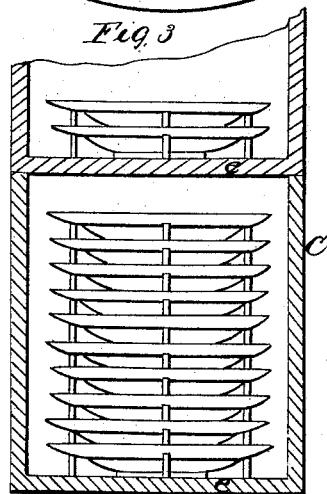
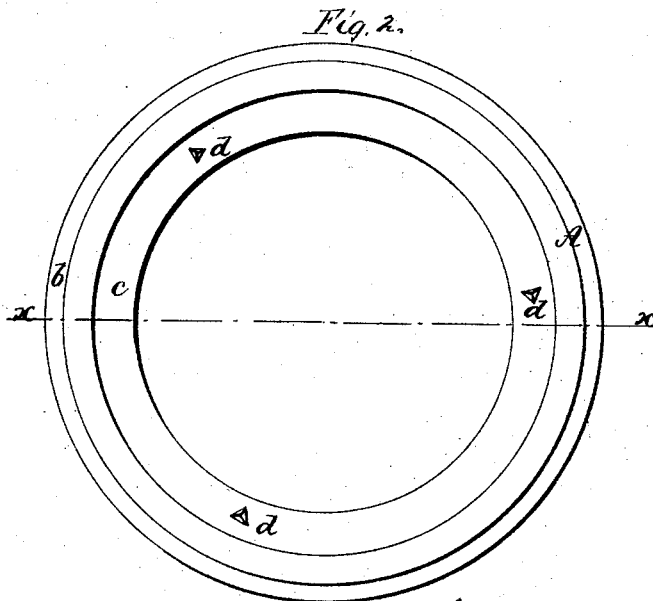
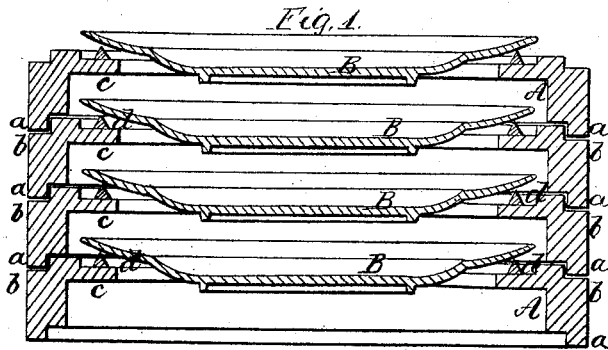


B. Jackson,

Protecting Pottery

N^o 46,109.

Patented Jan. 31, 1865.



Witnesses,
C. L. Topliff
Theo. Fusch

Inventor,
Benjamin Jackson
per *James H. C.*
attorney

UNITED STATES PATENT OFFICE.

BENJAMIN JACKSON, OF TRENTON, NEW JERSEY.

SAFE-GUARD FOR PROTECTING POTTERY-WARE.

Specification forming part of Letters Patent No. **46,109**, dated January 31, 1865.

To all whom it may concern:

Be it known that I, BENJAMIN JACKSON, of Trenton, in the county of Mercer and State of New Jersey, have invented a new and Improved Safe-Guard for Protecting Pottery-Ware During the Process of Burning or Baking; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical central section of my invention, taken in the line *xx*, Fig. 2; Fig. 2, a plan or top view of the same; Fig. 3, a vertical central section of the safe-guard in present use, drawn with a view of showing the difference between it and my improvement.

Similar letters of reference indicate like parts.

Pottery-ware during the process of burning or baking requires to be protected from cinders, smoke, and other substances which are liable to come in contact with it and soil it or impair its value. At present the articles or ware are placed within a cylinder made of fire-clay and provided with a close bottom, the articles being placed one over the other and prevented from being in contact by means of rods or pins. These cylinders are of various sizes, according to the size of the articles they are to receive, and are placed one over the other in the furnace in rows or tiers. These cylinders, commonly termed "safe-guards" or "saggars," are attended with some disadvantages. In the first place, it is rather difficult to adjust the articles in and remove them from the cylinders, and considerable room or space is lost by them, and the top article in each cylinder liable to be injured by fragments dropping from the bottom of the cylinder, immediately above. These difficulties are fully obviated by my invention.

My invention consists in forming the cylinders of a series of rings, provided with a flange or annular lip at their lower edges and with a corresponding recess in their upper edges, so that one ring may be fitted over the other, a vessel or article to be burned or

baked being fitted in each ring and resting on pins thereon, as hereinafter fully shown and described.

A represents a series of rings constructed of fire-clay, and of any suitable dimensions. These rings are formed with an annular lip or flange, *a*, at their lower edge, and with a corresponding groove or recess, *b*, in their upper edges, so that one ring may be fitted over the other and be prevented from slipping off laterally. (See Fig. 1.) At the upper edge of each ring there is a flange, *c*, projecting inward, and these flanges have three recesses made in them to receive pins *d* of fire-clay, on which pins the articles *B* of pottery to be burned or baked rest. Plates are represented in Fig. 1 placed on the rings *A*.

By this arrangement it will be seen that the cylinders may be made of any required height, and the plates or other vessels or articles kept separate from each other and not allowed to come in contact. It will also be seen that the plates may be readily adjusted in and taken from the cylinders, and as the latter are bottomless, the upper plate or article in each cylinder is not liable to be injured or damaged by particles falling from the bottoms of the ones immediately above them, as is frequently the case with the old cylinders *C*, which are provided with bottoms *e*, and formed of one piece, as shown in Fig. 3, and these bottoms frequently crack and shell off under the action of the heat. By my improvement also considerable economy is effected in space, as in the original plan the bottoms *e* cause a considerable waste of room, especially when deep dishes or basins are fitted within them, as the lower dish or basin, in consequence of resting upon the bottom *e*, cannot rest or fit within the upper dish or basin in the cylinder immediately below it.

My invention requires no "wading"—that is, a roll of clay put around the cylinder or safe guard to exclude the air and prevent the fire from coming in contact with the ware.

I would remark that although the term "cylinder" is herein used to designate the form of the safe guard, said form is not strictly essential.

Instead of rings A, frames of polygonal or other form may be used and the same end attained.

I claim as new and desire to secure by Letters Patent—

A safe-guard or saggar, to receive articles of pottery-ware while being burned or baked, composed of a series of rings or frames of

fire-clay, so constructed or arranged that they may be fitted one over the other, and receive pins to support the articles fitted within, substantially as described.

BENJAMIN JACKSON.

Witnesses:

ISRAEL HOWELL,

ROBERT ELLIS: