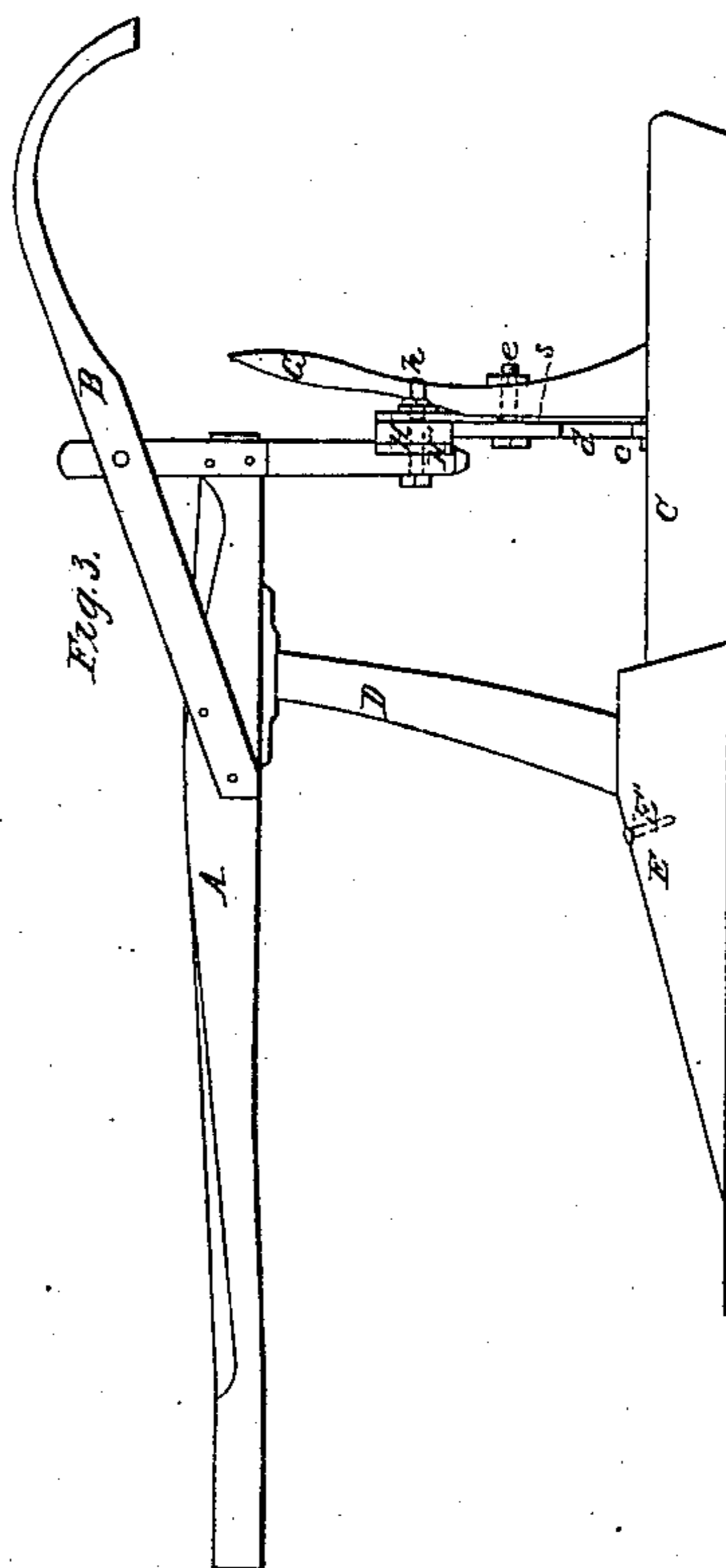
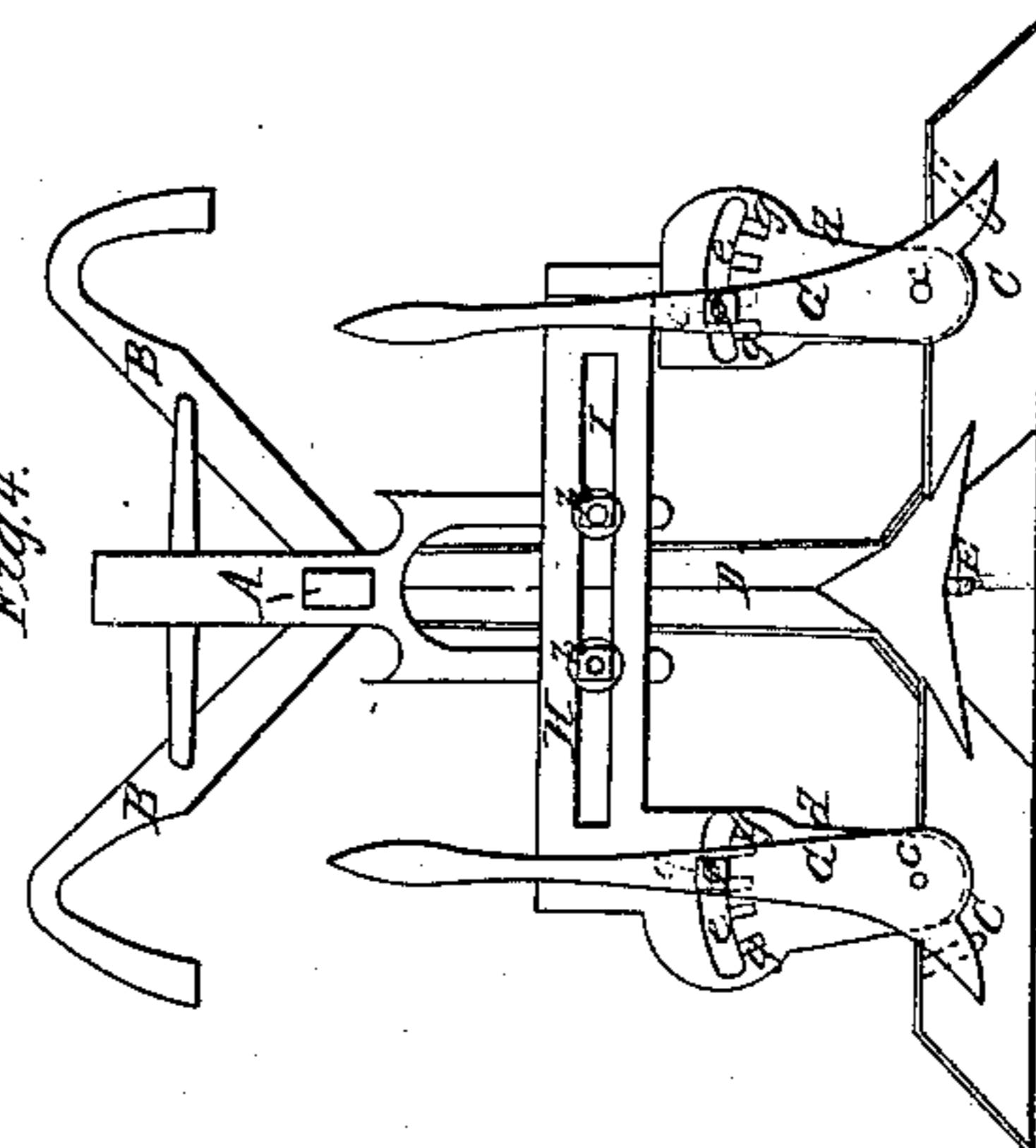
