(No Model.)

J. H. HIGGINS.

HOEING AND COVERING ATTACHMENT FOR PLOWS AND CULTIVATORS.

No. 362,627. Patented May 10, 1887.

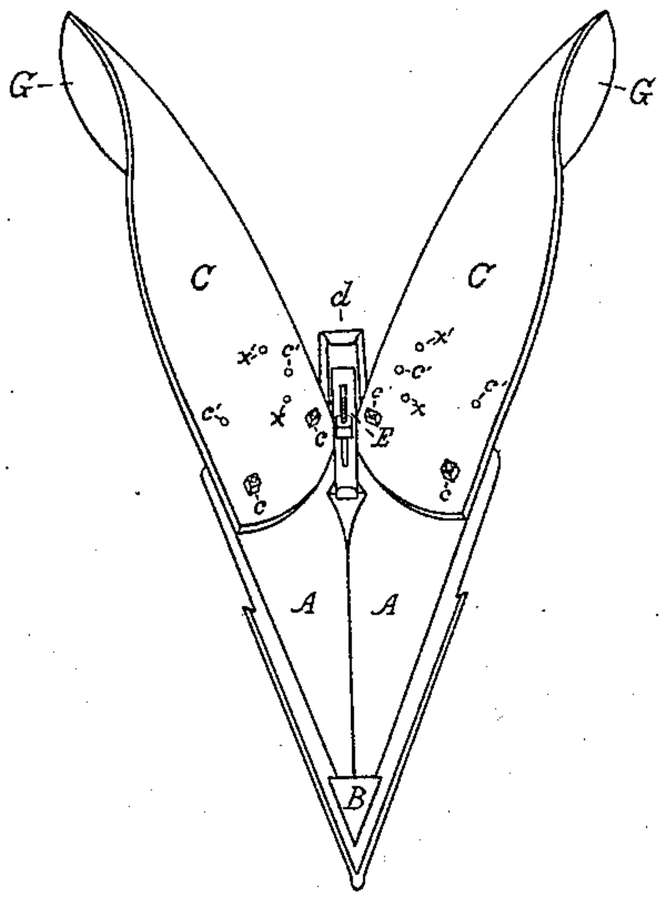

Fig. 2

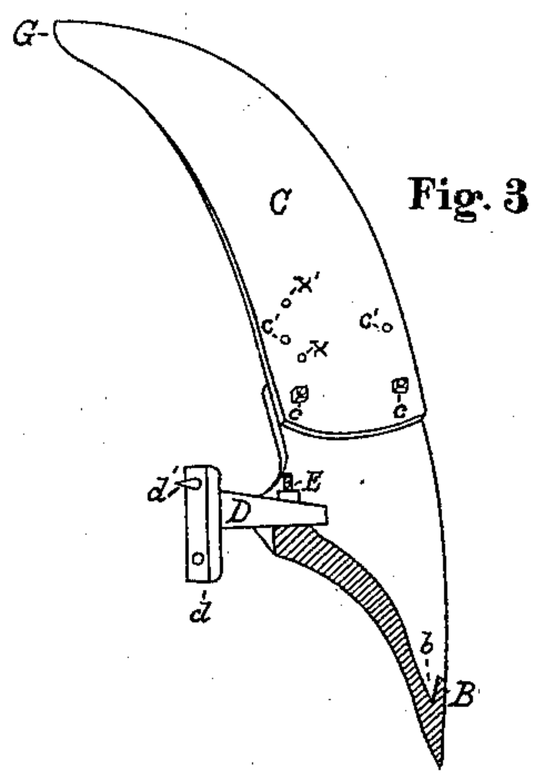

Fig. 3

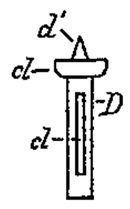

Fig. 6

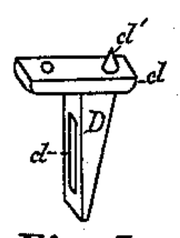

Fig. 5

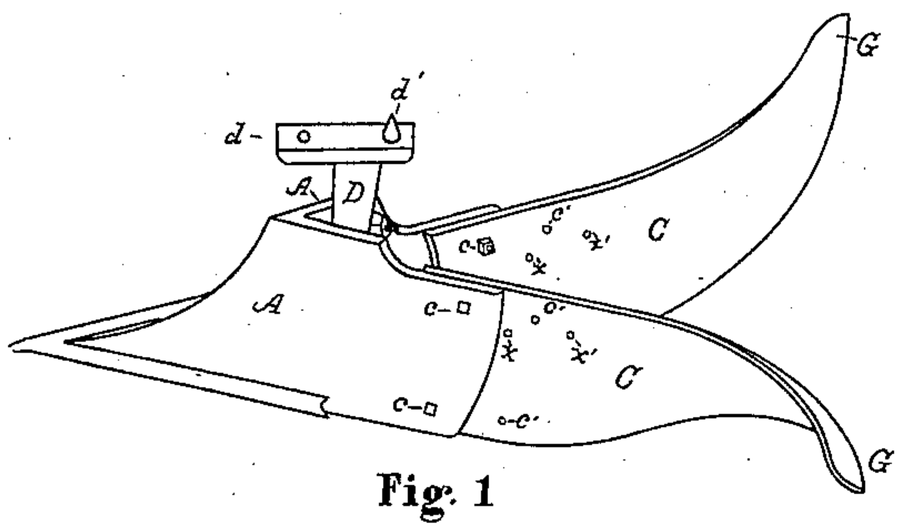

Fig. 1

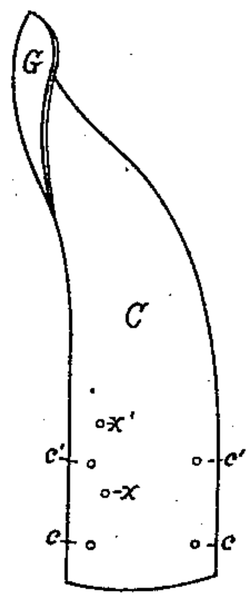

Fig. 4

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JOHN H. HIGGINS, OF CHARLESTON, MAINE.

