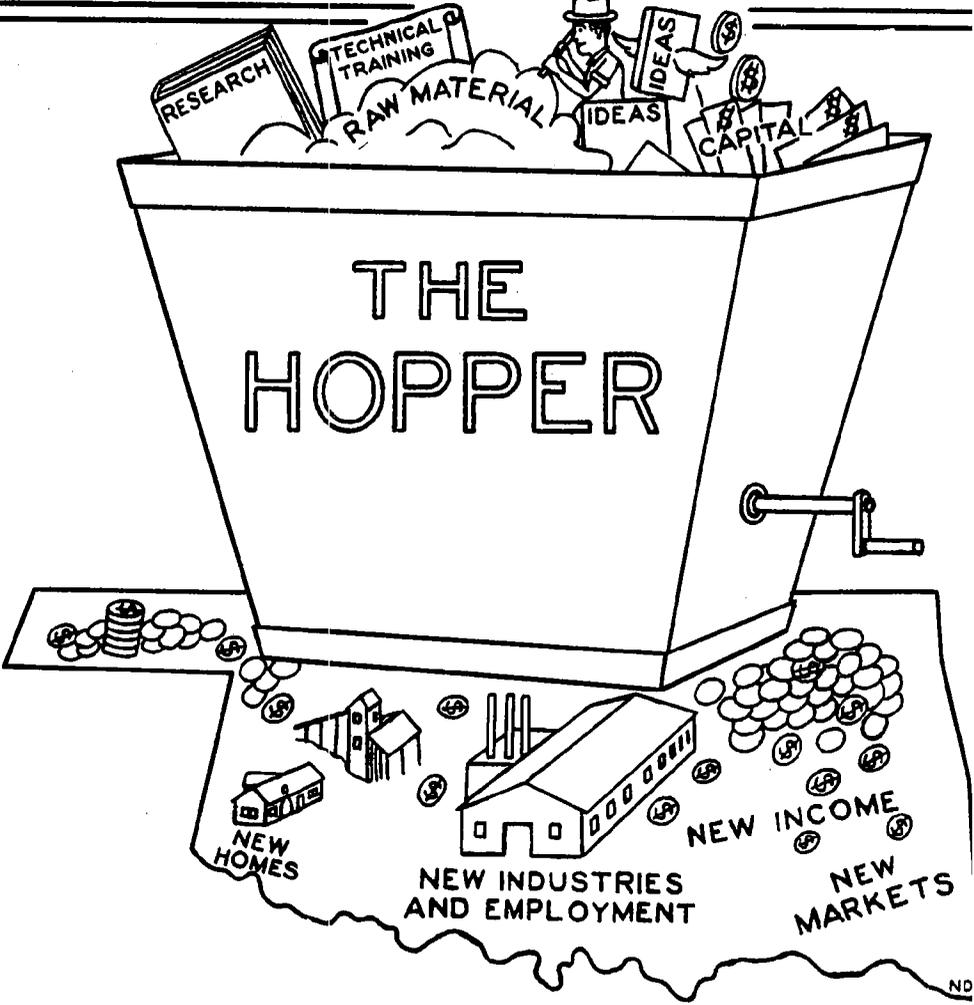


DEDICATED TO OKLAHOMA'S DEVELOPMENT



PUBLISHED IN THE OFFICE OF THE  
OKLAHOMA GEOLOGICAL SURVEY  
NORMAN, OKLA.

POTTERY INDUSTRY OF OKLAHOMA  
(continued)

by

Virginia Butcher, Assistant Geologist  
Oklahoma Geological Survey

III. Potteries of Oklahoma (continued)

Permian Pottery: What, with red soil, red clay, red mud, red people, red barns, red brick buildings, it's enough to make some one red eyed; so it should not be surprising that from our western Oklahoma "red beds" region should come the idea of trying to make good pottery from red mud. And, at last it happened, in Frederick, Oklahoma, to Mariemma and Paul McLellan.

Unlike most of our other operators of Oklahoma pottery factories, the McLellans have another and successful business, an undertaking establishment -- and people still die, you know, in spite of all the freedoms for living. Mariemma, who had studied ceramics under John Frank at the University of Oklahoma, had not been able to forget the fun to be derived from creative art in the medium of clay. Anyway, just for fun, the McLellans invested in a kiln and learned a lot of the do's and don'ts of handling clays. Samples from several deposits were tried; and the Fates, perhaps just for fun, decreed that some of the red clays fired to good red pottery. Because this McLellan pottery captured something of the color and spirit of Oklahoma, people who saw wanted to buy, often in greater quantity than the McLellans are organized to produce. They design their originals from any idea at hand, fire them from clay they dig just outside of Frederick, and refuse to accept orders so large that the thrill of personalized production is lost!

