

allied forms or species by descent from a common ancestor."

Besides the "Enumeratio," Thwaites published subsequently a few papers on detailed points in Ceylon botany.

His tenure of office was associated with some of the most important developments of the Ceylon planting industry. In 1861 and subsequent years he took an active part in the operations undertaken by the Government of India, in concert with the Royal Gardens, Kew, for the introduction of Cinchona into the East. From the first the enterprise succeeded in Ceylon beyond expectation, and in 1869 the first ton of bark grown in the island was sent to England for sale. In 1864 he began to urge the cultivation of tea, and in 1868 a sample, manufactured in Ceylon, was sent to this country. Cocoa was similarly brought forward in 1867, and it now bids fair to be one of the most important of Ceylon staples. Liberian coffee was introduced from Kew in 1873. In 1876 the plants of Para, Ceara, and Central American india-rubber plants, obtained for the Indian Government, were sent from Kew, where they had been propagated, to Dr. Thwaites' charge in Ceylon, which was made the depôt, for their subsequent distribution to India.

During the later years of his life Dr. Thwaites had been in weakly health, and lived latterly a retired and extremely abstemious life. But his singularly refined and cultivated mind always gave him a position of distinction in Ceylon society, and he enjoyed the esteem and personal friendship of successive governors. He became a Fellow of the Linnean Society in 1854, and of the Royal Society in 1865; and in 1878 the Crown conferred upon him the Companionship of St. Michael and St. George, in recognition of his long services. Two years afterwards he retired, and took up his abode near Kandy, being unable to persuade himself to leave the island where so much of his life had been continuously spent. He died on September 11, and was followed to the grave on the following day by a large assemblage and the members of the Peradeniya Garden Staff, including the coolie labourers.

W. T. T. D.

ELEVATION OF THE SIERRA MADRE MOUNTAINS

DURING the past summer, in travelling across the Sierra Madre Mountains from Parral in the southern part of the State of Chihuahua, Mexico, to the mining town of Guadalupe y Calvo, on the Pacific slope about one hundred and fifty miles from the Gulf of California, some observations were taken with a small pocket aneroid barometer with thermometer attached, which may be of interest to the readers of NATURE. Both barometer and thermometer had been carefully compared with the standard instruments in Vanderbilt University and the proper corrections made.

Starting from Parral, or Hidalgo as it is generally named on the maps, the road leads in a south-westwardly direction to the small mining town of Santa Barbara, at the foot of the Sierra Madre range. From this point there is no road, but merely a trail running westwardly through the small villages of Providentia, Cerro Prieta, and Piedra Larga—the two former in Durango—to the old mining town of Guadalupe y Calvo, a distance of about eighty Mexican leagues or two hundred English miles. The journey can only be made on mules, or horses accustomed to mountain travel, as there are no roads, and the trail passes over several precipitous mountains. The distances, as near as could be ascertained, are about as follows:—

	Leagues.
Parral to Santa Barbara	7
Santa Barbara to Providentia	7
Providentia to Cerro Prieta	18
Cerro Prieta to Piedra Larga	26
Piedra Larga to Guadalupe y Calvo	22

The heights going westward as determined by the barometer at the several stations mentioned, are as follows:—

	Feet.
Parral	5,880
Santa Barbara	6,490
1st Mountain	8,670
Providentia	6,850
2nd Mountain	10,220
Cerro Prieta	6,720
3rd Mountain	8,760
Cave	9,270
Valley of Rio Verde	9,110
4th Mountain	9,440
5th "	9,350
Piedra Larga	8,010
6th Mountain	9,470
7th "	9,260
Guadalupe y Calvo	7,500

The temperature in the mountains—July 10 to 31—ranged from 58° to 85°. During five days in Guadalupe y Calvo—July 20 to 25—the temperature was taken at 6 a.m., 12 a.m., and 6 p.m., and found to range from 59° to 68°. On two days—July 21 and 22—it was 65° at the time of each observation. The rainy season begins about the middle of June and extends to the 1st or middle of September. The amount of rain that falls increases towards the west. The mountains run generally S.S.E. and N.N.W., and are covered with fine timber, consisting mainly of yellow pine.

Outside of the villages mentioned there are no inhabitants except a few Indians, descendants of the Aztecs, who live chiefly in caves and cultivate small patches of corn, beans, and pepper, and have small herds of cattle. These Indians are peaceable. The Apaches once roamed through these mountains, but of late years their depredations are confined to Middle and Northern Chihuahua and Sonora.

N. T. LUPTON

Vanderbilt University, Nashville, Tenn., October 3

NOTES

MR. M. A. LAWSON, M.A., F.L.S., having been appointed Superintendent of the Government Cinchona Plantations (Madras), the Professorship of Botany at Oxford will shortly be vacant.

ALTHOUGH they have M. Cochery as their common president, the two Electrical Congresses now sitting in Paris have separate sittings, as well as separate ends. The greater number of Governments have appointed separate delegates for each. The programme for the Congress on Electric Units was already published at the end of the session of the Congress of Electricians, and adopted by them. The consequence is that the committees were established beforehand, and that some Governments, as Belgium and Italy, appointed special delegates for each committee. The total number of delegates is sixty-two. The German Empire, having the exclusive right of representing the central Government in foreign parts, no delegate has been appointed either by Bavaria or Saxony; but amongst the five German delegates we find the name of Dr. Kohlrausch, Professor at the Bavarian University of Wurzburg. After having appointed M. Cochery as president, the Congress appointed a secretariat composed of two French officials; four others, belonging to the French Administration, have been appointed as *secrétaires rédacteurs*. The records of the Congress will be published under their authority. The members of each of the several committees have appointed their president or a president and secretary, and will communicate the results of their work at general meetings. It is probable that scientific committees will be established, and that the Congress will dissolve after having appointed them, or possibly adjourn to a future occasion. The