OCEANOGRAPHY

Found in the Pacific

The waters of the Pacific hold treasures recently discovered by archaeologists and oceanographers—carved rock columns and an 800-mile crack in the ocean floor—By Barbara Tufty

See Front Cover

➤ STRANGE CARVED ROCK columns, shown on this week's front cover, some with writing on them, have been sighted by cameras 6,000 feet under the sea off the coast of Peru. (Photo credit: Duke University)

This unknown Atlantis of the Pacific lies too deep for exploration from a surface ship, said Dr. Robert J. Menzies, director of ocean research at the Duke University Marine Laboratory, Beaufort, N.C. A mobile deep-diving vehicle is needed for precise observation.

Two upright columns, about two feet or more in diameter, were sighted extending five feet out of the mud. Two more had fallen down and were partially buried, and another angular squarish block was seen, said Dr. Menzies.

The pieces were sighted from a surface ship carrying apparatus for lowering cameras to within a few feet of the ocean floor.

The oceanographic cruise of the research vessel Anton Brunn lasted for six weeks off the coasts of Peru and Ecuador in the waters of the Milne-Edward Deep, a deep trench that drops off to almost 19,000 feet in places. The cruise was sponsored by the National Science Foundation.

The sunken columns are located about 55 miles off the city of Callao, the port of Lima, capital of Peru. This is near the Ring of Fire, the zone of earthquakes and active volcanoes that encircles the Pacific Ocean. The area had once been covered by at least 600 feet less of seawater, about 11,000 years ago at the time of the great glaciers of the Ice Age, said Dr. Menzies. The area is now slowly sinking.

Until further investigations can be made, Dr. Menzies is cautious in explaining what the five fragments could be. Perhaps the pillars toppled down into the trench from a nearby Spanish island, he said. Old Inca ruins have been found around that area, and civilizations predating the Incas by many years are now believed to have existed nearby.

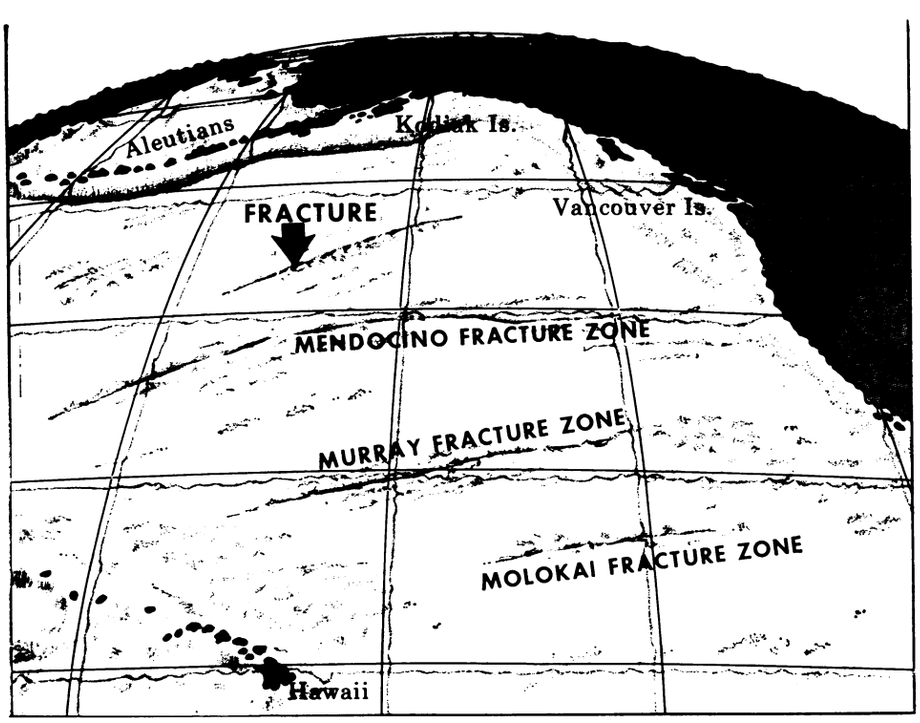
Dr. Menzies came upon the mysterious sea pillars by accident, while searching for specimens of a small mollusk called Neopilina, one of the world's oldest living fossils. The search vessel was slowly probing the Milne-Edward Deep, which contains the richest waters in the world and teems with sea life.

Most underwater trenches are nearly devoid of life, said Dr. Menzies, but the warm Humboldt Current flowing over this one has encouraged the activities of almost every kind of sea creature found in shallow waters.

While collecting about 60,000 specimens of sea animals and taking 1,000 underwater photographs, Dr. Menzies noticed the sunken ruins.

"We did not find structures like these anywhere else," he said. "I have never seen anything like this before".

• Science News, 89:239 April 9, 1966



Coast and Geodetic Survey

OCEAN FRACTURE—A massive undersea upheaval more than 50 million years ago caused a fracture in the ocean floor. It is the northernmost to be found in a 4,000 mile area of the Pacific extending from Hawaii to the Aleutians.

OCEANOGRAPHY

Deep Sea Valley Found in Pacific

➤ AN 800-MILE crack in the ocean floor has been discovered in the vast area between the Hawaiian Islands and the Aleutians.

The trench, up to 15 miles wide at some points, resulted from a massive undersea upheaval more than 50 million years ago, reported oceanographers with the Coast and Geodetic Survey, part of the Environmental Science Services Administration (ESSA).

The upheaval in the ocean bottom raised a range of mountains over one-half mile high and dropped part of the adjacent bed one-half mile, forming a trough or valley extending in a northeast-southwest direction.

The newly-discovered break is the northernmost of a series of major fracture zones which include the Mendocino, Murray and Molokai Fracture Zones. The new fracture has not yet been named. All the fractures are located in the area extending for some 4,000 miles between Hawaii and the Aleutians.

The discovery is a result of the SEAMAP project, an intensive program aimed at mapping the ocean bottoms. Before World War II, not much was known about the bottom of the seas. Since 1945, oceanographers have been mapping the ocean floor with sophisticated electronic equipment.

• Science News, 89:239 April 9, 1966