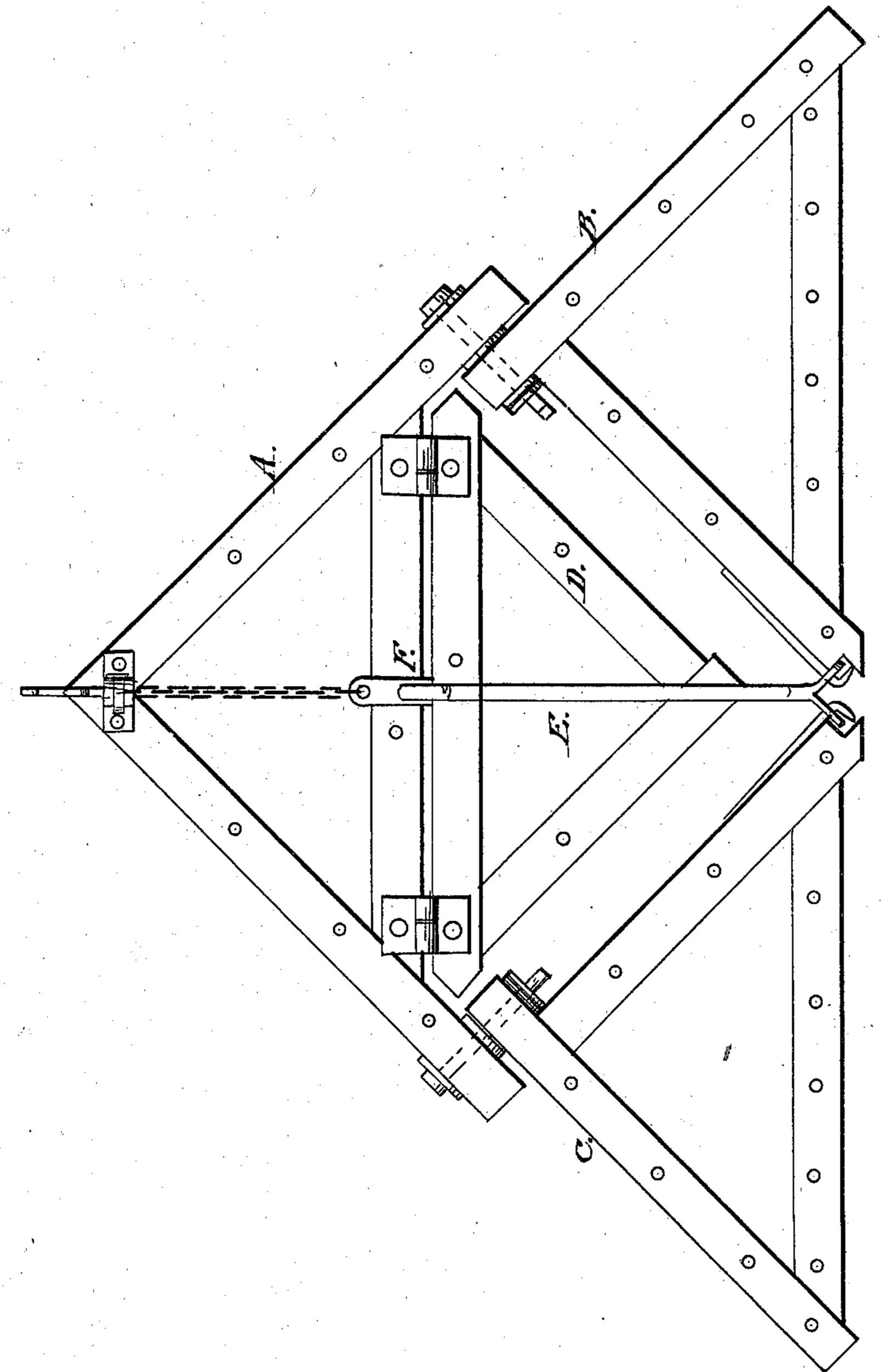


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Witnesses: ABenneyendorf S.F. Roberk Inventor:

N.B.Marsh.

Municipal

Attorney



NELSON B. MARSH, OF MARENGO, ILLINOIS, ASSIGNOR TO HIM-SELF AND I. R. MILLER, OF SAME PLACE.

Letters Patent No. 87,577, dated March 9, 1869.

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, Nelson B. Marsh, of Marengo, in the county of McHenry, and State of Illinois, 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 others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to improvements in harrows, the object of which is to provide a harrow that will accommodate itself more perfectly to the ground, and which will be less liable to clog than those now in use.

It consists in the arrangement of several sections, and the manner of jointing or hinging them together; also, in the arrangement of the teeth.

The drawing represents a plan view of my improved harrow.

My improved harrow is composed of the four triangular sections, A, B, C, and D, the sides of which are at right angles to each other.

The apex of the angle of the section A is the point to which the draught is applied, and the sections B and C are jointed at their apices respectively to the rear ends of the legs of the sides of the section A, while the base of the section D is hinged to the base of the section A, and the rear ends of the legs of the inner sides of the sections B and C are jointed to a draught-rod, E, running rearward from the apex of the section A, where it is secured.

This arrangement admits of such action of the several sections, with reference to each other, that no

matter what may be the form of the surface of the ground, it will be thoroughly acted upon by the harrow.

Another advantage of this arrangement is, that it is very much less liable to clog, for the reason that, in consequence of there being so many beams for supporting the teeth, it admits the teeth in the central portion to be placed considerably further apart than in ordinary harrows.

The rod E, connecting the inner corners of the sections B and C, being loosely jointed at F, allows the said sections to oscillate in any direction, while it supports them rigidly against lateral motion, which would seriously interfere with the strength of the connecting-joints, by which they are connected to the legs of the section A.

Having thus described my invention,

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

1. The improved arrangement of the sections A B C D, in connection with each other, substantially as and for the purpose described.

2. The arrangement of the draught-rod E, in combination with the sections A, B, and C, substantially as and for the purpose described.

The above specification of my invention signed by me, this 28th day of August, 1868.

NELSON B. MARSH.

Witnesses:

ALDEN JEWETT, I. R. MILLER.