

ARCHAEOLOGY

Guardian of Antiquity

Expedition discovers a doorkeeper that has kept his post for more than eight centuries at St. Catherine's Monastery at the foot of Mount Sinai.

By Dr. FRANK THONE

See Front Cover

► THE OLD DOORKEEPER was about to leave his job. He was reluctant to give it up, for it was the only one he had ever had, and he had held it for 60 years.

The people he had served faithfully and well through all that time were reluctant, also, to see him go. But there was nothing they could do about it; he could not be held against the call which had now come for him.

For Brother Stephen was dying.

"Father Abbot," he said, as he looked up from his pallet at the bearded face of his superior, "I only wish I might be allowed to keep watch by the door here forever!"

"My son," replied the abbot, "you shall have your wish."

So Brother Stephen died with a smile on his face. And his fellow monks, instead of burying him, robed him in a new habit, with the symbols of his faith embroidered on the scapular, and set him down on a chair beside the door of the crypt that holds the bones of all the departed members of the community, as shown on the cover of this week's SCIENCE NEWS LETTER. There he is sitting still, after more than eight centuries—easily the longest record for holding one job on this insecure planet.

Brother Stephen

This is the story of Brother Stephen, monk of the Greek Orthodox Church at the Monastery of St. Catherine, which stands at the foot of Mount Sinai, the rugged peak where Moses received the Tables of the Law. It was in the sixth century that he took up his long vigil. In the middle of the twentieth, by arrangement with the present head of the monastery, he posed for a portrait before the camera of William Terry, field executive of the University of California African Expedition.

Mr. Terry and his party visited St. Catherine's not on a pious pilgrimage but as a part of their scientific undertaking to amass all possible scientific data about the peoples of Africa, from one end of the great continent to the other.

Strictly speaking, of course, the Sinai peninsula is a part of Asia. However, it sits at the threshold of Africa just as Brother Stephen used to sit before the door of his monastery. Moreover, it is politically a part of the Kingdom of Egypt, and eccle-

siastically St. Catherine's Monastery is subject to the Patriarch of Alexandria. So it could quite legitimately be included in the scope of the African Expedition.

For a physical anthropologist, the monastery appears to be a veritable treasure-house. It has thousands of the kind of specimens that interest him most—human skulls. The skulls are those of former members of the community. And they have been accumulating for nearly 1,600 years, for the monastery claims A. D. 363 as the year of its founding.

When a monk of St. Catherine's dies, he is buried in one of the seven permanent graves in the monastery chapel. He remains there until his flesh has partly disappeared, partly mummified in the dry atmosphere of the desert.

Rotate Seven Graves

The seven graves are used in rotation. As each monk becomes a candidate for occupancy of one of them, the grave that has been occupied longest is opened and the now well-dessicated remains of its tenant are removed.

They are taken to the general storage-vault for bones, watched over by Brother Stephen. The limb bones and the trunk skeleton are added to a great stack at one end, while the skull is added to the mound of skulls at the other. Although the community at St. Catherine's is not large—only 20 monks—it has been there so long that there are plenty of skulls for even the most eager of anthropologists to measure.

Living thus in the constant presence of all their predecessors does not make the monks gloomy or severe. Their business is the contemplation of eternity, and with that point of view they can look upon death quite calmly as a mere incident. To anthropologists also death is not too unpleasant: it is as natural and inevitable at one end of life as birth is at the other. So the scientists and the monks had a common ground on which to meet.

The monks introduced them to another pair of notable early members of their community. These were two exceedingly zealous young monks—now skeletons for many centuries—who took vows to spend their whole lifetime in unceasing prayer, day and night.

