

E. HAIMAN.

Sweeps for Cultivators and Plows.

No. 147,633.

Patented Feb. 17, 1874.

Fig. 1.

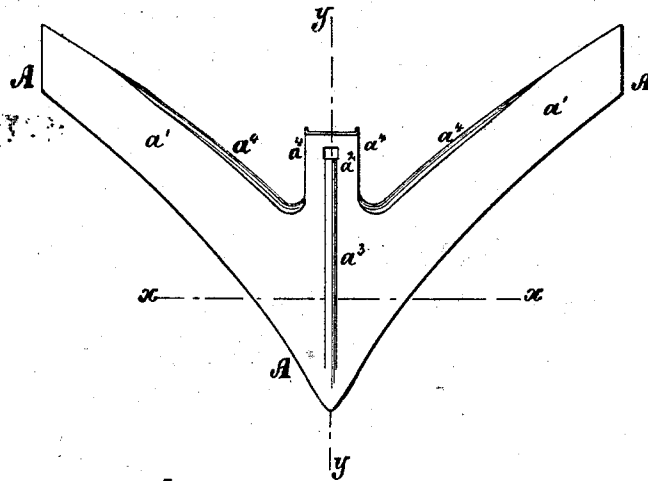


Fig. 2.



Fig. 3.



Fig. 4.

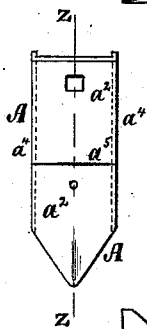
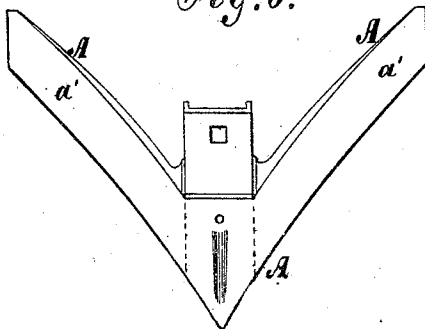


Fig. 5.



Fig. 6.



Witnesses:

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UNITED STATES PATENT OFFICE.

ELIAS HAIMAN, OF COLUMBUS, GEORGIA.

IMPROVEMENT IN SWEEPS FOR CULTIVATORS AND PLOWS.

Specification forming part of Letters Patent No. **147,633**, dated February 17, 1874; application filed June 7, 1873.

To all whom it may concern:

Be it known that I, ELIAS HAIMAN, of Columbus, in the county of Muscogee and State of Georgia, have invented a new and useful Improvement in Cultivator-Sweeps; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a front view of my improved sweep. Fig. 2 is a cross-section of the same. Fig. 3 is a vertical section of the same. Fig. 4 represents the stem made separate. Fig. 5 is a vertical section of the detached stem. Fig. 6 is a front view of a sweep to be used with a separate stem.

My invention has for its object to construct sweeps and their stems so as to enable them to be made lighter and cheaper.

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

A represents the sweep, of which a^1 is the wings, and a^2 the stem. The middle part of

the sweep A has a bead or ridge, a^3 , formed along its central line and extending from the bolt-hole in the stem to, or nearly to, the point, while the side edges of the stem a^2 are bent to form flanges a^4 , extending along the upper edges of the wings a^1 . Nothing less than a longitudinal and transverse rib will answer the purpose; but these two corrugations being thus relatively placed, prevent the sheet from being bent in either a vertical or horizontal direction, and enable me to employ thin metal that is more easily worked and makes a much cheaper article.

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

As a new article of manufacture, a sheet-metal sweep, A, having the ribs a^3 a^4 , arranged as described.

ELIAS HAIMAN.

Witnesses:

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