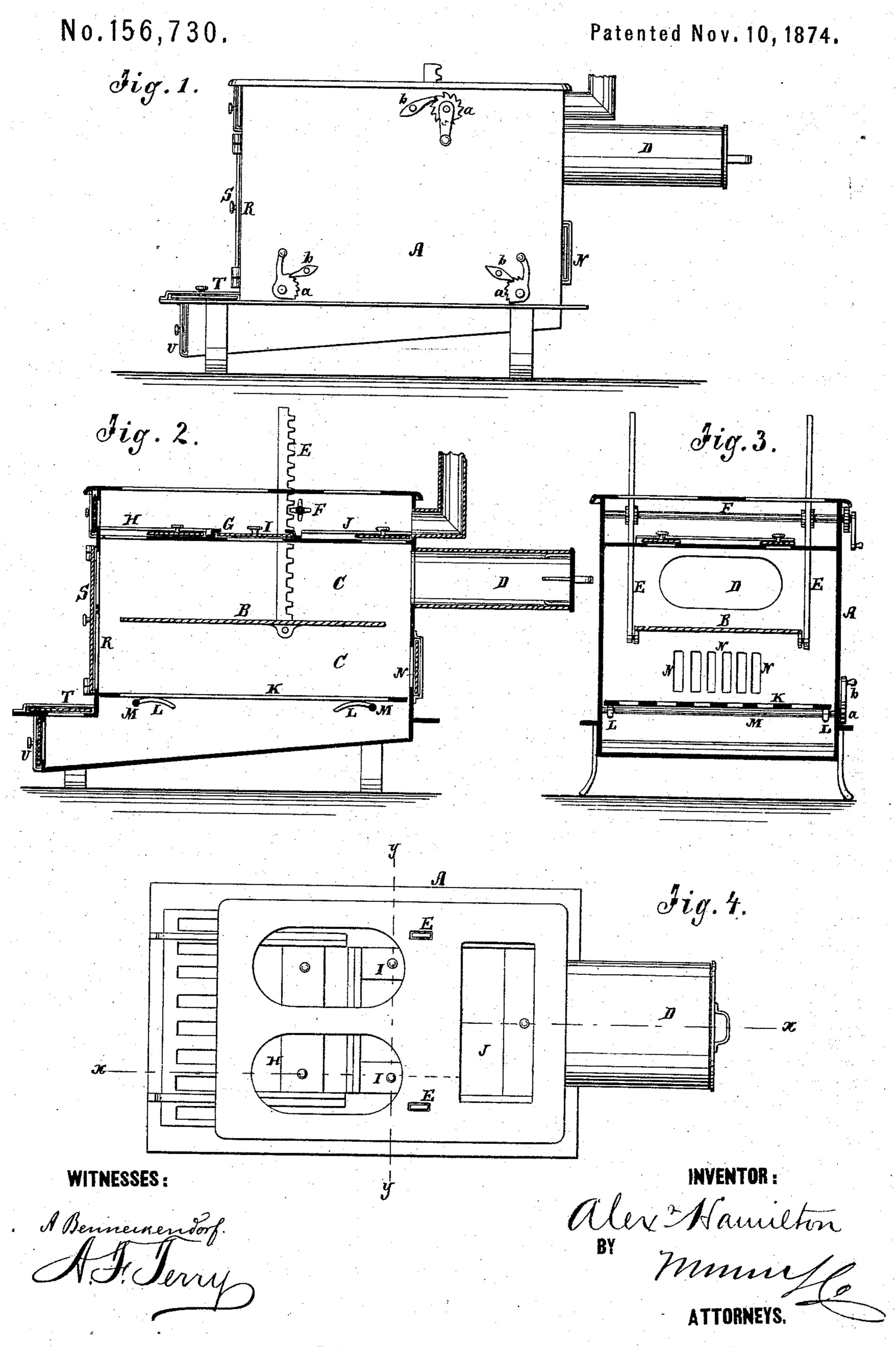
A. HAMILTON. Stoves.



UNITED STATES PATENT OFFICE.

ALEXANDER HAMILTON, OF CRESCO, IOWA, ASSIGNOR OF ONE-HALF HIS RIGHT TO AUG. BEADLE AND BENJ. HUNTTING, OF SAME PLACE.

IMPROVEMENT IN STOVES.

Specification forming part of Letters Patent No. 156,730, dated November 10, 1874; application filed August 29, 1874.

To all whom it may concern:

Be it known that I, ALEXANDER HAMILTON, of Cresco, in the county of Howard and State of Iowa, have invented a new and Improved Stove, of which the following is a specification:

The object of the invention is to provide a stove in which straw, hay, or grass may be packed or compressed, so that it will burn slowly, and may thus be profitably utilized as a fuel.

Figure 1 is a side elevation of a cooking and heating-stove provided with means according to one plan that may be adopted for carrying out my invention. Fig. 2 is a sectional elevation taken on the line xx of Fig. 4. Fig. 3 is a sectional elevation taken on the line yy of Fig. 4, and Fig. 4 is a plan view.

Similar letters of reference indicate corresponding parts.

A represents a box stove, preferably of sheet-iron, in which is a press-follower, B, adapted to be raised up to the top of the fire-chamber C, and receive fuel of hay, straw, and the like, under it—say from a tubular feeder, D—and then be forced down on the fuel to press it into a dense mass. In this case the follower is provided with toothed bars E, extending up through the top of the stove, and gearing with a cranked shaft, F, for working it; but it may be worked by a screw or any other approved means.

The feeder may extend out through the side of the house, or through a partition into a room in which the fuel is stored.

G represents a partition over the fire-chamber and below the top plate, with dampers H, I, and J, for causing the heat to pass up through different parts, as may be required. K is the bottom grate, which is contrived so as to rise and fall, and provided with arms L and rock-shafts M for operating it, the object being to adjust it relatively to the follower according to the quantity of fuel required between them. N is an opening for draft, with a register, the opening being traversed by bars or gratings O, to prevent the hay from being pressed out. Gratings are also employed in the front openings R, to prevent the fuel from being pressed out when the doors S are opened. T and U are draft-openings, with dampers in the top and side of the hearth for draft, and for taking out the ashes. The shafts F and M, for raising and lowering the follower and the grate, have a ratchet and pawl upon the outside of the stove, a b, to hold them at any required point.

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

The combination, in a fire-chamber, C, and with a press-follower, B, of a vertically-adjustable grate, as and for the purpose described.

ALEXANDER HAMILTON.

Witnesses:
WM. M. PAT

WM. M. PATTERSON, FRANK KYTE.