The Continental Plates　盘古大陆，板块迁移

Whenever you look at a world map, doesn't it look like a big **jigsaw** puzzle? If you think the continents were once a single giant one, you are right. For the last 200 million years, they have slowly separated, creating the **globe**'s surface as we know it today.

当你看着世界地图时，会不会觉得它很像一块大拼图？如果你认为世界各大洲曾是一整块巨大的陆地，那么你的想法是正确的。两亿年以来，陆地渐渐分裂，创造出我们今日所知的地球表面。

In 1912, Alfred Wegener **contended** that the great continent he called **Pangaea**, meaning "all land" in Greek, began to **split** apart 200 million years ago. He **coined** the phrase "Continental Drift" to describe his idea. Today, we have evidence supporting the theory. Identical fossils have been found in West Africa and eastern South America, and rock layers form a **continuous** line on these separate continents. There are also tropical plant fossils in **Antarctica**, leading experts to believe that this frozen continent was once located in tropical waters.

1912 年，韦格纳主张这块他称为「盘古（Pangaea）」的大陆在两亿年前开始分裂，Pangaea 在希腊文中意为「所有的陆地」。他创造出「大陆漂移」这个名词来描述他的概念。如今，我们有证据可支持这项理论：在西非和南美东部发现相同的化石，且在这两个分开大陆的岩层形成了一条连线；在南极洲也有热带植物的化石，让专家相信这块冰冻陆地曾经位于热带海洋中。

The **mechanism** that causes continental drift is now understood. According to the theory of plate **tectonics**, the continents are actually plates that float **atop** the earth's **mantle**, which is made of **molten** rock known as **lava**. The inner mantle is heated by the earth's **core** and it rises. As the mantle spreads, the plates are carried along with it. When they **collide**, one continent is forced up, creating mountains, while the other is forced down, returning to the inner earth. The areas where these plates meet have a high frequency of earthquakes. So next time you feel like you're on solid ground, remember that you're really floating on a continent!

造成大陆漂移的机制现已为人所知。根据板块运动理论，陆地其实是漂浮在地幔上的板块，而地幔的成份是熔化的岩石，即岩浆。地幔内部被地核加热开始上升。地幔扩张，大陆板块也随之移动。当板块碰撞时，其中一个板块受力上升形成山脉，另一个则受力下降回到地球内部，板块交界带发生地震的频率很高。所以，下次你觉得自己像踩在坚固的地面上时，别忘了你其实是在陆地上漂浮着！

–by Howard Weston

Vocabulary

contend [kən ` tɛnd] v. 坚决主张，声称
core [kor] n. 核心
collide [kə ` laɪd] v. 碰撞；相撞

More Information

jigsaw [` dʒɪg˛sɔ] n. 拼图玩具

globe [glob] n. 地球

Pangaea [ˈpændʒɪə] n. 盘古大陆

split [splɪt] v. 分裂

coin [kɔɪn] v. 创造，杜撰〔新字等〕

continuous [kən ` tɪnjʊəs] adj. 连续的

Antarctica [æn ` tɑrktɪkə] n. 南极洲

mechanism [` mɛkə˛nɪzəm] n. 机制

tectonics [tɛk ` tɑnɪks] n. 构造学,构造地质学,大地构造学

atop [ə ` tɑp] prep. 在…上面

mantle [` mænt!] n. 【地】地幔

lava [` lɑvə] n.【地】熔岩

molten [` moltən] adj. 熔化的