

E. A. E. BOHM.

BAKER'S OVEN.

No. 183,629.

Patented Oct. 24, 1876.

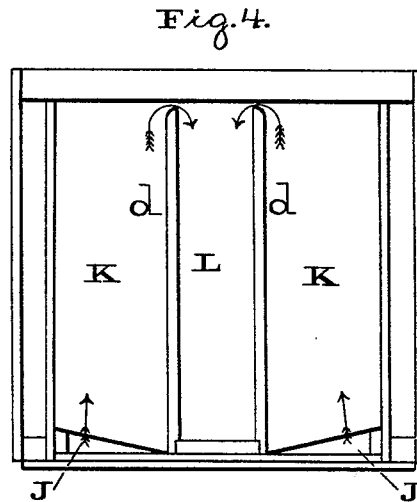
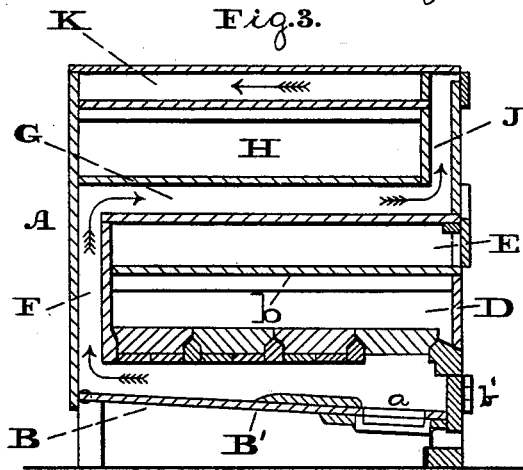
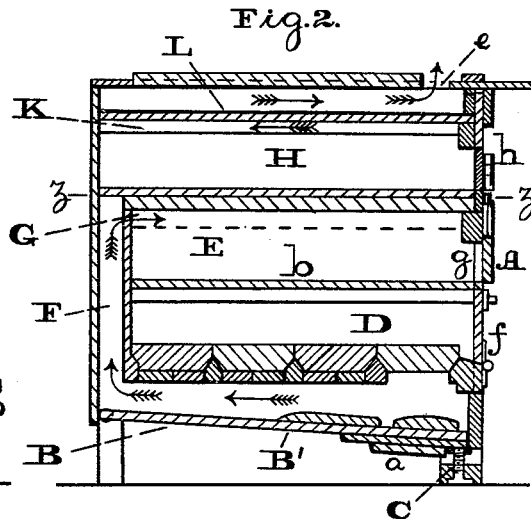
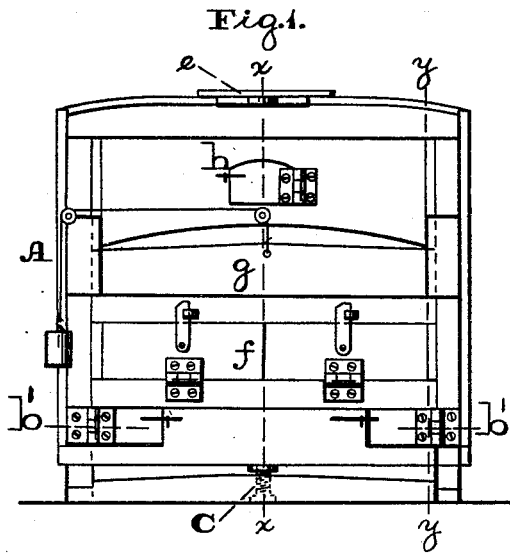
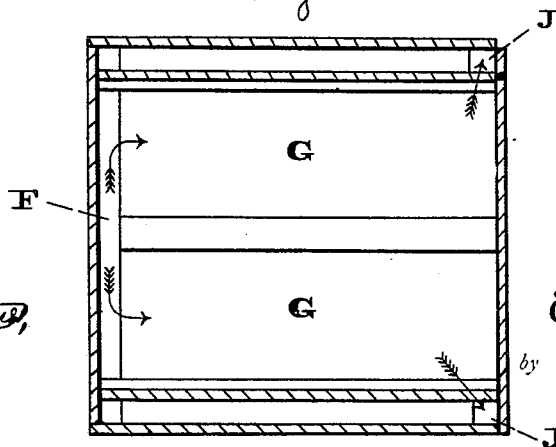


Fig. 5.



