



LEFT: Plate with Confucius pattern, airbrush and stencil. BELOW: Squaw Valley mug, blue clay body, underglaze decal. BOTTOM: Donner Party 1846, platter from the Early California series, tissue transfer.

their experimental stove-top clay body with which they tried, unsuccessfully, to make frying pans and casseroles that could take direct flame.

But most of the raw ingredients for their standard clay body came from the East. Railroad cars of Georgia kaolin, Old Hickory Kentucky ball clay, North Carolina feldspar and West Virginia silica were uncoupled on the Tepco spur and the contents emptied into crushers. Suction conveyors vacuumed materials into silolike tanks which held 35 carloads.

Raw ingredients measured according to a master recipe were carried in batch cars to 3000-gallon buhrstone-lined ball mills. These mills were like enclosed cement mixers filled with smooth stones; they ensured an intimate mixture of finely ground materials suspended in a 50 percent water solution. After a two-day grind, the slip was drained through 300-mesh electromagnetic lawns or screens—which removed lumps and iron—into underground agitator sumps where it was aged to make it more workable. Sump pumps sent slip at high pressure through canvas filters that dewatered the clay and left it in cakes. Peeled from the filter press, the clay was tossed into a ten-ton-capacity pug mill, whose rotating knives and vacuum chambers removed all trapped air. A continuous eight-inch square column of jigger-ready clay was pushed through the tapered extruding end of the mill. Three-foot lengths were cut and stacked on zinc-covered carts.

The batter-out and the jiggerman, Butch Pagliero told me, were pieceworkers; they wasted no time in attacking the clay columns. Armed with a piano wire garrote, the batter-out cut the columns into stacks of one-half inch blanks. He slapped each blank onto a flat plaster bat, "stomped" it with a felt-covered cast-iron maul, then passed the "pancake" to his partner at the jigger.

The jiggerman—during the war there were two jiggerwomen—centered the pancake on a whirling Rosatti mold whose top surface gave shape to the face of the plate. He lowered a lever mounted

with a steel template, cutting bottom and edge in sharp profile. Ovals were thrown on eccentric jiggers. Cups, deep bowls and other holloware were jiggered in concave molds whose inner walls shaped the item's outer surface. Each of the 16 jiggermen, with his batter-out partner, threw about 200 dozen pieces a day. For decades after Eastern innovators had introduced completely automatic 12-head jiggers, Tepco methods remained "hands-on"; later, a semiautomatic 2-head jigger was used.

The jiggered ware was dried to "chalk white" in rooms heated by open-front gas heaters. Finishers sponged and fettled plates in stacks, then passed them on a vibrating conveyor belt under cascades of sand, which worked itself between each piece. Covered with setting sand to minimize warping, placed in refractory saggars and onto kiln cars, the ware was fired to



vitrification at 2400 degrees Fahrenheit. The doughnut-shaped bisque kiln, a 180-foot continuous circular tunnel, had an open segment (a bite out of the doughnut) that allowed four men in two hours to remove bisque from the moving car and replace it with greenware before it reentered the tunnel.

The car completed the circle in 56 hours, unless there was an accident. Eddie Pagliero remembers being awakened at home in the early morning hours, and having to shut down and enter the dark, hot tunnel to clean up spilled saggars. The closer to the heat zone, the longer the downtime as the kiln cooled and reheated. "I lost a lot of hair that way," Eddie laughs. His hands and arms, like those of the kiln placers, became so callous he could pick up blistering hot china without pain.

After bisque firing, the ware was no

longer fragile, and the workers tossed it about with practiced abandon. Plates that had cracked in firing were quickly eliminated from the production line, in a sort of industrial Darwinism.

Setting sand which stuck to the ware during the bisque was removed by sandblasting. Conveyor belts carried smooth ware past the stampers, who applied underglaze-inked rubber stamps spelling Tepco. A woman who had stamped for nine years told me that they used a variety of other trademarks; these included Pa-Ce-Co, Pamco, Solano, Genesee and a single gothic P. This assortment purportedly was a sales ploy.

Eckman, once foreman of the decorating shop, recalled the different decorating processes. The early china was undecorated white or tan, or at most it had a few brushed-on bands of brown, blue, red or green underglaze. Later, transfer printing, airbrush and stencil, and underglaze decals were used. Bill Hoyt, the chief of the art shop, began each process with a drawing according to Pagliero's or a customer's specifications. For an airbrushed pattern, the drawing was cut into a flexible sheet of lead; this could be cut into parts, since each size and type of item required a different modular stencil assembly, which was bound with wire and soldered. The upstairs decorating shop included 12 spray booths.

In the tissue transfer process, a Hoyt drawing was engraved on a copper cylinder, which was then chrome-plated. The cylinder, mounted on a printing press and inked with underglaze colorant dissolved in pine tar oil, printed patterns onto lengths of sheer, strong tissue. The tissue was dried on clotheslines, cut, laid in place and pasted down on the ware with a film of soft lye soap. Decorators

