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NOTES ON THE GEOLOGY AND MINERAL RESOURCES OF TRINIDAD AND BARBADOS, B. W. ISLANDS.

By R. W. ELLS, LL.D., Etc.

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The islands of Trinidad and Barbados are among the most southerly of the Windward island group of the West Indies. The former lies a few miles off the north coast of South America, opposite the mouth of the Orinoco river, with an area of 1,750 square miles, and a population of about 255,000; the latter, about 200 miles to the north-east, with an area of 166 square miles, and, with a population of rather more than 1,200 persons to the square mile, can rightly be considered the most densely populated country in the world in so far as now known.

The geology of both these islands is quite simple. In Trinidad, the northern portion from the passage separating the north-west corner from Venezuela, known as the Bocas, to the cape at the north-east extremity, is occupied by a range of hills with elevations rising in places to more than 3,000 feet, composed of slaty and schistose rocks with occasionally areas of limestone. The schist is cut by veins of quartz, generally of small size, in which traces of gold are found, while the presence of iron has also been recognized at several points. These schists are the oldest rocks in the island, and resemble the lower Cambrian of Canada in many respects.

South of this and comprising by far the greater part of the island the rocks are much more recent, consisting for the most part of shales and sandstones of Tertiary age, with possibly small areas of underlying Cretaceous, especially along the southern flank of the mountain range. These Tertiary rocks comprise large areas of oil-bearing sandstone, and the formation as a whole, is thrown into a series of folds or anticlines, of which four principal ones have been recognized as extending in a general east and west direction across the southern part of the island, with several secondary ones. Along the courses of all these, oil-springs, outflows of asphalt or thickened petroleum and occurrences of natural gas are frequently seen, with mud volcanoes which indicate the escape of the gas in large quantity.

The most northerly of these anticlines, yet definitely recognized, comes to the west coast at the town of San Fernando