted.

F is a recessed plate, vertically secured on the outer face of the standard.

G is a sheet-metal shield, cut preferably in the form shown in Fig. 3, being curved and pointed at both ends. This shield is secured to the bent arms H, which are secured at their free ends to a cross-bar, I, and to the vertical and downwardly-projecting slide-bars J. A portion of this shield is cut away upon its bottom edge, the opening or cut-away portion being preferably of the form shown at *b*, rather than in the curved forms shown in similar shields for a like purpose which have heretofore been employed. The size of this opening may be arbitrarily regulated by means of the plate K and suitable bolts through a series of holes in said plate and coincident holes in the shield.

In practice, the plates D and F being properly secured in position, as described, the vertical slide-bars J are engaged with the vertical recesses in said plates, so that the shield will be supported in its position with relation to the implement, and at the same time be susceptible of a free vertical movement to adapt itself by its own gravity to varying surfaces of the ground. As the shield is sheet metal, presenting a thin edge, in loose and sandy soils its weight would have a tendency to force it too far into the ground; hence I place upon the inner edge thereof, on each side of the opening, and with its lower edge coincident with and conforming to the shape of the lower edge of the shield, a wooden shoe, L, which adds very little to the specific gravity of the shield, while it forms a runner to prevent such shield from entering the ground.

It will be noticed that this shield may be reversed and used right-handed or left-handed, as may be desired, or as the front wears away by use.

What I claim as my invention is—

1. The reversible shield G, provided with bent arms H and vertical arms J, in combination with the beam and standard A B and suitable sockets fastened thereto for adjustably holding the arms J J of the shield, substantially as specified.

2. In combination with a cultivator beam and standard, the fixed socket F, rigidly secured to the standard, the slotted plate D, adjustably secured to the beam and provided with a vertical socket, E, the shield G, and the vertical bars J of said shield, substantially as specified.

3. In combination with the beam and standard, the shield G, bars H I J, and plates D F, constructed, arranged, and operating substantially as and for the purposes specified.

GROVE BROWNE.

Witnesses:
H. S. SPRAGUE,
E. SCULLY.