Curiosities of Bygone Ages

Relics from New Mexico and from Bible Lands

Relics of an Ancient People in New Mexico.

BY E. P. WILSON.

AZTEC, New Mexico, is located in the northwest corner of the State and in the midst of the ruins of a prehistoric race that at one time was thickly scattered throughout the region. Irrigated farms now line the valley of the Rio de Las Animas River, where once the roughly built stone dwellings of the ancient people stood. No writings of any kind remain to tell who the builders of these pueblos were or where they went. The Navajo Indian occupied the region when the first white men entered this mountain recess over thirty years ago. The Navajo traditions are unreliable as to the vanished race. One of these is that the Navajo chased the ancient people into the river and they all were turned into fish.

In excavating one of these ancient dwellings that might have been inhabited as late as 1,500 years ago, Mrs. Orren Randall, living on a farm about a mile west of the modern Aztec, uncovered a curiosity that is one of the most interesting of relics. It is an image or idol, formed of the clay like the pottery that is found so plentifully here. The image is perhaps 16 inches high and is perfect with the exception of one missing leg. It was found with its back against the back of a human skeleton. At the side was found a large bowl with handsome decorations as well as several smaller bowls and mugs.

Archæologists have viewed the ruins near where this relic was found, and they estimate that it is 1,500 years since the ruins were inhabited. Arrow points, bone needles, stone ax heads, rocks for grinding grain, corn cobs, bowls of all sizes, mugs, vases, beads, pumpkin rinds and many other things are found by digging into the dilapidated dwellings.

Another Remarkable Discovery in Babylonia.

BY EDGAR J. BANKS.

In the *SCIENTIFIC AMERICAN* not long since there appeared a translation of a long inscription upon a large clay cylinder of Nebuchadnezzar, king of Babylonia from 604 to 561 B. C. The cyl-

inder was found in the walls of the temple at Marad, south of Babylon, where Nebuchadnezzar buried it for future generations to read. Near the end of the long inscription is an account of the restoration of the temple at Marad in these words:

Image of clay discovered in the New Mexico ruins.

"At that time in the temple of Lugal-Maradda, my lord, in Marad, whose foundation no former king had seen since ancient days, I sought and found the ancient foundation stone, and upon the base of Naram-Sin, my ancient ancestor, I fixed its foundation. I wrote an inscription and my name and placed it therein."

No tale in fiction is more marvelous than the tale that the archæologist may now tell. The foundation stone of Naram-Sin, the same inscribed stone which Nebuchadnezzar says "no former king had seen since ancient days" has been discovered. A photograph of the inscription upon it is here reproduced.

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Who was Naram-Sin, this ancient ancestor of Nebuchadnezzar? Not long ago, when his name first appeared, he was regarded as one of the mythical characters with which prehistoric times was supposed to be peopled. Some years ago in the North Babylonian ruin Abu Habba, the ancient Sippar of the Bible, there was found an inscribed cylinder of Nabonidus, the last king of Babylonia, 555-538 B. C., and the father of the Biblical Belshazzar. In the inscription Nabonidus says that while restoring the temple of the sun-god, he dug to its foundation and saw the foundation stone of Naram-Sin, the son of Sargon, which no former king had seen for 3,200 years. Scholars were amazed at the statement, and at the long period of time which was mentioned. If Naram-Sin lived 3,200 years before the age of Nabonidus, or before 550 B. C., his date was 3750 B. C. Though he was regarded as a mythical being, inscriptions from both him and his father, Sargon, began to appear. On a clay tablet was the story of the birth of Sargon, very similar to that of the birth of Moses. Finally on a rock in the mountains of Armenia a sculptured figure representing Naram-Sin was discovered. Then in several of the Babylonian ruins large square bricks bearing the names of Sargon and Naram-Sin were found.

Relics dug from ancient ruins near Aztec, New Mexico.

tain that Naram-Sin lived as long before the time of Nebuchadnezzar as Nebuchadnezzar lived before our time.

The foundation stone of Naram-Sin is in the form commonly called a door-socket. The Babylonians seem to have been unacquainted with hinges for their doors. At one side of the doorway was placed a large flat stone with a cup-shaped hollow in its center. Into the hollow was fitted the wooden door post, which revolved as the door was opened and shut. Similar door posts and door sockets are still to be seen in houses of modern Babylonia. The stone door socket corresponded to our corner stone or foundation stone. It sometimes bore about the hollow, where it might easily be seen, the inscription of the royal builder.

