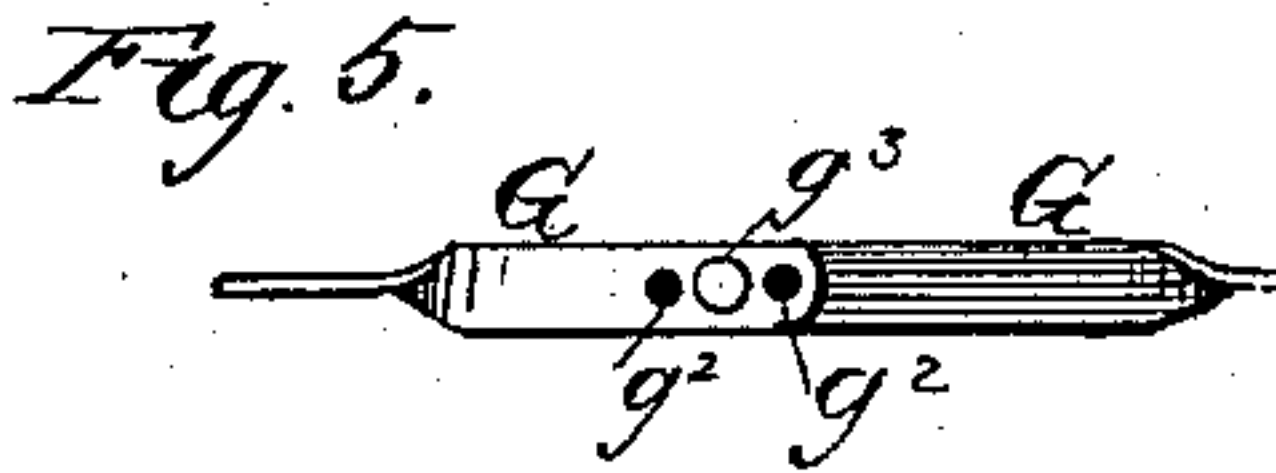
