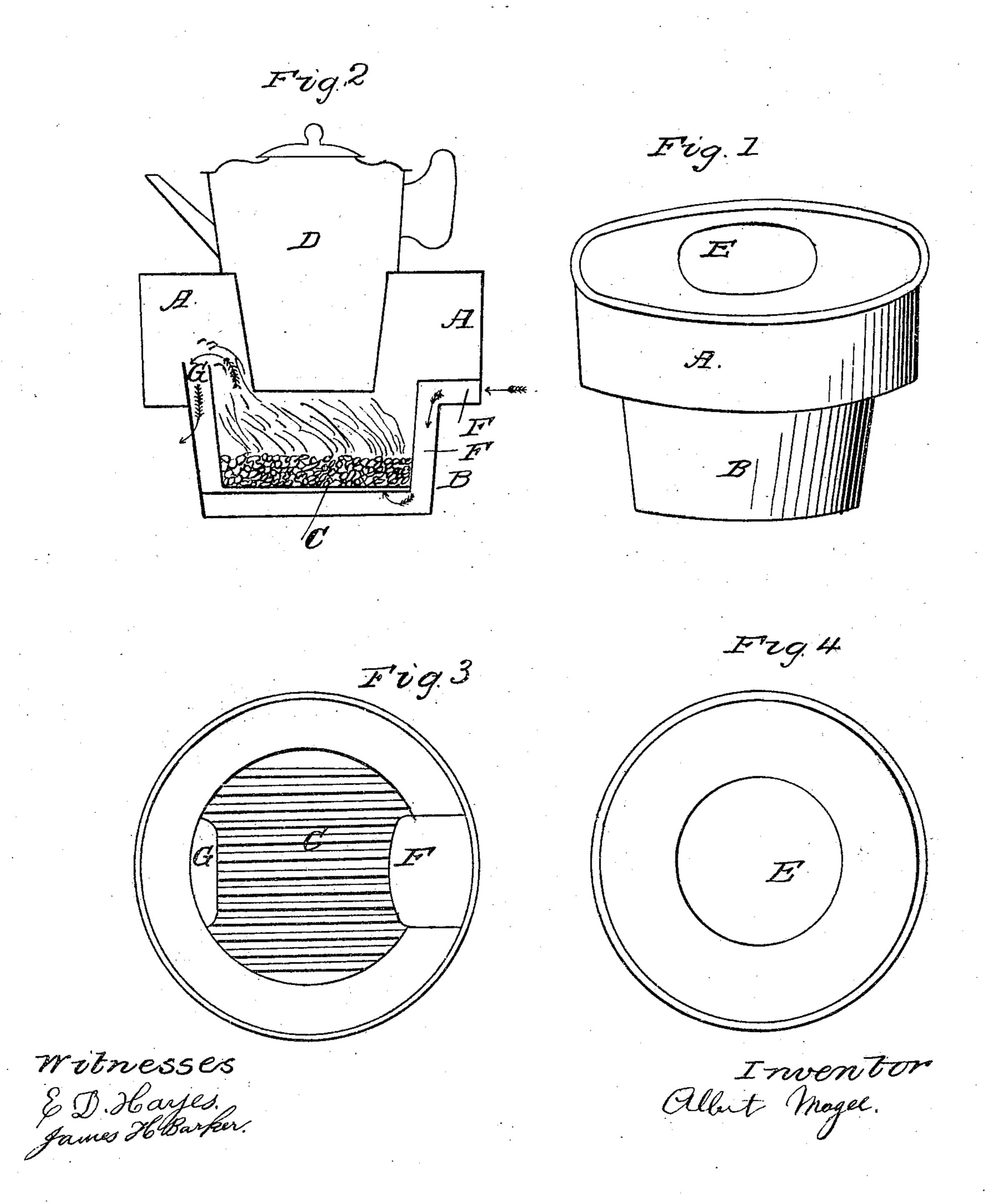
A. MAGEE.

Portable Furnace.

No. 40,570.

Patented Nov. 10, 1863.



United States Patent Office.

ALBERT MAGEE, OF LAWRENCE, MASSACHUSETTS.

IMPROVEMENT IN PORTABLE FURNACES.

Specification forming part of Letters Patent No. 40,570, dated November 10, 1863.

To all whom it may concern:

Be it known that I, ALBERT MAGEE, of Lawrence, in the county of Essex and Commonwealth of Massachusetts, have invented a new and Improved Portable Furnace; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 represents a side view of the furnace. Fig. 2 represents an interior side view. Fig. 3 represents a vertical view showing grate, &c. Fig. 4 represents a vertical view

showing cover.

My furnace is made to be used in connection with a stove, and is so made as to allow the part A to rest on the top of the stove, while the part B passes down through one of the openings in the stove. C is a grate, situated in the lower part of B, on which the fuel is placed. D is a kettle of the common kind, placed in the opening E, reaching nearly to the fuel. F is an air-conductor, which serves to conduct fresh air down under the fuel. The outside opening is above the top of the stove. The inside opening is below the grate. Its use is to furnish air to support the flame. G is a flue to conduct to the stove and chimney the smoke, gas, &c. Now, when the fuel is placed on the grate C and ignited, the air rushes in through the air conductor F down under the

fuel and supplies air for combustion, passing up through the flame, causing it to rise up around the kettle and heat the water, after which the smoke and gas will pass through the flue G into the stove and chimney, and es-

cape.

By my invention is secured a very useful and convenient furnace for summer use at the time when building a fire in a stove would make the heat oppressive, and, it being set in the stove, as described, a way is provided for the escape of gas, smoke, &c., into the chimney, instead of into the room.

The superiority of my invention over all others that have been tested is that I conduct the fresh air down under the fuel, thus making the flame rise up around the kettle, instead of allowing the air to rush in onto the flame and driving it down, thus preventing the heating of the water in the kettle.

.I claim—

The combination, in a portable furnace, of the induction cold-air flue F, smoke-exit flue G, and grate C, when constructed to be used as a utensil upon a cooking-stove or range, substantially as described.

ALBERT MAGEE.

Witnesses:

E. D. HAYES, JAMES H. BARKER.