

highest mountain, which the Indians called "Agiiohook," and which the white men would later call Mt. Washington. In 1869 Marsh completed the railroad up the western slope, and *Peppersass*, the engine, pushed its first load of passengers to the summit.

MEXICO

In view of various articles on the Mexican volcanoes in the *American Alpine Journal*, the following data, not readily accessible, may be of interest:

Orizaba. The Aztec name "Citlaltepetl" or "Star Mountain" is connected with the legend that the body of the serpent god Quetzalcóatl was consumed by divine fire in the crater of the mountain.

The first ascent was made in 1848 by Lieut. William F. Reynolds, accompanied by Maynard and several soldiers, during the occupation of Puebla by General Scott's army. They left an American flag on the summit with the date carved on the staff, which was found by a Frenchman, A. Daignon, in 1851.

The last eruptive period was 1545-66, and the volcano is now considered to be extinct, although Humboldt records that smoke was seen issuing from its summit as late as the beginning of the nineteenth century.

Orizaba was first measured in 1796 by Ferrer, by means of angles taken from the Encero, with a resulting figure of 17,879 ft. for the elevation. Humboldt, early in 1804, measuring from the plain near Jalapa, obtained a figure of only 17,375 ft. No carefully conducted measurement was made thereafter until 1877, when a Mexican scientific commission, composed of Plowes, Rodriguea and Vigil, made an ascent from San Andres and secured a figure of 17,664 ft. Ferrer's figure was generally accepted until Dr. Kaska's determination with mercurial barometer, almost a century later, increased it to 18,045 ft.

In April, 1890, Prof. Angelo Heilprin (1853-1907), later a member of the American Alpine Club and its first vice-president, led an expedition from Philadelphia whose purpose was to examine the physical features of the great volcanoes, with special reference to the vertical distribution of animal and vegetable forms. Within three weeks he ascended Orizaba, Popocatepetl, Ixtaccihuatl and Nevado de Toluca, making numerous measurements of altitude with a registered aneroid, tested and corrected at Philadelphia, at the sea level of Vera Cruz and at the observatory of Mexico City.

The results were published in the *Proceedings of the Academy of Natural Sciences of Philadelphia*, xlii (1890), 251. Heilprin's figure for Orizaba was 18,205 ft., and this elevation was then thought to be the loftiest in North America, since it was believed

to overtop Mt. St. Elias, the highest Alaskan peak which had at that time been measured.

Scovell and Bunsen (1891-92) obtained an elevation of 18,314 ft. The accepted figure, 18,700 ft., is the subject of an article elsewhere in this issue.

Popocatepetl. The Aztec name means "Smoking Mountain." According to legend, Popocatepetl, a warrior, was enamored of Ixtaccihuatl, daughter of the emperor. When Popocatepetl was returning from victory in war to claim his beloved, his rivals sent word that he had been killed, whereupon Ixtaccihuatl died of grief. Popocatepetl then built the great mountain pyramids, on one of which he placed her body, while he himself stands on the other holding her funeral torch.

There is a reproduction of Popocatepetl in eruption on p. 25 of the Codex Telleriano Ramensis, noted for the year 4 House, equivalent to 1509 A.D. Before the conquest Popocatepetl and Ixtaccihuatl were worshipped as deities, and at festivals of the mountains, called *Tepeylhuatl*, there were images of Popocatepetl made of amarand and maize seed paste. In the great temple of Tenochtitlan, the Aztec capital founded in 1325 on the present site of Mexico City, there was a wooden idol of Ixtaccihuatl.

The crater was reached in 1519 by Diego de Ordaz, one of Cortés' officers, with nine Spaniards and several Tlascalan Indians. The king of Spain allowed the Ordaz family to assume a figure of the burning mountain on their escutcheon in commemoration of this feat. In 1522, Francisco Montañón had himself lowered 400-500 ft. into the crater to secure sulphur for gunpowder.

Humboldt, in 1803, from the Llano de Tetruba, secured a reading of 17,700 ft. for the elevation. The brothers Glennie reached the highest point of the crater wall in 1827, obtaining a barometric reading of 17,884 ft. Truqui and Craveri ascended in 1855 to a point 50 m. below the summit, stated to be 17,159 ft. A. Sonntag, ascending in 1857, reported his results in the *Smithsonian Contributions to Knowledge* (xi), giving a figure of 17,785 ft.

The French Scientific Commission, Dolfus, De Montserrat and Pavie, reached the S. E. rim of the crater but not the Pico Mayor. Heilprin and Baker, in 1890, state distinctly that they ascended the Pico Mayor, for which Heilprin gives an altitude of 17,523 ft. The Mexican Geological Survey remained two days on the summit and reported 17,876 ft. in 1895, while the Mexican Geographical Society calculated it as being 17,885 ft.

Ixtaccihuatl. The Aztec name means "White Woman," the Spaniards call it, less euphoniously, *La mujer gordata*.

The first ascent was made in 1889 by James de Salis, a Swiss resident of Mexico City, and was closely followed by that of H. Remsen Whitehouse and von Zedwitz. Whitehouse, an Ameri-