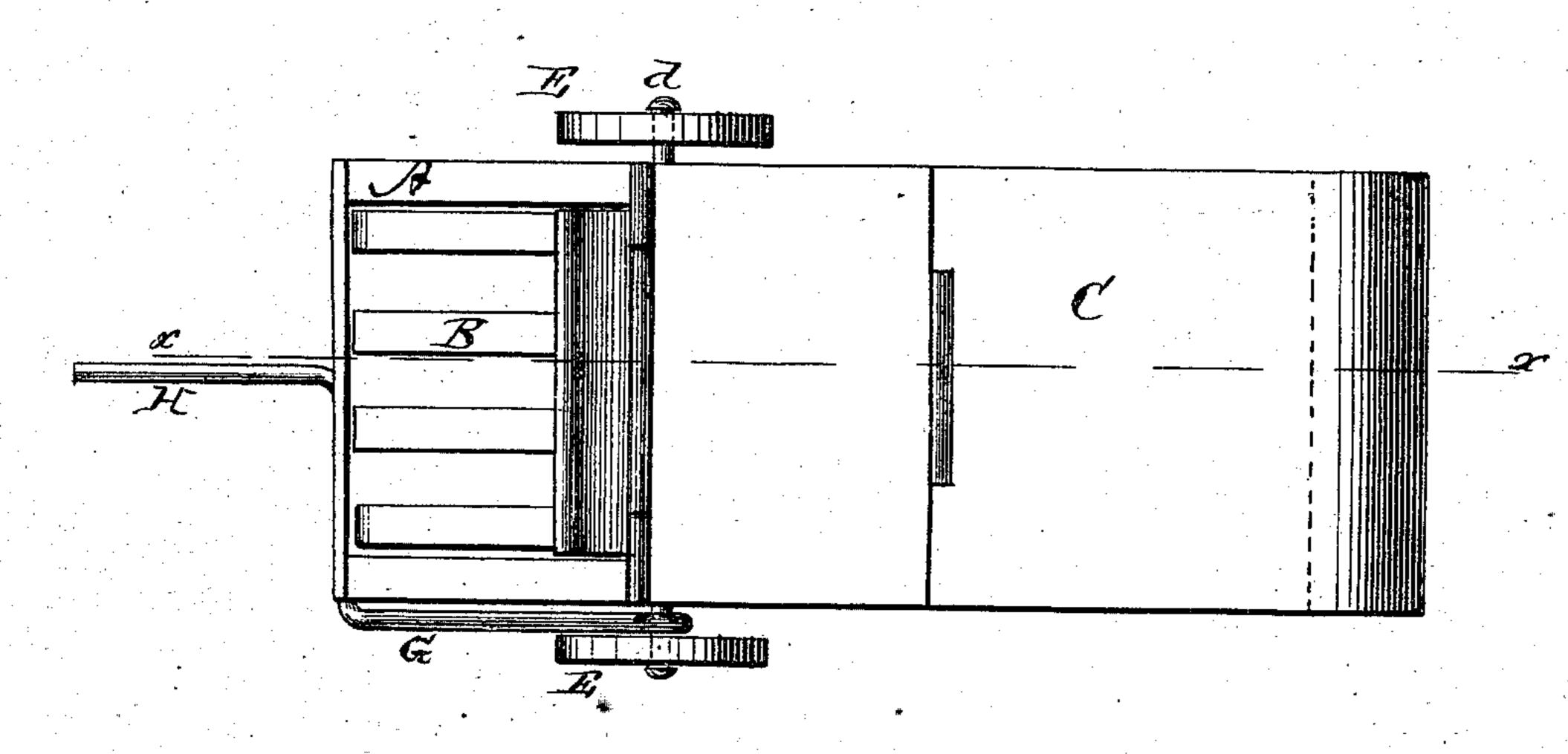
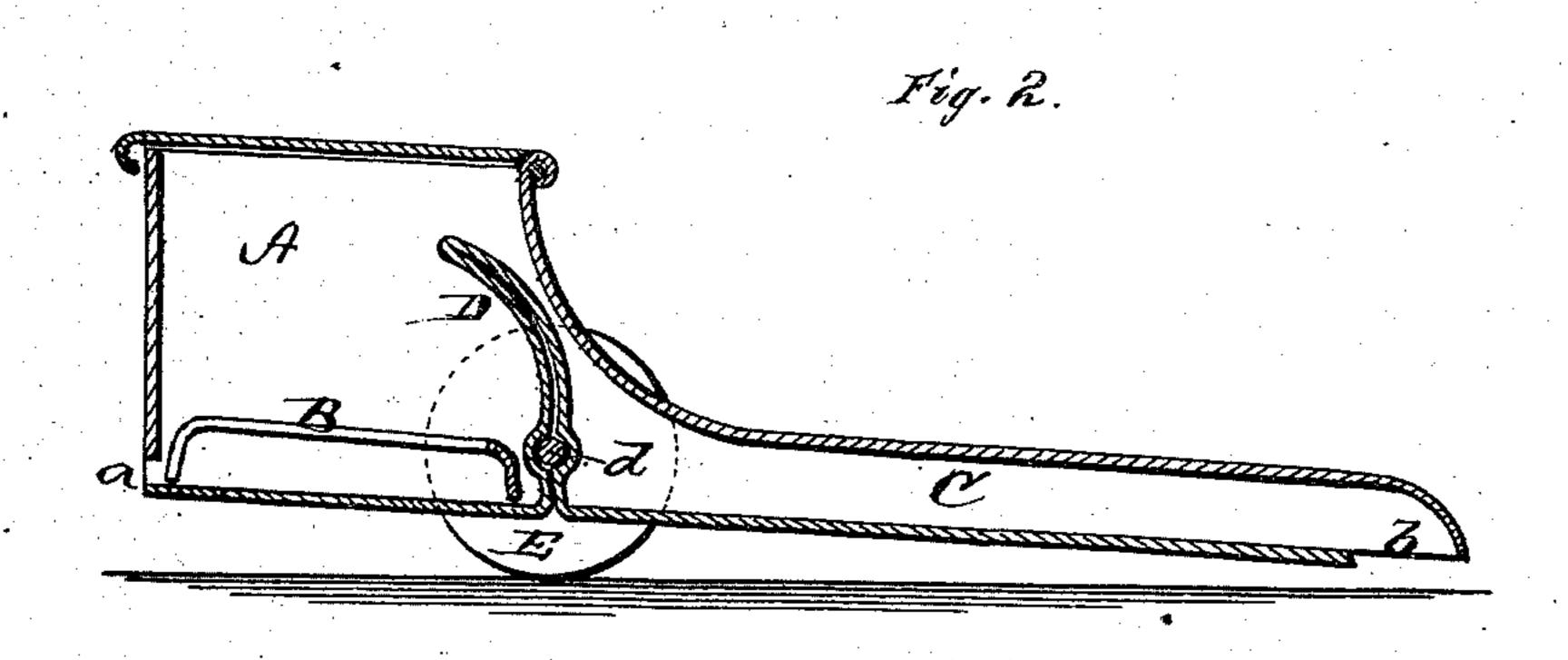
## J. COCHRAN, Jr. Chinch-Bug Destroyer.

