

*Fifth Meeting, January 24th, 1859.*

SIR RODERICK I. MURCHISON, PRESIDENT, in the Chair.

PRESENTATIONS.—*The Rev. S. W. King; Lieut. H. Lamb, I.N.; and James Allan, Valentine Labrow, Joseph Paul, and Theodosius Uzielli, Esqrs., were officially introduced upon their election.*

ELECTIONS.—*Captain Alexander Blakeley, R.A.; Captains T. G. Montgomerie, D. Nasmyth, D. G. Robinson, and James Walker, first assistants G. Trigon. Survey of India; Captain W. S. Sherwill, Professor of Surveying, Calcutta; Captain Thomas A. B. Spratt, R.N., C.B.; Lieut. John Townsend, R.N.; Major H. L. Thuillier, Deputy Surveyor-General of India; Captain E. C. S. Williams, officer of the Surveyor-General's Department; H. Stanhope Freeman, Vice-Consul Ghadames; Rev. Alexander Mackay, A.M.; Clark A. Duckett, Assistant-Surgeon, R.N.; and Hovendon Hely, T. Corbyn Janson, T. A. Thompson, and Arthur C. Vesey, Esqrs., were elected Fellows.*

EXHIBITIONS.—The third edition of ‘*Siluria*,’ by Sir Roderick I. Murchison; Sketches of the country and towns of the route of the Pernambuco Railway, by Colonel Westmacott, F.R.G.S.; and Findlay’s Chart of the North Atlantic, &c., were exhibited to the meeting.

The Papers read were:—

1. *Journey in Mexico.* By CHARLES SEVIN, Esq., F.R.G.S.

[The paper will be printed in the Journal.]

MR. SEVIN left England in May, 1856, with the view of examining the copper and silver mines of the north-western provinces of Mexico, and of ascertaining how far the mineral wealth of these regions might be worked to advantage with English capital. He was accompanied by Messrs. Hickens and Schahl. The party reached Mazatlan in July, and started for their destination without delay. He describes Mazatlan as a cheerful, well-built town, of 12,000 to 15,000 inhabitants, with gardens in which the cocoa-nut and banana thrive, and far in advance of any other place in the northern and Pacific part of Mexico. Mr. Sevin’s first point was El Fuerte. He took the road that led along the flanks of the Sierra Madre, travelling with mules, after the manner of the country, at the rate of 15 to 18 leagues a day, and sleeping at night on rugs spread on the floors of such ranchos as he selected for his night’s quarters. There is another road to El Fuerte, which skirts the sea-coast and traverses the lowlands of Cinaloa. It is the easier

road of the two, and the country it passes through is by no means unhealthy, notwithstanding the apparent insalubrity of its situation, but at the time Mr. Sevin was leaving Mazatlan, the usual summer rains had swollen the rivers and it was impassable. He passed through Culiacan, a town of 7500 inhabitants, and the seat of a bishop. It contains many private houses that were beautifully furnished, and belonged to individuals who had enriched themselves by means of some one or other of the numberless silver-mines of the adjoining Sierra. There are large silver amalgamation works in the place, and a Government mint, whose lessee gave Mr. Sevin a good deal of information. A considerable trade is carried on in the so-called Brazil or Niaragua wood, which grows abundantly in the neighbouring Sierra, whence it finds its way to the little harbour of Altata. The inhabitants of Culiacan are of a less mixed race than those of Mazatlan, and the Indians of the surrounding country are described as good labourers, whether in the field or in mines. They are of numerous tribes, who all obey one single chief; they go almost naked, and carry bows and arrows. Mr. Sevin states, that in the mountain-ridges from Mazatlan to the boundaries of Chihuahua and Sonora, there are numberless works for silver amalgamation. By inquiry at every village he passed through, he invariably heard of some mining operations in the immediate neighbourhood, but all these undertakings are conducted on a small scale and in a very desultory manner. The miners can apply but very limited means towards their undertakings, and as soon as a *bonanza*, or piece of good luck, arrives, they cease to labour and begin gambling. Hence the want of wealth of the inhabitants is no proof of the want of wealth of the country. El Fuerte was more backward than Culiacan; it was for a while the seat of a provincial Government, but since then has fallen into decay. Extensive fields of maize and sugar-cane in its neighbourhood attest the natural fertility of the country, and produce large returns to those Mexicans who take the trouble to redeem these lands from their natural state of wildness.

From El Fuerte Mr. Sevin travelled through Chois to the old mining town of Urique. On his way he ascended the Sierra, and speaks in great admiration of the prospect from its flanks at an elevation of 8000 or 9000 feet. The varied tints of vegetation were peculiarly beautiful; the flanks of the mountains were embellished with numerous cultivated valleys, dotted over with ranchos, and the main chain of the Sierra Madre rose in abrupt cliffs above them.

