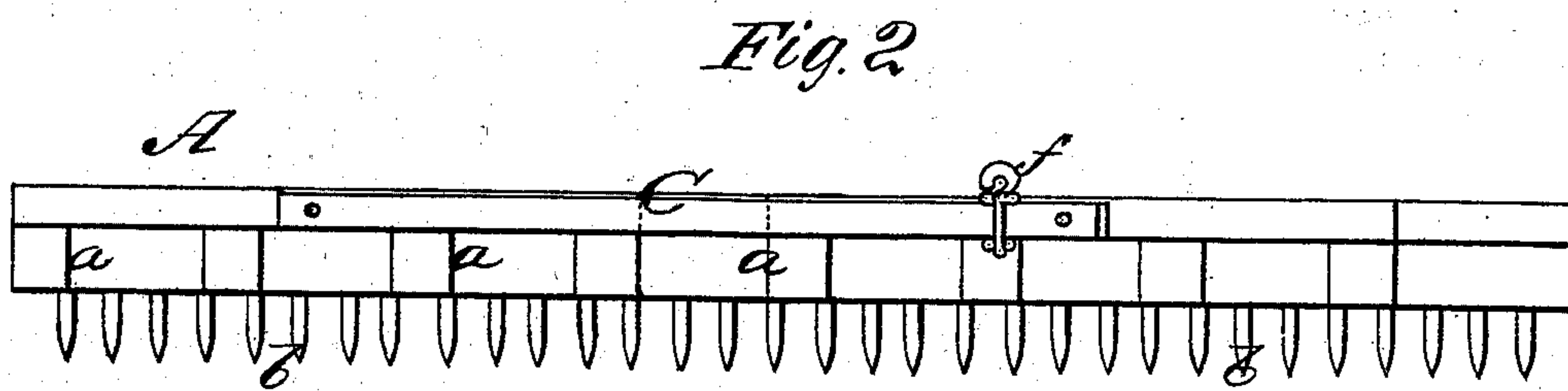
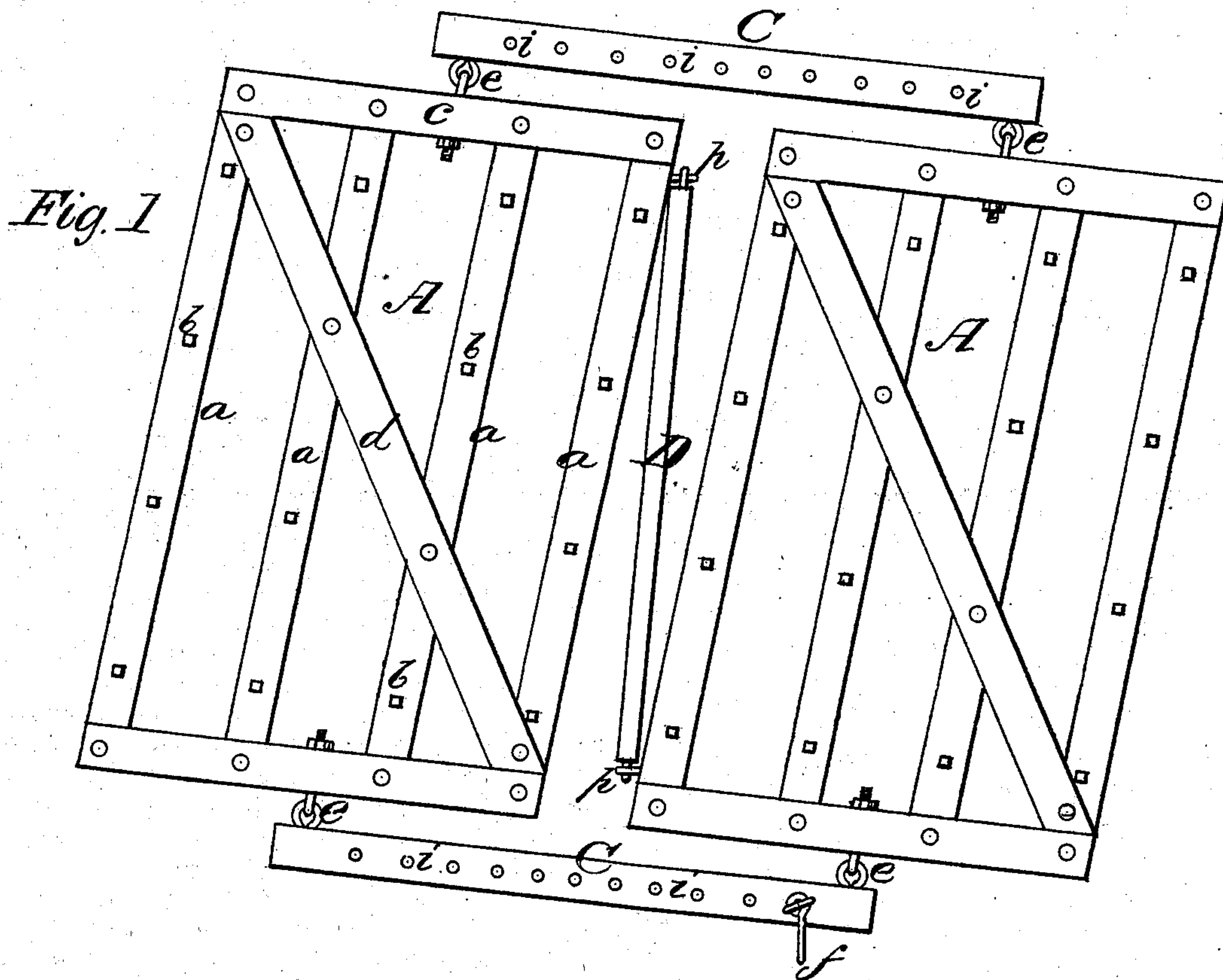


