



Fogg Art Museum

ROYAL SEALS—While excavating the inner mound of the tomb of King Gyges of Lydia, archaeologists uncovered these two royal monograms with chisel strokes clearly visible on blocks of supporting limestone wall. This expedition is a joint collaborative project of Harvard and Cornell Universities, with the American Schools of Oriental Research as sponsor.

ARCHAEOLOGY

Uncover Ancient Tomb

A huge burial mound erected in the seventh century before Christ and recently uncovered in Turkey is believed to be the tomb of King Gyges of Lydia.

See Front Cover

➤ A LARGE BURIAL TOMB of a mighty king has been uncovered about ten miles from the ancient city of Sardis, Turkey.

The tomb, erected in the seventh century before Christ, is a mountain of clay, earth and limestone, some 700 feet in diameter and 120 feet high, reported Prof. George M. A. Hanfmann of Harvard University, field director of the expedition.

Seen on this week's front cover is a view of the burial mound and tunnel from the south. The expedition's temporary camp is to the right.

Inside this huge mound scientists found an inner mound some 300 feet in diameter that had been constructed earlier. This inner mound is surrounded by a six-foot high wall of "beautiful masonry" on which one inscription is repeated ten times. The inscription, translated as "Gugu," led the scientists to believe the tomb belonged to King Gyges, because Gugu was the name given him in Assyrian annals, Prof. Hanfmann said.

Gyges became king under strange circumstances, the scientist noted. Because of an odd command of his predecessor, King Kandaules, Gyges was forced to gaze secretly at Kandaules' queen while she was nude. The queen noticed Gyges, however, and told him he must either be killed or kill her husband and become king. Gyges

killed the husband and became ruler of the great Lydian Kingdom which at one time extended across parts of Asia Minor until its defeat by the Persians and then by the Romans.

Renowned for their trading and commercial ventures, the Lydians have been credited with establishing the first inns of the world. They also were the first to coin money and to introduce the game of dice.

King Gyges, as other Lydian kings had done, probably started building his own burial mound during his lifetime, Dr. Hanfmann stated. After Gyges died while fighting Crimean invaders, his successor decided to magnify his memory by enlarging the burial mound.

A puzzling network of ancient tunnels extends through the southern half of the mound, Dr. Hanfmann said. These may have been dug several centuries later by the Romans in search of treasure believed buried with the King. But the Romans never reached their goal—the ancient tunnels stopped short of the inner mound.

This expedition hopes to go farther than the Romans and reach the final resting place of King Gyges next summer.

Other scientists in the area are excavating some Lydian houses, a civic center of Roman times, and a huge Roman gymnasium.

• Science News Letter, 86:323 November 21, 1964

MEDICINE

Abnormal Breathing Seen Cause of Ailments

➤ UNEXPLAINED NOSEBLEEDS, facial pains, headaches, recurrent sore throats and coughs could be brought on by abnormal breathing caused by a deformity inside the nose, reported a medical specialist.

Dr. Kenneth Hinderer, Pittsburgh rhinologist and spokesman for the Pennsylvania Academy of Ophthalmology and Otolaryngology, said such abnormal respiration will also increase the effort to take a breath. Over a period of years, he said, just breathing abnormally becomes as hard as strenuous activity for the normal person.

One common deformity inside the nose is a bent or deviated septum, Dr. Hinderer said.

When this partition that separates the two nasal cavities is crooked, air currents are altered as they pass through the nose, causing pressures that bring symptoms not associated with the real problem.

Modern surgery is able to correct such defects when they are properly diagnosed, whereas years ago the sole object of nasal reconstruction was for better appearance.

New knowledge about healing rates of tissues in the nose and better devices to measure pressures within the nose make surgery valuable to better breathing.

The nasal specialist must take into consideration such factors as allergies, nutrition, age, endocrine problems as well as the specific problems concerning the breathing process itself.

• Science News Letter, 86:323 November 21, 1964

TECHNOLOGY

Produce Uranium Foil Thinner Than Matchbook

➤ URANIUM FOIL, thinner than an ordinary matchbook cover, has been produced.

The foil, which is one-hundredth of an inch thick, was made from uranium first cast into a billet about 20 inches long, 20 inches wide and three inches thick. After being rolled and sheared into five separate sheets, the metal was rerolled to its final thickness. The Oak Ridge Y-12 Plant, operated by Union Carbide Corporation for the U.S. Atomic Energy Commission made the foil.

• Science News Letter, 86:323 November 21, 1964

PHYSICS

Nearly Perfect Mirrors Reflect Laser Light

➤ MIRRORS that can reflect nearly 100% of the light hitting them have been especially developed to reflect the highly intense light of lasers by Bell Telephone Laboratories, Murray Hill, N.J.

By coating the mirror blank with many layers of optically transparent dielectric material, the scattering of light from the reflecting surface is virtually eliminated.

• Science News Letter, 86:323 November 21, 1964