The motivating spirit of the McLellans is definitely "Sell Oklahoma" as, witness the trade-

mark, a miniature map of the state on which the town of Frederick is boldly lettered. The name, Permian Pottery, is for the great Permian system of rocks which outcrops so extensively in western Oklahoma. It is therefore, not a coincidence that the first successful souvenir created by them was an ashtray in the outline of the state. How successful this idea was can be judged by the fact that it is copied by firms in both California and Arkansas.

The clay, aged by soaking in a number two tub, screened through a fifty mesh screen, stirred by an undersized concrete mixer, has no chemicals added as flux. It is used for casting when it reaches the correct "slip" consistency, or, passed through a filter press makes excellent modeling clay. Two electric kilns are used for firing.

Designs are worked out by both, and Mr. McLellan has built himself a potters wheel with which he has become quite adept in the ancient art of throwing. They specialize in producing original designs for favors for different groups, and will design to conform with the theme of the occasion which may range from a bankers' or Eastern Star convention to a high school banquet. Ash trays, vases, cowboy boots, bowls, cups, and a variety of amusing animals are among the originals they have created for the souvenir and gift item trade. The cup represents another achievement for the McLellan philosophy of having fun and creating art with clay -- it is produced in a glaze which, under their skillful handling, resembles a varnished piece carved from a solid block of wood.

The McLellans are full of enthusiasm for the industrial future of Oklahoma in general, and for the future of ceramics in the state in particular. They firmly believe the possibilities of the ceramic industry in the state have been barely touched.

Hammat Originals: Graduated as an art major by Ohio State University, Mrs. Russ Hammat continued her interest and work in ceramics. During World War II she was able to return to college to study ceramics engineering. This, she felt necessary to add to her training if she were to be able to realize her dream -- to own and operate a successful ceramics art ware plant. In 1945, encouraged and aided by her husband and three daughters, she opened Hammat's Originals, a pottery plant just east of Tulsa on Highway 66. In order to better handle the problems of manufacture Mrs. Hammat took time out during 1946 for special studies in preparing clay formulas at the University of Kansas. Within a few short months the amount of business necessitated a major decision in the family. She could not run it alone. Mr. Hammat, convinced that the early success of his wife's creations was not a "flash in the pan", demonstrated his wholehearted faith in her ability by coming into the business as manager and devoting his full time and energy to the work.

It is truly a family enterprise with each member contributing his utmost. Many times to fill an order they have not hesitated to stay on the job 14 to 16 hours. The girls all show marked artistic ability and aptitude for the work, the oldest, Cindy, a sophomore at the Oklahoma A. and M. College, Stillwater, will return to Ohio State for the last two years of her ceramic engineering studies. She has had nation-wide recognition in such magazines as Mademoiselle of her ability in creating original designs.

Mrs. Hammat teaches classes in ceramics in addition to her work in the plant. She is a creative artist who thoroughly understands the science and technique of her chosen medium. All clays and glazes are mixed according to her personal formulae, through which she has developed a semiporcelain ware.

The ashtrays and parts of the buffet service which are used by the Tulsa Club are excellent examples of her workmanship and ability as a creative artist. This is a part of the special service she offers clubs, oil companies, etc. -- designs especially made for them with exclusive right to use of the design.

Among the more interesting of her creations for the home is an unusual TV lamp which she sells direct to one of the large New York stores. The range of her ability to work in semiporcelain to exact measurements is reflected in the number of orders for special items which she fills for doctors. Among the most unusual is a colon irrigator part which must be fired to exact size specifications.

Among the specialized processes developed by the Hammats is the utilization of Oklahoma volcanic ash for making glazes. Through experimental trials, methods were worked that are dependable and produce an excellent finish.

The reputation of Hammat Originals is firmly established and the family is now in the process of selecting a town in which to build a plant large enough to supply the orders which at the present must be regretfully refused.

Synar Ceramics: Mrs. Stanley Synar, formerly a commercial artist in California, married an Oklahoma rancher, and, unable to leave the art field entirely, embarked on a hobby of ceramic art which she has parlayed into a thriving business.

A three-room shop, located on the family ranch, on Highway 64, north of Warner, Muskogee County, was her solution to the growing demand for more and more of her art ware, and the necessity to have her business where she could keep a watchful eye on her family. This winter she plans to add a 36 x 60

foot addition to the present establishment and to increase her kiln capacity from 10 cubic feet to 52 cubic feet.

