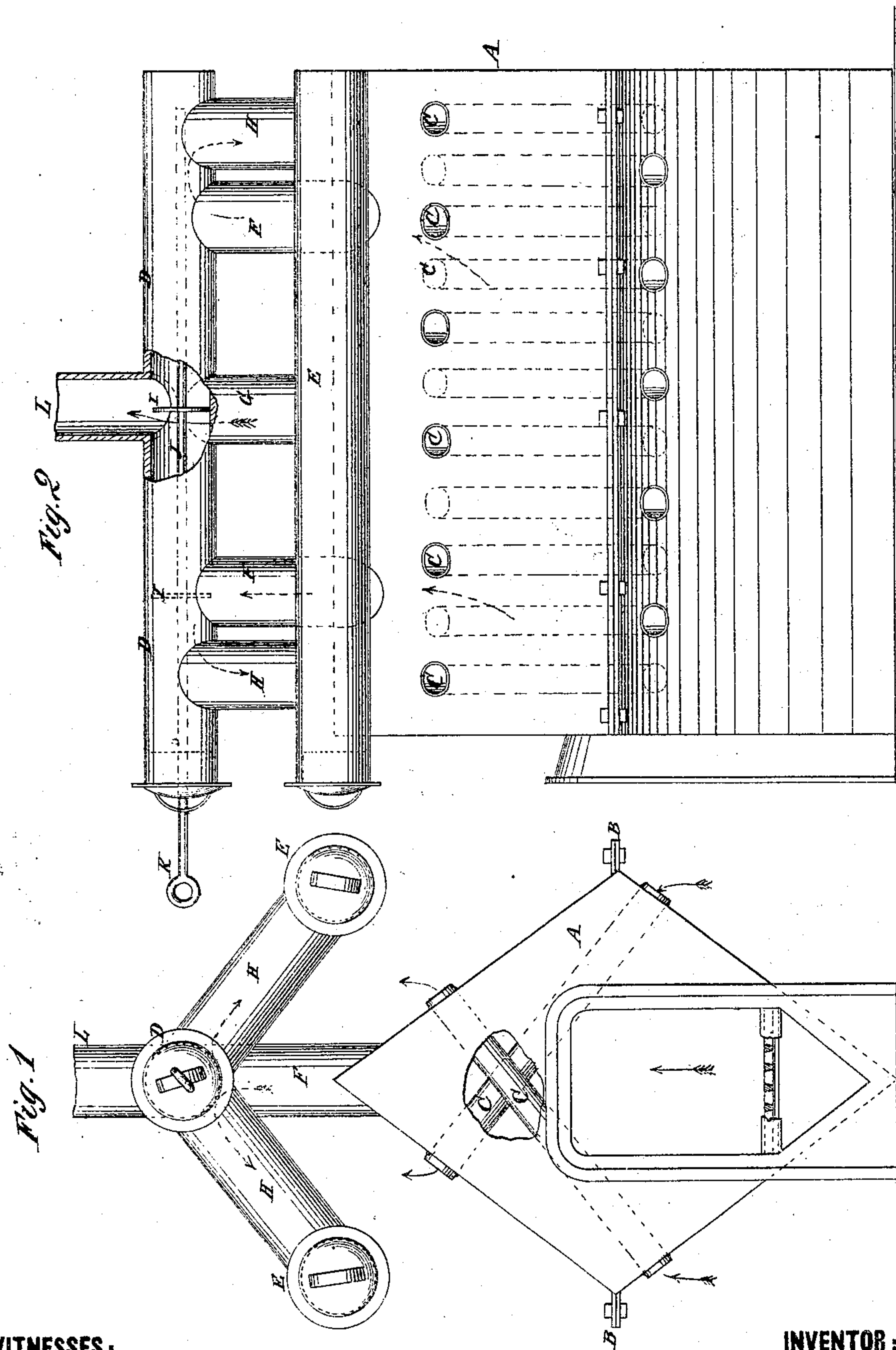


E. H. CAMP.
Hot-Air Furnaces.

No. 152,274.

Patented June 23, 1874.



WITNESSES:
A. W. Almqvist
Lodgwick

INVENTOR:
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UNITED STATES PATENT OFFICE.

EDWIN H. CAMP, OF JACKSON, MICHIGAN.

IMPROVEMENT IN HOT-AIR FURNACES.

Specification forming part of Letters Patent No. **152,274**, dated June 23, 1874; application filed March 7, 1874.

To all whom it may concern:

Be it known that I, EDWIN H. CAMP, of Jackson, in the county of Jackson and State of Michigan, have invented a new and Improved Hot-Air Furnace, of which the following is a specification:

The invention will first be fully described, and then pointed out in the claim.

Figure 1 is an end elevation of my improved furnace, and Fig. 2 is a side elevation.

Similar letters of reference indicate corresponding parts.

A represents the fire-box, which extends horizontally whatever length may be required for the capacity wanted, and is made diamond shape in cross-section, a little larger one way than the other, and arranged with its greatest diameter in its vertical axis. B represents flanges in the horizontal axis, which will, when the furnace is placed in the heating-chamber, separate the parts below from the part above, so that the cold air, which is first admitted to the lower part, will all be caused to pass through the fire-chamber by the tubes C into the upper part of the heating-chamber. D and E represent the horizontal tubes of the radiator in the space above the furnace. D is supported directly over the top of the furnace

by the two short flues F, discharging the smoke and hot air from the furnace into it. The tubes E are suspended over the sides of the furnace by the middle flues G, and end flues H. I represents disks on a rod, J, extending along the interior of tube D, and projecting out at the front at K for a handle for working the disks which constitute a damper for controlling the escaping smoke, hot air, &c. When said damper is adjusted as represented in Fig. 2 the smoke escapes directly through flues F D, and the smoke-pipe L; but when shifted a little to the right it passes through D, H, E, and G before reaching the smoke-pipe, and thus heats the radiating tubes.

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

The combination, with radiating furnace-tubes D E, connected with fire-box by flues F F, and with each other by tubes G H, of the movable rod J K, having the disks I arranged thereon, as and for the purpose specified.

EDWIN H. CAMP.

Witnesses:

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