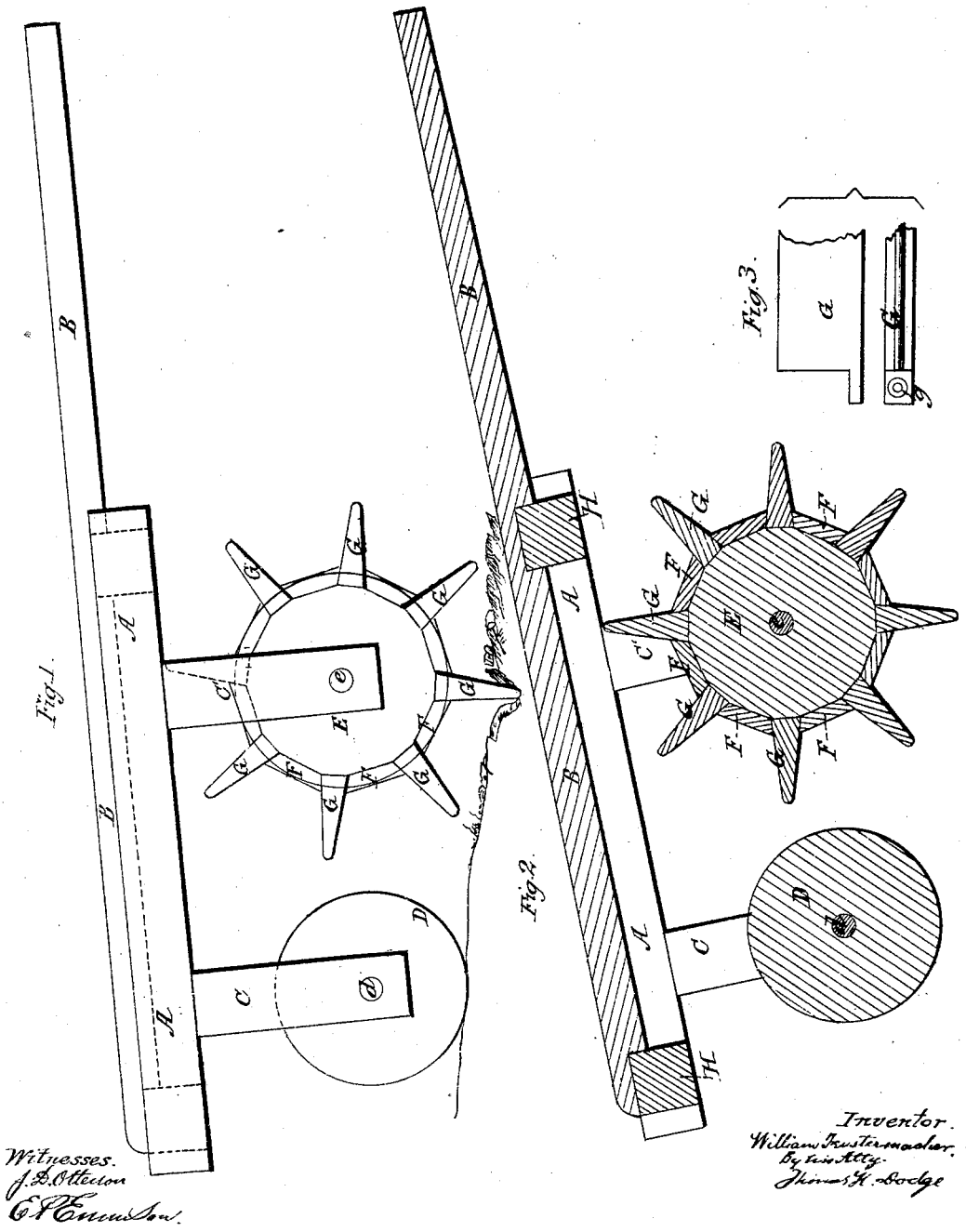
W. FENSTERMACHER.

Clod-Crusher.

No. 45,705. Patented Jan. 3, 1865.



UNITED STATES PATENT OFFICE.

WILLIAM FENSTERMACHER, OF SHIPPENSBURG, PENNSYLVANIA.

IMPROVEMENT IN CLOD-CRUSHERS.

Specification forming part of Letters Patent No. **45,705**, dated January 3, 1865; antedated March 7, 1864.

To all whom it may concern:

Be it known that I, WILLIAM FENSTERMACHER, of Shippensburg, in the county of Cumberland and State of Pennsylvania, have invented a certain new and useful Improvement in Clod Breakers and Rollers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and in which—

Figure I represents a side view of my improved clod breaker and roller, and Fig. 2 represents a longitudinal vertical section; and Fig. 3, detached and broken sections of one of the clod-breaking blades.

The object and purpose of the invention is to break or crush up the clods in fields preparatory to sowing or planting, or after the fields have been sowed or planted, thereby rendering the surface of the soil more even and smooth and rendering its cultivation easier, while at the same time insuring an increased production.

In the drawings, A represents the main frame, which is of rectangular form, and has four downwardly-projecting arms, C C and C′ C′, fastened securely thereto. A cylinder, E, provided with blades G, is supported in the arms C′ C′, its axle or journal *e* in bearings in the lower ends of said arms. The blades G run lengthwise of cylinder E, which may be made of wood, with grooves cut out to receive the base of the blades, or the blades may be fastened to the cylinder, and then pieces of wood nailed, screwed, or otherwise fastened between the blades, as indicated at F F, Fig. 2. I have found blades of cast-iron to answer well, although they may be made of wrought-iron or other material, as constructors may prefer. In the back set of arms, C C, a smooth roller, D, is sustained, its axle or journal *d* turning in bearings in the bottom thereof, as indicated in the drawings. This last-named roller is about the same diameter as the cylinder E before the blades are attached.

The machine is drawn by a tongue, B, which may be hinged or rigid, just as preferred.

The width of the machine and the dimensions of the parts will be governed by the judgment of the constructor. In practice I have found the machine to work well with the front cylinder fourteen (14) inches in diameter, with blades of cast-iron three (3) inches in width, and the rear roller of the same diameter as the first—viz., fourteen inches.

As the machine is advanced the blades G G crush and open the clods and dry lumps of the soil, while the smooth roller D follows and rolls and smooths down the earth thus broken up.

The advantages of my invention will be at once appreciated by those accustomed to cultivate fields on which the soil lumps up.

My invention is simple, and requires no more time than does the use of the ordinary smooth roller.

Having described my improved clod breaker and roller, what I claim as of my invention, and desire to secure by Letters Patent, is—

The combination, with the main frame A and arms or hangers C C and C′ C′, of the cylinder E, provided with blades G, and the rear smooth roller, D, said parts being arranged and operating in relation to each other as and for the purposes set forth.

WM. FENSTERMACHER.

Witnesses:

R. P. MCCLURE,

ISAAC HYKAS.