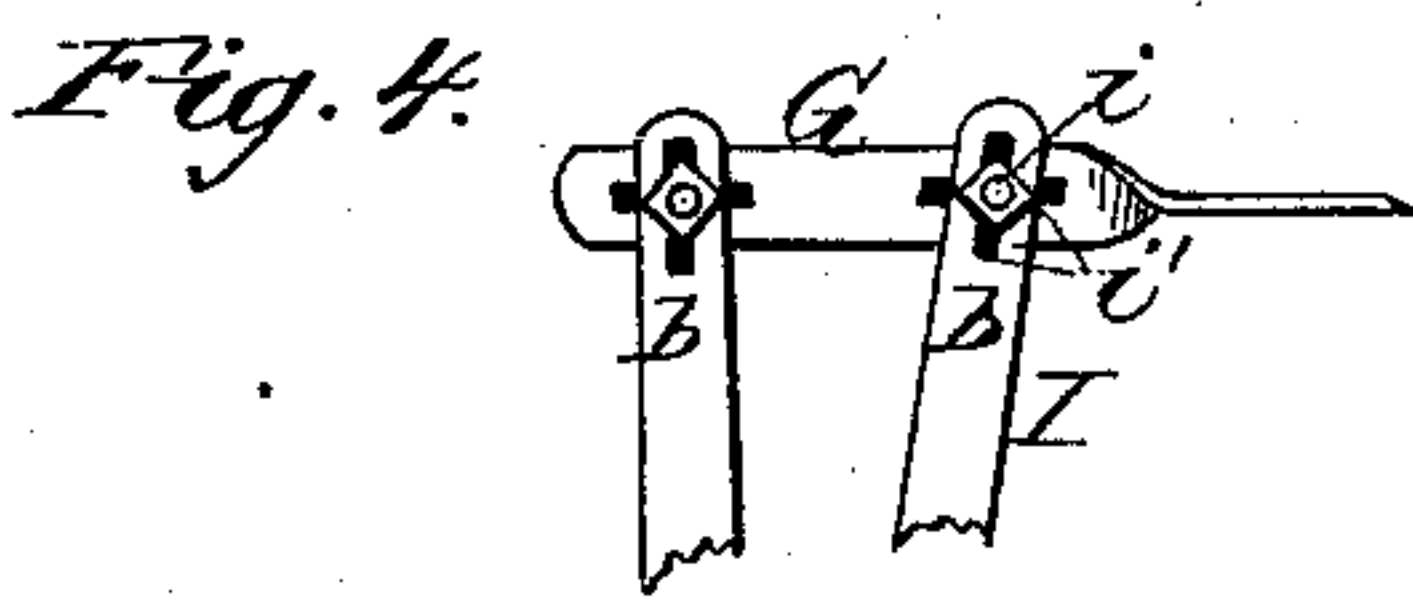
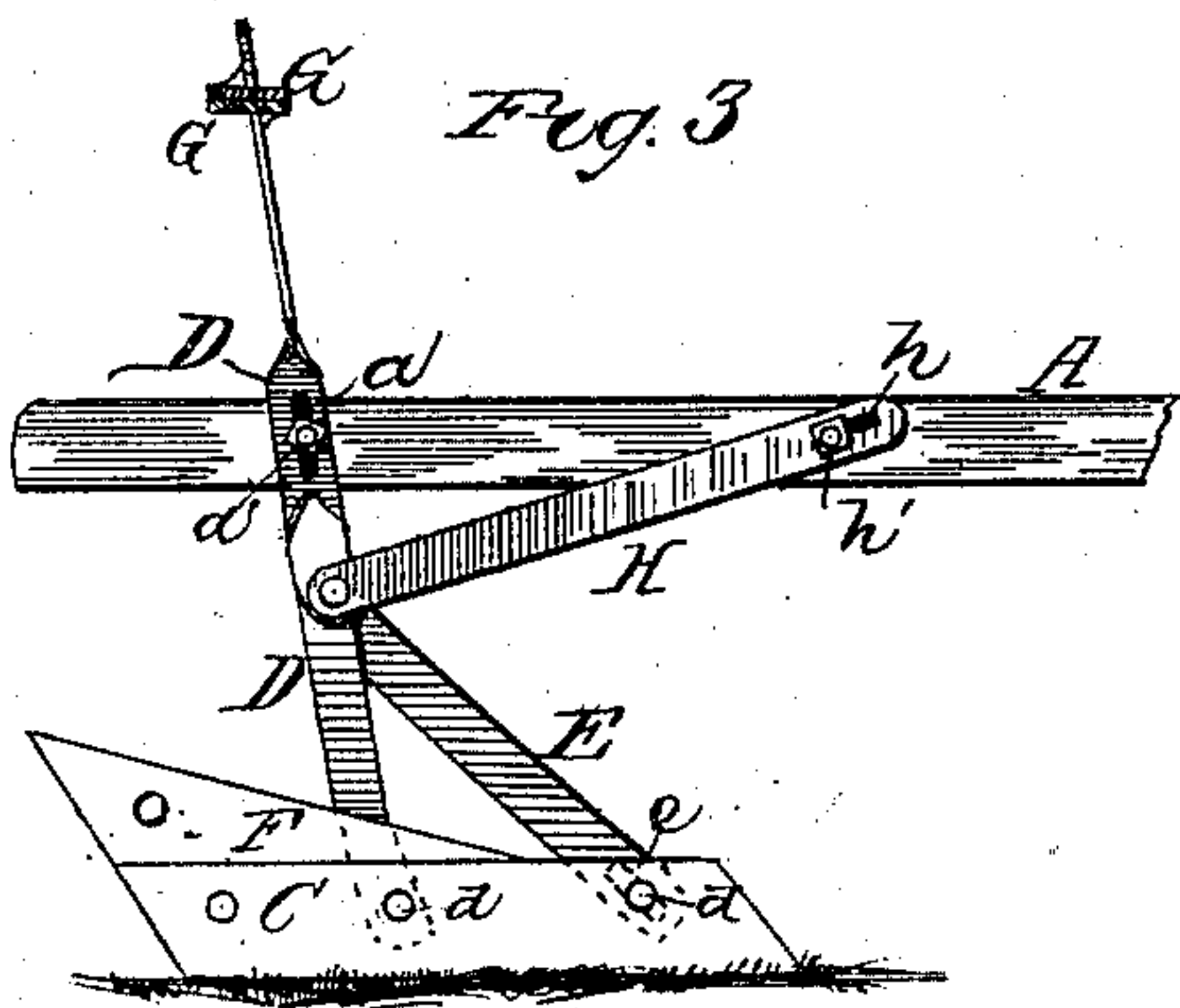
