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A. H. EDGERTON

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ENAMELING STAND

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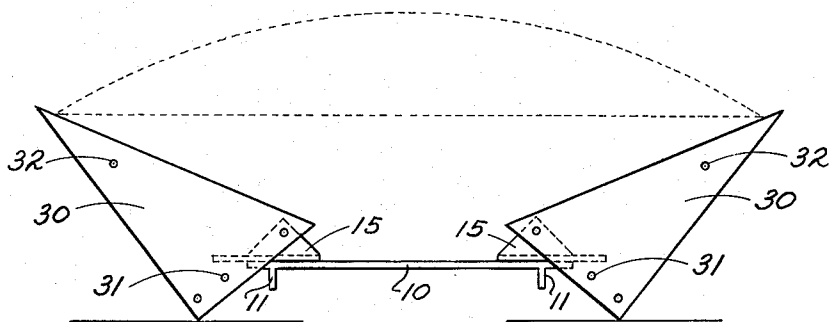
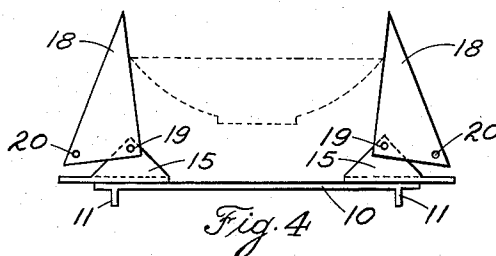
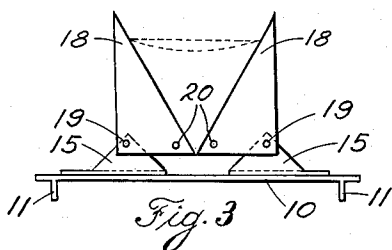
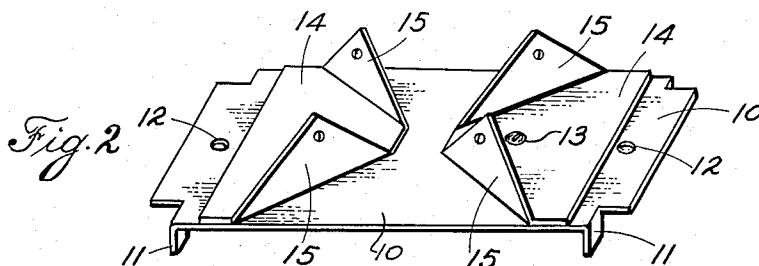
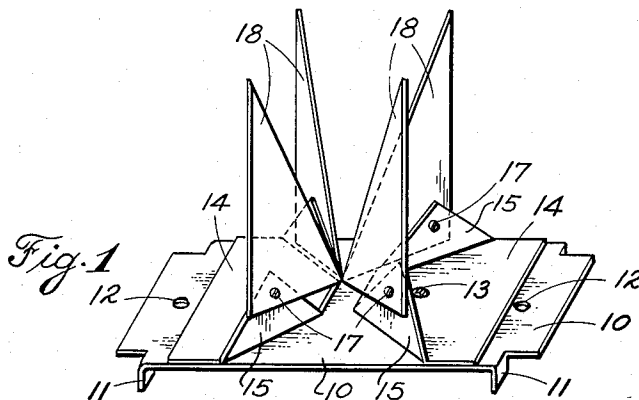


Fig. 5

INVENTOR.
ARTHUR H. EDGERTON

BY
RICHEY, WATTS, EDGERTON & M'NENNY

A. H. Edgerton
ATTORNEYS

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ENAMELING STAND

Arthur H. Edgerton, Rocky River, Ohio

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5 Claims. (Cl. 25—153)

This invention relates to enameling stands for supporting work pieces in a kiln during firing operations therein.

The objects of the invention reside in the provision of a stand which is designed to accommodate the support of articles of various size, shape, and form; a stand which may be adjusted to minimize the area of contact of the holding members with the periphery of the work; and a supporting structure which is adapted to support concave-convex work pieces on either face thereof.

Another object of the invention is to provide a stand in which the work-engaging edges of the holding members are disposed in radial relation with a work piece of annular form.

Another object of the invention resides in the provision of a stand which is designed to accommodate the loading and removal of the work from a kiln with ease and dispatch.

Another object of the invention is to provide interchangeable holding members for the stand which are designed so the lower edges thereof may rest upon the floor of the kiln and thus bear a portion of the load imposed thereon.

Further objects of the invention reside in the provision of a glazing stand which is light in weight, durable of structure, economic of manufacture, and adapted to facilitate rotative adjustment of the holding members and supporting brackets thereof.

Other objects and advantages more or less ancillary to the foregoing, and the manner in which all the various objects are realized will appear in the following description, which, considered in connection with the accompanying drawings, sets forth the preferred embodiment of the invention.

Referring to the drawings:

Fig. 1 is a view in perspective of the improved stand;

Fig. 2 is a perspective of the base with the brackets mounted thereon;

Fig. 3 is a diagrammatic view of the stand showing a work piece thereon;

Fig. 4 is a diagram illustrating the stand in an altered position; and

Fig. 5 is a diagram showing the stand equipped with larger work holding arms and the manner in which a work piece is supported thereon.

