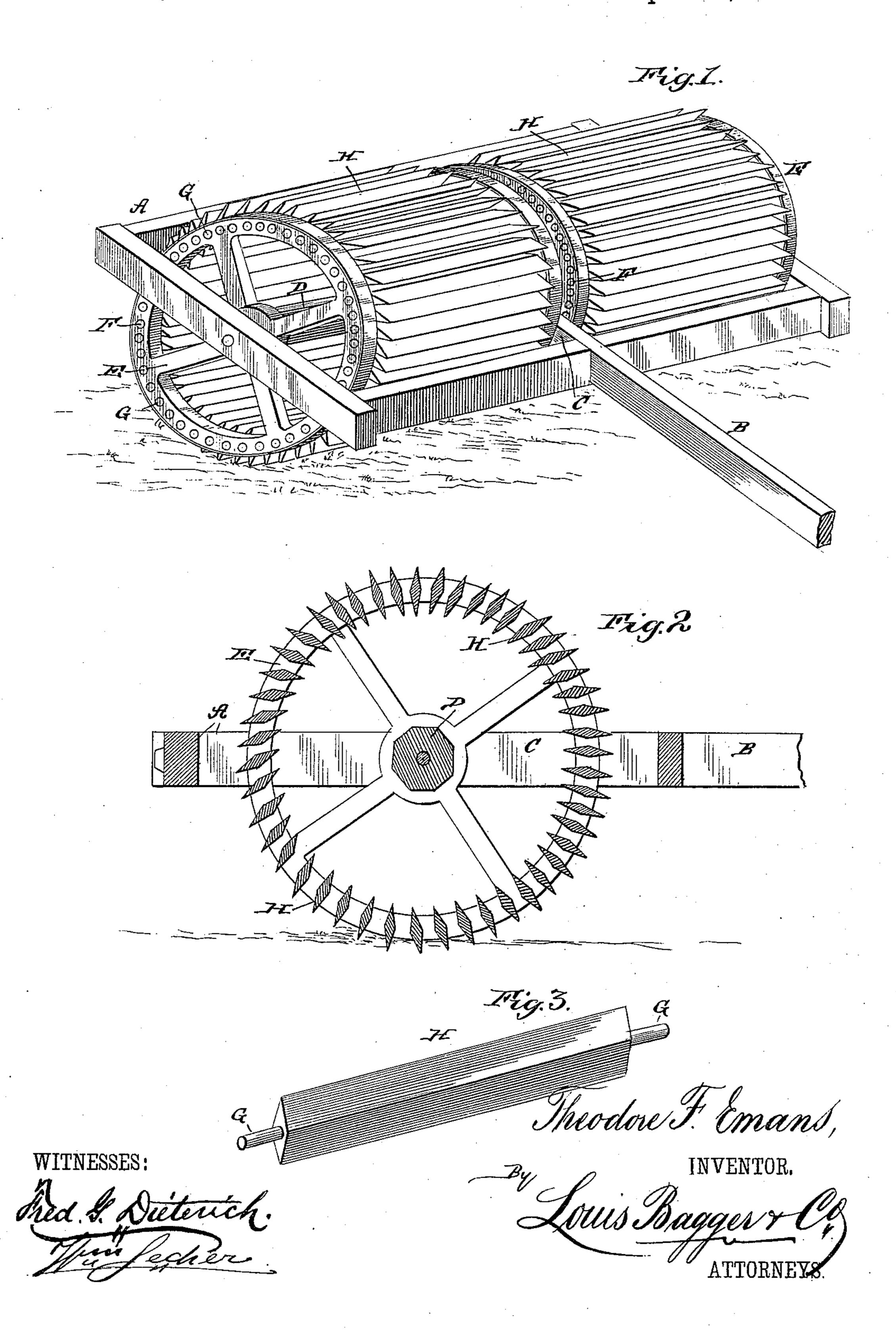
(No Model.)

# T. F. EMANS.

#### CLOD CRUSHER AND PULVERIZER.

No. 326,489.

Patented Sept. 15, 1885.



# United States Patent Office.

## THEODORE FRELINGHUYSEN EMANS, OF MENDON, OHIO.

### CLOD CRUSHER AND PULVERIZER.

SPECIFICATION forming part of Letters Patent No. 326,489, dated September 15, 1885.

Application filed January 27, 1885. (No model.)

To all whom it may concern:

Be it known that I, THEODORE F. EMANS, of Mendon, in the county of Mercer and State of Ohio, have invented certain new and useful Improvements in Clod Crushers and Pulverizers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use to the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved clod-crusher. Fig. 2 is a vertical section of the same, and Fig. 3 is a perspective view of one of the double-edged knives or slats.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to clod-crushers; and it consists in the improved construction and combination of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates a rectangular frame provided with a tongue, B, and with a cross-piece, C, similar to the frames generally used in land-rollers having two rollers.

Two axles, D D, are journaled transversely in the two portions of the frame formed by the cross-piece, their ends being journaled in bearings in the side pieces of the frames and in the cross-piece.

Two pairs of wheels or disks, E E, are secured upon the ends of the axles, and have a number of transverse perforations, F, near their periphery, which perforations form bearings for the reduced ends G of the doubleedged cutters or slats H, which form the petoriphery of the rollers journaled in the frame. These cutters or slats are thickest toward the middle, and decrease in thickness toward their inner and outer edges, thus offering sharp edges at the outside and at the inside of the cylinders or rollers formed by the axles, wheels, 45 or disks and the cutters or slats.

It will be seen that by having the cutters double-edged they may be reversed when worn, and that they likewise, by being sharpened upon both edges and by being pivoted free to 50 rock, they will not be liable to clog, and will, by rocking freely while being revolved, pulverize the soil perfectly.

It will also be seen that if a clod should pass in between the slats or cutters it will either 55 pass out at the ends, be crushed between the sides of the sharpened cutters, or be pulverized by rolling over the sharp edges of the slats.

Having thus described my invention, I 60 claim and desire to secure by Letters Patent of the United States—

1. A clod-crusher and soil-pulverizer having a number of double-edged cutters or slats rhombic in cross-section, pivoted with spaces 65 between them and rocking freely without revolving, so as to form the periphery of a roller, as and for the purpose shown and set forth.

2. The combination of the wheels or heads, having the transverse perforations near the 70 edges, with the cutters or cross-slats having their inner and outer edges sharpened, forming the figure of a rhomb in cross-section, and pivoted with their reduced ends in the perforations in the heads, with spaces between 75 them, so as to rock freely without revolving, as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

THEODORE FRELINGHUYSEN EMANS.

Witnesses:

Belle Harner, Emily Presho.