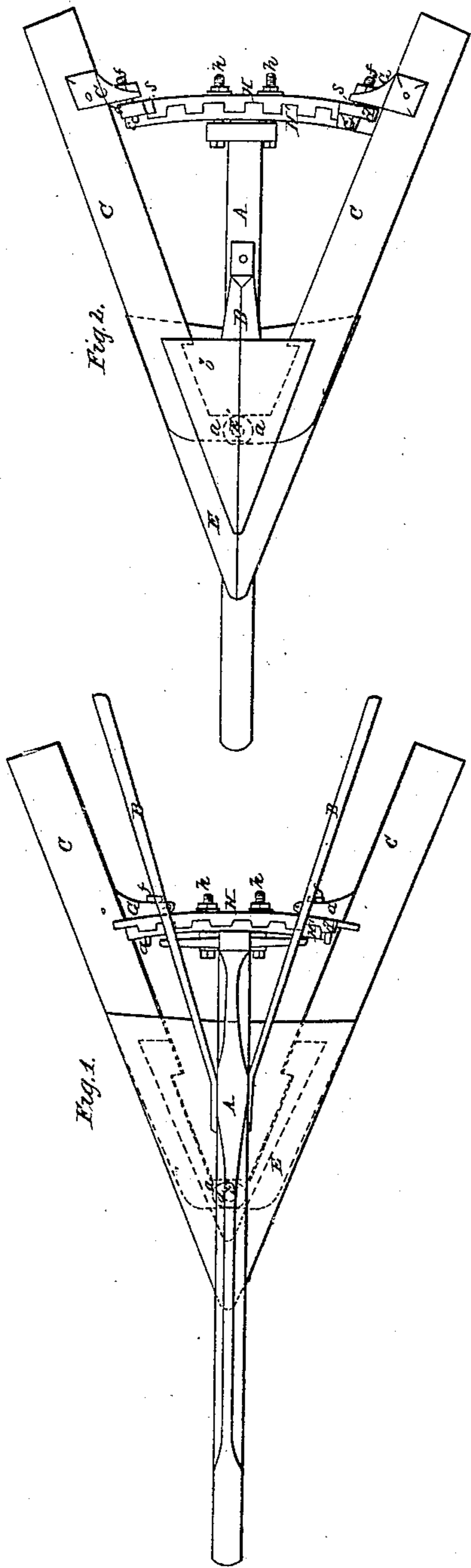