Referring first to Fig. 1, the enameling stand or so-called "trivet" comprises a base 10 formed from a blank of stainless steel sheet metal stock fabricated with legs 11 in the corners thereof to accommodate the use of a fork or spatula when lifting the stand into the kiln. The base is further machined with openings 12 in the major axis thereof disposed in equi-spaced relation with the center and provided for the reception of bolts 13 engaged with a pair of similar brackets 14. The brackets are struck from rectangular blanks of a width equal to that of the base and are formed with ears 15 folded upwardly normal to the face of the blank along convergent lines disposed at a ninety degree included angle. The ears are drilled in the center thereof to receive bolts 17 for the

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retention of arms 18 which constitute the work-supporting media. The arms are preferably of triangular form having openings 19 and 20 adjacent the corners of the base thereof to facilitate the support of the arms in variable spaced relation. As shown in Fig. 3 the arms are designed so the lower corners thereof will lie in contiguous relation when the bolts are assembled in the openings 19. With the arms in this position it will be recognized that the peripheral edge of a coated work piece of a relatively small diameter may be supported on the confronting edges of the arms and then fired without disfiguration of the glazed surface of the work. When a deep bowl or similar article is enamelled the arms 18 may be adjusted so the engaging edges thereof will be inclined at obtuse angles with the peripheral edge of the work, thus avoiding mutilation of the enamel on the outer face of the work (Fig. 4). In the event it is desired to glaze the outer surfaces of a bowl in a separate operation, the arms 18 may be adjusted so the work-engaging edges thereof are normal to the rim of the bowl when it is placed thereon in an inverted position (Fig. 5). When glazing deep hollow ware the arms may be adjusted with their upper free ends in convergent relation, the work being mounted in telescopic relation therewith.

For work pieces of a diameter larger than those normally retained by the holder as adjusted in Fig. 3 the arms may be inclined outwardly or repositioned with the bolts 17 in the openings 20. For still larger work the brackets 14 may be remounted with the bolts 13 in openings 12 in the outer ends of the base plate, the arms in such case being adjusted in the manner heretofore described to accommodate the depth, contour, or diameter of the work. If the work is of an irregular pattern, one or more of the arms may be inclined inwardly or outwardly as the case may be to engage the rim or other unglazed area therein, and if necessary, the brackets may be suitably revolved about the bolts in either of the openings 12.

The invention further contemplates additional sets of arms of the same general form as those heretofore described, but of an altitude as great or greater than the length of the base of the stand. The secondary arms 30 are formed with a plurality of openings 31 disposed in spaced, aligned relation with each other in the base of the triangle. When the arms 30 are adjusted in divergent relation, the free lower ends thereof will rest upon the floor of the kiln and the base of the stand will be elevated as illustrated in Fig. 5. In this position the stand merely ties the arms together, the weight of the work piece and stand being borne by the outboard corners of the triangles. The openings 31 may be employed to accommodate certain of the adjustments described in connection with the arms 18 or may, if desired, be provided with additional bolts positioned for abutting engagement with the brackets 15 and forming stops to restrain pivotal movement of the arms 30. When it is desired to glaze a large deep bowl or similar article necessitating an obtuse angular support the arms 18 may be attached to the arms 30 by bolts engaged in openings 32 adjacent the apex of the larger arms. In mounting the arms 18 either the openings 19 or 20 may be employed depending upon the character of the operation and/or contour of the work.

Although the foregoing description is necessarily of a detailed character, in order that the invention may be completely set forth, it is to be understood that the specific terminology is not intended to be restrictive or confining, and that various rearrangements of parts and modifications of detail may be resorted to without departing from the scope or spirit of the invention as herein claimed.

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I claim:

1. An enameling stand for holding a work piece during a firing operation in a kiln comprising a base plate, legs thereon for supporting the base in spaced relation with the floor of the kiln, vertically disposed ears on the upper face of said base plate disposed in convergent relation with the center of the base, and flat arms pivotally mounted on said ears with the inner corners thereof disposed in abutting relation with each other at the center of the base.

2. An enameling stand for firing work pieces comprising a base, legs thereon, bracket plates mounted on said base, ears having openings therein disposed on said plates, in convergent relation with the medial axis thereof and flat work-supporting arms bolted through the openings in said ears with the upper free ends thereof inclined outwardly from the center of the base.

3. An enameling stand comprising a base having a pair of openings adjacent the center thereof and a second pair of openings adjacent the ends, brackets having openings in the bottom wall of said brackets, bolts in said openings in the brackets engaged with one of said pair of openings in the base, vertical ears on said brackets disposed in convergent relation with each other, and flat triangular arms mounted on said ears with the confronting edges thereof inclined downwardly.

4. An enameling stand comprising a base plate, legs bent downwardly therefrom, a pair of bracket plates mounted in aligned relation on said base, ears having openings therein bent upwardly from the corners of the

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confronting ends of said bracket plates, flat triangular arms having openings adjacent the base thereof bolted respectively through the openings in the arms and the opening in the ears, said arms being arranged with the confronting edges thereof in planes that define the boundaries of an inverted pyramidal figure.

5. An enameling stand comprising a rectangular base, depending integral legs thereon, upright sheet metal work supporting arms mounted on said base, each arm having a lineal work supporting edge inclined towards the base and disposed in convergent relation with the longitudinal center line of the base, and means for adjusting said arms towards and away from each other along the longitudinal center line of the base, whereby circular work pieces of various size may be supported on the inclined convergent lineal edges of said arms.

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