F. POST.
Harrows.

No. 150,662.

Patented May 5, 1874.



WITNESSES
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By

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UNITED STATES PATENT OFFICE

FERDINAND POST, OF MOULTON, IOWA.

IMPROVEMENT IN HARROWS.

Specification forming part of Letters Patent No. **150,662**, dated May 5, 1874; application filed March 7, 1874.

To all whom it may concern:

Be it known that I, FERDINAND POST, of Moulton, in the county of Appanoose and State of Iowa, have invented a new and Improved Harrow, called the "Universal Reversible Harrow," of which the following is a specification:

Figure 1 of the drawings is a representation of a plan view of my harrow. Fig. 2 is a side view of the same.

The nature of my invention consists in a diagonal brace, which is applied between two articulating harrow-sections, and which will prevent the sections from receiving independent endwise movements without interfering with their flexibility, in combination with the bars which couple together the harrow-sections in front and in rear, as draft-bars, to one or the other of which the clevis or shackle is adjustably applied, as will be hereinafter explained.

The following is a description of my invention:

In the annexed drawings, A A designate two harrow sections, both of which are constructed alike, and are of a rhomboidal form. Each section A consists of parallel bars *a*, to which the teeth *b* are secured in any suitable manner, which bars are secured together at their ends by means of cross-bars *c c* and strengthened by means of a diagonal brace, *d*. The harrow-sections thus constructed possess great strength and rigidity, and are not liable to collect trash at the angles formed by their braces and cross-bars. The two sections A A are connected together, at a suitable distance

apart, by means of coupling-bars C C, which are attached, by means of eyebolts *e*, to the cross-bars *c c*, which bolts allow free articulation of the sections, so that they will accommodate themselves to inequalities of the surface passed over. These bars C C have attached to them the shackle or clevis loop *f*, to which the horses are hitched, which loop is removable and adjustable to one or the other of a number of perforations, *i*, through the bars. I am thus enabled to draw the harrow from any point along the line of either coupling-bars, according as it may be desired to harrow finer or coarser. To keep the two sections A A at a given distance apart, and prevent one section moving in advance of the other, I employ a diagonal coupling-brace, D, which is connected, by means of eyebolts *p p*, to the inner sides of the two adjacent bars of the sections, as shown in Fig. 1. By changing the hitching-loop from one bar, C, to the other, the harrow-teeth can be cleared of obstructions, and these teeth can be kept sharp and straight, and the wear made even on their opposite sides.

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

The diagonal brace D, jointed to the sections A A, in combination with the front and rear coupling-bars C C, as herein described.

FERDINAND POST.

Witnesses:

M. V. B. HOVELL,

W. W. MADEUX.