Mrs. Synar uses raw materials from four different states to prepare her modeling clay and slip. Some of her products are porcelain, others are in the semiporcelain class. Among the articles manufactured by her are: vases, powder boxes, cigarette chests, jewel boxes, figurines, decorative plates, etc., totaling 83 distinct items for the gift mart trade. The capacity of her present plant is 1,000 items per week. In addition to the outlets she has established in Oklahoma she sells direct to large department stores and gift shops in Ohio, New York, and North Carolina. Mrs. Synar has designed and secured the patent on a dinner service which she hopes to have in production in early spring of 1952.

The Donna J Pottery Company: The newest addition to the list of Oklahoma potteries was started in Sentinel, Oklahoma, in August, 1951. Mr. B.C. Evans, a native Oklahoman who spent seven years making pottery in California returned to his native state to take advantage of the lower costs of production when he was ready to make the big step -- the opening of a pottery of his own. The company is named for Mr. and Mrs. Evans' sixteen year old daughter, Donna Jean.

The Sentinel Leader, August 30, reports: Evans plans to set his production at 100 or more pieces per day. He is using a 16 cubic foot capacity gas fired kiln. His work will be twice fired, that is the first firing will last about 3 hours and 45 minutes and this, after color and glaze have been applied, will be followed by a second firing of approximately four hours in length. Colors being used by Evans now are blue, green, white, yellow, red, black, and pink. The eight pieces now being made include a flower vase, bowls of different

sizes and shapes, cigarette boxes, and ash trays. The clay used is from Kentucky, however Evans is experimenting with native clay of Washita County and has high hopes of developing one which he can successfully use. He does not plan to sell retail but to dealers and jobbers. At present, he has released pottery in Sentinel and plans to find outlets through jobbers.

Cyramic Kilns: Mr. and Mrs. Charles E. Creager of Muskogee, Oklahoma have for the last decade been experimenting with Oklahoma clays in their kilns. Mrs. Creager, the artist in the family, is ably assisted by her husband in the intricate art of making the master and production molds for her creations. Many of her pieces are not cast from molds, but are truly "one of a kind", being completely hand modeled. She has secured several design patents on several of her original creations. Her production is primarily aimed at the "collector item" trade. She designs made-to-order pieces for persons having definite ideas of a desired piece. Her work is particularly in demand for such things as wedding gifts.

Mrs. Creager and her husband have been primarily interested in developing a native Oklahoma clay for their ceramic work. They are successfully using two -- one from Porter and the other from Warner. Both are obtained from beneath the coal in strip mines, and are the clays underlying the coal seams. Both fire a light buff in color. In addition to the small experimental electric kiln, Mrs. Creager also has two larger gas firing kilns. In general, it could be said of her work that while the general idea is to produce a useful, lovely piece of ceramics ware, her work falls into two very definite groups -- the first is reminiscent of the early Indian pottery of the Spiro Mounds and the second group is interpreted in a completely modern theme. The one could be the interpretation of the Oklahoma of Territorial days, while in the

latter can be seen the Oklahoma of tomorrow.

Oklahoma City Pottery: Morris Robinson is the sole Oklahoma manufacturer of the unglazed florist-greenhouse type red flower pot. His plant is located at 530 SW 12th Street, Oklahoma City. This factory, which has been in continuous operation since 1946, is the first to be established in the state for the primary purpose of supplying this particular commodity. Nearest competitors according to Mr. Robinson are located in Athens, Marshall, and Cisco, Texas. Although the largest volume of business is carried on within a radius of 150 miles from Oklahoma City, Mr. Robinson supplies stores, greenhouses, etc. as far away as Gainesville, Wichita Falls, and Amarillo, Texas; and Clovis, New Mexico. One Oklahoma florist, Furrow and Company, located at Guthrie, uses annually one-fourth the entire production of the factory.

Approximately 100 tons of clay per month is stamped and fired into flower pots. This clay is obtained locally from clay outcrops in the immediate vicinity of Oklahoma City. The clay is ground in a hammer mill, then mixed in the wet pan with water until it reaches the correct consistency for stamping. Twenty-seven different sizes of flower pots are made; the greatest number being the 5-inch flower pot which is produced at the rate of 10,000 a day. The small, 2½-inch flower pot, in which thousands of Oklahoma and Texas housewives purchase a rooted plant is fired here at the rate of approximately 30,000 per week.

Two gas-firing, large bee-hive type, down draft, perforated-floor kilns are used. The pots are fired at 1650 degrees Fahrenheit for about 48 hours. If painted flower pots to be used in wrought iron stands are ordered the pot is painted and then re-fired at about 200 degrees Fahrenheit for about 2 hours, permanently fixing the paint to the unglazed surface of the pot.