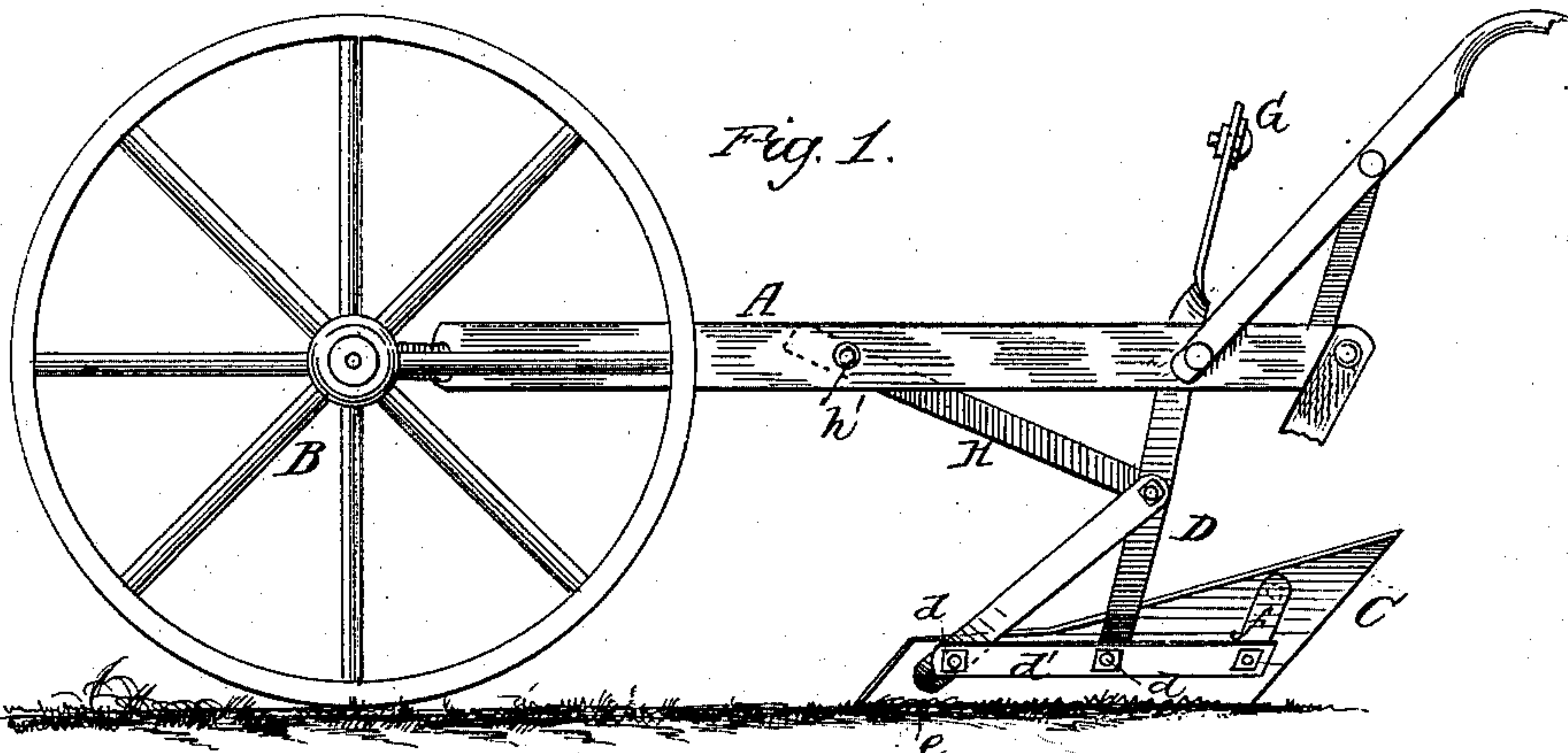


