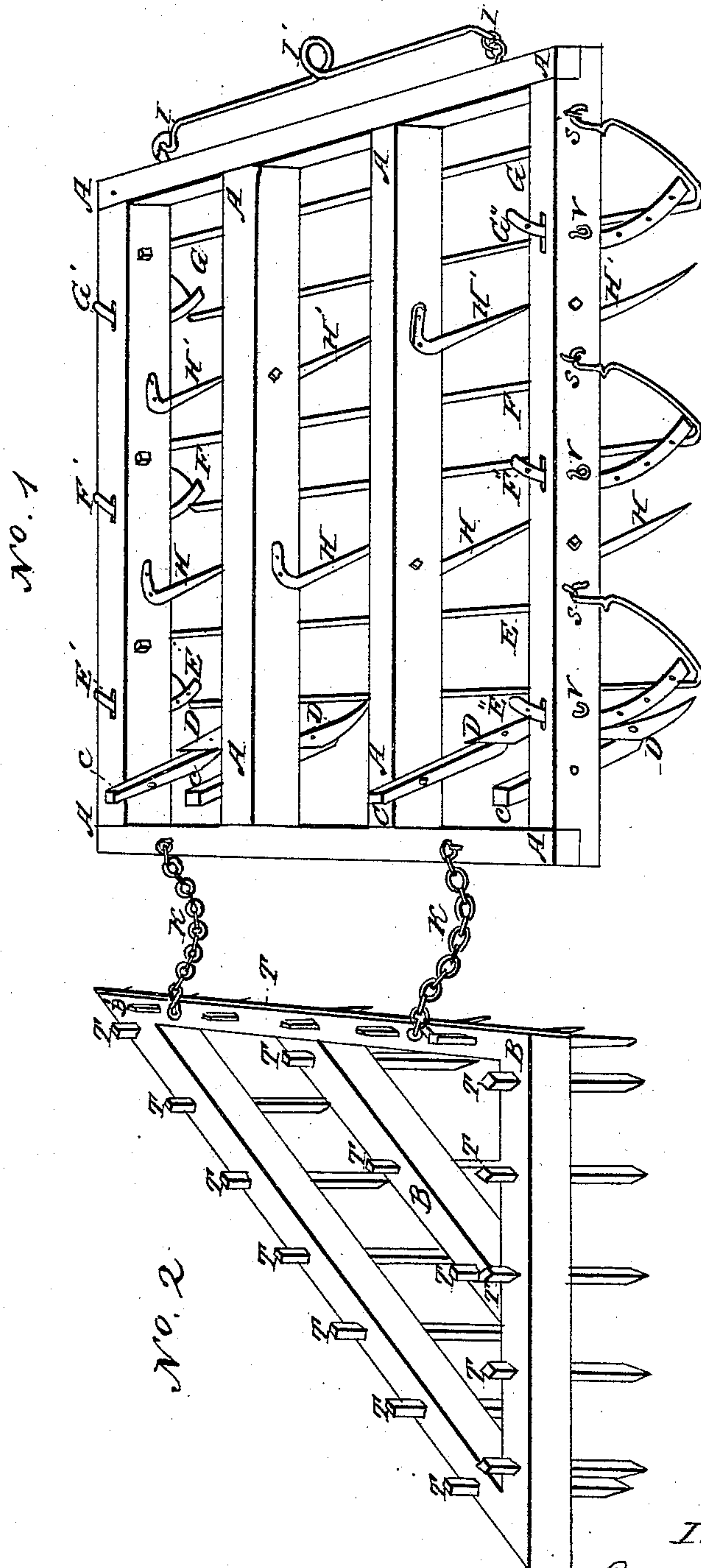


E. A. OLLEMAN.

Clod Crusher.

No. 106,397.

Patented Aug. 16, 1870.



Witnesses:
Geo. F. Fiedler
George Rieger

Inventor:
Ezra A. Olleman

United States Patent Office.

EZRA A. OLLEMAN, OF MOORESVILLE, INDIANA.

Letters Patent No. 106,397, dated August 16, 1870.

IMPROVEMENT IN GROUND-PULVERIZERS.

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, EZRA A. OLLEMAN, of Mooresville, in the county of Morgan and in the State of Indiana, have invented an Improved Ground-Pulverizer; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of the invention consists in the construction and combination of the ground-pulverizer hereinafter described; said device to be made of wood, iron, and steel, or any other convenient and suitable material.

To enable others skilled in the art to make and use my invention, I will proceed to describe it more fully, as follows, viz:

A A A of No. 1 of the accompanying drawing is a wooden frame, of the shape therein represented, to which convenient draft apparatus may be attached, at I.

H H H and H' H' H' are teeth, similar to the teeth of a harrow, fastened to the wooden frame A A A, in the position and in the manner and form as represented in the drawing.

E, F, and G are crushers, of the shape there represented, extending from side to side of the machine, and being under it, by means of the hooks and staples at S, in the manner and form as represented.

To regulate the slant of the pulverizers, they are provided with an adjusting apparatus, consisting of the arc-formed plates E' E", F' F", and G' G", which

pass through a mortise in the frame A A, and are held in proper position by means of the pins V V V, which pass through them and the frame A A, securing them to the mortise aforesaid.

Attached to the back end of this device, by means of the chain K K, is an ordinary harrow, at No. 2, the frame of which is represented by B B B, and the teeth by T, T, T, T, and T.

To use my said device, all these various parts are arranged in their proper places, as represented in the drawing. A sufficient number of draft animals is then hitched at I, by means of any convenient and suitable device. It is then dragged over the ground which it is to pulverize, when it will be found that, by reason of the combination of the crushers, the teeth, and plows, as aforesaid, the ground will be more effectually and evenly pulverized than by any other device now in use.

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

The construction and arrangement of the crushers E, F, and G, and arc-shaped plates E' E", F' F", and G' G", and the pins V V V, in manner and form substantially as set forth.

In testimony that I claim the foregoing specification, I have hereunto set my hand this 7th day of December, 1869.

EZRA A. OLLEMAN.

Witnesses:

F. HERYSCH,
GEORGE RIEGER.