The inscription of Naram-Sin, seen by Nebuchadnezzar and recently found by the Arabs, is on a round yellowish calcite stone about twenty inches in diameter. The uninscribed part of the stone has been cut away. The inscription in its two columns contains thirty-eight short lines. Its characters are of a very archaic form. Its translation reads:

"Naram-Sin, the mighty king of the four quarters of the earth, who subdued nine armies in one year. When he overcame those armies he made their three kings captive, and brought them before the god En-lil. On that day Libit-ili, his son, the governor of Marad, built the temple of Lugal-Maradda in Marad.

"May the gods Shamash and Lugal-Maradda destroy the estate and exterminate the seed of him who alters this inscribed stone."

The inscription is of historical importance. It positively identifies the very ancient Marad with the ruin mounds of Wana-Sadoun, and thus another long lost city may be restored to the map of Babylonia. It mentions a son of Naram-Sin, Libit-ili, hitherto unknown, and speaks of him as the governor of Marad. Another god, Lugal-Maradda, is added to the Babylonian pantheon, and what is no less interesting is that the accuracy of Nebuchadnezzar's statement is established. The very inscription which two thousand years ago he said he saw at the foundation of the temple, and which even then had already lain there for perhaps three thousand years, has been discovered.

Fragments of the vase of Ahazuerus in the New York Public Library.

"Xerxes the Great King" in four languages.

Inscription of Naram-Sin, King of Babylonia, 3750 B. C., which Nebuchadnezzar says that he saw.

and now a score or more of inscriptions on gold, stone, and clay have convinced us that Naram-Sin and his father were real beings, and have taught us much of their history.

Though Naram-Sin was one of the earliest known kings, it is still to be proved that he lived 3,200 years before Nabonidus, or 3750 B. C. Modern scholars believe that they have evidence that he lived a thousand years later than that date, but undoubtedly, when Nabonidus made the statement, he had before him the long lists of the Babylonian kings, which we know to have existed, and fragments of which have been found. Future discoveries may show that he was correct. Unfortunately Nebuchadnezzar, in his cylinder inscription, does not say how long before his time Naram-Sin lived. We are accustomed to call even the age of Nebuchadnezzar exceedingly ancient, yet it is cer-

A Quadrilingual Inscription From Queen Esther's Husband.

The prize for which the excavator among the buried cities of the ancient civilizations of the Orient is always searching is a bilingual inscription. If one of the two languages of the inscription he hopes to find has not yet been deciphered he thus has a key to a long-lost tongue. With that key he hopes to unlock the secrets of some ancient kingdom and restore to the world history and literature which has long been forgotten. The most familiar of the trilingual inscriptions is the famous Rosetta Stone in the hieroglyphic and demotic languages of ancient Egypt, and in Greek. Arabs discovered it at Rosetta in 1799, and it enabled Champollion to translate the inscriptions on the monuments of ancient Egypt. Another trilingual inscription of equal importance was found among the ruins of the palace of the Persian king, Darius, at Persepolis. Two of its three languages were Persian and Babylonian. By means of it Grotefend deciphered the cuneiform language of Babylonia and restored to the world the vast

(Concluded on page 89.)

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A Submarine for the Austro-Hungarian Navy

(Concluded from page 85.)

by voice pipes. Aft of the conning tower is a conning platform for surface navigation. The tower is inclosed in a structure, designed on ship-shaped lines, intended to diminish the resistance met when traveling under water. These two submersibles are propelled by two two-cycle heavy oil engines, aggregating 600 horse-power for surface navigation. Two electric motors, designed to develop 320 horse-power, are used for propulsion when the boat is submerged. The motors operate two reversible screws. The engine-room outfit comprises two main and one auxiliary motor-driven bilge pumps, two hand-worked bilge pumps for exhausting bilge and ballast water, air compressors and all accessories. A particular feature of German submarine naval policy is the provision for salving appliances. These, in a way, have preceded the construction of submarine craft. This feature is also emphasized in these boats. They carry a safety keel weighing 5 tons, which can be detached by working a very simple gear, merely by the movement of a handle. By emptying the ballast tanks the boat can be floated in 1½ minutes. Several appliances have been fitted to purify vitiated air, and thus prolong the stay under water, so that the liability to accident is greatly minimized. Air connections are fitted on the outside plating, which, under certain conditions, would allow communication to be made with the atmosphere. A buoy carried on deck can be unfastened from the inside of the hull in order that a telephonic connection can be established with a rescuing crew. Each boat is fitted with two 18-inch Whitehead torpedo tubes and carries a supply of three torpedoes. The surface speed at trials was 12 knots, but it is anticipated that it will be surpassed in deep water trials; the submerged speed is 8.6 knots. At an economic speed of 10 knots the radius of action is given as 1,200 miles above water and 60 miles submerged, the speed in the latter case being 6 knots.

