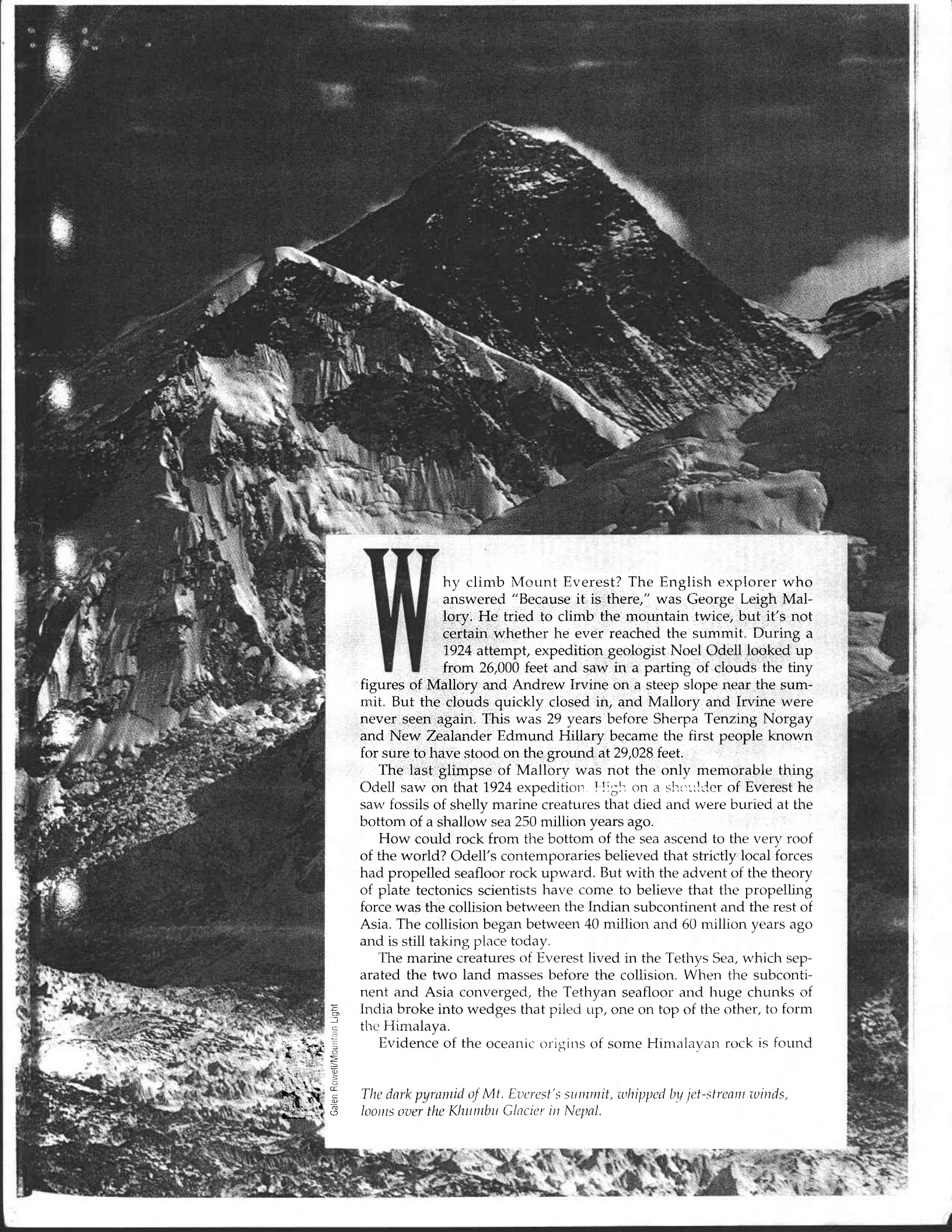


# ROOF OF THE WORLD

Colliding continents drove the Himalaya and Tibet into the sky — and may have radically altered Earth's climate.

By Tom Waters





**W**hy climb Mount Everest? The English explorer who answered "Because it is there," was George Leigh Mallory. He tried to climb the mountain twice, but it's not certain whether he ever reached the summit. During a 1924 attempt, expedition geologist Noel Odell looked up from 26,000 feet and saw in a parting of clouds the tiny figures of Mallory and Andrew Irvine on a steep slope near the summit. But the clouds quickly closed in, and Mallory and Irvine were never seen again. This was 29 years before Sherpa Tenzing Norgay and New Zealander Edmund Hillary became the first people known for sure to have stood on the ground at 29,028 feet.

The last glimpse of Mallory was not the only memorable thing Odell saw on that 1924 expedition. High on a shoulder of Everest he saw fossils of shelly marine creatures that died and were buried at the bottom of a shallow sea 250 million years ago.

How could rock from the bottom of the sea ascend to the very roof of the world? Odell's contemporaries believed that strictly local forces had propelled seafloor rock upward. But with the advent of the theory of plate tectonics scientists have come to believe that the propelling force was the collision between the Indian subcontinent and the rest of Asia. The collision began between 40 million and 60 million years ago and is still taking place today.

The marine creatures of Everest lived in the Tethys Sea, which separated the two land masses before the collision. When the subcontinent and Asia converged, the Tethyan seafloor and huge chunks of India broke into wedges that piled up, one on top of the other, to form the Himalaya.

Evidence of the oceanic origins of some Himalayan rock is found

*The dark pyramid of Mt. Everest's summit, whipped by jet-stream winds, looms over the Khumbu Glacier in Nepal.*