

UNITED STATES PATENT OFFICE.

SYDNEY MACKEY, OF ZANESVILLE, OHIO.

WARE SUPPORT AND PROCESS OF BURNING WARE.

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To all whom it may concern:

Be it known that I, SYDNEY MACKEY, a citizen of the United States, residing at Zanesville, in the county of Muskingum and State of Ohio, have invented certain new and useful Improvements in Ware Supports and Processes of Burning Ware; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in devices for supporting articles of clay or the like, while they are being fired in a kiln, and the principal object of the invention is to provide a device of this class which may be used for simultaneously supporting a plurality of inverted, nested receptacles, in such a manner that they may be effectively fired without providing their edges with any imperfections, such as those resulting from the use of the ordinary setters and saggars.

The invention also relates to a new process for burning ware, whereby a great number of receptacles may be simultaneously fired.

With the foregoing in view, the invention resides in the novel subject matter hereinafter described and claimed, the description being supplemented by the accompanying drawing.

Figure 1 is a plan view of a setter constructed in accordance with my invention.

Figure 2 is a vertical sectional view thereof as indicated by line 2—2 of Fig. 1, showing in dotted lines the manner in which the receptacles rest upon the device.

Figure 3 is a view similar to Fig. 2 but illustrating the invention embodied in the form of a saggar.

Briefly described in one manner, my invention includes a support having a plurality of supporting areas surrounding one another and adapted to engage the edges of a plurality of inverted, nested receptacles to be fired, and suitable provision is preferably made to permit the circulation of heat into these receptacles.

Differently described, the invention includes a support for a plurality of inverted nested receptacles, said support being inclined between its center and periphery, so as to space the bottoms of the receptacles desirable distances apart.

In the form of construction shown in Figs.

1 and 2, the numeral 1 designates a substantially horizontal body which may well be provided at its periphery with a downwardly projecting supporting flange 2 which is preferably formed with heat passages 3. I have shown the body 1 of a generally concavo-convex form, with its concave side disposed upwardly and provided with a stepped formation, whose individual steps 4 constitute the supporting areas for the edges of the receptacles to be fired, as illustrated in dotted lines in Fig. 2. These steps are disposed at altitudes gradually increasing from the center of the body to the periphery thereof, and I prefer to form said center with an opening 5 to admit heat into the innermost of the receptacles. From this central opening 5 to the edge of the body 1, I have shown a plurality of heat grooves 6 which extend through the steps 4, and each of these steps is by preference formed also with a plurality of vertical heat openings 7 which lead thereto from the lower side of said body.

The receptacles to be fired are placed in inverted, nested relation, upon the steps 4 and are subjected to heat. The edges of said receptacles preferably rest continuously upon said steps, except where they are interrupted by the grooves 6. It has been found that by providing this substantially continuous contact, the edges of the receptacles, when fired, will be smooth and free from imperfections such as those now commonly existing. The arrangement of grooves and openings 6 and 7 respectively, permits the passage of heat into all of the receptacles, so that they will be effectively burnt.

In Fig. 3, I have shown my invention embodied in the form of a saggar. In this view, I have disclosed a body 1^a constructed in the same manner as the body 1, with the exception that it constitutes the major portion of a saggar bottom, the wall of the saggar, being designated by the numeral 8. This form of construction has the same advantages as those above pointed out.

While excellent results may be obtained from the details disclosed, it is to be understood that the invention is not restricted thereto, except as claimed.

I claim:

1. A support for ware while burning the same, comprising a plurality of separated supporting areas surrounding one another

and adapted to engage the edges of a plurality of inverted nested receptacles to be burnt.

2. A support for ware while burning the same, comprising a plurality of supporting areas surrounding one another and disposed at progressively increasing altitudes, said areas being adapted to engage the edges of a plurality of inverted nested receptacles to be burnt.

3. A support for ware while burning the same, comprising a plurality of supporting areas surrounding one another and adapted to engage the edges of a plurality of inverted nested receptacles to be burnt, said support having ventilating passages for said areas.

4. A structure as specified in claim 2; said support having ventilating passages for said areas.

5. A support for ware while burning the same, comprising a substantially horizontal body provided with a central opening and having a downwardly extending peripheral supporting flange formed with ventilating openings, the upper side of said body having a plurality of substantially continuous ware-supporting steps surrounding one another and disposed at altitudes progressively increasing from the center toward the periphery of the body, said body having ventilating grooves leading from the afore-said central opening and extending through said steps, and being also formed with ventilating openings from its bottom to its top and opening through said steps.

6. A support for ware while burning the same, comprising a continuous wall and a bottom connected to the lower end thereof, said bottom having a plurality of separated supporting areas surrounding one another and adapted to engage the edges of a plurality of inverted nested receptacles to be burnt.

7. A support for ware while burning the same, comprising a continuous wall and a bottom connected thereto, said bottom having a plurality of supporting areas surrounding one another and disposed at progressively increasing altitudes, said areas being adapted to engage the edges of a plurality of inverted nested receptacles to be burnt.

8. A support for ware while burning the same, said support comprising a body inclined at its upper side between its center and periphery and adapted to be engaged by the edges of a plurality of inverted nested receptacles.

9. The method of firing a plurality of open-sided receptacles, consisting in supporting said receptacles independently of each other in nested relation and subjecting them to heat.

10. The method of firing a plurality of open-sided receptacles, consisting in supporting said receptacles independently of each other in inverted nested relation and subjecting them to heat.

In testimony whereof I have hereunto affixed my signature.

SYDNEY MACKEY.