

the better the plate will keep; and after all that has been written and tried to increase the sensibility of collodion, it appears very probable, that it is not so much in leaving free nitrate, as in having a collodion which does not become impenetrable, and transformed, in drying, into a *compact horny* substance. Albumen appears to act in this direction, and also tannin, and the addition of resinous substances; the employment of warm water has the effect of opening the pores of the collodion, and bringing it to a soft or permeable condition.

I conclude that the nitrate of silver is, by itself, insensible to light. We cannot say the same of iodide of silver. Although the presence of nitrate of silver is indispensable to effect the development, nothing has yet proved that the part of the nitrate of silver is the same during exposure in the camera. For my own part, I believe it goes for nothing at that moment, and that we shall soon arrive at knowing how to prepare a dry collodion, without albumen or tannin, as sensitive as wet collodion, by employing means susceptible of softening the collodion, and permitting the nitrate of silver to penetrate it as completely as at the moment of sensitizing.—*La Lumière.*

### Photographic Tourist.

#### A PHOTOGRAPHIC TRIP TO THE PITCH LAKE, TRINIDAD.

BY W. TUCKER.

THE Island of Trinidad, as yet, is but little known to the non-commercial European world; although from its geographical position and the fertility of its soil, it is one of the most valuable colonies belonging to the British in the West Indies. Commercially, the island is known to produce the finest cocoa for home consumption. Its area is about 2000 square miles, it is well watered and covered with magnificent virgin forest, even to the summit of its mountains, the highest range of which stretches along the whole of the northern coast, being the continuation of a spur from the South American Andes, and separated from them by the narrow mouths (*Bocas*) leading from the Caribbean Sea into the Gulf of Paria. Only one eighth of this fine island has been brought into cultivation, although, from its position, it will eventually become one of the principal depots of agriculture and commerce for this part of the world, commanding as it does, the mouths of several rivers, the principal of which is the Orinoco; and a large section of the Venezuelan coast. Not only from its position will it become more known, but its natural products, viz., coal, recently discovered near the surface, valuable timber, and its still more valuable and wonderful—lake of asphalt.

In July 1861 I readily accepted the offer of Mr. C. F. Stollmeyer to join him in a trip to the Pitch Lake for a few days. This gentleman is commercially engaged with the lake, and understands its, as yet, discovered uses; and is thoroughly acquainted with everything that is interesting and curious on or about its surface. The trip offering a good opportunity to take a few photographs of this really natural curiosity, I prepared the requisites for taking a few stereo pictures by the wet collodion process. We embarked from Port of Spain on board the steamer *William Burnley*, at 7 a. m., on Saturday, 13th July. This vessel plies daily to and from the next important town in the island (San Fernando), and twice every alternate week past La Brea or Pitch Point.

The steamer on her departure from town, took a southerly direction, coasting along within two miles of the shore, stopping first at Chaguanas, where a boat awaited her, some distance from the land. Several passengers disembarked, and we proceeded. Next called at New Bay, boat waiting as before; here cultivation first appears; up to this the coast is low and covered with forests of mangroves. From this point to San Fernando, sugar estates appear in succession, and present many picturesque spots, from the undulating

nature of the land. Before reaching San Fernando, we partook of a hearty breakfast, considerable zest having been given to our usual appetite by the cool morning breeze, and the easy movement of the steamer over the tranquil Gulf of Paria. Arrived at the San Fernando jetty at 10 a. m. The town as seen from the gulf, forms a pretty picture; the houses built on the hill-sides appearing over one another, topped on one side by a Masonic lodge, on another by the hospital, and wholly backed by the Naparmia Hill. On this hill the first trace of asphalt is said to appear. After leaving San Fernando, the coast takes an abrupt turn west; and the low point seen in the distance is our destination. On reaching opposite the Point D'or estate, before reaching the point, a strong smell of pitch is first noticed. We passed over a pitch bank, where a thin scum of petroleum was observed floating on the surface of the water. Rounded point La Brea at about 11 o'clock. Mr. Stollmeyer's boat was in waiting, and we were safely landed on the village beach. Truly, pitch is the prevailing element here—the huts pitch-floored, and, in some cases, pitch-roofed. Pitch roads, and to a stranger, the very atmosphere smells pitchy. La Brea village is about 27 miles south of Port of Spain, in a direct line by water, and consists of about fifty huts, or rather tropical village houses, Roman Catholic church, and police station; and derives its name and importance from the Pitch Lake in its vicinity (*Lac du Brea*). The inhabitants are mostly fishermen; some cultivate small patches of ground, and raise provisions for their own use, and work for wages as pitch-cutters and boatmen. The principal resident of the village is a negro named Nimrod, who, since the export of pitch, has been Mr. Stollmeyer's foreman and contractor. Point La Brea, a few hundred yards north of the village, is a deposit of pitch, fifteen feet deep, extending over seven or eight acres. Its surface is covered with small trees and shrubs, nourished by the earth formed by the pitch being exposed to the action of the elements, which causes it to lose its oily and carbonaceous nature, and forms earthy matter, the same as that formed in partial combination with the raw asphalt. From this point, and not from the lake, pitch is at present shipped; consequently, a large portion of the point has disappeared. The pitch from the lake is less suitable for shipment in bulk. On the south side of the village, the Paris Asphalt Company have erected works near the beach, where the pitch from the lake is refined for exportation. During the prevalence of northerly winds, a high surf runs on the beach, and makes landing difficult. A few days before our visit, several large boats were wrecked on this spot. We rested in Nimrod's house, in the principal room of which—half shop, half bed-room and parlour—we partook of refreshment, prepared by our host's *married* wife—a fine-looking creole woman. After purchasing at a Chinese shop, eggs, fowls, &c., to complete our provisions, we started in a boat for Mr. S.'s country residence on Point Rouge, about two miles south of La Brea. This was our head-quarters during the sojourn. After leaving the village, the beach regained its sandy appearance, and at Point Boyer we came to the first pitch-nugget, or boulder, projecting into the sea. These continue along the coast, at intervals of twenty or thirty yards, to Point Rouge. The coast, although now covered with fine forest trees, was, some thirty years ago, cultivated sugar estates, all traces of which have now disappeared, and nature resumed her sway even to the producing of goodly trees on the bare pitch-boulders. Point Rouge is a perpendicular cliff, washed by the sea, and formed of different layers of clay, which have undergone the action of subterraneous heat, and become burnt to the consistency of soft brick of a bright red, and, in some places, of a yellow ochre colour. In some of the layers semi-jaspers have been found. We reached the house, which is situated on the top of the point, about one hundred feet above the gulf, at 6 p. m. From this spot we command a splendid view of the opposite coast of Guapo. The stillness of the

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