They had only entered the monastery, at 18 years of age, when they undertook this heroic feat of asceticism and devotion. Although they lived side by side they never saw each other again. Each stayed in his

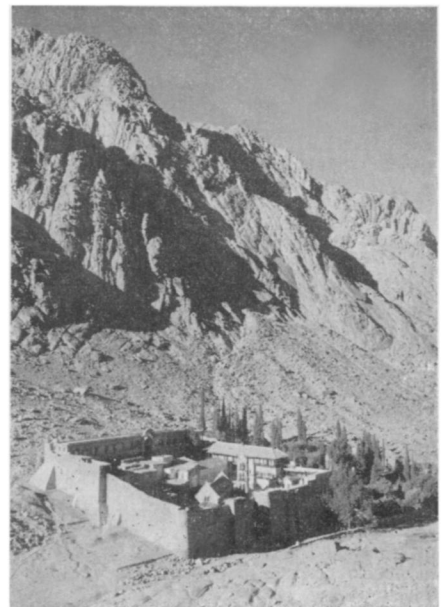
cell, and the two were linked together by a chain that ran through an opening in the wall. If either failed to hear the voice of his brother in prayer, indicating that he had fallen asleep, he could tug on the chain and thus arouse him again.

It is probable, of course, that both fell asleep simultaneously at times, else they wouldn't have lived very long. However that may be, they died together as they had lived together, and their bones now rest side by side in a pair of open caskets—still united by the chain.

Patroness of Monastery

Although the monastery of course can offer no hospitality to women, it has one permanent feminine resident, at least in part: the skull and a portion of the hand of St. Catherine of Alexandria, patroness of the institution. Catherine, first of a half-dozen or so female saints of the same name, was a young daughter of the Roman nobility. Converted to Christianity, she was so outspoken an advocate of her faith that she was first tortured and finally beheaded. So now her skull is kept in the monastery at the foot of Mount Sinai as a holy relic.

The monastery itself, though a place of peace, is stoutly walled against a hostile world, for it stands in a region that has been Moslem since the days of Mohammed himself. It has been assailed many times,



ST. CATHERINE'S MONASTERY
—The walled monastery, dating back to the fourth century, nestles against the base of craggy Mount Sinai, an oasis of peace in a savage desert.



PILE OF HUMAN BONES—Two of today's monks at the monastery add to the great pile of bones left by departed members of the community; the skulls go to another stack.

but the nomads could not get over the wall, and they were not equipped with siege engines to breach it. That the wall is really old is attested by marks made on it by visiting western knights during the Crusades.

St. Catherine's Monastery is known to the learned world chiefly as a repository of a

great mass of ancient manuscripts, including some of the oldest known texts of the Bible. Most of these of course are in Greek, but there are hundreds in Syrian, Arabic, Coptic and other languages. Even yet there are thousands of pages that no modern scholar's eye has ever seen.

Science News Letter, September 4, 1948

RADIO-PHYSICS

"Cosmic Noise" Studied

► "COSMIC NOISE" which left a region in outer space about 3,000 years ago is interfering with television, radar and FM and short-wave radio communication today. These mysterious energy waves have been recorded and studied by Australian scientists.

This radio frequency radiation comes from a mysterious space in the group of stars which forms the constellation Cygnus, the swan. It is a region where there are very few stars and little visible light.

J. G. Bolton and G. J. Stanley of the Division of Radiophysics of the Council for Scientific and Industrial Research have reported their investigation in the first issue of the new AUSTRALIAN JOURNAL OF SCIENTIFIC RESEARCH (March) published in Melbourne.

The radiation source in Cygnus, they explained, produces the second loudest "cosmic noise" of any place in our galaxy, the Milky Way. A place in the constellation

Sagittarius, the archer, in the center of our Milky Way produces the loudest "cosmic noise" while "solar noise" from the sun produces even greater effects on communications since the sun is so much nearer.

The point in Cygnus which "broadcasts" to earth is unusual because it sends out two kinds of signals. One signal is of constant intensity at about 100 megacycles frequency and above; the other is of varying intensity and uses frequencies below 100 megacycles.

The Australian scientists found that this spot in Cygnus sends 1,500 times more energy to the earth than any point in the surrounding area. The source is probably some 3,000 light years from the earth.

Maps of the sky showing the different frequencies of radiation coming from various spots in the heavens have been made by Grote Reber of the U. S. National Bureau of Standards.

The source of the energy waves is not associated with any stars or nebulae. The

"There are no problem children, only problem environments and parents."

EMOTIONAL MATURITY

by LEON SAUL, M.D.

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