

became scarce and *seacole* came into general domestic use. It was called 'seacole' because it was brought to London and the east coast towns by boat from the open cast pits in Durham and Northumberland. Coal cannot be burnt directly on a hearth, so the basket grate was developed to hold the coals.

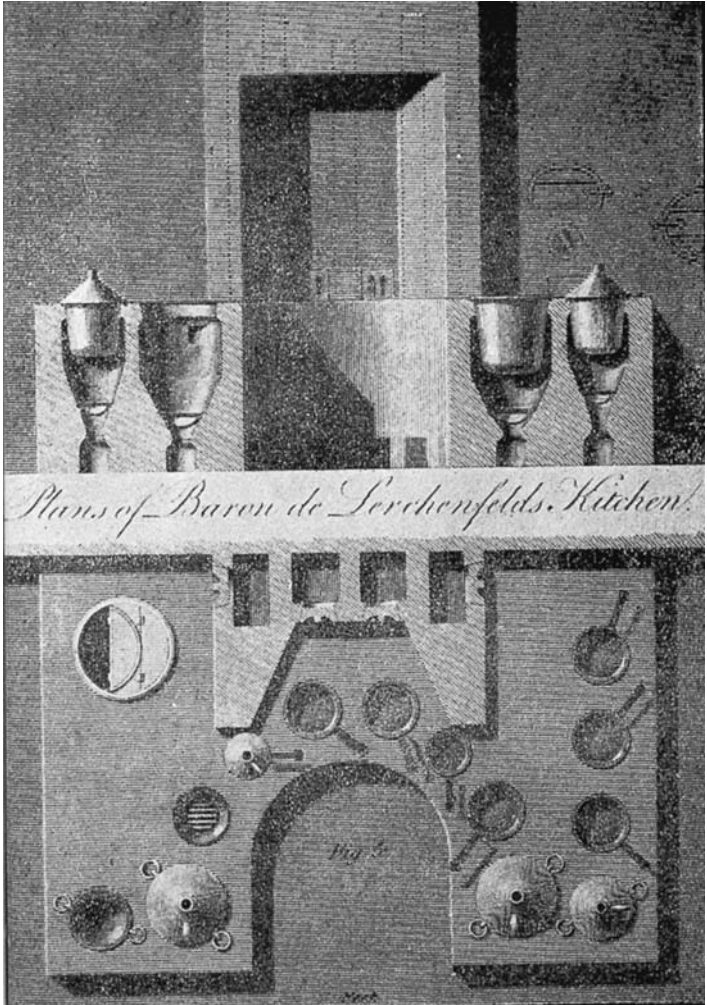
Early ovens

The first ovens were spaces made under brick or stone hearths, but they were soon moved into the return side walls of the open fireplace. These ovens, which can still be found in old cottages, were to bake bread. A fire was made inside using faggots and the door left ajar to allow the smoke to escape up the chimney over the adjacent fire. When the brick-lined oven was hot enough, the ashes were raked out and the loaves baked in the residual heat.

Development of the range

There were no innovations in ovens until the invention of the range, which was developed in the eighteenth century by men who were not professional stove makers but inventors such as Benjamin Franklin, Count Rumford and the missionary Philo Stewart.

In the late eighteenth century Count Rumford, an English physicist raised in America but living in Europe, wrote several far-seeing essays on the construction of kitchen fireplaces and utensils. He put forward the first idea for a kitchen range to supersede the open fire. He designed one fireplace for a Bavarian nobleman, which had several small fireplaces hollowed out of the masonry, and arranged in a horseshoe plan. The cook could stand in the middle and attend his pots, which were sunk into holes over the fires. By 1800, he had designed small cast iron ovens for poor families, and proposed roasting ovens set in masonry over a small fire below. He suggested the use of steam for cooking and also economising on heat by using stacked pans. Twin-walled steamers were suggested for the purpose of containing heat more efficiently.



Count Rumford's design for a kitchen for a Bavarian Nobleman 1797. Built of massive brick providing insulation. Pans were fitted into the top over an individual firebox with door to regulate air intake. Two roasting ovens and a hot water boiler were also included