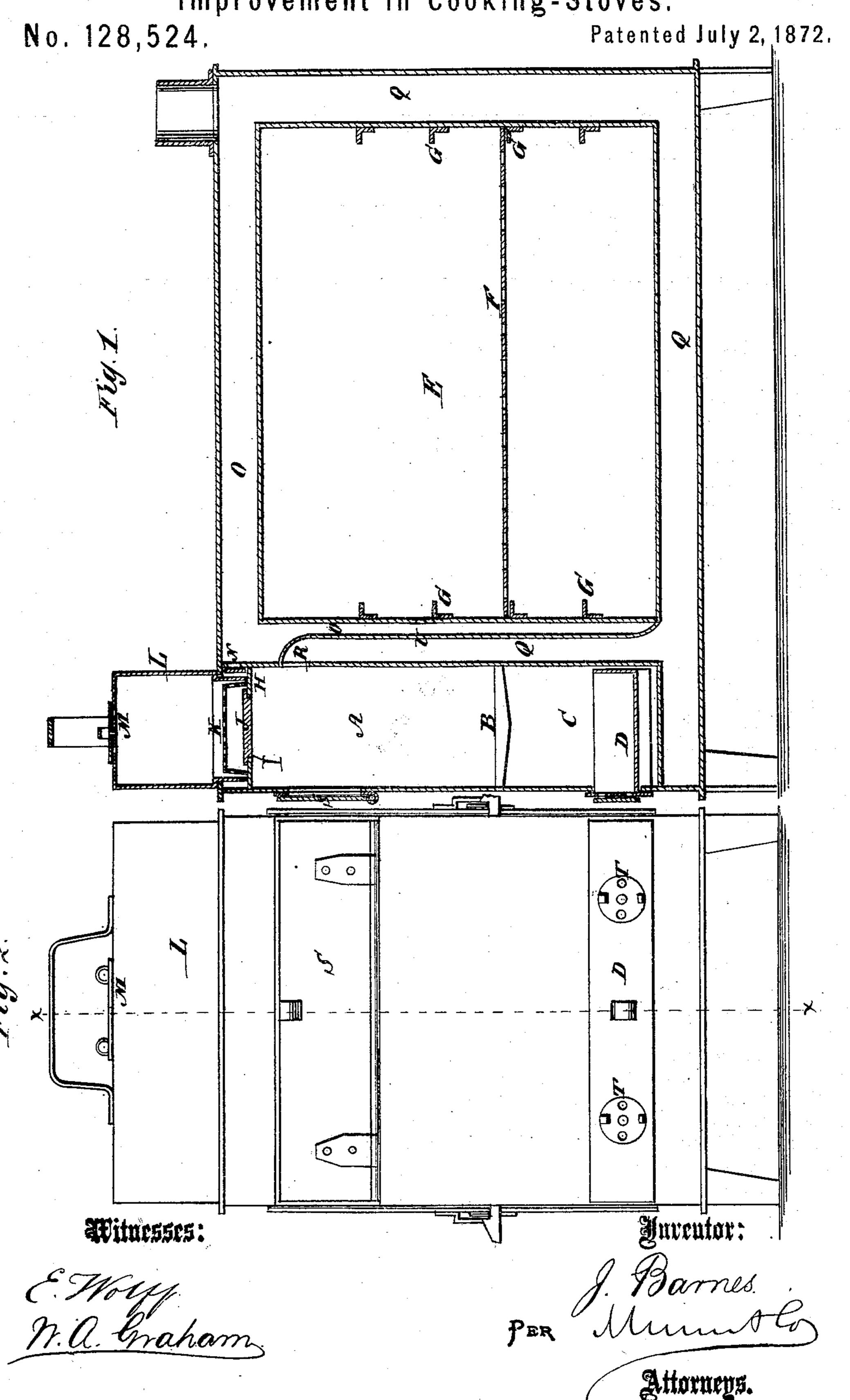
J. BARNES. Improvement in Cooking-Stoves.



UNITED STATES PATENT OFFICE.

JACKSON BARNES, OF BURLINGTON, VERMONT, ASSIGNOR TO HIMSELF AND A. C. TUTTLE, OF SAME PLACE.

IMPROVEMENT IN COOKING-STOVES.

Specification forming part of Letters Patent No. 128,524, dated July 2, 1872.

Specification describing a new and useful Improvement in Cooking-Stoves, invented by Jackson Barnes, of Burlington, in the county of Chittenden and State of Vermont.

This invention relates to new and useful improvements in stoves for domestic use, or cooking generally, and consists in the construction and arrangement of parts hereinafter described.

In the accompanying drawing, Figure 1 is a vertical longitudinal section of the improved stove taken on the line xx of Fig. 2. Fig. 2 is a front-end view.

Similar letters of reference indicate corresponding parts.

This stove is of square or rectangular form of suitable size, composed of plates preferably of galvanized iron to insure lightness,

cheapness, and portability.

A is the fire box. B is the grate. C the ash-pit, and D the ash-drawer. E is the oven containing one or more grates, F, supported on the bracket-flanges G. H represents a plate in the top of the stove directly over the fire box, through which are one or more boilerholes I with covers J. Above the plate and covers is a removable rack or griddle, K, and over the whole is a box-cover, L, with a surrounding flange and shoulder which rests upon the top plate of the stove, as seen in Fig. 1. In the top of this cover is a register-damper, M, by means of which air may be admitted to produce a draught for carrying off the vapor. This cover forms a separate compartment over the fire, in which the boiling, broiling, toasting, and roasting is mainly done. N is an orifice closed by a movable damper through which the gases or vapor generated in the pro-

cess of cooking escapes into the flue O, and passes up the discharge-funnel P. Q is the flue through which the smoke and unconsumed gases from the fuel escape. R is the opening in the fire-box through which they find egress from the fire-box. S is the fire-box door for the introduction of fuel. The front of the ash-pan is provided with one or more draught-dampers T, for supplying the fuel with air. U is a partition-plate which separates the fire-flue Q from the vapor-flue O.

It will be seen that by this arrangement the vapor and gases generated in the process of cooking are not allowed to escape into the apartment, but are conducted with the uncon-

sumed gases to the chimney.

I do not confine myself to the precise form or arrangement of any of the parts described, as they may be varied in many ways without departing from my invention.

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

ent-

1. The plate H, rack or griddle K, and box-cover L, in combination with the fire-box of a cooking-stove having the aperture N communicating with flue O, arranged substantially as shown and described.

2. The arrangement of the flues O and Q, substantially as and for the purposes described.

3. The partition-plate U, by which the vapor-flue O and the fire-flue Q are separated, as shown and described.

JACKSON BARNES.

Witnesses:

ROBT. J. WRIGHT, W. L. BURNAP.