A great number of silver-mines have been worked near Urique,

but the old mine of S. Rosario is still the richest of all. The advent of Mr. Sevin's party created quite a sensation, for the want of a new element to elevate the population from its present miserable condition is severely felt among all classes in Mexico, and Mr. Sevin feels assured that energetic foreigners, with a bonâ fide purpose of trade and industry, would be cordially welcomed by the natives. His next point was Huacaybo, in reaching which he passed the famous mines of Jesus Maria, which are now worked in a most desultory manner by mining squatters; the richest of them is flooded with water. The copper lode at Huacaybo appears to be on an immense scale, and its position and capabilities are minutely described. At this point Mr. Sevin turned back; his mules were lamed, his stock of provisions and necessary luxuries were consumed, and he went back to Mazatlan by another route.

He reports on numerous mining districts, Bastoseágochic, Sentrion, Cerocáhuic, Monterde, Guadalupe el Calvo, El Parral, Hydalgo, San Diego, and Santa Eulalia. In the immediate neighbourhood of the last of these more than 250 mines have been worked, 50 of which are more than 200 yards deep and remarkably extensive, but the working of all of them has been checked since the expulsion of the Spaniards. He then passed to Batopilas; and, after visiting another group of mining districts as numerous as the last, and all of which are minutely described in Mr. Sevin's paper, that gentleman and his companions reached Mazatlan in November.

Mr. Sevin finds great fault with the cartography of the country he saw:—"As for the different rivers, mountains, and villages laid down in the different English and Spanish maps known to me, I have not seen one in which their geographical position was in accordance with my daily observations, and where the names of the localities were rightly spelled."

The paper concludes with a minute description of the physical geography of Chihuahua.

THE PRESIDENT.—Geographers must be well pleased to know that a gentleman going to remote parts of Mexico without any mission to carry out our special objects, has of his own accord, and at his own expense, devoted so much labour and talent in laying before us a picture of a country, some parts of which have been visited by various British miners, but of which we have not yet had so clear a general sketch. The journey was not performed without difficulty; fire-arms having to be employed occasionally in those parts where the road was beset by robbers. We have, indeed, every reason to thank Mr. Sevin for having so successfully accomplished the object of his travels, and for having made the remote parts of Mexico much better known to us.

MR. J. CRAWFURD, F.R.G.S.—Mr. Sevin, perhaps, will have the goodness to give us some estimate of the amount of silver produced within the republic of Mexico. At the same time I would ask him, has the price of quicksilver

greatly diminished? Since the discovery of the quicksilver mines of California, I understand that the amount of silver produced every year depends almost entirely upon the price of quicksilver.

MR. SEVIN.—It is impossible to state what amount of silver is found in Mexico, because the silver is exported in dollars, and also in bars, which are smuggled out of the country in great quantities; the exportation of silver in bars is altogether prohibited by law—therefore no exact statistics can be drawn up of the actual produce and exports of silver. In the republic of Mexico, in the year 1856, when I was there, there were thirty-five millions of dollars coined. By comparing statements, it appears that the silver coined in former years did not amount to so much; but whether it is larger this year than last, I cannot tell. With respect to the price of quicksilver ten years back, it was one dollar and a-half in California, and two dollars in Mexico. Now, the price is about half a dollar in California: but at present the mines are involved in a law-suit, and the price will rise if the American Government should lay an injunction upon the working of the mines.

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The second Paper read was—

2. *Extracts from Reports by Captains BURTON and SPEKE, of the East African Expedition, on their discovery of Lake Ujiji, &c., in Central Africa.*

Unyanyembe, Central Africa, 24th June, 1858.

SIR,—I have the honour to transmit, for the information of the Royal Geographical Society, a copy of a field-book, with a map by Captain Speke. The details contained in the map render all remarks upon the country superfluous until we may be able to communicate them in person.

We left the Lake of Ujiji about a month ago, and are now halted at this main depôt of Arab trade. Captain Speke has volunteered, when he and the rest of the party are sufficiently recovered from their present state of universal sickness, to visit the Ukerewe Lake, of which the Arabs give grand accounts. It lies nearly due north of Unyanyembe, at a distance of from 12 to 15 marches. Thus we shall be enabled to bring home authentic details of the four great waters which drain Eastern and Central Africa, viz. the Nyassa, the Chama, the Ujiji lake, and the Ukerewe. On Captain Speke's return, we shall lose no time in repairing to the coast, which, if we pass safely through perilous Ugogo, we may hope (D.V.) to reach about December of this year.

We have both suffered severely from illness. We were compelled to travel from Unyanyembe to Ujiji during the wet monsoon, and in the same season to embark in open canoes, exposed to wind and rain, sun and dew, and, when on shore, sleeping in mud to explore the lake—a labor of about a month. During this time we endured great hardships and ran not a few risks. Our limits of the lake were laid down by the accounts of the tribes.