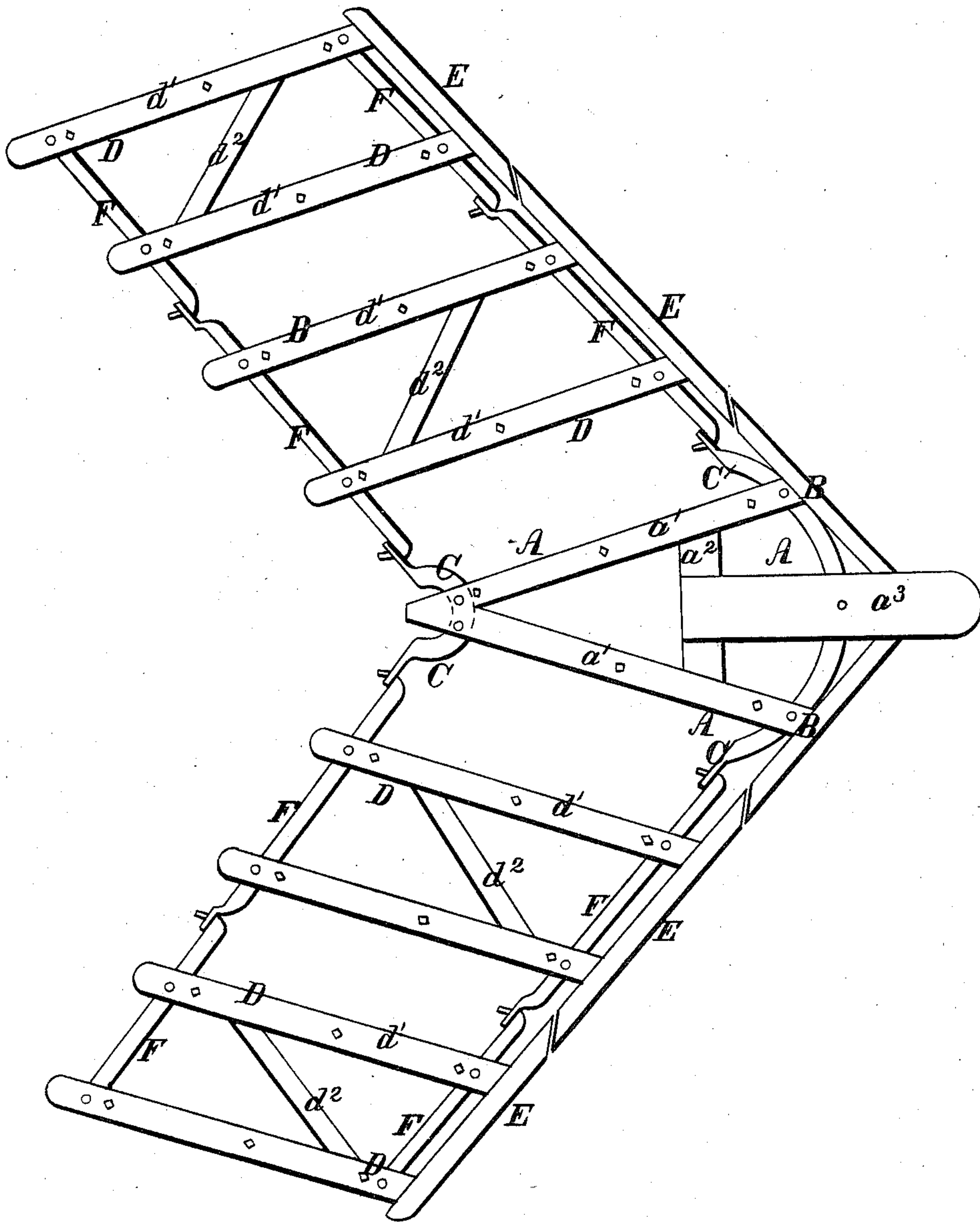


W. H. BARRY.

Harrow.

No. 83,238.

Patented Oct. 20, 1868.



Witnesses:  
Wm A. Morgan  
L. C. Cotton

Inventor:  
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W. H. BARRY, OF RABBIT RIVER, MICHIGAN.

Letters Patent No. 83,238, dated October 20, 1868.

IMPROVEMENT IN HARROWS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, W. H. BARRY, of Rabbit River, in the county of Allegan, and State of Michigan, have invented a new and useful Improvement in Harrows; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which the figure is a top view of my improved harrow.

My invention has for its object to furnish an improved harrow, which shall be so constructed that it may be readily adjusted as a large or small harrow, which will harrow the ground evenly, and which will not be liable to catch upon stumps or trees, or upon the feet of the horses; and it consists of the harrow, constructed and arranged as hereinafter more fully described.

A is the central part or piece of the harrow, which is formed of two bars,  $a^1$ , attached to each other at their rear ends, and which incline from each other as they pass forward, as shown in the drawing.

The forward parts of the bars  $a^1$  are connected to each other by the cross-bar  $a^2$ , to which is attached the bar  $a^3$ , to the projecting forward end of which the draught is attached.

B are the guard-bars, which are attached to the forward ends of the bars  $a^1$ , and the forward ends of which are attached to the forward part of the draught-bar  $a^3$ , so as to give firmness and strength to the part A.

C are curved iron bars, the longer of which is attached to the forward end, and the shorter to the rear end of the part A, as shown in the figure, so that their ends, in which are formed eyes, may project at the sides of the said part A.

D are the wings, consisting of two longitudinal bars,  $d^1$ , connected to each other by an inclined brace-bar,  $d^2$ .

To the forward ends of the bars  $d^1$  are attached the guard-bars E, which are set at the same inclination as the guard-bars B, and the ends of which are made inclined, so that their forward ends may underlap and their rear ends overlap the ends of the adjacent guard-bars, so that, should the forward end of the harrow strike against the stump, tree, or other obstruction,

the said obstruction cannot enter between the ends of the longitudinal bars, but the forward end of the harrow will slide along and pass the said obstruction.

These guard-bars also prevent the horses' feet, in turning, from becoming entangled with the harrow.

To the parts or wings D are attached iron bars F, having hooks formed upon their inner ends, and having eyes formed upon their outer ends, as shown in the drawing.

This enables a greater or less number of parts or wings D to be attached together and to the part A, so that the harrow may be made larger or smaller, as may be desired.

The parts of the harrow can only be detached from each other by turning them into such a position that the overlapped ends of the guard-bars may be separated from each other. The construction thus guards against the parts of the harrow becoming detached in passing over rough or uneven ground.

The teeth are attached to the longitudinal bars of the various parts, in such positions that, when the harrow is drawn forward, the tracks of the teeth may all be parallel with each other, and at equal distances apart, which can be done, in a harrow of this construction, without its being necessary to place the teeth closer together in one part than in another, which diminishes the liability of the harrow to become clogged with sods, &c.

I claim as new, and desire to secure by Letters Patent—

1. The combination of the overlapping guard-bars B and E with the forward ends of the parts D and A, substantially as herein shown and described, and for the purpose set forth.

2. The described arrangement of the curved metallic bars C C, and straight bars F, with relation to each other, the central part A of the harrow, the wings D, and guards B E, as herein described, for the purpose specified.

W. H. BARRY.

Witnesses:

F. S. SHEARMAN,  
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