L. M. WHITMAN.  
CULTIVATOR.

No. 10,123.

Patented Oct. 11, 1853.



# UNITED STATES PATENT OFFICE.

L. M. WHITMAN, OF WEEDSPORT, N. Y., ASSIGNOR TO SAMUEL G. WISE.

## IMPROVEMENT IN CULTIVATING-PLOWS.

Specification forming part of Letters Patent No. 10,123, dated October 11, 1853.

*To all whom it may concern:*

Be it known that I, L. M. WHITMAN, of Weedsport, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Cultivators; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan or top view. Fig. 2 is an inverted plan or bottom view. Fig. 3 is a side elevation, and Fig. 4 is a back view of the cultivator.

Similar letters of reference in each of the several figures indicate corresponding parts.

The nature of my invention consists, first, in a novel manner of setting the long inclined adjustable blades steep or more perpendicular for the purpose of throwing more pulverized soil against or up to the hills, or setting them less steep for the purpose of allowing the pulverized soil, weeds, &c., to pass over them into the open space in the center and escape freely, while in either case they cut up the weeds and pulverize the soil the same.

My invention consists, second, in constructing the point or share and the lower part of the main standard, together with the front ends of the inclined adjustable blades, in such a manner that they can all be held together and in their places by one bolt, and the said bolt at the same time be made to serve as a joint or center for the blades to turn upon as they are moved to the required distance apart by the adjusting-standards attached to the back of said blades and under the back end of the beam.

To enable others skilled in the art to make and use my invention, I will describe it more fully.

A represents the beam, and B B the handles.

C C are the long inclined adjustable blades, which are set very steep, so as to throw the soil up against the hills, or less steep to allow the pulverized soil, weeds, &c., to pass over them into the large open space in the center and escape freely. These blades cut up the weeds and soil effectually in both cases. The front ends, *a a*, of these blades lap over each other, and are so shaped that they lie snugly

on the lower part, *b*, of the main standard D, and play freely under the point or share E, as shown in the drawings, the share E and lower part, *b*, of standard D, and the front ends, *a a*, of the inclined blades being all constructed in the manner shown in Fig. 2, and united together by the bolt E', which passes through them in the manner shown in the drawings. On this bolt the blades are allowed to swing or turn freely as they are set more or less steep, and when they are being set at the required distances apart. To the back ends of these blades are firmly attached levers G G, which serve to adjust or set the blades more or less perpendicular. These levers carry fulcrum-pins *c c*, with which they turn, these pins *c c* serving to connect the vertical standards *d d* of the notched adjustable and adjusting cross-bars or racks H H, which serve to move the blades farther apart or nearer together, as desired. Near and through the center of the vertical standards *d d* segmental slots *e e* are cut, in which set-screws *f f* work freely to the right and left when the blades are raised to nearly a perpendicular line or set less steep. Just below these stops, and on the back of the standards, a number of notches, *g g*, are cut, into either one of which a cog, *s*, on the front of each lever G fits, and thereby keeps the blades firmly in the desired position while plowing. These catches can be easily withdrawn and fitted into other notches by simply unscrewing the set-screws *f f*. By having a number of notches it will be seen that any inclination desired may be given to the blades. The arrangement of these levers for setting the blades at greater or less inclination, and the arrangement for moving them nearer to or farther from each other, will be clearly seen in Figs. 1, 2, 3, and 4.

The rack segmental cross-bars H H' have an oblong slot, *l*, through their center, in which the fixed set-screws *h h* play freely as the bars are moved, one to the right and the other to the left, by moving the levers G G in similar directions. After these bars have been moved far enough to the right and left and the blades set at a proper distance apart, they are forced together, the teeth of one fitting snugly into the notches of the other. The set-screws are now screwed up tight, thereby locking the bars

together and keeping the blades firmly in their places. This device, in connection with the manner of setting the blades at different inclinations, and the manner of connecting the share standard and blades by one bolt, renders the cultivator far more perfect and utile than any other cultivator in use.

The long blades also answer a very good purpose in turning up the soil against the hills, and also to allow the same to escape with the weeds, &c., when desired.

What I claim as my invention, and desire to secure by Letters Patent, is—

The employment of the long inclined spring wings C C, secured at their front ends to the share and main standard, and turning upon the pin F, in combination with the mechanical

contrivances herein shown and described for expanding and contracting the wings, or setting them more perpendicular and nearer together for the purpose of throwing more pulverized soil against or up to the hills or setting them less inclined to the horizontal plane and farther apart for the purpose of allowing the pulverized soil, weeds, &c., to pass over them into the broad open space in the center, the said wings in either case cutting up the weeds and pulverizing the soil the same as herein fully set forth.

L. M. WHITMAN.

Witnesses:

WILLIAM WATSON,  
WM. COWELL.