No. 161,099

Patented March 23, 1875.





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John Cochron Ir

C.H. Watson Go ATTORNEYS.

## United States Patent Office.

JOHN COCHRAN, JR., OF ROSCOE, MISSOURI.

## IMPROVEMENT IN CHINCH-BUG DESTROYERS.

Specification forming part of Letters Patent No. 161,099, dated March 23, 1875; application filed September 11, 1874.

To all whom it may concern:

Be it known that I, John Ccchran, Jr., of Roscoe, in the county of-St. Clair and State of Missouri, have invented certain new and useful Improvements in Chinch-Bug Destroyers; 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 which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a machine for destroying chinch-bugs by fire, as will be hereinafter more fully set forth.

In the accompanying drawing, Figure 1 is a plan view of my machine; and Fig. 2 is a longitudinal vertical section of the same

through the line x x, Fig. 1. A represents a fire-box of any suitable dimensions, provided with a grate, B, and a draft-opening, a, along the lower front edge thereof. From the back of the fire-box A extends a broad flue, C, for a suitable distance toward the rear, with an opening, b, along the rear edge at the bottom for the escape of the heat and smoke. In the rear part of the firebox A is a curved partition, D, forming the | back wall of the fire-box. This partition may be made of the sheet metal doubled, as shown in Fig. 2, or otherwise, as may be desired. d represents the axle of the machine passing through the rear part of the fire-box through or close by the partition D, and provided with a bearing-wheel, E, on each end. To the axle

d is attached a bail, G, which is secured to and along the lower side and front edges of the fire-box or furnace A, and has poles H or shafts attached to it. Fire being made in the furnace A the machine is drawn by one or two horses over the ground where the bugs are, and the bottom-plate of the flue C becoming heated, the bugs are soon destroyed by the radiated heat from said bottom-plate, as well as from the heat and smoke escaping through the opening b.

The machine may be made of sheet-iron or other suitable material, and is cheap to manufacture, and durable and effective in operation.

I am aware that it is not new to destroy weeds and insects by blowing a flame upon the ground by means of a blower, in connection with a furnace mounted upon runners, and I, therefore, lay no claim to such device; but

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

The combination of the fire-box or furnace A, broad elongated flue C to extend toward the rear, with bottom-exit b, axle d, wheels E, and draft-bail G, all constructed substantially as and for the purposes herein set forth.

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

JOHN COCHRAN, JR.

Witnesses:

A. B. FREEMAN, P. P. DOYLE.