HOEING AND COVERING ATTACHMENT FOR PLOWS AND CULTIVATORS.

SPECIFICATION forming part of Letters Patent No. 362,627, dated May 10, 1887.

Application filed October 20, 1886. Serial No. 216,766. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. HIGGINS, a citizen of the United States, residing at Charleston, in the county of Penobscot and State of Maine, have invented a new and useful Hoeing and Covering Attachment for Plows and Cultivators; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improved hoeing and covering attachment for plows and cultivators, and is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the complete attachment. Fig. 2 is a bottom view of the same. Fig. 3 is a vertical section of the same. Fig. 4 is a plan of one of the mold-board extensions with wing. Fig. 5 is a perspective view of post. Fig. 6 is an end view of post.

Similar letters refer to corresponding parts throughout the figures.

The object of my invention is to provide a device readily attachable to the common plow or cultivator, whereby the scope of their work may be enlarged, a wider space, or a space of such width as may be desired, excavated between the hills, and the hills raised to an increased height.

My device consists of a share and two mold-boards, A A, formed and united like the same parts of the double mold-board plow, and of such size that it may fit over the corresponding parts of the common plow and form a sort of sheath. Underneath the forward extremities of the mold-boards A A, or of the share, and flush with the bottom edges of the mold-boards, I construct a base-plate, B, forming a pocket, *b*, for the reception of the point of the share of the plow. I provide metallic extension mold-boards C C, formed with two or more longitudinal parallel rows of bolt-holes, *c c′ c c′*, through which, at different points in their lengths, they may be bolted to the mold-boards A A. These extensions, at their union with the mold-boards, are concaved to conform to the curve of the mold-boards, and are of substantially the same height, and are in this form prolonged backward as far as will give them, when adjusted upon the mold-boards A A to their greatest length, a spread equal to the maximum width between rows. From this point the lower edges of the extensions are sharply curved upward, but still prolonged backward, until they terminate in union with short downward curves from the upper edges, and being bent downward and outward form wings G G.

The extensions C C are bolted to the mold-boards A A, through the bolt-holes *c c* or *c′ c′*, accordingly as a greater or less spread is desired.

Two or more bolt-holes, *x x′*, may be formed in each of the extensions C C, near their upper edges on either side of one of the upper bolt-holes *c* or *c′*, on a circle having the corresponding lower bolt-holes *c* or *c′* as a center, and the upper edges of the extensions being bolted to the mold-boards A A through the bolt-holes *x*, the wings G G are depressed, while, when bolted through the bolt-holes *x′*, they are elevated; or, if preferred, a curved slot may be substituted for the bolt-holes *x x′*.

I further provide a post or standard, D, whereby the whole attachment may be secured to the plow-beam or cultivator-frame at any desired vertical adjustment. The post D has an arm, *d*, projecting horizontally at right angles from its top, whereby it is bolted or clamped to the under side of the plow-beam or cultivator-frame, and an upwardly-projecting spur, *d′*, which enters the beam and prevents rotation. The body of the post is formed with the longitudinal vertical slot *d″*, which receives a bolt, E, with screw-threaded point projecting backward from the junction of the two mold-boards A A, and the post is secured upon the bolt at any point in the length of the slot by means of a nut. My attachment may thus be secured to plows and cultivators of different heights, the slotted post affording a means for all necessary vertical adjustment.

The wings G G form a novel and useful feature of my device, as from their peculiar shape and location they operate to even the tops of the hills and throw off any stones or pieces of turf thrown up by the share and carried back by the extensions of the mold-boards.

The operation of the whole device is to loosen the soil, raise and carry it back and cover the hills. It in effect performs all the

functions of both cultivator and horse-hoe, and from its construction may be readily attached to any common plow or cultivator.

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

1. The herein-described attachment for plows and cultivators, consisting of the combination of the mold-boards A A, properly joined, and the extension mold-boards C C, adjustable and securable longitudinally upon the mold-boards A A and having wings G G and provided with bolt-holes x x', or a curved slot so located on said extensions as to permit them to be adjusted and secured to said mold-boards at different inclinations out of the direction of the length of said mold-boards, substantially as described.

2. The combination of a common plow and its beam or a cultivator and its frame, a hoeing and covering attachment consisting of two mold-boards properly joined, and extension mold-boards longitudinally adjustable and securable to said mold-boards, and a standard or sheath having a horizontally-projecting arm at its top so formed as to be clamped, bolted, or otherwise secured to the plow-beam or cultivator-frame, and having a vertically-slotted post formed and arranged so that the hoeing and covering attachment may be bolted to said post at any point in the length of said slot, substantially as described.

JOHN H. HIGGINS.

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