Mr. Robinson is always interested in mixing and firing a "batch" from an untried clay outcrop. He states for his type product it is economically unwise to attempt to haul the large amounts of clay needed from a greater distance than twenty miles. Occasionally he does custom firing for local artists requiring larger kiln space than that ordinarily available.

Mold Manufacturer: Mr. and Mrs. Eddie Figueroa have started in connection with their art shop at Checotah, the manufacture of master molds. The object of this enterprise is to supply those in the ceramics field who, because of lack of training or equipment, are unable to make their own molds for their personal designs. In addition to being a professional mold maker, Mr. Figueroa does unusual art work in plaster. Mrs. Figueroa is the third generation of potters in her family. The firm is establishing trade with hobby shops, small ceramic plants, etc., in Texas, Oklahoma and Arkansas in supplying the master molds for the individual's personally created design. At the present more than eighty percent of such molds used in this area are supplied by the ceramics industries of California.

Oklahoma A. and M. College, Okmulgee Branch, School of Technical Training: Donald A. Rowland, Instructor, Ceramics, reports that his students are using two native clays -- Ada clay supplied by Frankoma and a Henryetta clay supplied by an ex-student. The training school at present has students ranging from pre-eighth grade to a few at college level. Many are interested in using the knowledge and skill gained here in later establishing a hobby shop or ceramics work shop of their own. This training unit could very well be built into a supply of skilled labor for the ceramics industry. Continual experimenting with the local clays is going on; some of it brought by students from land owned by parents or from the general area where the student thinks he might like to start a hobby shop.

One of the local glass companies supplies the school with soda ash. This company is going to rebuild a glass tank in the near future and promised to give the school the discarded refractories which can be recut and used, giving the student invaluable training in the building and repair of kilns. There are several electric kilns of intermittent type in different sizes. One large 6-cubic foot kiln is fired by gas. The possibilities of such a supply of trained labor would be most important to any new ceramics industry considering an Oklahoma location.

\* \* \* \* \*

#### DISTINGUISHED VISITORS IN THE ARBUCKLE MOUNTAINS

A group of distinguished geologists from four states were guests of the Oklahoma Geological Survey for a field trip in the Arbuckle Mountains on September 10 to 15, studying the Arbuckle group of limestones and dolomites. Dr. W. E. Ham, Assistant Director of the Oklahoma Geological Survey, conducted the trip and was assisted by Myron E. McKinley, Assistant Geologist on the Survey staff. Robert H. Dott, Director of the Oklahoma Geological Survey, and Hugh D. Miser, Staff Geologist of the United States Geological Survey, who for the past three years has been compiling information for a new geological map of Oklahoma, also participated.

Honors to the geologist traveling farthest for attendance go to Professor O. Dunbar of Yale University, who came from New Haven, Connecticut. Dr. Dunbar is Professor of Paleontology and Stratigraphy at Yale and was a major professor for Dr. Ham's Ph.D. dissertation on the Arbuckle group. Besides having experience with Lower Ordovician rocks and fossils from Newfoundland that are similar to those in the Arbuckle Mountains, with which analogies could be drawn, Professor Dunbar also made comparisons with certain reef limestones he had observed in the South Pacific.

Dr. Josiah Bridge, Geologist, United States Geological Survey, flew from Washington, D.C. He has had wide experience with rocks of Upper Cambrian and Lower Ordovician age in the Appalachians, Missouri, and Texas, and made many valuable remarks on the Arbuckle limestone. The peculiar horn-like fossil Ceratopea which occurs in six well-defined zones in the upper 3,000 feet of the Arbuckle limestone had already been examined by Dr. Bridge from collections of the Oklahoma Geological Survey, and from this examination correlations with stratigraphic units elsewhere have been established.

Dr. Virgil E. Barnes, Geologist, Texas Bureau of Economic Geology, Austin, Texas, participated in the entire trip and was able to point out very strong similarities and dissimilarities between the Arbuckle group and the Ellenburger group of Texas, with which he is thoroughly familiar from years of field experience. The continuity of certain fossil zones from central Texas into southern Oklahoma, and beyond into Missouri and Tennessee, is a remarkable feature of these older Paleozoic rocks.

Dr. C. W. Tomlinson, independent geologist from Ardmore, Oklahoma, a past-president of the American Association of Petroleum Geologists and an authority on the Arbuckle Mountains, spent two days with the party and then invited them to a dinner in picturesque Lake Murray Lodge. Our out-of-state visitors were very pleasantly surprised and impressed with Oklahoma's new recreational facilities.

Work on the Arbuckle group in the Arbuckle Mountains still is in progress, although now it is in the last stages of completion and will be available for use in compiling the new geologic map of Oklahoma. At some future date a comprehensive report will be published by the Geological Survey.