

Architect Wanted Tomb Like Queen's

Archæology

The strange story of Senmut, an Egyptian architect who wanted a kingly burial, is pieced together following the latest excavations at Thebes made by the Metropolitan Museum's Egyptian Expedition.

While digging around the ruins of a temple which Senmut built for the famous Egyptian Queen Hatshepsut, the expedition discovered steps leading down deep into the ground, H. E. Winlock reports. Here, 100 yards below the surface, was found the unfinished secret tomb which the architect was building for himself while he worked on the queen's temple.

Senmut stood so high in the favor of Queen Hatshepsut that he bore the high-sounding titles of Chief Guardian of the King's Daughter, High Steward of the royal household, Superintendent of the Royal Slaves, and Superintendent of the Royal Bedrooms. But this commoner yearned for permanent records of his close association with royalty.

Two years ago, this ambition was indicated when the expedition discovered that Senmut had ordered his own portrait introduced behind every door in the temple he was building.

"And now," says Mr. Winlock, "this past season we find him tunneling right under the temple enclosure to make a tomb for himself



SENMUT, from a portrait in his tomb.

suggestively like Hatshepsut's own."

The tomb was like the queen's in its plan, in its secrecy, and like the queen's in that it tunneled toward the sacred precincts of the temple.

Senmut even went further and dared link his name with that of the ruler of Egypt. On the ceiling of his tomb was written in hieroglyphs a sentence in flowery Egyptian which in plain English contains the idea, "Long live the King of Upper and Lower Egypt (Hatsheput) and the Chancellor, the Steward of Amon, Senmut."

But the ambitious architect never had the satisfaction of inhabiting his regal secret tomb. Hatshepsut and her officials were involved in politi-

cal intrigues which ended in Thutmose III taking Hatshepsut's place as the King of Egypt. Senmut's downfall came first, the excavations show. For his portraits in the tomb are mutilated, while Hatshepsut is still respectfully left alone.

"As soon as news arrived of the end of the Great Steward, orders were given to close up his presumptuous new tomb," Mr. Winlock states. "Workmen went down to the decorated chamber and smashed the faces of Senmut wherever they noticed them.

"Hastily gathering together bricks and stones at the mouth of the tomb they started to wall it up, but the work did not go fast enough, and before they had finished their wall they gave it up and raked down dirt just enough to cover over the doorway."

When the expedition entered the walled-up tomb, it found only one room had been decorated by Senmut's workmen before the downfall. Walls of the chamber were lined with hieroglyphics. The real gem of the room, however, is the ceiling which represents a chart of the heavens. This is pronounced one of the best and one of the earliest astronomical charts yet found, drawn by the most skillful penmen of the fifteenth century.

Science News-Letter, March 10, 1928

Heaviest German Locomotive

Engineering

A new type of locomotive, the heaviest yet used in Europe, is being built in Germany. It is especially designed to haul heavy freight trains over tracks cursed with many curves, and through regions where water is scanty.

The Garrat locomotive, as the new engine is called, shows a radical departure from the usual types of locomotive design. The driving wheels, of which there are two sets of six each, are not placed under the main body of the locomotive at all, but under the tenders. Of these there are two, one of them pushed ahead of the engine and the other pulled behind in the usual position. The cylinders are as far apart as possible, the forward pair being under the forward end of the front tender, while the rear pair is under the opposite end of the rear tender. This necessitates

long steam lines but the builders claim that they are able to deliver steam at 189 pounds pressure with entire success.

This type of construction makes the locomotive a three-section affair, articulated by two pivots. Although total length is $75\frac{1}{2}$ feet, it can turn in a circle of 300-foot radius.

The forward tender carries nothing but water, the rear one both water and fuel—either oil or coal. In addition, there is a third supply of water carried in a tank slung under the boiler, in the space usually occupied by the driving mechanism. In all about 27 tons of water can be carried, and about 15 tons of fuel. The unusual capacity for water is designed to permit the locomotive to operate in arid regions.

The total weight when ready for service is 206 tons.

Science News-Letter, March 10, 1928

Coyotes Agents of Mercy

Zoology

Furtive coyotes, working together in little packs to pull down elk calves or yearlings, must sometimes be looked upon as performers of merciful acts in that they shorten the sufferings of animals that are doomed to die in any case. This is the opinion of E. J. Sawyer, government naturalist of Yellowstone National Park. Coyotes, he explains, are reluctant to attack strong and vigorous game animals, even when they outnumber them heavily. They seldom go after even a sick elk if it is fullgrown, preferring to wait for it to die of natural causes. They also discreetly avoid the hooves of young elk in good health. But calves and yearlings that are sick or injured or the victims of famine are very likely to be "winter killed" by cold and continued starvation; and in killing these, Mr. Sawyer holds, the coyotes perform acts of mercy, and from an economic point of view benefit the herd as a whole.

Science News-Letter, March 10, 1928