Curiosities of Bygone Ages

(Concluded from page 87.)

literature of ancient Mesopotamian civilization. The language of the mysterious Hittites is still undeciphered, yet several scholars, confident that they have found its key, have published attempted translations, only to find that their labor has been in vain. Men have long been searching for a bilingual inscription, one of whose languages is Hittite, and one such inscription has been found. It is a little silver object about the size of half an orange, now in the British Museum. It bears the words "Tarkendemos King of Ermes" in the cuneiform language of Babylonia, and also some Hittite hieroglyphs which probably mean the same thing, but the hieroglyphs are too few to be of service.

Recently there has been presented to the New York Public Library three fragments of a large onyx base bearing upon its side a quadrilingual inscription. As far as I know this is the only quadrilingual inscription yet discovered. As all of its four languages have been deciphered, it is no longer valuable as a key to a lost tongue, yet it is no less interesting. It sheds new light upon ancient customs, and is evidence of the great intercourse among the nations of the early world.

The onyx vase, when perfect, stood 13 inches high. It had a wide lip, a short neck, and its sides curved gracefully down to its small base. The marks upon the interior walls show that the stone was turned upon a lathe. On the outer wall, just beneath the neck, are three lines of cuneiform writing. The first is in Persian, the second in Elamitic, and the third is in Babylonian. Beneath the three cuneiform lines is a vertical line of writing in Egyptian hieroglyphs. The upper of the hieroglyphs are inclosed in a cartouche, showing that they spell a royal name. The inscription is very short, for in each of the four languages it merely

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says: "Xerxes the Great King."

The purpose which the vase served is evident. It was the custom of the ancient Oriental kings and nobles to present votive objects to the temples and shrines; thus they hoped to win the favor of the gods. The most common of such objects were vases of rare stones or of beautiful form. Sometimes the beauty of the stone was the only adornment required; other votive vases were inlaid with ivory and bright stones, or engraved. Most of them were inscribed with the name of the giver. That none might fail to know who was the giver of this beautiful vase, Xerxes had his name inscribed upon it in four languages. To what temple or shrine it was presented is no longer certain, for it was found by wandering Arabs. Evidently, however, it was presented to some prominent religious edifice to which people from the most distant lands resorted, where Persians, Elamites, Babylonians, and Egyptians worshipped.

The name of Xerxes on the vase is of scarcely less interest than the quadrilingual inscription, for Xerxes is no other than Ahazuerus, the husband of Queen Esther of the beautiful Bible story. This story has often been called a fairy tale, and many a scholar has claimed that of all the Persian kings none bore the name of Ahazuerus. Xerxes was the Greek pronunciation of the name, with which we are familiar, but the pronunciation of the name as it was written in Babylonian characters upon the vase is Hi-shi-i-ar-sh-a. So the great Assyrian king whom the Greeks called Sardanapalus was known to the Hebrews as Osnapper and to the Assyrians as Assurbanipal. The apparent differences in the ancient names may easily be accounted for by a simple law of phonetics. Ahazuerus and Xerxes are the same, so scholars are now agreed.

In 1852 Mr. Loftus dug a few trenches into the mound containing the ancient royal city of Shush or Susa. It was the same mound in which the French later found the famous stone engraved with the Hammurabi code of laws. There were found the ruins of Shushan, the palace in which Queen Esther lived, and in the palace were numerous inscriptions telling of its history. In 1884 Dieulafoy uncovered the famous banquet hall which figures so prominently in the Book of Esther. Its limestone walls are still standing, and little but its roof, which was supported by thirty-six great columns of stone, has fallen. The walls were highly polished, and the parts which were of stucco were painted red. The floor was paved with bricks. Naturally the interior decorations have perished, but the rugs and draperies of ancient Persia probably surpassed in beauty those of the modern country. In the rear of the hall, beneath a crimson canopy, was the golden throne, and before it were rich carpets which the king's feet alone might tread. There sat the king who received Queen Esther, and who gave as a votive offering to some temple the beautiful onyx vase which is now in the New York Public Library.

Causes of Forest Fires

REPORTS on the forest fires in northern Idaho and Montana state that 35 per cent are caused by railroads, 26 per cent by lightning and 10 per cent by campers, the remainder being due to burning brush and miscellaneous unknown causes. There is one frequent cause of forest fires that is seldom referred to and which has not received proper attention from the authorities, and is those set maliciously and those started by men who expect to earn a few dollars by helping to fight the conflagration they are responsible for. As these latter are usually started near the railroads, these companies generally get the credit for the damage.

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