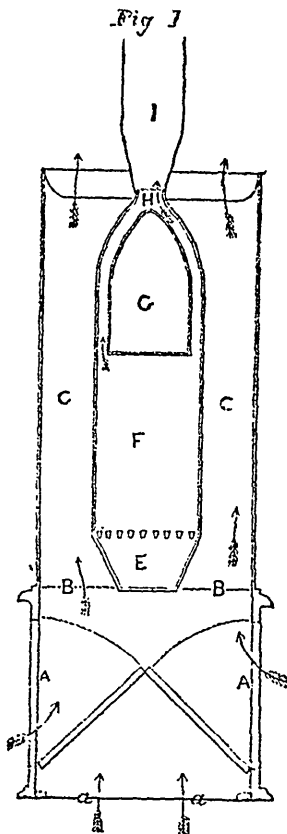


Fig. 1 is a vertical cross section. Fig 2 is a prospective view. Fig. 3 is a vertical-longitudinal section. Fig. 4 is a horizontal section. Fig. 5 is a wooden or non pedestal. Fig. 6 is a bottom plate. Figures 7 and 8 show the manner in which the ventilating air is drawn under the floors.



A A are apertures to admit air from rooms. a a are apertures to admit air from outside. B B are apertures in the bottom plate. C C are apertures on each side of the stove. D are apertures to admit cold air from outside for oven. E is an ash pit. F is a fire chamber. G is an oven. H is a fire flue round the oven. I is a smoke pipe. K is the skirting or base. L are foul air apertures in skirting. M the floor of room. N are joists. O a space between joists. P are two inch slats, or firing nailed across joists, to lath to. Q lath and plastering. R a space between plastering and bottom of joists, for circulation of air across the joists.

The *Scientific American* in a recent favorable notice of Mr. Ruttan's patent, observes:

"This machine is not necessarily connected

subject; nor affect, as we can see in the least, the efficiency of Mr. Ruttan's apparatus. We will cheerfully give "Mr. Carbonic Acid" and the inventor a reasonable portion of our space—if they should require it—for an amicable discussion of a subject so pregnant with importance to all that breathe.—*Edison.*

with ventilation: any process by which the ventilating air may be warmed, not heated, will be