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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN BAKERS' OVENS.

Specification forming part of Letters Patent No. 183,629, dated October 24, 1876; application filed September 13, 1876.

To all whom it may concern:

Be it known that I, ERNST A. E. BÖHM, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Bakers' Ovens; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a front view of the oven embodying my invention. Fig. 2 is a vertical section in line *x x*, Fig. 1. Fig. 3 is a vertical section in line *y y*, Fig. 1. Fig. 4 is a top view thereof, the top plate being removed. Fig. 5 is a horizontal section in line *z z*, Fig. 2.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a series of ovens, which are successively heated, the temperature being such that articles of various kinds may be simultaneously baked. For this purpose I employ a series of ovens and flues, the construction and operation of which will be hereinafter more fully set forth. It also consists of the combination of a series of ovens with a raising and lowering grate, for adjusting the heat to the main oven. It also consists of the combination of a series of ovens with the grate, constructed with a small fuel-surface and large heating-surface.

Referring to the drawings, A represents the walls of the oven, which is preferably made portable. At the bottom of the oven there is located the grate B, which is hinged at its rear end, and supported at its front end on a conveniently accessible screw or screws C, by means of which the grate may be raised or lowered, in order to bring the fire nearer to or farther from the floor of the oven above it. The grate is constructed of a plate, B', with grated portions *a* at the sides of its front portion, and access will be had thereto through doors *b'* at the sides of the front wall of the oven.

By these means a fire may be made at one or both sides of the grate, and as the plate B' provides a large heating-surface, and it

will be heated from the fire on the small grated portions *a*, there will be a saving in the quantity of fuel.

D represents the lowermost oven, above which is another oven, E, the separating-plate *b* of which constitutes the roof of the oven D and floor of the oven E. At the rear of the ovens D E is an upright flue, F, which communicates with the combustion-chamber above the grate B. G represents a horizontal flue, which is located above the oven E, and H represents an oven which is above the flue G. The front corners of the oven H are made diagonal, or cut away so as to leave at both front corners vertical flues J J, which communicate with the flue G, said flues J extending vertically, and communicating with horizontal side flues or spaces K above the roof of the oven H, said flues K extending to the rear of the oven, where, by means of uprights *d d*, extending longitudinally between the roof of the oven H and top plate of the entire oven, and forming a horizontal flue, L, centrally of the flues, the said flue K communicates with said flue L, at whose forward portion is the chimney-flue or place of exit, as at *e*. Access will be had to the several ovens D E H by means of doors *f g h*, respectively.

It will be seen that the products of combustion first heat the floor of the oven D, and then, passing into the flue F, they heat the rear of the ovens D E, after which they enter flue G, and heat the roof of the oven E and floor of the oven H. Said products now enter the flue J, and heat the front of oven H, and thence to the flues K, rearward to the flue L, and through the flue L to the exit *e*, by which two flues K L the roof of the oven H will be heated.

It will thus be seen that the flues are utilized to heat various parts of different ovens, and as the heat will be less as it reaches the roof of the oven H, it is directed rearward and forward in the flues K L, so that every portion of said roof will be subjected to heat, and by the two flues stated.

The lower oven will be employed for articles (say bread) requiring great heat, the next oven above for cake requiring less heat, and

the top oven for fancy cakes, sugar-baking, and other articles requiring to be baked without browning.

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

1. The series of ovens D E H, in combination with the vertical flue F, horizontal flue G, and vertical flue J, constructed and operating substantially as and for the purpose set forth.

2. The oven H, with corner flues J, in combination with the horizontal side flues K and horizontal central flue L, substantially as and for the purpose set forth.

3. The combination of the series of ovens D E H and the raising and lowering grate B, substantially as and for the purpose set forth.

4. The combination of the series of ovens D E H and the grate B, consisting of the plate B', with grated portions *a a* at the sides of its front, substantially as and for the purpose set forth.

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Witnesses:

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