



Some Frit from

Northern Mesopotamia

By DAVID CROWNOVER



Frit, the word derived from the Italian "fritta," (fried), is a chemical compound made up of silicate of lime and copper that when fired in a furnace hardens into a crystalline material resembling faience. Used in numerous ancient civilizations, small frit objects were dispersed over great areas. Frit was probably the outcome of a glaze, and glassy frit glazes are known in Mesopotamia as early as the fourth millennium B.C. Whether by accident or not, the glazes, with attractive polished surfaces, were produced to make beads, inlay, and jewelry. Elaborate texts in cuneiform have given a clue to ancient methods of manu-

facture, such as a tablet in the British Museum from the Royal Library at Niniveh, which includes recipes for simple uncolored frit, blue frit, and Egyptian Blue glass or faience. In all cases, the ingredients are mixed in a crucible, put down into a furnace, where a good smokeless fire burns, until the mixture reaches a white heat and is removed and let cool. The result of this is recrushed, put again into a cool furnace, heated until the mixture liquefies and can be poured into moulds. The furnace, fired by logs, produced high heats that rose between the "eyes" of the furnace.

At Tell al-Rimah, in Northern Iraq, a large hoard of frit objects came to light during the first season's work. Many of these objects, ranging from over a thousand beads of a variety of types, to cylinder seals, to miniature cosmetic capsules, to masks and amulets, were concentrated in the fill in front of the Temple façade and on the floor of a small room on the second level of the Ziggurat mound. This room, located quite near the front terrace of the latest temple restoration, formed part of a complex of rooms built up on and served by a paved street in the Temple courtyard. In the damaged mud-brick room, the frit and glass objects predominated, having fallen in layers as if from shelves, while shells of various kinds and three or four small bone carvings were mixed in. At the end of the first season's diggings at Tell al-Rimah, there was no evidence of a furnace being located nearby.

The concentration of the material, the number of beads and amulets and figured objects—faces and female nudes might easily be described as

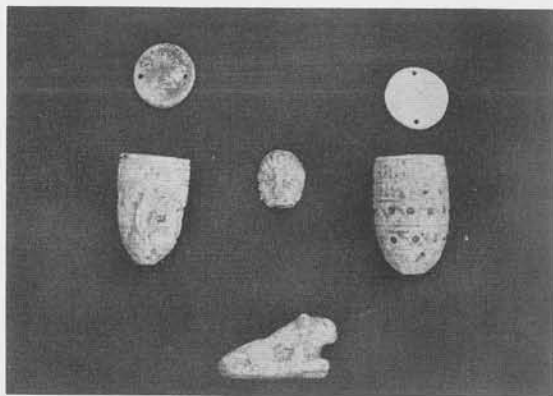
DAVID CROWNOVER's first connection with the University Museum in 1954 was as a student assistant in the Mediterranean Section while he was doing graduate work at the University of Pennsylvania. In 1956, he was made Manager of Exhibitions, responsible for both permanent installation and temporary shows, and in 1963, he was appointed Executive Secretary of the Museum. His interests are varied, ranging from African tribal art to archaeological work in the Mediterranean Area and the Near East.



the goddess Ishtar—suggest a souvenir shop. If you go to any religious shrine today, even Chartres or the Vatican itself, a shop retailing religious objects is located within easy access to the basilica or cathedral. If at Tell al-Rimah we have a Temple of Ishtar—and a future season will determine this fact—why may we not have a religious article shop for the use of the visitors to a large religious shrine in the second millennium before Christ? **2**



Fragment of quartz-frit vessel with traces of yellow and brown glaze, 5½ inches long, in the form of a duck. The head and wings are carefully modelled and painted.



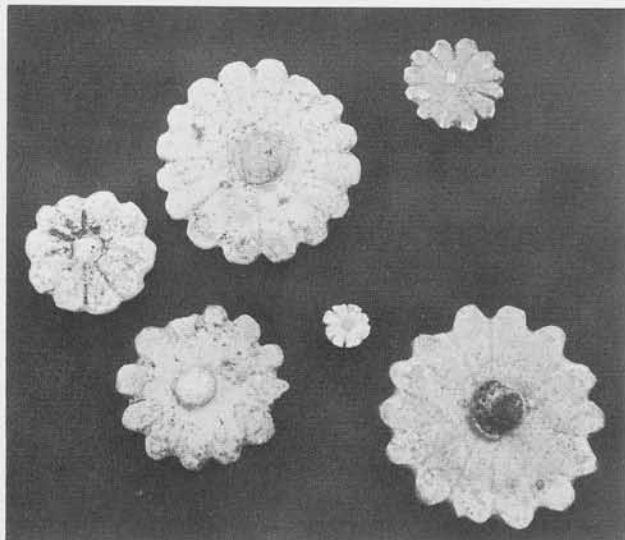
Two miniature cosmetic capsules with their lids, each 1½ inches high, of frit with a green glaze. The one to the left imitates a Mitannian seal design: two stags on either side of a palmette tree fill one side and four figures in procession advance toward the left on the other. The capsule on the right is decorated with rosettes alternating with bands of guilloche. In the center of the picture is a small glass amulet (¾ inch) moulded in the form of a human face, perhaps representing the goddess Ishtar. Below it is a couchant lion, 1¾ inches long, in quartz-frit ware with remnants of yellow glaze, found in the "souvenir shop."



A large white frit female mask with traces of green glaze, 3 inches high. The eyebrows and the large sockets for the eyes are grooved for inlay; there is also a groove for an inlaid necklace. The finely modelled mouth suggests a date in the 14th-13th century B.C.



Cosmetic capsule and lid of white frit with traces of green glaze, 1¾ inches high, bearing a stamp seal on its base. The major decoration, a crowned female head, rises from a moulded necklace. The capsule was found on the floor of the small room and was reconstructed from six fragments.



"Rosettes" of glazed quartz-frit are all perforated on the reverse for attachment. They vary in size from 2½ to ¼ inch and the petals are glazed in yellow, blue, and light green. One center is of black glaze.