Gopher or Ridging Attachment for Cultivator.

No. 198,752.

Patented Jan. 1, 1878.



Witnesses
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UNITED STATES PATENT OFFICE.

HUGH PARKER, OF OTTAWA, ILLINOIS.

IMPROVEMENT IN GOPHER OR RIDGING ATTACHMENTS FOR CULTIVATORS.

Specification forming part of Letters Patent No. **198,752**, dated January 1, 1878; application filed August 14, 1877.

To all whom it may concern:

Be it known that I, HUGH PARKER, of Ottawa, in the county of La Salle and State of Illinois, have invented certain new and useful Improvements in Gopher or Ridging Attachments for Cultivators; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being made to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a side view of my invention as applied to a cultivator. Fig. 2 is a rear view of the same. Figs. 3, 4, and 5 are detail views.

This invention relates to improvements in gopher or ridging attachments for either walking or wheel cultivators; and the invention consists in the general construction and arrangement of parts, all as hereinafter fully described.

In the drawings, A represents one of the plow-beams of a cultivator, having its front end pivoted to the axle of the wheel B, in the usual manner. C C represent the blades of my improved attachment. These blades are made in the form of a parallelogram, with their front and rear ends inclining forward from the top to the bottom of the blades, all as clearly shown in Fig. 3.

D D represent vertical twisted bars, to the lower end of which the blades are centrally pivoted. The blades are also connected in front to the bars D by brace-bars E, pivoted to the bars D. The bars D and brace-bars E are connected to the rear sides of the blades by bolts *d* and nuts, and the longitudinal bar *d'*, through which the bolts *d* pass.

F F represent triangular mold-boards, secured to the top and rear ends of the blades by means of the plates *f* and bolts, in the usual manner. The brace-bars E are provided at their lower ends with vertical slots *e*, through which the bolts *d* pass for connecting them with the blades, and whereby the front ends of the blades are adapted to be raised and lowered, thus regulating their depth in the earth.

The vertical bars D are provided with slots *a*, by which they are adjustably secured by bolts *a'* to the rear ends of the cultivator or plow beams A. The bars D extend a short

distance above the plow-beams A, and they are connected together at their upper ends by horizontal twisted bars G G. The upper ends of the bars D are provided with vertical slots *b b*, and the bars G with horizontal slots *g*, through which bolts *g*¹ pass, for adjustably connecting said bars together, and the bars G are provided with holes *g*², through which a bolt, *g*³, passes, for adjustably connecting the bars G together, whereby the blades can be moved nearer together or farther apart, as may be desired. H H represent brace-bars for also connecting the bars D with the plow-beams. Said brace-bars are pivoted to the bars D, and at their front ends are provided with slots *h*, by which they are adjustably secured, by bolts *h'*, to the plow-beams. I I represent brace-bars for also connecting the horizontal bars G with the bars D. Said bars I I are also pivoted to the bars D, and at their upper ends are provided with vertical slots *i*, by which they are adjustably secured to said bars G by bolts *i'*.

By means of the vertical slots *a* in the bars D they can be adjusted to assist in regulating the depth that the blades enter the earth, and also allow the attachment to be adapted to different cultivators, where some have the plow-beams higher than others.

By means of the slotted and pivoted brace-bars the blades can be adjusted at any desired angle, and also raised and lowered, for regulating their depth into the earth, while the adjustable bars G permit the blades to be moved nearer to or farther from the corn-rows, as may be desired.

The slots in the bars D and several brace-bars may be made of any desired length for giving the necessary adjustments to different heights of beams, and also to the different angles required in adjusting the blades to the earth.

The cultivator-legs should all be removed when the gopher or ridging attachment is on the cultivator. This attachment may be applied to any form of cultivator, and the attachment straddles the rows the same as in other cultivators, thereby throwing the dirt or earth to each side of the hills of corn.

I claim as my invention—

1. The herein-described gopher or ridging

attachment for cultivators, consisting of the adjustable blades C C, bars D D, pivoted brace-bars E H I, and adjustable bars G, substantially as and for the purpose specified.

2. The combination, with the blades C, of the bars D, provided with the vertical slots *a*, and the slotted brace-bars E H I, substantially as and for the purpose specified.

3. The combination of the bars D, provided with the slots *a* and slotted brace-bars, and the horizontal bars G, provided with the slots *g*, substantially as and for the purpose specified.

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